

## Abstract N°: 36

### **Combining automated lesion risk and change assessment improves melanoma detection: A study applying Artificial Intelligence to multi-modal imaging.**

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#### **Introduction & Objectives:**

Several Artificial Intelligence (AI) models for melanoma detection have reported high accuracy. However, most studies have focused solely on the classification of single lesion images at a single time-point. Sequential image data can be pivotal in detecting lesion changes and distinguishing between naevi and melanoma, particularly in cases where dermoscopic atypia is not seen. We retrospectively assesses the individual and combined capabilities of lesion malignancy risk and lesion change detection AI models incorporated into a three-dimensional total-body photography (3D-TBP) system to accurately detect melanoma in pigmented skin lesions and report on their potential added value in a clinical setting.

#### **Materials & Methods:**

Participants were included in this study if they had  $\geq 1$  histopathological confirmed melanoma captured with both 3D-TBP and dermoscopy prior to excision. All pigmented naevi  $\geq 2$ mm imaged with 3D-TBP were assessed for lesion change by both a trained melanographer and the lesion change AI model. All lesions captured with dermoscopy were assessed using the malignancy risk AI model, and compared with corresponding histopathological diagnosis where available. The automated lesion change scores and malignancy risk scores were analysed both separately and in combination for their accuracy in predicting malignancy.

#### **Results:**

A total of  $n=2286$  naevi and  $n=37$  excised lesions ( $n=13$  melanomas) in  $n=13$  patients were analyzed. The median lesion change varied considerably between individuals (0.0-0.7) (Fig 1.), where higher scores denote greater change. The median change score in excised lesions was 1.5 (IQR: 0.0-4.2). Median change scores for melanomas and benign lesions were 4.2 (IQR: 2.2-5.9) and 0.0 (IQR: 0.0-1.6), respectively ( $p=0.036$ ). Sensitivity and specificity of the malignancy risk assessment of excised lesions were 0.85 and 0.63, respectively. Median malignancy risk scores for melanomas and benign lesions were 7.7 and 0.5, respectively ( $p=0.004$ ), where higher scores denote greater risk. Combining AI models and adjusting for individuals' unique level of change, would have resulted in recommending excision of  $n=5/7$  melanomas, and flagging the remaining  $n=2$  for clinical review. Of the  $n=14$  excised lesions with confirmed benign histopathology, three would have been recommended for excision and three recommended for clinical review, while the excision of eight benign lesion would have been prevented.

#### **Conclusion:**

Lesion image analysis using AI models and multi-modal imaging, support that the extent of lesional change varies between individuals, and change indicative of malignancy in one individual may not indicate malignancy in another individual. Furthermore, we show that the combined use of AI models and imaging modalities assessing lesion change and malignancy risk of lesions improves the predictive accuracy. This complementary information

could support clinicians in the early detection of melanoma and reduce the number of benign lesion excisions.

**Figure 1. Boxplot of the distribution of lesion change (y-axis) per participant (x-axis) as calculated by the lesion change detection AI model, where each black dot represents change of a non-excised lesion considered an outlier of the individual's change distribution. Excised lesions are highlighted in colour with histopathology as follows: red dots melanoma (MEL), green dots naevi (NV), blue dot seborrhoeic keratosis (SebK), and purple dot solar lentigo (SL).**

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**Abstract N°: 88****Challenges in diagnosing Skin Cancers in Skin of Color**Prajwal Pudasaini\*<sup>1</sup><sup>1</sup>Civil Service Hospital of Nepal, Dermatology, Kathmandu, Nepal**Introduction & Objectives:**

Skin Cancers are neoplastic proliferation of cells of skin, with potentiality of metastasis and eventual morbidity and mortality. Although uncommon, more often than not, these are some of the dreadful entities which can be missed. Specially, in skin of color, the typical manifestations and clinical phenotype can be altered and early diagnosis can be delayed. In resource restrained settings of South East Asian region, these can be derogatory for one's health, if not diagnosed and treated on time. Herein, we iterate the need of physician education and training for early diagnosis of these cutaneous oncological entities to prevent hazardous complication by early diagnosis through educational intervention of physician and Health Care Providers. This study aims to identify and corroborate clinically, typical dermoscopic features in skin cancer patients which includes Basal cell Carcinoma (BCC), Squamous Cell Carcinoma (SCC) and Melanoma predominantly in skin of color patients from government based hospital of a south east Asian country.

**Materials & Methods:**

Patients with classic clinical features of Skin cancers were selected. Skin cancers were subdivided into Basal cell Carcinoma (BCC), Squamous Cell Carcinoma (SCC) and Melanoma and their corresponding clinically corroborative dermoscopic features were enlisted respectively. Dermoscopy was done using DermLite III DL3N Polarized & Fluid Dermoscope w/PigmentBoost Brand (3Gen, DermLite LLC, San Juan Capistrano, CA, USA ) and images were obtained to create digital dermoscopy system by attaching camera-equipped mobile device via an optional connection kit. (Redmi Note 11, MIUI version 13.0.5, CHINA) and the findings were enlisted concurrently.

**Results:**

In this study of dermoscopic findings of skin cancers, 15 patients were evaluated for their clinical lesions along with its corroboration with the dermoscopic features. BCC was seen in 10 patients and 5 patients had typical cutaneous phenotypic and dermoscopic feature of SCC. The most common dermoscopic finding seen in patients with BCC in skin of color was blue gray dots, structureless white translucent, scar-like area and fine branching serpentine vessels. Similarly in the SCC subtype, whitish circles surrounded the Keratin clods along with linear irregular vessels directed towards the center of the tumor.

**Conclusion:**

Dermoscopic findings of skin cancers and their clinical corroboration is a much-needed aspect in treating patients with pigmentary disorders and in those with skin of color, especially in developing countries. Utilization of dermoscope in clinical settings of low income countries and in government based hospitals will decrease the add on economic burden of invasive diagnostic modalities like biopsy and other inadvertent tests done to rule out pigmentary conditions.



**Abstract N°: 121****Treatment of angiosarcoma with alternating monthly administration of pazopanib and docetaxel**Hiroyuki Miura<sup>\*1</sup>, Yuya Nakanishi<sup>1</sup><sup>1</sup>Osaka Minato Central Hospital, Dermatology Department, Osaka, Japan**Introduction & Objectives:**

Angiosarcoma is an aggressive tumour with rapid and fatal progression. Cytotoxic chemotherapy, including taxanes, can produce significant responses; however, their durability is limited, and targeted therapy with tyrosine kinase inhibitors is often well tolerated but prone to developing resistance.

Here, we report a case of angiosarcoma treated with alternating monthly administration of pazopanib and docetaxel.

**Materials & Methods:****Results:**

An 88-year-old man who had undergone electron radiotherapy and chemotherapy with paclitaxel or eribulin for face angiosarcoma for 2 years presented with progressively enlarging lesions of the nodules and purpura on the right cheek.

Oral pazopanib 200 mg/day, which is a quarter of the regular dose because of decreased renal function, decreased the purpura; however, the nodule tended to enlarge.

Subsequently, docetaxel 10 mg/m<sup>2</sup> was administered weekly, and the nodule disappeared. However, the purpura was not suppressed.

Therefore, we alternately administered the cytotoxic chemotherapy (docetaxel) and targeted therapy (pazopanib) monthly, and the progression of the lesions was suppressed, if not resolved, for approximately a year.

**Conclusion:**

We alternately administered cytotoxic chemotherapy and targeted therapy for angiosarcoma in an older patient, resulting in therapeutic effects that are unexpected with single agents.



**Abstract N°: 235****Statins Inhibit Cutaneous SCC Cells**

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**Introduction:** Cutaneous Squamous Cell Carcinoma (SCC) is the second most common cutaneous malignancy. Treatment is excision. However, when surgical treatment is not feasible due to a high surgical risk or an advanced disease, other modalities are used. Radiation, chemotherapy and recently augmentation agents are used with concern for harmful side effects. Preclinical studies of statins, well-known drugs with a high safety profile, have demonstrated antiproliferative, pro-apoptotic and anti-invasive effects of the drugs on different cancer cell lines.

**Objectives:** To evaluate statins' in-vitro effects on human cutaneous SCC cells.

**Methods:** Human cutaneous SCC line (A431) cells were incubated with increasing concentrations of Atorvastatin and Simvastatin. Cell viability was determined using ELISA reader. Flow cytometry was used to evaluate apoptosis, based on Annexin V, and proliferation using a fluorescence-based proliferation assay. Finally Hanging Drop (spheroid) assay was used to quantify statins' effects on the 3D cancerous cell organization.

**Results:** Atorvastatin and Simvastatin showed a consistent decrease in cell viability in a dose-dependent manner. There was a significant increase in overall apoptosis for all examined statin concentrations ( $p < 0.005$  of all). There was a significant decrease in proliferation in the Atorvastatin group ( $80\mu\text{M}$   $p=0.007$  and  $160\mu\text{M}$   $p=0.028$ ). All treatment groups showed statistically significant decrease in spheroid formation ( $p < 0.005$  for all).

**Conclusion:** Simvastatin and Atorvastatin were found in-vitro to decrease humane SCC cells' proliferation, viability and 3D organization and to increase apoptosis. Given statins' anti-tumor effect, they may have a clinical role when applied topically on cutaneous SCC and actinic keratosis, either alone or in combination with another therapy.





## Abstract N°: 238

### Microwave therapy for the treatment of cutaneous melanoma metastases

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#### Introduction & Objectives:

We have previously shown evidence for microwave therapy (MWT) using a hand-held applicator in the treatment of viral warts and that this treatment can induce cutaneous anti-viral immunity. Others have reported MWT for actinic keratoses. Here we set out to test the role of MWT in cutaneous melanoma metastases.

#### Materials & Methods:

Twelve participants with metastatic melanoma and cutaneous metastases (stable disease, despite therapy) were recruited from the melanoma oncology clinic. Three nearby metastases (T1, T2, T3) were identified and measured. Tumour volume was assessed at 0 and 3 weeks. Biopsies were taken from T1 pre and post treatment for histology and RNA sequencing. T1&T2 lesions were treated with non-ablative microwave energy (T1 30-50J; T2 10-20J) and T3 was not treated (control).

#### Results:

Pre-treatment histology confirmed viable melanoma metastases in 9/12 patients. MWT was generally well tolerated and associated with a variable experience of short-lived pain. Of the 9 treated participants, three experienced complete response of the treated T1 nodule (clinical and histological resolution). Significant shrinkage was observed in all the T1 (mean reduction 67.6%;  $p=0.002$ ) and T2 (mean reduction 38.7%;  $p=0.037$ ) lesions at 3 weeks. There was no significant change in the volume of the untreated (control) metastases.

The tumour transcriptome was assessed from skin at baseline and week 3 with an immune-oncology panel of 1392 genes (HTG EdgeSeq Precision, UK). In line with clinical observation of response, expression of melanoma markers (MLANA, S100B, PMEL, PRAME) were expressed at lower levels in the post-treatment samples. Furthermore, treatment with microwave therapy was associated with induction of immune pathways, including IL1A, IL17A, CCL27 and CXCL5. However, these pathways were more actively induced in complete than partial responders.

#### Conclusion:

This pilot study suggests the potential efficacy for treatment of cutaneous melanoma metastases with MWT. One-third of cases had a complete clinical and histological clearance of the high-energy microwave treated tumour. At a molecular level, there was evidence that complete response was associated with a greater induction of immune signalling pathways raising the possibility that repeated treatments may increase the likelihood of tumour clearance. If the mechanism of action is confirmed to show microwave induction of anti-melanoma response, it

would be conceivable that this treatment could also be beneficial as an adjunctive therapy to standard metastatic melanoma therapy for the purpose of increasing whole body anti-tumour immunity with the aim to reduce total tumour burden.

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**Abstract N°: 271****Invasive squamous cell carcinoma on sternotomy scar**Farnaz Araghi<sup>1</sup>, Nima Sarisarra<sup>2</sup>

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**Introduction & Objectives:**

Since 1828, the term Marjulin's ulcer has been referred to as Squamous Cell Carcinoma (SCC) which grows on the burned ulcers. Currently, the terminology has been revised to include all types of skin tumors that develop on the damaged skin not just burn scars. There are only a few studies in which the SCC grew on surgical uncomplicated scars particularly sternotomy surgical scars. Here, we are reporting a patient in which an invasive SCC tumor developed on the uncomplicated sternotomy scar after 5 years.

**Materials & Methods:**

An 85-year-old male patient was referred to our dermatologic clinic with an ulcerated lesion on his chest. He mentioned the rapid growth of the tumor within 2 months on his surgical scar of the chest. He had a history of pelvic bone fracture related to the trauma 5 months prior. Additionally, he had undergone an uncomplicated Coronary Artery Bypass Grafting (CABG) 5 years earlier. His sternotomy scar on his chest had been excellently healed 1 month later and he denied any trauma or infection in this area. The nodule had a 3-centimeter diameter and the surrounding skin of the nodule was indurated. The center of the nodule was a crater full of keratin. No palpable lymph node has been detected during the examination.

**Results:**

In his microscopic examination, endophytic crateriform squamous hyperplasia with severe dysplasia and evidence of dermal invasive consistent with invasive squamous cell carcinoma, crateriform. Due to the general condition of the patient, we decided to refer him to the plastic surgery hospital to perform the surgery using general anesthesia and precise monitoring.

**Conclusion:**

In this report the tumor lesion was displayed within 2 months, however the surgical scar had healed 5 years prior. Based on recent studies, the possible explanation for such rapid occurrence could be attributed to the genetic factors that make certain individuals more susceptible to tumor growth. Accordingly, p53 over-expression, E-cadherin and beta-catenin decline may lead to the aggressive behavior of SCC in an individual. As indicated previously, SCC tumors that develop on scars have the potential to metastasize in 10 to 100 of the patients, whereas this may occur in only 1% of the patients with nonscar-SCC tumors.

Taken together, early detection and management of such tumors hold remarkable significant importance among patients. Hence, this study recommends raising the patients' awareness about chronic ulcers and the potential alterations they may experience. Furthermore, it emphasizes the need for accurate examination of surgical ulcers with any changes even after the healing process completion.



## Abstract N°: 281

### **Complete remission of paraneoplastic generalized eruptive keratoacanthoma of Grzybowski after treatment of the primary tumor**

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#### **Introduction & Objectives:**

Generalized eruptive keratoacanthoma of Grzybowski (GEKA) is a rare disease characterized by the sudden appearance of multiple millimetric keratoacanthomas, with diffuse distribution, mainly affecting the photoexposed areas, face and intertriginous areas.

The etiology is unknown, although it has been proposed that it may be related to ultraviolet radiation, chronic inflammatory skin diseases, trauma, drugs or with malignant tumors.

#### **Materials & Methods:**

We present the case of a patient with GEKA refractory to multiple treatments, which finally resolved completely after surgical and chemotherapy treatment of gallbladder cancer.

#### **Results:**

A 55-year-old woman, with no relevant personal history, consulted for pruritic skin lesions that appeared abruptly 1 year ago on the arms and legs. Two biopsies were performed, both with result of keratoacanthoma. Neoplasms were ruled out in relation to possible Muir-Torre syndrome by gastroscopy, colonoscopy, ultrasound of the urinary tract and urine cytology. Finally, it was diagnosed as GEKA according to the criteria of Nofal A et al.

During 3 years of follow-up, different treatments were performed, all of them without success, both local (imiquimod, tretinoin, photodynamic therapy) and systemic (isotretinoin, acitretin, methotrexate, erlotinib).

Only 1 month after discontinuation of erlotinib, the patient was admitted to the hospital for acute cholecystitis. A cholecystectomy was performed, and the anatomopathological analysis revealed the presence of a gallbladder adenocarcinoma. The CT extension study shows peritoneal carcinomatosis, which is defined as stage IVB. Adjuvant chemotherapy with cisplatin + gemcitabine is started.

Three months after surgery, the patient reported that skin lesions had stopped appearing and that the pruritus had disappeared. In subsequent follow-up visits, a gradual regression of the keratoacanthomas was observed, parallel to the radiological response of the adenocarcinoma.

Due to later progression of the metastatic disease, the patient receives different lines of chemotherapy. In any case, throughout the follow-up during the 4 years after the cancer surgery, a complete response of the keratoacanthomas is maintained at cutaneous level.

#### **Conclusion:**

To our knowledge, this is the first described case of GEKA associated with gallbladder cancer, as well as the first case of GEKA associated with a malignant tumor with complete remission after treatment of the primary neoplasm.

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**Abstract N°: 367****The Frequency of Microsatellite Metastases, Satellite metastases, and Residual Melanoma in Thin Invasive Melanomas: A Retrospective Cohort Study**Ebba Wennberg<sup>\*1, 2</sup>, Rudy Bittar<sup>1</sup>, John Paoli<sup>1, 2</sup>

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**Introduction & Objectives:** Thin invasive melanomas have a Breslow thickness  $\leq 1$  mm. Despite increasing incidence in Sweden, thin melanomas exhibit a notably favorable prognosis. The treatment involves a complete diagnostic excision typically followed by a wide local excision (WLE), aiming to remove any potential microsatellite and satellite metastases as well as residual melanoma. **Materials & Methods:** The study population included all thin melanomas (Breslow thickness  $\leq 1$  mm) diagnosed and histopathologically verified between 2014 and 2020.

**Results:** A total of 1,012 cases of thin melanoma were available for analysis. In the diagnostic excision, no melanomas exhibited microsatellites and only 2 cases (0.2%) presented with macroscopic satellite metastases. Among the lesions that underwent WLE (n=887, 87.6%), no lesions exhibited microsatellite or satellite metastases in the extra tissue removed. Among the 936 melanomas (92.5%) that were completely excised during the initial diagnostic excision, only 2 exhibited residual melanoma in the WLE (0.2%, 95% CI 0.07-0.46).

**Conclusion:** Our findings regarding the frequency of microsatellite and satellite metastases in thin melanoma resemble the findings of the limited number of studies conducted on this topic. As per our research, only one lesion with satellite metastases will be detected for every 506 thin melanomas and the number needed to treat with a WLE to eliminate one case of residual melanoma following a complete diagnostic excision is 479. This implies that individuals with completely excised thin invasive melanoma may be subjected to excessive and unnecessary treatment during the WLE.





## Abstract N°: 519

### Norcantharidin nanoemulsion effectiveness against melanoma in a murine xenograft model

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#### Introduction & Objectives:

Melanoma is one of the most aggressive forms of skin cancer and is also one of the most diagnosed cancer types. While surgical excision of the lesions is the primary treatment for melanoma, not all cases are candidates for surgical procedures. Also, the rise of adjuvant therapies that could benefit the treatment outcome urges more research and developmental efforts. Furthermore, topical alternatives can offer a wide range of possibilities given their direct application to the tumor in cutaneous melanoma. In the present study, a norcantharidin-loaded nanoemulsion was developed and evaluated in vivo.

#### Materials & Methods:

The model was performed using a B16F1 melanoma cells xenograft model inoculated in the left hind leg of ICR mice. Three days after the initial inoculation, mice were randomly assigned to four treatment groups. The first group received as treatment the application of 0.1 g of the norcantharidin nanoemulsion (NCTDNem; n=8) using a fine-tipped cotton swab where the tumor was inoculated. The second group was treated with the same amount of nanoemulsion, previously pressing the inoculation area with an adjustable Microneedling Pen with 36 nano pin cartridges (NCTDNem + MD; n=8). The third group was orally treated with pentoxifylline using a 60 mm mouse feeding needle at a dose of 60 mg/kg of body weight, in addition to the application of nanoemulsion with the microneedling pen (NCTDNem + MD + PTX; n=8). The treatments were initiated three days after the initial xenograft inoculation. Our model includes a surgical removal of the tumor, simulating the standard treatment and assessing the role of nanoemulsions as adjuvant therapy. On days 20 and 30 of the assay, melanoma lesions from all groups were photographed using a dermatoscope (DERMALITE) for amplification and captured with a high-resolution 48 MP smartphone camera. Tumors with a diameter > 40 mm were procured and processed for further analysis.

#### Results:

We observed a significant decrease in the growth rate of the melanoma lesion in the treated groups compared to the control group, both at the 20th and 30th days of treatment. Leading to a decrease in surgical procedures. Moreover, we evaluated the drug bioavailability in serum samples, and the results showed that norcantharidin was detectable in a range of 0.1 to 0.18 mg per mL in the treated groups. Furthermore, histopathological analysis was performed on the excised tumors, where significant differences were found regarding *size*, *mitosis rate*, *lymphocytic infiltration*, and multispectral quantitative *image analysis* compared to the control group.

#### Conclusion:

If more clinical studies are conducted, the norcantharidin-containing nanoemulsion could be a potential alternative or adjuvant therapy for melanoma treatment. Topical nanosystems can become or complement

standard therapies, which is needed as melanoma affects not only in terms of mortality but also the patient's morbidity and life quality. Moreover, it can be an affordable option for underdeveloped countries.

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**Abstract N°: 549**
**Persistent agminated lymphomatoid papulosis and anaplastic large-cell lymphoma in a psoriatic patient with polycythemia vera**

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**Persistent agminated lymphomatoid papulosis and anaplastic large-cell lymphoma in a psoriatic patient with polycythemia vera**
**Introduction & Objectives:**
**Materials & Methods:**
**Results:**

This 64-year-old man with psoriasis, hypertension and dyslipidemia presented to our clinic with a non-healing ulcer on the left calf for two months despite standard wound care. Thus, a biopsy was taken in July, 2015, demonstrating perivascular and interstitial infiltration of atypical medium-to-large sized lymphoid cells involving the upper dermis and subcutis. The atypical lymphoid cells are positive for CD3, and CD5, but negative for CD20, CD56, or ALK. Many large cells are positive for CD30. EBV in situ hybridization is negative. The above pathological findings are consistent with the diagnosis of a primary cutaneous anaplastic large-cell lymphoma (ALCL). Therefore, this patient was referred to a hematologist for further management. Inguinal lymph node biopsy, positron emission tomography and whole-body computer tomography did not show extracutaneous involvement. He received 36 Gy/18 Fx radiotherapy and the calf ulcer healed completely.

Nonetheless, polycythemia vera (PV) was diagnosed by the hematologist during subsequent follow-ups with Hb of 18 g/dL and Hct up to 54%. He received regular phlebotomy afterwards. No evidence of ALCL recurrence was found until 2019, when numerous pinhead-sized brownish discrete papules localized on the right lower leg were noted. Biopsy was performed, revealing a dense infiltrate of lymphoid cells in the upper dermis with scattered medium to large sized CD3, CD4, CD30 + atypical lymphocytes. The pathological features were consistent with lymphomatoid papulosis (LyP). He was then treated with methotrexate 15 mg/week. During the course, no ulceration or crusts were noticed on these papules. Because the lesions were asymptomatic and no new lesions occurred, the patient declined more aggressive therapies and the lesions remained stationary for 5 years till now. Combining the clinical manifestation, course and pathological findings, a persistent agminated LyP (PALP) is diagnosed.

LyP is characterized by a chronic course of years to decades of recurrent papulonodular lesions, each of which undergoes spontaneous regression after weeks or months. PALP is a distinct clinical variant of LyP which represents either a composite lymphoma, a localized LyP or an own entity. Most cases occurred on the acral sites, mainly the feet. PALP often has a stationary course, but there is a potential of developing malignancy or evolving into classic LyP. Occurrence of mycosis fungoides at the same or discontinuous sites has also been reported. LyP and primary cutaneous ALCL represent opposite extremes in the spectrum of primary cutaneous CD30+ lymphoproliferative disorders. Nonetheless, the association of PALP and primary cutaneous ALCL has never been mentioned in our literature search.

PV is well-known for the risk of developing secondary acute myeloid leukemia but the association of PV with cutaneous T cell lymphoma has been rarely described. However, bone marrow involvement has been detected to

precede the development of LyP. A nationwide cohort study identified 97 individuals with confirmed dual diagnoses of myeloproliferative neoplasm and lymphoma, including one with ALCL. Secondary nodal ALCL has also been described following PV. The rare coexistence of PALP, PV and primary cutaneous ALCL might suggest common underlying pathogenic events.

**Conclusion:**

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**Abstract N°: 637****Estimation of the tissue and serum Levels of Interleukin (IL)-35 in mycosis fungoides: a case-control study**Maha Fathy Elmasry<sup>\*1</sup>, Yasmine Ahmed<sup>1</sup>, Zeinab Nour<sup>2</sup>, Sally Doss<sup>1</sup><sup>1</sup>Faculty of Medicine, Cairo University, Dermatology, <sup>2</sup>Faculty of Medicine, Cairo University, Medical biochemistry

**Introduction & Objectives:** Mycosis fungoides (MF) is the most common type of primary cutaneous T-cell lymphomas (CTCL) with its aetiology not yet fully understood. Interleukin (IL)-35 is an inhibitory cytokine that belongs to the IL-12 family. High plasma levels of IL-35 and elevated expression of it in the tumor microenvironment increase tumorigenesis and indicate poor prognosis in different types of malignancies. The aim of this study is to estimate the expression levels of IL-35 in tissue and serum of MF patients versus healthy controls.

**Materials & Methods:** This case-control study included 35 patients with patch, plaque, and tumor MF as well as 30 healthy controls. Patients were fully assessed, Serum samples and lesional skin biopsies were taken prior to starting treatment. The IL-35 levels were measured in both serum and tissue biopsies by Enzyme Linked Immuno-Sorbent Assay (ELISA) technique.

**Results:** Both tissue and serum IL-35 levels were significantly higher in MF patients than in controls ( $P < 0.001$ ) and tissue IL-35 was significantly higher than serum IL-35 in MF patients ( $P < 0.001$ ). Tissue IL-35 was significantly higher in female patients and patients with recurrent MF compared to male patients and those without recurrent disease ( $P < 0.001$ ).

**Conclusion:** Both tissue and serum IL-35 levels are increased in MF. IL-35 is suggested to have a possible role in MF pathogenesis. IL-35 can be a useful diagnostic marker for MF. Tissue IL-35 can be also an indicator for disease recurrence.




**Abstract N°: 700**
**Autoimmune myositis and myocarditis associated with immune checkpoint inhibition with avelumab in Merkel cell carcinoma**

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**Introduction & Objectives:**

Immune checkpoint inhibition with avelumab (PD-L1 inhibitor) is a common therapy in advanced Merkel cell carcinoma. Common side effects include e.g. fatigue, musculoskeletal pain, diarrhea, nausea, infusion-related reactions, or rash. Additionally, related immunotherapy toxicity may affect all organ systems and can present as colitis, pneumonitis, hepatitis, myositis, or myocarditis.

We present a case of immune checkpoint inhibitor-induced myositis and myocarditis in a patient with Merkel cell carcinoma.

**Materials & Methods:**

An 82-year-old patient with stage IIIB Merkel cell carcinoma presented herself with autoimmune myositis CTCAE grade III and autoimmune myocarditis CTCAE grade III - IV after two cycles of therapy with avelumab 800 mg every 2 weeks. Initial laboratory works showed highly elevated muscle enzymes with myoglobin at 2275 µg/L, creatinine kinase at 3922 U/L, CK-MB at 248 U/L and troponin T at 757 ng/L as well as consecutively elevated transaminases with aspartate aminotransferase (AST) and alanine aminotransferase (ALT) both more than 8-fold above the upper limit of normal (ULN) due to muscle cell destruction. N-terminal prohormone of brain natriuretic peptide (NT-proBNP) appeared normal.

Diagnostic imaging showed no indication of a myocardial infarction, pulmonary embolism, pneumonia, or pneumonitis.

Clinically, the patient presented a significant muscular weakness and dyspnea resulting in almost permanent rest and persistent necessity of oxygen supply of 2 liters per minute.

**Results:**

The treatment with avelumab was stopped and we initiated high-dose intravenous systemic corticosteroids (200 mg  $\pm$  2 mg/kg prednisolone per day). The muscle enzymes and transaminases declined properly with significant improvement of the patient's muscle strength. However, the dyspnea remained. The patient's oxygen saturation decreased down to 80% without additional oxygen supply. Pulmonary function tests showed a severe restriction with impending exhaustion of the respiratory muscle pump. We transferred the patient to the respiratory care unit to intensify the non-invasive ventilation. The patient was initially supplied with continuous positive airway pressure (CPAP) therapy during the nights and later with a long-term oxygen therapy (LTOT). The prednisolone dose could be tapered over 12 weeks. The above-mentioned enzymes normalized.

**Conclusion:**

In this case we show severe adverse events related to immune checkpoint inhibition with the PD-L1 inhibitor avelumab. Those may occur in an early phase of treatment. Patients have to be monitored closely for potential

side effects and eventually treated by a interdisciplinary team.

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**Abstract N°: 711****Prevalence and severity of sleep disorders in patients with Mycosis Fungoides: A case-control study**Hamidreza Mahmoudi<sup>\*1</sup>, Maryam Daneshpazhouh<sup>1</sup><sup>1</sup>Tehran, Dermatology , Tehran, Iran**Introduction & Objectives:**

Mycosis fungoides (MF) is the most common form of cutaneous T-cell lymphoma. In this study, we investigated sleep disorders among patients with MF in light of their importance and effect on life and other mental health problems.

**Materials & Methods:**

In this case-control study, 72 patients with MF were enrolled in the case group, and 72 matched healthy individuals were enrolled in the control group. Data regarding sleep disturbances were collected and analyzed using the Pittsburgh Sleep Quality Index (PSQI) and Insomnia Severity Index (ISI) questionnaires.

**Results:**

The control and case groups had mean scores of  $6.39 \pm 4.86$  and  $16.28 \pm 6.99$  by ISI and  $5.12 \pm 2.57$  and  $10.22 \pm 3.75$  by PSQI, respectively ( $p < 0.001$ ), indicating a statistically significant difference in sleep disturbance severity between the two groups. Based on the results of two questionnaires, we found that there was a direct link between the age of patients with MF and the severity of sleep disturbances experienced by them. However, no such correlation was observed in the control group. Furthermore, the prevalence of poor sleep quality based on PSQI (score  $> 8$ ) and ISI (score  $> 10$ ) was found to be significantly higher in the patients' group ( $p < 0.001$  for each).

**Conclusion:**

Both the severity and prevalence of sleep disorders were significantly higher in the patients with MF compared to a matched healthy population. Due to the profound impact of sleep on quality of life and considering the high prevalence of sleep disorders in MF patients, evaluating a patient's sleep quality could improve their quality of life. Therefore, professional treatment can be administered if sleep disorders are observed or suspected.





## Abstract N°: 719

### Mutational profiles in melanocytic lesions provide diagnostic information

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#### Introduction & Objectives:

Diagnosis of primary melanoma can be challenging and is reliant on partly subjective clinical and histopathological evaluation. Methods based on genomics and molecular analyses are the most objective methods for evaluating the biology of melanocytic lesions and response to treatment of melanoma. Pathogenic mutations in metastatic and thick primary melanomas have been mapped extensively, and include mutations in *BRAF*, *RAS* genes, *NF1* and the *TERT* promoter. Less is known about pathogenic mutations in nevi, melanoma in situ and early invasive melanomas. In this study, based on tissue biopsies from primary nevi, melanoma in situ and early invasive melanoma, we aimed to comprehensively profile all these categories of primary melanocytic lesions

#### Materials & Methods:

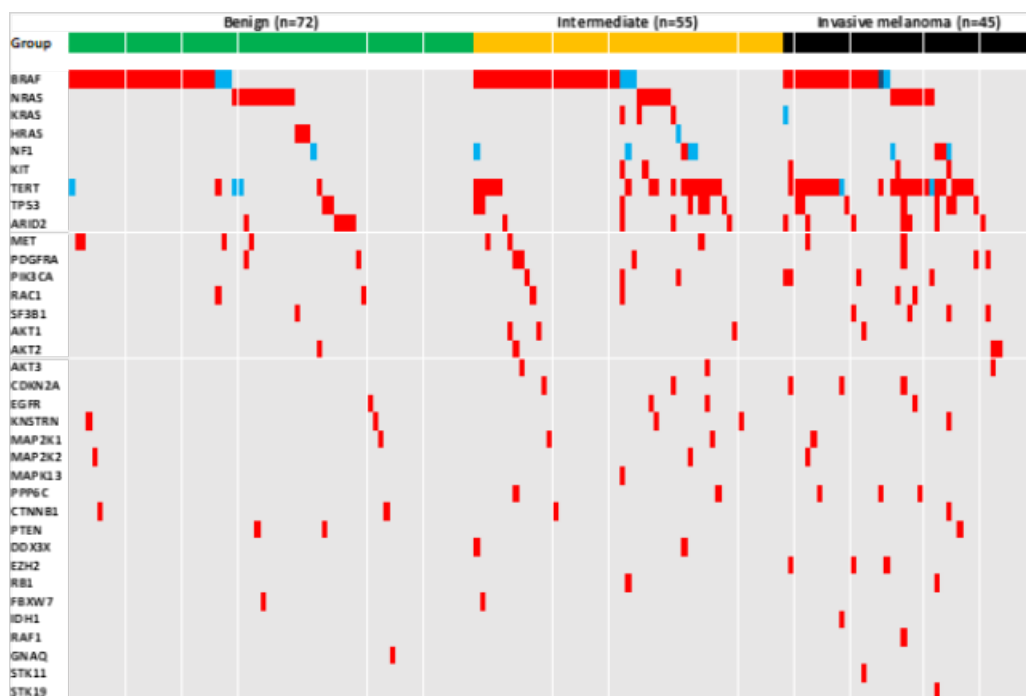
Perioperative tissue biopsies from 172 primary melanocytic lesions from patients were analysed using deep targeted sequencing with a 39-gene custom panel. The lesions were divided into benign, intermediate and invasive according to histology.

#### Results:

Of the lesions 72 were benign, 55 intermediate and 45 invasive melanomas. Average number of mutations increased with more severe diagnosis, as did *TERT* mutations. Major differences in the MAPK-pathway (*BRAF*, *RAS*, *KIT*, *NF1*) mutations were not found.

#### Conclusion:

This study revealed mutational accumulation from benign nevi to invasive melanomas that potentially can harbor diagnostic value.



**Figure 1.** Mutational profiles of melanocytic lesions grouped as benign, intermediate and invasive melanoma. Red and blue colour indicate somatic mutations, of which blue are non-hotspot mutations.





## Abstract N°: 720

### Effectiveness of photodynamic therapy for Extramammary Paget's disease: a multicenter retrospective study

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**Introduction & Objectives:** Surgical excision has long been regarded as the treatment of choice for patients with Extramammary Paget's disease (EMPD). However, alternative treatment modalities, such as photodynamic therapy (PDT), have been proposed due to the high recurrence rates and associated morbidity linked to surgical excision. While PDT has shown to be an effective treatment for EMPD, evidence supporting its use remains very limited. The aim of this study is to assess the therapeutic outcomes of PDT in EMPD.

**Materials & Methods:** Retrospective chart review of EMPD patients treated in 20 Spanish tertiary-care hospitals between 1990-2022.

**Results:** A total of 46 patients with 48 lesions of EMPD were included in the study. The most common sites of presentation were the perianal (43.5%) region and the female genitalia (41.3%). Dermal invasion was observed in 7 patients (15.2%), with 2 patients (4.3%) presenting metastatic disease. Most patients (84.6%) used 5-methyl aminolevulinate (mALA) as a photosensitizer, while 15.4% employed 5-aminolevulinic acid (5-ALA). After a median of 3 PDT sessions (range 1-16), 7 patients (14.6%) achieved a complete response (CR, no clinical and/or

histological lesions post-treatment) and 21 (45.8%) a partial response (PR,  $\geq 50\%$  of reduction in size). CR rates were higher with 5-ALA compared to mALA (37.5% vs 6.1%, respectively  $p=0.043$ ; OR 9.30,  $p=0.031$ ). A higher likelihood of achieving a  $\geq 50\%$  of clinical improvement was also observed in patients treated with 5-ALA than with mALA (87.5% vs. 54.5%, respectively,  $p=0.092$ ). Treatment response did not differ significantly by disease type (first-time [non-pretreated] vs. previously treated cases), lesion size, number of PDT sessions, presence of dermal invasion, sex, age at diagnosis, or anatomical area affected.

**Discussion:** The present investigation represents, to our knowledge, the largest cohort study of EMPD patients treated with PDT. Although most EMPD patients (60.4%) achieve significant clinical improvement after PDT, according to our results, a very low CR rate would be expected after this treatment modality. In line with our findings, previous studies have reported CR rates ranging from 9-36%. Regarding topical photosensitizers, our data support the use of 5-ALA as the most appropriate choice for EMPD patients treated with PDT.

**Conclusion:** Our study reveals that, although PDT may not represent a curative approach for EMPD, it often leads to clinical improvement through a significant reduction in tumor size. Therefore, it might be particularly useful for subjects who are poor surgical candidates, patients seeking symptomatic relief or as part of a combined treatment approach. Our data supports that 5-ALA appears to be the most effective topical photosensitizer in EMPD patients.

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**Abstract N°: 751**

**Morphological features of different forms of actinic keratosis depending on localization.**

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**Introduction & Objectives:**

Actinic keratosis is a widespread pathology, the purpose of our study was to identify certain morphological features of this pathology depending on the localization and nature of the lesion (erythematous, atrophic, hypertrophic)

**Materials & Methods:**

We monitored 95 people suffering from various forms of actinic keratosis. The average age of the patients under our observation was  $58.3 \pm 0.5$  years. 53 (55.7%) men and 42 (44.0%) women participated in the study.

**Results:**

Actinic keratosis does not equally affect different areas of the face. Thus, in women, damage to the forehead and temporal areas was observed in 18 cases (18.9%), in men in 24 cases (23.3%); localization in the area of the cheeks was observed in women in 9 cases (9.5%), in men in 12 cases (12.6%); the nose area was affected in women in 6 cases (6.3%), in men in 6 cases (6.3%); the skin of the ears was affected much less often - in 3 women (3.1%) and 4 men (4.2%). Neck skin lesions were found in 2 (2.1%) men and 1 (1.1%) woman.

Examination of samples with erythematous form of AK revealed perivascular lymphoid infiltrates with the presence of atypical pleomorphic keratinocytes with large nuclei and a small amount of cytoplasm in the basal layer of the epidermis. The detected changes indicated the active phase of the disease with the phenomena of pathological proliferation of epidermocytes and violation of their apoptosis (Fig. 1)

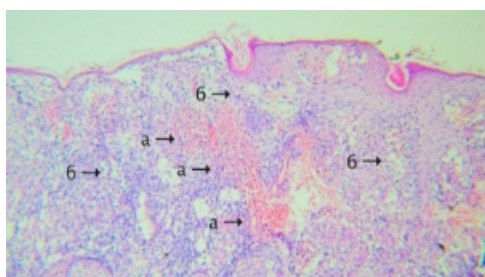


Figure 1. Erythematous form of actinic keratosis: a –accumulation of hemosiderophages; b - disorganization of cell layers with a small accumulation of cytoplasm. Staining with hematoxylin and eosin.

In the hyperkeratotic form, foci of hyperkeratosis and parakeratosis were identified, under which dysplastic changes of the epidermis in the form of disorganization of cell layers, nuclear polymorphism, and proliferation of atypical keratinocytes were noted. It depended directly on the duration of the disease and the activity of insolation (Fig. 2).

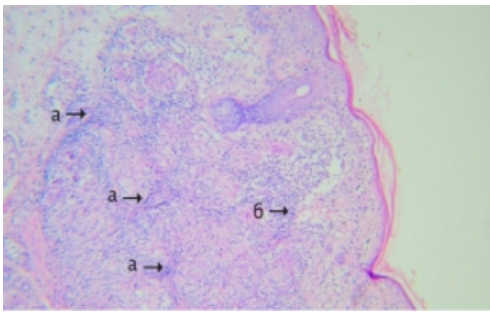


Figure 2. Hyperkeratotic form of actinic keratosis: a – perivascular lymphoid infiltration; b – proliferation of epidermocytes. Staining with hematoxylin and eosin.

In the studied materials with an atrophic form of AK, areas covered by a thinned epidermis with para- and hyperkeratosis, focal hypogranulosis, which in most areas consisted of 3-4 layers of atypical keratinocytes, were found. In the underlying dermis there were signs of solar elastosis. (Fig. 3).

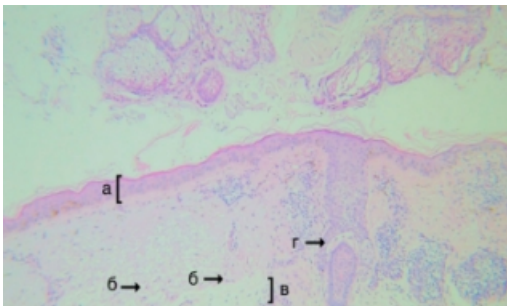


Figure 3. Atrophic form of actinic keratosis: a – a section of thickened epidermis with para- and hyperkeratosis; b – mitoses; c – solar elastosis; d – melanophages. Staining with hematoxylin and eosin.

In addition to the general morphological features of AK, some differences were also observed, depending on the form and localization of the disease. Thus, the largest number of neoplastic changes during histological examination was found in samples of hypertrophic forms of actinic keratosis localized on the forehead and dorsum of the nose - 5 cases (4.2%), in erythematous forms of AK, early signs of squamous cell carcinoma were found in 2 (2.1%) cases (localization of the cheek, back of the nose).

### Conclusion:

Thus, the most clinically unstable and active form of actinic keratosis (hypertrophic) are localized mainly on the areas of the skin most prone to radiation: forehead, dorsum of the nose. Further study of the histological features of actinic keratosis will allow more effective detection of early signs of neoplastic transformations of this pathology.





**Abstract N°: 756****Cutaneous Manifestation of Internal Malignancy**Sazia Afrin<sup>1</sup><sup>1</sup>Bangladesh Medical College Hospital, Dermatology & Venereology, Dhaka, Bangladesh**Introduction & Objectives:**

Cutaneous metastases from visceral malignancies often lack specific characteristics, presenting as various nodules ranging from flesh-coloured to pink or violaceous. Patients may remain asymptomatic despite the presence of these lesions.

This study aimed to identify different types of skin lesions associated with internal malignancies and characterise their clinical presentations in adult patients.

**Materials & Methods:**

A longitudinal study was conducted at the Dermatology Outpatient Department and Oncology Department of Bangladesh Medical College Hospital (BMCH). Patients' complete medical histories were obtained, and clinical examinations were performed. Relevant investigation reports were collected and recorded using a fixed questionnaire. Data were classified, edited, coded, and analysed using SPSS-19.

**Results:**

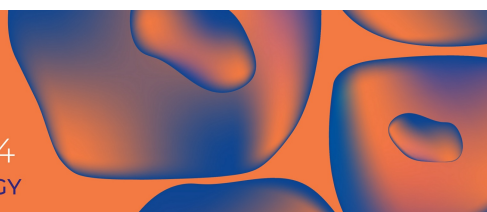
Among 30 cases, the mean age was 51.66 ( $\pm 7.68$ ) years, with the 51-60 age group comprising the majority (40%). Sixty per cent of the patients were male, with a male-to-female ratio of 1.5:1. Skin lesions were most commonly observed on the scalp (26.7%), followed by the upper extremities (20%). Lesions presented variably, with ulceration (33.3%) and scaling (26.7%) being the most prevalent. Symptoms such as itching, burning pain, wetness, and dryness showed significant improvement between the first and second visits ( $p < 0.05$ ). A history of surgery (10%), gynaecological procedures (13.3%), blood transfusion (16.67%), and skin disorders (23.3%) were noted among the patients. Smoking (53.33%) and betel leaf consumption (36.67%) were everyday habits, with a minority reporting alcohol consumption (3.33%). The most common malignancy encountered was carcinoma of the colon.

**Conclusion:**

This study reveals a diverse range of skin manifestations associated with internal malignancies, indicating significant variability among patients with different malignancies. Furthermore, observed lesions showed considerable improvement between initial and subsequent visits, emphasising the importance of continued monitoring and managing cutaneous manifestations in malignancy patients.







## **Abstract N°: 812**

### **Skin cancer brachytherapy with use of 3D printing - review.**

Piotr Sobolewski<sup>\*1</sup>, Irena Walecka<sup>1</sup>, Damian Zimon<sup>1</sup>, Półtorak Michał<sup>2</sup>, Banatkiewicz Paweł<sup>2</sup>, Półtorak Łukasz<sup>3</sup>, Szwaśc Maciej<sup>4</sup>

<sup>1</sup>Centre of Postgraduate Medical Education, Dermatology Clinic, Warsaw, Poland, <sup>2</sup>The National Institute of Medicine of the Ministry of the Interior and Administration, Centre of Radiotherapy, Warsaw, Poland, <sup>3</sup>University of Lodz, Department of Inorganic and Analytical Chemistry, Łódź, Poland, <sup>4</sup>Warsaw University of Technology, Department of Chemical and Process Engineering, Warsaw, Poland

### **Introduction & Objectives:**

Skin cancer is one of the most common types of cancer worldwide, with an ascending trend in the incidence reported every year, mainly basal cell carcinoma and squamous cell carcinoma. The treatment of this type of cancer routinely involves surgery or radiotherapy, and brachytherapy is commonly chosen in cases of skin cancer that cannot be surgically removed without serious consequences or cosmetic defects. 3D printing technology has the potential to improve the accuracy and effectiveness of skin cancer treatment by developing and creating customized applicators that precisely conform to the shape of tumor and surrounding skin.

### **Materials & Methods:**

This review paper was based on a literature survey. Publications that were examined during this work were found via a dedicated scientific web browser (PubMed, Web of Science, Scopus, and Google Scholar).

### **Results:**

Some of the advantages are intuitive, whereas others can be concluded from a literature overview as follows: 1) Possibility of developing patient-specific applicators that precisely match the shape of tumor area; 2) Reduction of the time required for applicator production, especially when custom-made devices are needed; 3) Reduction of manufacturing costs; 4) Treatment procedures improvement; 5) Improvement of safety measures accelerated by the development of smart materials (e.g., polymer

filaments with admixture of heavy elements); 6) Possibility of nearly instant adjustment into tumor treatment (applicators can be changed as the tumor is changing its shape); and 7) Applicators designed to securely fit to treatment area to hold radioactive source always in the same place for each fraction.

### **Conclusion:**

The review showed the need for a search of modern solutions in brachytherapy of skin cancer. Modern methods, such as 3D printing of the applicator based on CT scans demonstrate significant advantages over previously used applicators. Individual skin cancer applicators printed with 3D technology help to achieve accurate dose distribution and fewer air gaps between the applicator and patient surface and are an alternative to traditional applicators through fitting to each patient unique anatomy in skin cancer. That improves the accuracy and effectiveness of treatment, while minimizing damage to healthy tissue. When compared with traditional manufacturing methods, 3D printing technology allows for faster and more cost-effective production of applicators. In general, 3D printing of individual skin cancer applicators is a potential method of improving the precision and outcomes in radiation therapy. It is therefore advisable for radiotherapy centers to implement this type of solutions into clinical practice.





**Abstract N°: 813**

# **Treatment Options and Demographics of Primary Cutaneous B-Cell Lymphomas: A Real World Multicentre Study in Greece**

Vasiliki Nikolaou<sup>\*1</sup>, Ioannis-Alexios Koumprentziotis<sup>1</sup>, Stavrianna Diavati<sup>2</sup>, Evangelia Papadavid<sup>3</sup>, Aikaterini Patsatsi<sup>4</sup>, Antonios Tsimpidakis<sup>1</sup>, Sabine Kruger-Krasagakis<sup>5</sup>, Leonidas Marinos<sup>6</sup>, Stella Kalliamou<sup>1</sup>, Maria Gerochristou<sup>1</sup>, Evdokia Panou<sup>1</sup>, Kyriaki Lampadaki<sup>3</sup>, Marios Koumourtzis<sup>3</sup>, Vasiliki Papa<sup>3</sup>, Vasiliki Athanassopoulou-Lazarou<sup>3</sup>, Anthi Mpouhla<sup>3</sup>, Efrosini Kypraiou<sup>3</sup>, Vasileios Kouloulas<sup>3</sup>, Konstantinos Angelopoulos<sup>2</sup>, Alexandros MacHairas<sup>2</sup>, Theodoros P Vassilakopoulos<sup>2</sup>, Maria Arapaki<sup>2</sup>, Eliana Konstantinou<sup>2</sup>, Vasiliki Papadopoulou<sup>4</sup>, Athanasios Tsamaldoupis<sup>4</sup>, Aikaterini Doxastaki<sup>5</sup>, Elisavet Georgiou<sup>4</sup>, Triantafyllia Koletsas<sup>4</sup>, Elisabeth Lazaridou<sup>4</sup>, Alexander Stratigos<sup>1</sup>, Marina Siakantaris<sup>2</sup>, Maria Angelopoulou<sup>2</sup>

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**Introduction & Objectives:** Primary cutaneous B-cell lymphomas (PCBCL) comprise a group of B-cell derived lymphoid neoplasms with distinct classifications including primary cutaneous marginal zone lymphoma (PCMZL), primary cutaneous follicle-center lymphoma (PCFCL), and primary cutaneous diffuse large B-cell lymphoma, leg type (PCDLBCL-LT). Currently, numerous treatment options exist, yet with variable efficacy. Our study aims to present real-world insights into the diagnosis and management of PCBCL among Greek patients.

**Materials & Methods:** All patients diagnosed with PCBCL in a 10-year period at 5 referral centers for cutaneous lymphomas in Greece were retrospectively collected and analyzed.

**Results:** A total of 235 patients with PCBCLs were included (110 males), with a median age at diagnosis of 58 years (IQR 49-71). The median follow-up was 3 years (IQR 1.3-6.4). Ninety-six patients were diagnosed with PCFCL, 123 with PCMZL and 16 with PCDLBCL-LT. Head and neck involvement was detected in 90 cases (41.2%), trunk involvement in 87 (42.7 %), upper extremities in 45 (21.3 %), and lower extremities in 30 cases (14.2%). The majority (54.3%) presented with a solitary lesion. Initial treatment included surgical excision (SE) for 82, radiotherapy for 63, systemic rituximab for 30, chemotherapy for 18 and topical/intralesional corticosteroids for 17 patients. After 1st line treatment, complete response was observed in 77.3 % cases. Relapse rates were 22.6% among complete responders, with 50% occurring within one year and 75% within two years after initial treatment. The median time-to-next-treatment (TTNT) for the entire cohort was 390 days (IQR 160-770). Radiotherapy and topical/intralesional corticosteroids demonstrated longer TTNT compared to SE (445 and 429 vs 200 days). The 1-year progression-free survival (PFS) was 85.7% (95% CI: 80-89.8) and the 5-year PFS was 65% (95% CI: 57- 72). During the observation period, six disease-related deaths occurred (5 from systemic spread and 1 from chemotherapy toxicity).

**Conclusion:** This is the first study to present epidemiological insights and treatment outcomes for Greek PCBCL patients. Our findings underscore a female predominance across all PCBCL types. Radiotherapy and topical steroids emerge as superior therapeutic options compared to surgery. Nevertheless, the persistence of relapses within a relative short timeframe following initial response highlights the ongoing challenges in managing PCBCLs effectively. Further research is warranted to optimize treatment strategies and improve long-term outcomes for patients with PCBCL.

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**Abstract N°: 832****Differential Gene Expression and Signaling Pathways in Metastatic Versus Non-Metastatic Acral Melanomas in Asian Populations: A Comparative Study**Yu-Jen Chiu<sup>\*1</sup>, Jai-Sing Yang<sup>2</sup><sup>1</sup>Taipei Veterans General Hospital, Department of plastic and reconstructive surgery, Taipei City, <sup>2</sup>China Medical University Hospital, Taiwan

**Introduction & Objectives:** Metastatic melanoma presents significantly worse prognoses compared to its non-metastatic counterpart, particularly among Asian populations where melanoma, though less prevalent, tends to manifest more aggressively with poorer therapeutic outcomes. This study aims to elucidate the disparities in gene expression profiles and related signaling pathways between metastatic and non-metastatic acral melanomas in situ, thereby providing insights into the molecular underpinnings of melanoma metastasis in Asians.

**Materials & Methods:** We conducted a comprehensive analysis using 15 formalin-fixed paraffin-embedded tissue samples, including 5 with distant metastases and 10 without, employing whole transcriptome sequencing to assess gene expression variances and regulatory pathway alterations. The study also contrasts genomic characteristics between Asian and Caucasian melanomas, highlighting differences in UV signatures and tumor mutational burdens, and explores the expression of cell cycle and immunogenic genes in acral versus non-acral melanomas among Asians.

**Results:** Our findings revealed 2,576 genes significantly upregulated and 5,443 genes significantly downregulated in the tumor cells of metastatic acral melanomas compared to non-metastatic counterparts. Pathway analysis indicated heightened expression levels in MMP, NFkB, and EMT-related signaling pathways within metastatic lesions. Further comparative analyses of metastatic lymph node melanomas and primary tumors at the molecular level showcased significant disparities in gene expression, particularly noting a distinctive genomic profile in Asian melanomas characterized by lower UV signatures and tumor mutational burdens compared to Caucasians, alongside significant variances in cell cycle and immunogenic gene expressions between acral and non-acral types.

**Conclusion:** Our study sheds light on the specific transcriptomic features distinguishing metastatic from non-metastatic acral melanomas in Asians, revealing critical insights into the molecular pathways implicated in melanoma metastasis. These findings are pivotal for identifying biomarkers for metastatic melanoma in Asian populations and hold substantial implications for the development of targeted therapies, underscoring the need for further research into the genetic specificity of melanoma progression in this demographic.



**Abstract N°: 864****Cutaneous Merkel cell carcinoma (MCC): updates from AAD Annual Congress 2024.**Ettore Minutilli\*<sup>1</sup><sup>1</sup>Catholic University of Sacred Heart, Surgical Sciences, Roma

**Introduction & Objectives:** Recent scientific research concerning prognostic factors and particularly molecular biomarkers linked to its clinical behaviour confirms that cutaneous MCC can develop an aggressive course in more than 30% cases with rapid and fatal spreading. Moreover, new serologic tools such as the detection of ctDNA and particularly antibodies anti-MCPyV oncoproteins (Amerk test) are currently used to diagnose the early systemic spreading of the disease and above all to manage better the responses to the therapy. Actually, immunotherapies and particularly checkpoint inhibitors are the gold-standard for the treatment of the advanced MCC, but recent clinical trials have investigated new combinations of standard immunotherapies with vaccines or target-therapies in refractory MCC patients. This presentation focuses on the principal biomarkers to be outlined for the identification of high-risk MCC patients and their resistance to standard immunotherapies.

**Materials & Methods:** The 18th Multicenter Merkel Interest Group (MMIG) meeting during AAD Annual Congress 2024 has developed the principal topics concerning updates on MCC and particularly new treatment strategies.

**Results:** 1) Histopathological and molecular biomarkers of the primary MCC have demonstrated their prognostic role to select high-risk MCC patients because of poor response to standard immunotherapy and frequent relapses (refractory MCC). 2) Amerk test is extremely useful to diagnose early recurrences during the course of the therapy as well as it is a prognostic marker of the immune response in MCPyV-positive MCC patients. 3) The gold-standard for the treatment of advanced MCC remains the association of radiotherapy and checkpoint inhibitors (in particular, avelumab) after radical surgery of this rare skin cancer. Therapeutic responses are more frequently partial than complete after 1-2 years of standard immunotherapy with possible relapses after its cessation. In refractory MCC patients, the association of 2 different immunostimulatory drugs or possible combinations of checkpoint inhibitors and vaccines or target-therapies have been proved. 4) Several controlled studies have been made for alternative treatments with mRNA-vaccines (based on MCPyV-related LT-Ag) in comparison with target therapies (KRT-232 and others), frequently in combination with checkpoint inhibitors. Nowadays, mRNA-vaccines for MCC patients show still many disadvantages (immunogenicity and escape mechanism) in comparison with some advantages (immune cellular response) to become so rapidly the best future therapy.

**Conclusion:** Relevant scientific progresses have been made in these years for a better knowledge of this rare skin cancer, particularly concerning its histopathological diagnosis and clinical management. However, further studies are necessary to characterize better refractory MCCs and to develop alternative treatment strategies for their care.\*\*



**Abstract N°: 998****Primary Cutaneous Adenoid Cystic Carcinoma presenting as a perineal mass: A Comprehensive Case Report**Mun Leng Lee<sup>1</sup>, Puo Nen Lim<sup>2</sup>, Colin Moyes<sup>2</sup>, Catriona Harkins<sup>2</sup><sup>1</sup>Glasgow Royal Infirmary, Dermatology, Glasgow, United Kingdom, <sup>2</sup>Glasgow Royal Infirmary, United Kingdom**Introduction & Objectives:**

An 86-year-old Caucasian male was referred to Dermatology with an 18-month history of lesion on the medial left thigh. The initial referral differential diagnoses were fibroepithelial polyp or possible vascular lesion. Examination at the time of presentation revealed an 8cm firm infiltrated plaque at the groin fold extending into the perineum.

**Materials & Methods:**

Biopsy revealed dermal infiltrates of well-differentiated glandular and tubular structures. Glandular areas demonstrated cribriform patterns with cysts containing alcian blue positive mucin material. While mitotic activity was present, Ki67 was relatively low. Adenoid cystic carcinoma features, including eosinophilic hyaline membranes lining pseudolumina and PAS stain highlighting the basement membrane, were evident. Notably, sporadic tubules were observed near the epidermis, but there was no apparent epidermal origin or dysplasia in this case. Positive markers included CK7, CAM 5.2, CD117, CEA (luminal material), SOX10, p63, p40, and SMA

CT scan of the head/ neck/ chest/ abdomen and pelvis revealed no evidence of metastasis or other primary origin. MRI showed extensive soft tissue involvement in the left proximal thigh, left gluteal cleft, and perineum. The lesion measured approximately 11cm in diameter, 2cm in depth, with a length of about 5.5 cm. No deep musculature invasion was observed. Surgical removal of the lesion is the planned treatment strategy.

**Results:**

Primary Cutaneous Adenoid Cystic Carcinoma (PCACC) is a rare skin cancer originating from sweat glands, appearing as a solitary nodule, typically affecting middle-aged to elderly individuals. Adenoid cystic carcinoma (ACC) are slow-growing indolent tumours which have a propensity for local recurrence and late distant metastases. These are typically found in salivary glands, but can manifest in other gland-bearing organs such as breast, cervix as well as upper and lower respiratory tracts. ACC is composed of basaloid and myoepithelial cells arranged in three primary architectural patterns: cribriform, solid, and tubular. Solid pattern is associated with increased local recurrence, high metastatic rate, and higher mortality. Guidelines for treatment remain unclear, with the current recommendation supporting a 2cm wide local surgical excision and potential adjuvant radiation therapy.

**Conclusion:**

This case report highlights a rare occurrence of PCACC in the perineum. Given its rare entity, PCACC may be mistaken for benign processes such as lipoma or fibroepithelial polyp. This case report emphasises the importance of expert histopathological evaluation and diagnostic modalities to distinguish PCACC from salivary gland-originating ACC. This distinction significantly influences prognosis and guides the management approach.





**Abstract N°: 1002****Primary Cutaneous Adenoid Cystic Carcinoma Presenting as a Perineal Mass: A Comprehensive Case Report**Mun Leng Lee<sup>1</sup>, Puo Nen Lim<sup>1</sup>, Colin Moyes<sup>1</sup>, Catriona Harkins<sup>1</sup><sup>1</sup>Glasgow Royal Infirmary, United Kingdom**Introduction & Objectives:**

An 86-year-old Caucasian male was referred to Dermatology with an 18-month history of lesion on the medial left thigh. The initial referral differential diagnoses were fibroepithelial polyp or possible vascular lesion. Examination at the time of presentation revealed an 8cm firm infiltrated plaque at the groin fold extending into the perineum.

**Materials & Methods:**

Biopsy revealed dermal infiltrates of well-differentiated glandular and tubular structures. Glandular areas demonstrated cribriform patterns with cysts containing alcian blue positive mucin material. While mitotic activity was present, Ki67 was relatively low. Adenoid cystic carcinoma features, including eosinophilic hyaline membranes lining pseudolumina and PAS stain highlighting the basement membrane, were evident. Notably, sporadic tubules were observed near the epidermis, but there was no apparent epidermal origin or dysplasia in this case. Positive markers included CK7, CAM 5.2, CD117, CEA (luminal material), SOX10, p63, p40, and SMA

CT scan of the head/ neck/ chest/ abdomen and pelvis revealed no evidence of metastasis or other primary origin. MRI showed extensive soft tissue involvement in the left proximal thigh, left gluteal cleft, and perineum. The lesion measured approximately 11cm in diameter, 2cm in depth, with a length of about 5.5 cm. No deep musculature invasion was observed. Surgical removal of the lesion is the planned treatment strategy.

**Results:**

Primary Cutaneous Adenoid Cystic Carcinoma (PCACC) is a rare skin cancer originating from sweat glands, appearing as a solitary nodule, typically affecting middle-aged to elderly individuals. Adenoid cystic carcinoma (ACC) are slow-growing indolent tumours which have a propensity for local recurrence and late distant metastases. These are typically found in salivary glands, but can manifest in other gland-bearing organs such as breast, cervix as well as upper and lower respiratory tracts. ACC is composed of basaloid and myoepithelial cells arranged in three primary architectural patterns: cribriform, solid, and tubular. Solid pattern is associated with increased local recurrence, high metastatic rate, and higher mortality. Guidelines for treatment remain unclear, with the current recommendation supporting a 2cm wide local surgical excision and potential adjuvant radiation therapy.

**Conclusion:**

This case report highlights a rare occurrence of PCACC in the perineum. Given its rare entity, PCACC may be mistaken for benign processes such as lipoma or fibroepithelial polyp. This case report emphasises the importance of expert histopathological evaluation and diagnostic modalities to distinguish PCACC from salivary gland-originating ACC. This distinction significantly influences prognosis and guides the management approach.







**Abstract N°: 1103**

**Comprehensive Analysis of Cutaneous Plasmacytomas: a Case Series**

Mariana Dultra<sup>\*1</sup>, Denis Ricardo Miyashiro<sup>1</sup>, Jade Cury Martins<sup>1</sup>, Bruno Souza<sup>1</sup>, Gracia Martinez<sup>1</sup>, José Antonio Sanches<sup>1</sup>

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**Introduction & Objectives:**

Plasmacytomas are tumors derived from plasma cells morphologically identical to those seen in multiple myeloma. They may affect bone or soft tissues, the latter being called extramedullary plasmacytomas. Extramedullary plasmacytomas are classified as primary, with no primary medullary or extramedullary plasma cell disease at diagnosis, or secondary, when plasma cell malignancy is detected in other sites. Notably, cutaneous plasmacytomas are rare, with primary cases being even more exceptional.

**Materials & Methods:**

A retrospective analysis of medical records, laboratory, histopathology, treatment, and follow-up data were collected from patients with diagnosis of cutaneous plasmacytomas.

**Results:**

Between 2014 and 2023, six patients were diagnosed with cutaneous plasmacytomas, four females and two males. Median age at diagnosis was 51,3 years (range 44.2–68.6 years). Five patients presented secondary plasmacytomas (four had multiple myeloma; one had plasma cell leukemia), while one had a primary cutaneous plasmacytoma, as shown in Figure 1.

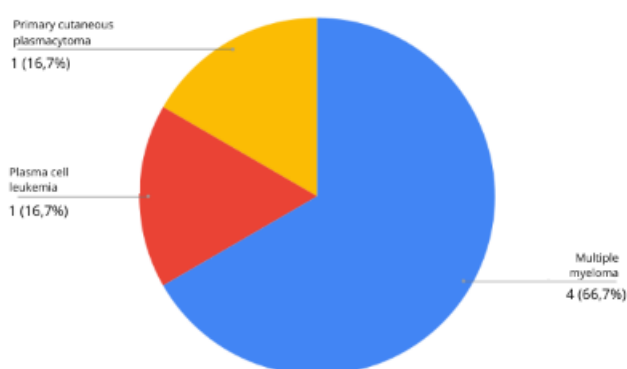


Figure 1. Cutaneous Plasmacytoma Causes

Histopathology revealed a dense dermal infiltration of plasma cells, with consistent CD138 positivity and CD20 negativity across all samples.

Chemotherapy was the most prevalent treatment option, used in five patients (83,3%). Treatment regimens varied, but most included cyclophosphamide, dexamethasone, and thalidomide. Radiotherapy was used in three patients (50%), either as monotherapy or combined with chemotherapy, vemurafenib or bone marrow transplantation. Surgical excision was used in one case of primary cutaneous plasmacytoma.

The observed mortality rate was 50%. Median overall survival (OS) was 26.6 months, and median OS after

appearance of skin lesions was 11.0 months. The patient with primary cutaneous plasmacytoma is alive with complete remission after a follow-up period of 9.5 years.

### **Conclusion:**

In this study, most patients with cutaneous plasmacytomas had multiple myeloma, underscoring the notion that these tumors often occur as part of a broader systemic disease.

Histology and immunohistochemistry provide a solid foundation for the diagnosis of cutaneous plasmacytomas. Expression of CD138 and absence of CD20 in tumor cells are distinctive markers that help differentiate plasmacytomas from other B-cell neoplasms.

Chemotherapy is the cornerstone in controlling systemic disease. Notably, one case featuring exclusive cutaneous involvement, surgical excision was performed. This patient is still in remission after a long follow-up period. This is in accordance with the literature, where survival rates of primary extramedullary plasmacytoma involving skin and lymph nodes are reported to be significantly higher.

Median OS for patients with multiple myeloma is 7.5 years. In our study, survival outcomes for patients with multiple myeloma and cutaneous plasmacytomas were significantly worse (median OS 26.6 months).

The observed 50% mortality rate highlights the poor prognosis for patients with cutaneous plasmacytomas, aligning with studies that document similarly challenging survival outcomes. In one such study, among eight patients followed for an average of 42 months, only one patient lived beyond 156 months. The rest died within 1 week to 10 months (average of 6 months) after the appearance of skin lesions. It underscores the unfavorable prognosis associated with cutaneous plasmacytomas and the urgent need to develop more effective therapeutic strategies.

**Abstract N°: 1107****Leukaemia cutis revealing acute T-cell lymphoblastic leukemia**

Sara Nejari<sup>1</sup>, Madiha Jazouly<sup>1</sup>, Inas Chikhaoui<sup>1</sup>, Nouama Bouanani<sup>1</sup>, Soumia Chiheb<sup>2</sup>

<sup>1</sup>Cheikh Khalifa Bin Zayed Al Nahyan Hospital, dermatology, Morocco, <sup>2</sup>University Hospital Center Ibn Rochd - Casablanca

**Introduction & Objectives:**

Leukaemia cutis\*\* correspond to a specific cutaneous blast infiltration .

We report the observation of an unusual skin rash revealing a rare hemopathy.

**Materials & Methods:**

Mr M.S, aged 65, with no previous medical history, was admitted to the hematology department for a complete bone marrow failure syndrome, associated with, painless, non-pruritic, infiltrated, purplish nodular lesions of the face and scalp.

On clinical examination, similar lesions were found on the trunk, on a purpuric erythemato-purple base.

Examination of the oral mucosa revealed gingival hypertrophy.

Examination of the lymph nodes revealed bilateral adenopathies in the right supraclavicular, retroauricular and inguinal areas.

A skin biopsy revealed a cutaneous localization of T-phenotype acute lymphoblastic leukemia, indicative of leukaemia cutis, confirmed by immunophenotyping on myelogram, which revealed a rich marrow invaded by 94% agranulocytic blasts.

The patient was put on a chemotherapy protocol.

**Results:**

Skin manifestations of leukemia vary widely, and include non-specific cutaneous reactions, most often in the form of hemorrhagic papulo-nodules, particularly in the context of thrombocytopenia, and specific lesions, such as leukaemia cutis, which presents as reddish-brown to purplish papules, plaques or indurated dermal nodules.

Other rare clinical presentations include bullae, ulcerations and erythroderma resulting from diffuse infiltration of the epidermis.

**Conclusion:**

The particularity of this case is the unusual skin involvement, which led to the diagnosis and management of this rare hemopathy.





## Abstract N°: 1139

### Decreased skin barrier function, increased bacterial colonization, and inflammation correlate with progression of Mycosis Fungoides and Sézary Syndrome

Elise Beljaards<sup>1, 2</sup>, Catherine Mergen<sup>1, 2, 3</sup>, Selinde Wind<sup>1, 2</sup>, Rianne Rijneveld<sup>2</sup>, Deepak Balak<sup>1</sup>, Lisa Bruijninx<sup>2</sup>, Marieke de Kam<sup>2</sup>, Koen Quint<sup>1</sup>, Jacobus Bosch<sup>2, 4</sup>, Maarten Vermeer<sup>1</sup>, Robert Rissmann<sup>1, 2, 3</sup>

<sup>1</sup>Leiden University Medical Centre, Department of Dermatology, Leiden, Netherlands, <sup>2</sup>Centre for Human Drug Research, Department of Dermatology, Leiden, Netherlands, <sup>3</sup>Leiden Academic Centre for Drug Research, Department of Dermatology, Leiden, Netherlands, <sup>4</sup>Leiden University Medical Centre, Oncology, Leiden, Netherlands

#### Introduction & Objectives:

The main subtypes of cutaneous T-cell lymphomas (CTCLs) include mycosis fungoides (MF), which is characterized by epidermotropism of malignant T cells and presents as patches, plaques, or tumors on the skin, and Sézary Syndrome (SS), which is characterized by malignant T cells in the skin and blood, and manifests as erythroderma. Previous studies reported impaired skin barrier function and increased bacterial colonization in lesional skin of MF and SS patients. However, these studies were mainly performed in small study cohorts, often limited to early stage MF and frequently focused solely on investigating the presence of *Staphylococcus aureus* (*S. aureus*). Correlations of TEWL with bacterial colonization and inflammation have not been performed till now. In the present study, we conducted a comprehensive analysis of skin barrier function, bacterial colonization, and erythema (used as a proxy for inflammation) in a large cohort of CTCL patients, encompassing all stages of MF and SS.

#### Materials & Methods:

In this prospective, observational, cross-sectional, real world study, 35 patients with MF and 8 patients with SS were included. The MF group comprised 16 patients with patches, 12 with plaques, and 7 with non-ulcerative tumors. Patients who used antibiotic treatment were excluded. To assess skin barrier function, transepidermal water loss (TEWL) was evaluated in both lesional and non-lesional skin using the GPSkin Barrier Pro-1. Swabs were taken with nylon flocked swabs from the left nostril, lesional, and non-lesional skin, followed by the evaluation of bacterial colonization through culturing and sequencing. Erythema was assessed using Multispectral Imaging (MSI) and clinical scores.

#### Results:

In all stages of CTCL, TEWL was significantly increased in lesional skin compared to non-lesional skin ( $p < 0.001$ ). In MF, TEWL increased significantly from 17.2 in patches to 34.4 in plaques to 47.2 in tumors ( $p < 0.001$ ). Increased TEWL was closely correlated with increased erythema in all stages of CTCL ( $p < 0.001$ ). Bacterial colonization was increased in lesional skin compared to non-lesional skin. In MF, bacterial colonization increased with progression of disease and was predominantly observed in the tumor stage (*S. aureus* frequency in lesional skin 43%). Subtyping of bacterial strains is ongoing and will be presented at the conference.

#### Conclusion:

The present study shows that decreased barrier function, increased bacterial colonization and enhanced inflammation are observed in lesional versus non-lesional skin, and increase with progression of the disease stage. These observations are in line with previous studies suggesting bacterial colonization as a factor in the progression of CTCL and as target for therapeutic intervention. Further investigation, including ongoing bacterial sequencing,

will provide deeper insights into the microbiome composition and its role in the pathogenesis of MF and SS.

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## Abstract N°: 1143

### Dermoscopy of skin metastases in advanced systemic (visceral, hematologic) and cutaneous cancer.

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<sup>1</sup>Carol Davila University of Medicine and Pharmacy, Ist Clinic of Dermatology Colentina Clinical Hospital, Romania,

<sup>2</sup>Faculty of Mathematics and Computer Science, Mathematics, Bucharest, Romania, <sup>3</sup>Carol Davila University of

Medicine and Pharmacy, Dermatology, Bucharest, Romania, <sup>4</sup>Carol Davila University of Medicine and Pharmacy,

Pathology, Bucharest, Romania, <sup>5</sup>Carol Davila University of Medicine and Pharmacy, Oncology, Bucharest, Romania

### Introduction & Objectives:

Skin metastases are present in up to 10% of cancer patients. Dermoscopy is an easy-to-use non-invasive diagnostic tool, but standardized criteria for the recognition of skin metastases are still lacking.

### Materials & Methods:

We conducted a retrospective study on high quality dermoscopy images of 715 skin metastases from 33 patients with different types of primary cancers (breast, ovary, melanoma, non-melanoma skin cancer, chronic leukemia), recruited between 2013-2023. All primary and secondary cancers were biopsied (in cases of multiple clinically similar lesions on the same patient only one lesion was biopsied). Four independent observers (3 experts and one beginner) analyzed 32 parameters for each metastasis, with high interobserver agreement: patterns, colors, vessels, structures.

### Results:

A structureless pattern was the dominant feature for skin metastases (95.8%), for all types of primary cancers. A correlation between type of primary cancer and dermoscopy pattern of skin metastases ( $P < 0.001$ ) was found. Besides the main structureless pattern, breast cancer metastases showed a blue nevus pattern (22,22%), as well as a heterogeneous pattern (10,12%), while melanoma metastases showed more frequently a blue nevus pattern (61,38%) and a nevus-like pattern (11,11%). Non-melanoma skin cancer metastases showed a vascular pattern (42,11%) and an angioma-like pattern (31,58%).

The type of cancer correlated with the color of metastases ( $P < 0.001$ ). White was the main color for all types of metastases (84.20%). Additionally, breast cancer metastases were characterized by blue (41,48%) and red (34,32%), while melanoma metastases were strongly defined by blue (85,71%). Non-melanoma skin cancer metastases showed most frequently pink (57,89%) and red (57,89%), while the ovarian metastases had tan color (100%) plus pink (42,86%) and red (42,86%).

Moreover, a correlation between vessels and type of cancer ( $P < 0.001$ ) was also identified. Breast cancer metastases showed irregular vessels (13,58%), melanoma metastases presented both dotted (17,46%) and irregular (9,52%) vessels, while non-melanoma skin cancer metastases were characterized by various vessel types (irregular 57,89%, thin hairpin 47,37%, comma 47,37%, thick hairpin 26,32%).

The elementary lesions (dots, globules, lines, streaks, lacunae) did not vary significantly among different types of skin metastases.

### Conclusion:

Our study showed key dermoscopy features in skin metastases. Structureless white pattern should raise suspicion of skin metastases and prompt further investigations. Significant differences exist between breast cancer, melanoma and non-melanoma skin cancer metastases. This paper is the first extensive approach of systemic and cutaneous advanced cancer, in terms of dermoscopy analysis of skin metastasis. A first glance approach of structure and color patterns can be an effective tool for non-invasive diagnosis, easy to perform, in any practice.

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**Abstract N°: 1164**

**Mucinous Carcinoma of the Skin in the Male Mammary Region**

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**Mucinous Carcinoma of the Skin in the Male Mammary Region**

**Introduction & Objectives:** Primary cutaneous mucinous carcinoma is an extremely rare, slow-growing cancer that produces mucin, mainly originated from the epithelial glandular structures of eccrine glands<sup>1</sup>.

Most medical literature on this topic has been limited to case reports and case series due to its low prevalence in the population<sup>2</sup>.

**Materials & Methods:** A 47-year-old male presents with a dermatosis localized on the trunk, specifically affecting the anterior chest at the level of the right mammary areola. It is characterized by a 2x1cm neoformation with regular, well-defined borders, a smooth and translucent surface, and has been evolving over a period of 2 years without causing any symptoms.

The patient has type 2 diabetes, controlled with empagliflozin and metformin, and is currently stable.

**Results:** An excisional biopsy was performed, revealing the dermis with a malignant neoplastic lesion characterized by small infiltrative nests and islets of epithelial cells showing mild atypia, with hyperchromatic or open chromatin nuclei and nucleoli, and scant cytoplasm. These cellular groups are surrounded by abundant mucin, which forms large clusters, confirming the diagnosis of well-differentiated invasive mucinous carcinoma. A thoraco-abdomino-pelvic computed tomography scan showed no activity at any other level. Subsequently, the patient underwent margin enlargement, during which no tumor activity was found.

**Conclusión:** Although rare, primary cutaneous mucinous carcinoma mainly occurs in the head and neck region, with the eyelid being the most affected area<sup>3</sup>. These tumors are characterized by being nodular, asymptomatic, painless, and pigmented<sup>1</sup>. Diagnosis is confirmed through biopsy and histopathological examination, where nests of tumor cells separated by areas of mucin through fibrocollagenous septa are observed<sup>3</sup>.

The differential diagnosis includes various cutaneous and neoplastic conditions, underscoring the importance of careful evaluation and histological confirmation. Although evidence-based treatment guidelines are lacking, surgical excision with a margin of at least 10 mm is recommended<sup>3</sup>. It is considered a low-grade tumor but with significant rates of local recurrence and regional and distant metastasis<sup>2</sup>.

Long-term follow-up is crucial for detecting any recurrence or tumor progression. Regular follow-up every 3 to 6 months during the first years after diagnosis is confirmed, with less frequent follow-up in subsequent years<sup>2</sup>.

This case highlights the importance of considering primary cutaneous mucinous carcinoma in the differential diagnosis of cutaneous lesions, especially in atypical areas such as the breast, where it may mimic breast metastasis or other malignancies. Although cases are rare and evidence is limited, proper understanding and management of this disease can improve outcomes for patients.

1.- Alnehlou, F. *et al.* (2024). Primary cutaneous mucinous carcinoma of the scalp masquerading as a benign dermatological mass – a case report, *International Journal of Surgery Case Reports* 114, p. 109175.



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3.- Abiola OO, Ano-Edward GH, Oluwumi OA, Lasisi ME. Primary cutaneous mucinous carcinoma of the scrotum: A rare tumor at a rare site – A case report and review of literature. *Urol Ann* 2020;12:83-6.

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**Abstract N°: 1193**

**Unusual aspect of mycosis fungoides: a lepromatous-like form**

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**Introduction & Objectives:**

Cutaneous lymphomas are incipient lymphomas that predominate in the skin, and represent the second most common site of extra-nodal lymphoma after digestive lymphoma. Cutaneous lymphomas form a heterogeneous group with very different clinical, histological and immunohistological pictures. Mycosis fungoides, the most common, accounts for around 50% of cutaneous T-cell lymphomas. It has an indolent, multi-stage course, with highly polymorphic clinical features, making diagnosis difficult but aided by immunophenotyping.

**Materials & Methods:**

We identified 30 cases over a 14-year period (2009- 2023), 20 men and 10 women, with an average age of 54. We present an unusual form of erythrodermic MF on pigmented skin in a pseudoleprosy form.

MF is the most common cutaneous lymphoma.

Numerous clinical variants are found, with a classic MF appearance similar to that observed in white skin (infiltrated plaques simulating chronic eczema, possibly preceded by large-plate parapsoriasis lesions); nodular aspects are also possible.

As in our patient, erythrodermic MF is the most frequent clinical presentation, with possible cutaneous infiltration giving a pseudolepromatous appearance (also reported in a Malian study). Erythrodermic MF mainly affects adults aged between 40 and 60, with a median age of 50 and a slight male predominance.

**Results:**

Clinically, it presents as a dry, desquamative erythroderma with occasional intervals of healthy skin, highly pruritic and finely scaly, associated with pachyderma, exaggerated skin squaring and a leonine appearance of the face. Pathological examination of erythrodermic MF reveals a subepidermal and epidermotropic infiltrate consisting mainly of CD 4+ T lymphocytes.

The infiltrate is often lichenoid in appearance, with Pautrier micro-abscesses occasionally observed. Immunologically, the tumor infiltrate phenotype is most often CD 3+, CD45RO+, CD1- and CD30-.

Genotypic analysis may reveal a cutaneous T clone.

Clinical differential diagnoses include psoriasis, lichen planus, drug-induced pseudomycosis fungoides, and Sézary syndrome, whose anatomopathological appearance is similar to that of erythrodermic MF.

This syndrome was ruled out in our case on the absence of ectropion, alopecia, onychodystrophy, and above all on the absence of circulating Sezary cells in the blood.

The diagnosis of leprosy is ruled out by the absence of hypochromia and coppery appearance of the skin, as well as by histological and immunophenotyping data.

Lesions evolve indolently over several years, with a prognosis that depends on: the age of onset of erythroderma before 65 years of age a delay of more than 10 years before diagnosis, which is associated with a favorable prognosis of the disease.

**Conclusion:**

Erythrodermic MF is the most common clinical presentation of mycosis fungoides on pigmented skin; however, it can lead to confusion with other pathologies, notably leprosy, which is endemic in Africa, hence the importance of anatomopathological and immunological studies for early diagnosis and better management.

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**Abstract N°: 1222****Basosquamous cell carcinoma with local recurrence and pulmonary metastases treated with surgery, radiation therapy and vismodegib**

Elena De Jesús García Verdú<sup>1</sup>, Elena Lucia Pinto Pulido<sup>1</sup>, Paola Merlo Gómez<sup>1</sup>, Laura Martínez Alcalde<sup>1</sup>, Susana Medina<sup>1</sup>, Isabel Polo Rodríguez<sup>1</sup>

<sup>1</sup>Hospital Universitario Príncipe de Asturias, Dermatology, Alcalá de Henares

**Introduction & Objectives:**

Basosquamous cell carcinoma is a rare variant of basal cell carcinoma with areas of squamous differentiation characterized by aggressive local growth (local recurrence of 4.5%) and metastatic potential (rate of 5-8.4% compared to less than 0.1% for conventional basal cell carcinoma).

**Clinical case presentation:**

A 71-year-old man received treatment with surgery and subsequent radiation therapy in the left forearm 4 years ago for the treatment of an ulcerated basal cell carcinoma of adenoid and infiltrative pattern with areas of squamous differentiation and poor prognosis data (subcutaneous and perineural cell tissue involvement) without nodal involvement. He consulted for cutaneous retraction in the inner arm with ipsilateral elbow and forearm dysesthesias. Upon physical examination, a retracted erythematous skin cord was observed in the middle third of the inner side of the left arm, up to 4 cm above the retracted area. There were no adenopathies. A biopsy was performed showing infiltration by basal cell carcinoma with foci of keratinization. In the extension study, there were foci of tumour involvement in the right upper lung lobe that, after lobectomy, showed a carcinoma arranged in solid nests with peripheral palisade and basaloid cells with adenoid-pattern areas and keratinization zones; immunohistochemistry established the basal cell carcinoma metastasis diagnosis. After the tumour commission evaluation, it was decided to start treatment with Vismodegib 150 mg/day and undergo Traumatology surgery.

**Discussion:**

Metastatic basosquamous carcinoma is a therapeutic challenge for which several alternatives are available, such as surgery, radiation therapy, chemotherapy, Hedgehog pathway inhibitors and anti-receptor antibodies for programmed cell death. However, given the good efficacy and safety results in metastatic basal cell carcinoma of Vismodegib, its use as a first line seems feasible.

**Conclusion:**

We present a case of metastatic basosquamous carcinoma that has required a multidisciplinary approach combining surgery, radiation therapy and Vismodegib.





## Abstract N°: 1237

### Oncolytic Viral Therapy for Non Melanoma Skin Cancers – A Systematic Review

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#### Introduction & Objectives:

Non-melanoma skin cancers (NMSCs) are among the most common malignancies globally. While most NMSCs are curable, advanced NMSCs not amenable to resection or radiotherapy often carry a poor prognosis. Current systemic therapies are limited by toxicities and inability to maintain lasting effects, highlighting the pressing need for more targeted and effective therapies. In recent years, oncolytic viruses (OVs) have garnered increasing interest as anticancer immunotherapies, in view of their potential to selectively attack and destroy tumour cells, and stimulate anti-tumour immunity. However, little is known about its use in NMSC treatment. We conducted a systematic review to evaluate the role of OVs in the treatment of NMSCs.

#### Materials & Methods:

The review was conducted in accordance with PRISMA guidelines and registered in PROSPERO (CRD42024526854). PubMed, Embase, Scopus, Web of Science and ClinicalTrials.gov were searched from inception until March 2024. Clinical trials (including unpublished trials), non-randomized studies, case series and reports were included. Data on published and unpublished studies were collated separately and synthesized for our narrative review, with quantitative data analysed accordingly.

#### Results:

Our search identified 11 published studies comprising 8 case reports/case series and 3 clinical trials, involving a total of 20 patients with NMSC (cutaneous squamous cell carcinoma (SCC) n=3, Merkel cell carcinoma (MCC) n=7, cutaneous T cell lymphoma (CTCL) n=9, basal cell carcinoma (BCC) n=1). Of the identified studies, OVs used include Talimogene laherparepvec (T-VEC) (73%, n=8), measles virus (9%, n=1), vesicular stomatitis virus (9%, n=1), and adenovirus (9%, n=1). Complete response occurred in 67% (n=2) of SCC cases and 85% (n=6) of MCC cases, while stable disease was reported in the single BCC case. Less favourable responses were reported in CTCL, with only 1 case (11%) displaying complete response. Overall, common adverse events reported included fatigue, fever, nausea, injection site reactions, flu-like symptoms, and chills.

In addition, 14 ongoing or unpublished phase 1 or 2 clinical trials were identified. They had significantly heterogeneous study designs investigating various regimes, including OV monotherapy (43%, n=6), combination therapy with existing immunotherapy (21%, n=3), and comparing OV combination versus monotherapy (29%, n=4) or versus immune checkpoint inhibitor alone (7%, n=1). OVs from the herpes simplex virus family were the most studied (50%, n=7).

#### Conclusion:

Oncolytic viruses offer immense promise as an emerging anticancer therapy. However, existing studies are notably heterogeneous in the design, study population and response assessment, limiting generalizability. Robust evidence from phase 3 clinical trials demonstrating safety and efficacy of OVs is also lacking at present. Further studies will reveal the potential role of OVs in shaping the future of NMSC treatment.



**Abstract N°: 1267****Photodynamic treatment of BCC using red light immediately followed by intense pulsed light delivered with mechanical pressure.**Robert Stephens<sup>1</sup><sup>1</sup>North West Sydney Dermatology, Rouse Hill, Australia**Introduction & Objectives:**

We propose that haemoglobin (Hb) may be acting as a competing chromophore during photodynamic treatment of basal cell carcinoma. Hyperaemia occurs during conventional red-light activation and there is also conversion of oxy-Hb to deoxy-Hb. Notably, deoxy-Hb is a much stronger absorber of 630nm light compared to oxy-Hb.

In our experience, flushing is more often observed at facial locations which may explain poorer treatment outcomes at facial sites. Removing haemoglobin should increase scattering and recycling of light from dermal collagen in the tumour surrounds. This should increase the delivery of photons to tumour cells. Scattered light, being multidirectional, may also be of 'higher quality' for photodynamic activation as it may overcome shadows created by small opacities in the tumour microenvironment.

Removing blood will also facilitate penetration and scattering of stronger photodynamic activating wavelengths in the green-yellow-orange-red spectrum of the IPL emission. In particular, the green to yellow spectrum is strongly absorbed by oxy-Hb and deoxy-Hb.

We postulate that heat generated during red light activation leads to dissociation of oxygen from Hb so that oxygen shortfall should not be an issue for higher fluence IPL activation.

We also propose that the peripheral cells of tumour nodules, being germ-line cells are of utmost importance for photodynamic targeting. These cells are situated in closest proximity to blood vessels hence reinforcing the value of removing blood.

**Materials & Methods:** This is a retrospective observational study of BCCs treated consecutively at our clinic\*\* using a protocol\*\* where activation was performed using red light immediately followed by IPL delivered with enough mechanical pressure to remove blood.

**Results:** In our series of 36 tumours of which most lesions were nodular and most were located on the face, there have been 2 recurrences at a mean 24-month follow-up.

We have used optical coherence tomography to verify clearance of most tumours.

**Conclusion:**

A modified activation protocol consisting of red light followed by IPL delivered with mechanical pressure to remove blood enhances photodynamic treatment efficacy of BCCs.



**Abstract N°: 1280**

**Pigmented skin metastasis mimicking a melanoma revealing a breast cancer**

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<sup>1</sup>Mohemed VI university hospital, dermatology and venerology, marrakech, Morocco

**Introduction & Objectives:**

Cutaneous metastases of breast cancer can take on different clinical and histopathological aspects, sometimes constituting a diagnostic challenge.

Pigmented cutaneous metastasis of breast cancer is a rare cutaneous manifestation of an underlying mammary carcinoma that can be confused clinically, dermoscopically, and histologically with a primary cutaneous melanoma.

We report a case of extensive pigmented cutaneous metastasis revealing a breast cancer.

**Materials & Methods:**

A 50-year-old female with no significant medical history was admitted to the cardiovascular surgery department for management of a large pericardial effusion of unknown etiology.

The clinical examination of the patient revealed the presence of a pigmented, heterogeneous and extensive plaque covering her breasts with areas of healthy skin, resting on a sclerotic skin extending to the right axillary cavity and the right arm. The presence of meliceric crusts in the peri-areolar area was noted.

Dermoscopy showed features suggestive of cutaneous melanoma, including heterogeneous pigmentation with blurred borders, a blue-gray veil, pepper-like granularity, areas of regression, and some polymorphic vessels.

A skin biopsy with histopathological examination revealed giant carcinoma cells suggestive of metastasis from lobular breast carcinoma, which was confirmed by immunohistochemical analysis. Mammography was performed, and the patient was referred to gynecologists for further management.

**Results:**

Pigmented cutaneous metastases of breast cancer are uncommon. The first description was reported by Azzopardi and Eusebi in 1977. Subsequent publications have described cases of pigmented cutaneous metastases from a primary breast tumor mimicking melanoma.

There is limited literature on the dermoscopic features of cutaneous metastases, especially pigmented ones, which remain one of the rarest forms.

Recently, hypopigmentation, peripheral pigmentation, small globules, and a bluish tint mimicking a blue-gray veil have been reported as dermoscopic signs in pigmented breast metastases. Our patient exhibited all these dermoscopic signs.

In rare cases of pigmented metastases from breast cancer, melanoma should always be considered as a differential diagnosis. Clinically, melanomas are usually raised compared to the skin surface, while pigmented metastases are aligned with the skin level. However, the diagnosis should always be confirmed by histopathological examination and immunohistochemical analysis.



The pigmented nature of the metastasis can be explained by various hypotheses, including melanin release by the epidermis following tumor invasion and phagocytosis by melanophages.

In our case, the pigmented presentation in a patient with no previous medical history raised clinical suspicion for a breast cancer, which was confirmed by histopathological examination, allowing the targeted search for the primary tumor and appropriate management despite the poor prognosis associated with late tumor diagnosis.

### **Conclusion:**

The presence of skin metastasis is generally associated with an advanced stage of the disease indicating a poor prognosis. The role of the dermatologist is to early recognize a skin metastasis which can be the first sign revealing the tumor or its recurrence leading to the acceleration of the treatment.

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**Abstract N°: 1306****Sebaceous carcinoma: clinical and demographic profile of patients in a university hospital in Brazil**

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<sup>1</sup>Hospital das Clínicas of the University of São Paulo, Brazil

**Introduction & Objectives:**

Sebaceous carcinoma (SC) is a rare malignant neoplasm that affects mostly the head and neck, with special predominance in the ocular region. Its clinical presentation is variable and can be mistaken for benign ocular diseases as well as other skin tumors.

Our aim is to establish the demographic characteristics and clinical presentation of SC in the population assisted by a tertiary hospital in Brazil.

**Materials & Methods:**

This study reviews all SC cases diagnosed in a Brazilian University Hospital from 2006 to 2020. Variables of sex, age, location, history of skin neoplasia, dermatological characteristics, Muir-Torre investigation, dissemination, treatment modalities and recurrence were organized in tables of frequency and percentages were calculated.

**Results:**

This retrospective review found 22 cases of sebaceous carcinoma. Male patients corresponded to 55% of the cases and the mean age at the time of diagnosis was 67 years old. Thirty six percent of the tumors were ocular SC and 64% were extraocular. SC presented a variety of dermatologic features and immunohistochemistry analysis for MLH-1, MSH-2, MSH-6 and PMS-2 showed loss of expression in 4 patients, favoring Muir-Torre syndrome diagnosis. Surgical excision was the preferred treatment modality. This is a case series study and the information obtained was limited to the description in patient's medical charts.

**Conclusion:**

Diagnosing and treating SC can be challenging. Its early diagnosis provides the opportunity of genetic predisposition investigation and a favorable outcome.



**Abstract N°: 1307****A case of spontaneous regression of merckel cell carcinoma of the leg**

Amal Chamli<sup>\*1</sup>, Sana Bouzid<sup>1</sup>, Raja Jouini<sup>1</sup>, Refka Frioui<sup>1</sup>, Anissa Zaouak<sup>1</sup>, Houda Hammami<sup>1</sup>, Samy Fenniche<sup>1</sup>

<sup>1</sup>Habib Thameur Hospital, Dermatology, Tunis

**Introduction & Objectives:**

Merkel cell carcinoma is a rare primary cutaneous neuroendocrine tumor typically occurring on sun-damaged areas in elderly and immunosuppressed individuals. Despite its aggressiveness, a few reports of MCC complete spontaneous regression have been reported in the literature.

**Materials & Methods:**

Herein, we describe a case of MCC of the lower limb spontaneously regressing after biopsy, with a description of dermoscopic features.

**Results:**

A 77-year-old male patient with no medical history presented to our dermatology department with a rapidly growing skin tumor on his calf. On physical examination, a 4-cm erythematous nodule with ulceration, thick crust, and violaceous surroundings was noted. A dermoscopic examination showed polymorphous vascular structures with enlarged branching, linear irregular vessels and curved narrow vessels, milky pink areas, and white structureless areas. Histopathology revealed tumoral proliferation in the dermis made of small round, non-adherent cells. An Immunohistochemical study showed a dot-like paranuclear staining for cytokeratin 20. One month after the biopsy, on examination, we noticed that the tumor had decreased in size and had become brownish. A second biopsy was thus performed showing granulomatous inflammation and absence of malignant cells. A decision was to perform a complete surgical excision with a 1-cm margin. The final histological exam showed the absence of malignant cells. Thus, spontaneous regression of MCC was assessed. The patient continues to be followed with no signs of recurrence 9 months after the initial biopsy.

**Conclusion:**

Regression of MCC is a very rare event, with as few as 40 cases reported in the literature. The mechanism of this phenomenon remains unclear; however, T-cell-mediated immunity and apoptosis appear to play a major role. In contradiction to other skin carcinomas such as malignant melanoma, spontaneous regression in MCC seems to have a better prognosis, given most of the reported cases did not show evidence of recurrence at follow-up.



**Abstract N°: 1347****Cardiac Involvement in Patients with Mycosis Fungoides: A Narrative Review**Laya Ohadi<sup>1</sup>, Sahar Dadkhahfar<sup>1</sup><sup>1</sup>Skin Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran

**Introduction & Objectives:** Primary cutaneous lymphoma (PCL), specifically mycosis fungoides (MF), is a rare type of non-Hodgkin lymphoma that primarily affects the skin. While MF mostly manifests as skin lesions, it can progress to involve any organ, including the heart. Cardiac involvement in MF is a serious complication associated with poor prognosis, emphasizing the importance of early recognition and intervention. This review aims to explore cardiac involvement in MF and its implications for patient prognosis, providing valuable insights for clinical practice.

**Materials & Methods:**

A comprehensive literature search was conducted using PubMed and relevant keywords and Mesh terms. Case reports and editorials evaluating cardiac involvement in patients with MF were included in the study. Furthermore, a thorough examination of the references cited in each study was carried out to identify relevant reports. The cases included in the review were analyzed, and common cardiac manifestations and diagnostic approaches were identified.

**Results:**

This review study found multiple instances of cardiac involvement in patients with MF, characterized by symptoms such as heart failure and arrhythmias. Detecting cardiac involvement in MF necessitates a comprehensive approach that combines different imaging methods like echocardiography, cardiac MRI, and CT scans, along with histopathological analysis.

**Conclusion:**

Cardiac involvement in MF is a rare but serious complication that can manifest with various symptoms and cardiac abnormalities. Routine non-invasive imaging techniques play a crucial role in early detection, even in asymptomatic patients. Timely intervention through personalized management approaches, including surgery, when necessary, can contribute to positive cardiovascular outcomes. This review provides valuable insights for clinical practice in managing cardiac complications in MF.



**Abstract N°: 1421****Neonatal vesiculopustular rash, a rare manifestation of transient leukemia of the newborn**

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**Introduction & Objectives:**

Vesiculo-pustular eruptions of the newborn are frequent, often transient and benign dermatoses, which may or may not have an infectious origin, and in some cases, particularly in Trisomy 21 newborns, may reveal a leukemoid reaction. These are generally acute myeloid leukemias (AML) of the M7 type, which often go into spontaneous remission, hence the name “transient leukemia”

**Materials & Methods:**

We report the case of a generalized vesiculopustular rash that appeared at 3 days of age in a 26-day-old newborn with trisomy 21 phenotype, following a vaginal delivery at term. The rash was associated with respiratory distress evolving in a context of apyrexia. It consisted of vesiculopustular and papular lesions on an erythematous base, initially localized on the face, then generalized to the trunk, upper and lower limbs.

**Results:**

Bacteriological and mycological samples and cytodiagnosis of tzanck were negative. Respiratory PCR revealed respiratory infection with CORONAVIRUS HKU1. The blood count showed a hyperleukocytosis of 43,880, predominantly lymphocytes; the blood smear showed infiltration of 47% by medium-sized blast cells; the myelogram showed marrow invasion by 29% blasts; and the cardiac ultrasound didn't show any malformations or pericardial effusion. Treatment consisted of management of respiratory distress, therapeutic abstention and monitoring of the leukemoid reaction. The evolution was marked by normalization of the leukocyte count at 36 days of age, concomitant with disappearance of the skin lesions; a follow-up myelogram is planned at 3 months of age.

**Conclusion:**

Approximately 10% of newborns with Down's syndrome are born with a myeloproliferative syndrome, of which 20% develop leukemia over the following 4 years. The pathophysiology of the transient leukemoid reaction is poorly understood, cutaneous manifestations are present in only 5% of cases, appearing in the first few days of life and corresponding to vesiculopustular and papular lesions localized to areas of friction and trauma.

The myeloproliferative syndrome of the newborn is often transient, but it can have serious complications threatening the vital prognosis, such as organ infiltration by leukemoid cells or progression to leukemia. This is why it is so important to be aware of this pathology and to evoke it in the presence of a vesiculopustular or crusty neonatal rash predominating at the cephalic extremity, without any obvious clinical context, and mainly in newborns with a trisomic 21 phenotype.



**Abstract N°: 1490****Acitretin for the treatment of Kaposi Sarcoma: case report and review of the literature.**

Luis Feito-Sancho<sup>1</sup>, Abraham Santa Cruz Martín<sup>1</sup>, Leticia Calzado-Villarreal<sup>1</sup>, Gema Vázquez-Contreras<sup>1</sup>, Marta Folcrá-González<sup>1</sup>, Alberto Saez-Vicente<sup>1</sup>, Tatiana Sanz-Sánchez<sup>1</sup>, Carolina Garrido-Gutiérrez<sup>1</sup>, Paola Maldonado-Cid<sup>1</sup>, Tatiana Cobo-Ibáñez<sup>2</sup>, Iolanda Prats-Caelles<sup>1</sup>

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**Introduction & Objectives:**

Topical alitretinoin has been previously described for the treatment of Kaposi sarcoma. However, the efficacy of other retinoids (systemic or topical) has not been as studied in the past. We present a case of Kaposi's sarcoma and concomitant rheumatoid arthritis successfully treated with acitretin.

**Case Presentation:**

A 66-year-old woman with a history of seronegative rheumatoid arthritis currently treated with tofacitinib, methotrexate, and folic acid, presented with a several-month history of asymptomatic cutaneous lesions. Upon physical examination, the patient presented with several violaceous vascular-looking lesions spread over the distal surface of both legs. A 4 mm punch biopsy confirmed the diagnosis of Kaposi sarcoma. After considering different therapeutic options along with the patient, we opted for an initial approach using a 25 mg daily dose of oral acitretin, achieving a significant clinical response within the first few weeks.

**Discussion:**

Kaposi sarcoma (KS) is a rare angioproliferative disorder associated to Human Herpes Virus 8 (HHV-8) infection. There are four main types of KS, ie, classic, endemic, epidemic/HIV-related and iatrogenic. The latter has been classically associated to immunosuppressive therapies in organ transplant-recipients, but more recently, it has also been associated to other immunosuppressive medications.

There are many potential treatments for KS, including surgery, cryotherapy, radiotherapy as well as many topical and systemic drugs. Even though the application of alitretinoin gel over the specific KS lesions has been widely described in the past, evidence on the use of oral acitretin for more severe cases of KS is still scarce.

**Conclusion:**

We present a case of iatrogenic KS successfully treated with oral acitretin, showcasing the potential benefits of systemic retinoids in this vascular neoplasm.



**Abstract N°: 1542****Scalp Eccrine Porocarcinoma with a Benign Preexisting Poroma: case report**Gintare Ulianskaite<sup>1</sup>, Alvija Kučinskaitė<sup>2</sup>, Domantas Stundys<sup>1</sup><sup>1</sup>Vilnius university hospital Santaros klinikos, Centre of Dermatovenereology, Vilnius, Lithuania, <sup>2</sup>Faculty of Medicine of Vilnius University, Vilnius, Lithuania**Introduction:**

Eccrine porocarcinoma (EPC) is a rare adnexal skin appendix tumour, arising from the intraepidermal ductal part of eccrine sweat glands. It accounts for about 0.005-0.01% of all skin tumours. It could arise de novo or develop from preexisting lesions, such as poroma. We present a case report of scalp porocarcinoma, which was primarily diagnosed as benign poroma.

**Case report:**

A 73-year-old woman presented with a crusty, intermittently bleeding scalp lesion that had been present for a year. The evaluation of the skin lesion using dermoscopy revealed polymorphous vessels, milky pink structureless areas and whitish with a yellow hue round to oval areas separated by whitish septae. Furthermore, histopathological findings of 3 mm punch biopsy specimen were suggestive of a benign cutaneous adnexal tumor indicating syringoadenoma, hidradenoma, or poroma. Even after benign histopathological diagnosis, the patient underwent wide local excision of the scalp mass with a 0.5 cm margin. The wound was partially closed leaving the central part to heal with a secondary healing due to the lack of tissue. Upon histopathological study of the entire lesion, the histopathological and immunohistochemical findings were indicative of an eccrine porocarcinoma, accompanied by a component of benign preexisting poroma. Ultrasound examination of the cervical lymph nodes was performed postoperatively with no pathologic findings observed. The patient had no signs of local or distant recurrence at all subsequent visits to date (at 3, 6, 9 months).

**Conclusion:**

Eccrine porocarcinoma, sharing many similar features with other benign tumours, is diagnostically challenging. A conventional biopsy might be misleading and surgical excision should be considered in order to establish correct diagnosis and avoid inaccuracies.





**Abstract N°: 1543****Vitiligo like depigmentation as a predictor of prolonged response to immune checkpoint inhibitors in patients with advanced melanoma - single center experience**

Aleksandar Popovic<sup>1</sup>, Ana Stojkovic<sup>1</sup>, Ivan Petkovic<sup>2</sup>, Andrija Jovic<sup>1</sup>, Mirjana Balic<sup>1</sup>, Ana Cvetanovic<sup>2</sup>

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**Introduction & Objectives:**

The introduction of immune checkpoint inhibitors (ICIs) immensely improved outcomes in melanoma patients. Distinguishing between responders and non-responders is still not plausible, but certain predictive biomarkers are emerging. Vitiligo-like depigmentation (VLD) is a well-documented immune-related adverse event (irAEs) of ICIs which is well tolerated and often associated with prolonged response to treatment. The aim of this study is to assess the effect of VLD occurrence on progression-free survival (PFS) and overall survival (OS) in advanced melanoma patients treated with ICIs.

**Materials & Methods:**

We conducted a retrospective analysis among 109 unresectable stage III and stage IV melanoma patients treated with Pembrolizumab or Nivolumab at University Clinical Center Nis from May 2017 to February 2024. Patients included underwent at least one radiological assessment by RECIST 1.1. The chi-square or Fisher's exact test were used to evaluate the categorical variables, as appropriate for the category size. PFS and OS were estimated using the Kaplan-Meier method (CI 95%;  $p < 0.05$ ). Survival between the patients with or without VLD was compared using a log rank ( $p < 0.05$ ).

**Results:**

A total of 109 patients were included, including 22 who developed VLD (20.2%). The median time of VLD onset was 10.44 months (range 3.94-31.15). There was no statistical significance in the occurrence of VLD based on gender ( $p=0.474$ ), median age ( $p=0.99$ ), BRAF mutation status ( $p=0.206$ ), elevated LDH ( $p=0.582$ ) or ECOG PS ( $p=0.166$ ). Median follow-up in the VLD group was 39.4 months, with 59% still alive and progression-free 3 years after treatment initiation

The overall response rate (ORR) was 72.7% vs 29.9%, with 31.8% vs. 13.8% of complete responses in favour of the VLD subgroup. The occurrence of VLD was associated with significantly longer median PFS (8.148 vs. 52.862 months;  $p=0.0001$ ), and median OS (12.715 vs. NR months;  $p=0.0001$ ).

**Conclusion:**

Prediction of VLD occurrence is not possible, therefore it cannot be a predictive parameter per se, but it can be associated with prolonged response to ICI treatment in patients who develop this adverse event.



**Abstract N°: 1596****Ultrasonography of basal cell basal cell carcinoma.**

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**Introduction & Objectives:**

We observed 16 patients with BCC. In 10 of them the nodular-ulcerative form was established and in 6 patients the nodular form. In 7 patients with nodular ulcer and in all 6 patients with nodular form, a history of jet cryodestruction was performed. We examined all patients by histological and immunohistochemical methods with the Ki67 proliferation marker; the average proliferation index was  $24.77 \pm 6.47$  with a 95% confidence interval of 20.27-27.26.

**Materials & Methods:**

All patients underwent DUB ultrasonography (TPM GmbH, Germany), which allows visualization of the structure of organs and tissues. The article presents studies using ultrasonography with a high-frequency sensor (75 MHz). As a result of ultrasound scanning, all studied clinical variants of BCC were determined in the form of echo-negative foci with clear contours located directly under the epidermis. In this case, superficial tumors on the scanogram were most often visualized as oblong in shape, and nodular lesions were round or oval in shape, rising above the surface of unchanged skin and having a structure.

**Results:**

Thus, the present study showed the feasibility of using ultrasound in the diagnosis of basal cell skin cancer at the pretherapeutic stage. Ultrasound makes it possible to differentiate BCCs as hypoechoic formations in the dermis with clear contours. Depending on the clinical picture, they differ in shape, depth, as well as the presence and quantitative ratio of point, hyperechoic structures in them. Considering the predominant localization of lesions in open, cosmetically significant areas of the skin, it seems relevant to further study the ultrasound characteristics of the tumor for the subsequent use of high-frequency ultrasound in non-invasive diagnostics and determination of treatment tactics.

**Conclusion:**

In the future, conservative therapy methods will be carried out using PDL in combination with a 5% imiquimod solution, depending on the depth and size of the lesion.



**Abstract N°: 1640****Pigmented Pathological Type and Depth of Follicular Extension as Predictors of Treatment Failure in 5-Aminolevulinic Acid Photodynamic Therapy for Actinic Keratosis: A Retrospective, Matched Nested Case-Control Study**Qinyuan Zhu<sup>\*1</sup>, Huyan Chen<sup>1</sup>, Jing Luan<sup>1</sup>, Qiong Huang<sup>1</sup>, Lianjun Chen<sup>1</sup>, Wenyu Wu<sup>1</sup>, Shujun Chen<sup>1</sup><sup>1</sup>Huashan Hospital, dermatology, shanghai , China**Introduction & Objectives:**

5-Aminolevulinic acid photodynamic therapy (ALA-PDT) has been widely used in treating actinic keratosis (AK). However, some AK lesions tend to demonstrate resistance to ALA-PDT or to experience relapse after treatment. This study aims to identify the clinical and pathological characteristics of AK associated with resistance and relapse following ALA-PDT treatment.

**Materials & Methods:**

This matched case-control study nested in a 12-month follow-up cohort study, analyzed data from 119 patients who had completed 4 consecutive ALA-PDT treatments, including clinical information, pathological features and clinical response.

**Results:**

One hundred and six out of the 119 patients (89.1%) achieved the initial complete clearance at 3 months and the sustained complete clearance was maintained in 85.4% (70/82) at 12 months. Pigmented AK had a significant independent association with treatment resistance ( $P=0.003$ , OR=44.05) and lesions with follicular extension reaching the isthmus or deeper were strongly linked to recurrence within 1 year independently ( $P=0.003$ , OR=17.26).

**Conclusion:**

ALA-PDT treatments demonstrated long-term effectiveness and good safety in Chinese patients with AK. Pigmented AK and AK with follicular extension to the isthmus or deeper may serve as valuable predictors of the efficacy of ALA-PDT.




**Abstract N°: 1673**
**A 34-year retrospective study of skin adnexal tumors in a tertiary hospital in Southern Taiwan**

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**Title: A 34-year retrospective study of skin adnexal tumors  
in a tertiary hospital in Southern Taiwan**
**Introduction & Objectives:**

Based on the 5th WHO classification, skin appendage tumors have been classified into eccrine, apocrine, follicular, and sebaceous origins. There is a paucity of recent data on the presentation of these tumors in clinical practice within the Southern Taiwan population.

**Materials & Methods:**

The initial statistical analysis of pathology slides from 1990 to 2024 was conducted to determine the distribution of pathological diagnoses. Cases lacking electronic records were excluded after initial statistical analysis. Malignant adnexal tumors with accessible electronic records underwent further analysis. For a comprehensive analysis of cases with malignant adnexal tumors, continuous variables, such as age, are presented as means and standard deviations (mean  $\pm$  SD), while categorical variables are presented as counts and percentages.

**Results:**

In the benign group, the most frequently encountered diagnoses, ranked by prevalence, are pilomatricoma, poroma, syringoma, hidrocystoma, and hidradenoma. Within the malignant group, the prevalent diagnoses include sebaceous carcinoma, extramammary Paget's disease, and porocarcinoma.

Among 22 patients with malignant apocrine and eccrine tumors other than EMPD, the demographic characteristics of age, gender, and anatomical distribution exhibited a predominantly average distribution. Approximately half of the patients presented with in situ lesions, while 24% were diagnosed with stage I, 14% with stage II, and 19% with stage III. A majority, around 80%, underwent wide excision, with a quarter of them opting for flap reconstruction. Therapeutic lymph node dissection was performed in two patients, with one receiving radiotherapy and another undergoing chemotherapy.

Analysis of 23 cases of sebaceous carcinoma revealed a distribution of 18 men and 5 women, with a mean age of 67.6 years at diagnosis. Approximately 74% of sebaceous carcinomas were located on the eyelid, with the remaining cases found on the head (non-eyelid area), trunk, and limbs. Most patients presented with stage I disease initially, followed by stage II, in situ, and stage III. Around 70% underwent wide excision, with one-third receiving intra-operative frozen section analysis, and one patient underwent total exenteration. Recurrence occurred in 21.7% of patients.

Analysis of the 32 cases of EMPD revealed a distribution of 23 men and 9 women, with a mean age of 72.5 years at diagnosis. Symptoms typically manifested 3.1 years prior to diagnosis, often mimicking eczema, fungal infections, or squamous cell carcinoma, leading to misdiagnosis. The majority (68.7%) underwent tumor wide excision, with 15 also undergoing intraoperative frozen analysis. Only 1 patient with margin-free resection had

tumor wide excision without intraoperative frozen analysis. Three patients received adjuvant radiotherapy, 2 had adjuvant chemotherapy, and 2 were referred for intralesional interferon alfa-2b IA chemotherapy. All tumors were excised with safe margins and showed no recurrence or metastasis during a mean follow-up of 40.7 months (range: 10–80 months).

## Conclusion:

For malignant skin adnexal tumors, surgery is typically the mainstay of treatment, with radiotherapy, chemotherapy and photodynamic therapy reserved for adjuvant, palliative, and re-treatment scenarios.

Table 1. Statistical analysis of pathology slides for skin adnexal tumors over a 34-year period in a tertiary hospital in Southern Taiwan (total number of slides and the percentages of each diagnosis in benign or malignant skin adnexal tumors)

Benign (1954 slides, 100%)				Malignant (241 slides, 100%)			
Benign (470, 24.1%)		Eccrine adnexal tumors		Malignant (14, 5.8%)			
Hidradenoma	99	5.0%		Hidradenocarcinoma	2	0.8%	
Poroma	205	10.4%		Porocarcinoma	8	3.3%	
Cylindroma	0			Cylindrocarcinoma/ spiradenocarcinoma	0		
Spiradenoma	59	3.0%		Digital papillary adenocarcinoma	0		
Syringoma	104	5.3%		Microcystic adnexal carcinoma	2	0.8%	
Eccrine syringofibroadenoma	3	0.2%		Endocrine mucin-producing sweat gland carcinoma	2	0.8%	
Benign (166, 8.5%)		Apocrine adnexal tumors		Malignant (110, 45.6%)			
Hidrocystoma	103	5.3%		Adenoid cystic carcinoma	3	1.2%	
Mixed tumor	47	2.4%		Apocrine adenocarcinoma	4	1.6%	
Syringocystadenoma papilliferum	33	1.7%		Mucinous carcinoma	4	1.6%	
Hidradenoma papilliferum	13	0.7%		Mammary Paget's disease	2	0.8%	
Nipple adenoma	17	0.9%		Extramammary Paget's disease	97	40.2%	
Benign (45, 2.3%)		Sebaceous gland tumors		Malignant (108, 44.8%)			
Sebaceous adenoma/sebaceoma / sebaceous epithelioma	17/26/2	2.3%		Sebaceous carcinoma	108	44.8%	
Benign (1226, 62.7%)		Follicular adnexal tumors		Malignant (9, 3.7%)			
Pan-follicular	Trichofolliculoma	57	2.9%				
Follicular	Trichoblastoma	67	3.4%	Trichoblastic carcinoma/carcinosarcoma	0		
germinative and follicular	Trichoepithelioma	89	4.5%				
stromal cells	Desmoplastic trichoepithelioma	6	0.3%				
Follicular mesenchymal differentiation	Trichodiscoma (Fibrofolliculoma)	1 (17)	0.9%				
Matrical	Pilomatricoma (pilomatrixoma)	78 (787)	44.2%	Pilomatrical carcinoma (Pilomatrix carcinoma)	0		
Bulb/stem outer root sheath differentiation	Trichilemmoma	32	1.6%	Trichilemmal carcinoma	1	0.4%	
Isthmic outer root sheath	Tumor of follicular infundibulum	7	0.3%	Proliferating trichilemmal tumor	8	3.3%	
	Pilar sheath acanthoma	10	0.5%				
Infundibular	Trichoadenoma	6	0.3%				
	Dilated pore (of Winer)	69	3.5%				

Table 2. clinicopathologic characteristics of the patients with malignant apocrine and eccrine tumors other than EMPD. (N=22)

	N=22	%
<b>Age</b>		
≥ 65-year-old	10	45.5%
< 65-year-old	12	54.5%
<b>Gender</b>		
Male	10	47.6%
Female	12	52.4%
<b>Diagnosis</b>		
Porocarcinoma	7	31.8%
Hidradenocarcinoma	2	9%
Microcystic adnexal carcinoma	2	9%
Endocrine mucin-producing sweat gland carcinoma	2	9%
Adenoid cystic carcinoma	1	4.5%
Primary cutaneous apocrine carcinoma	2	9%
Primary cutaneous mucinous carcinoma	2	9%
Mammary Paget's disease	2	9%
Sebaceous carcinoma	2	9%
<b>Primary location</b>		
Head and neck	11	50%
Extremities and trunk	11	50%
<b>Initial stage</b>		
0	9	42.9%
I	5	23.8%
II	3	14.3%
III	4	19.1%
IVA	0	0%
IVB	0	0%
<b>Management</b>		
Wide excision	17	80.9%
Flap reconstruction	6	28.6%
Therapeutic LN dissection	2	9.5%
Radiation	1	4.8%
Chemotherapy	1	4.8%

Table 3. summarizes the clinicopathologic characteristics of the patients with EMPD. (N=32)

	N=32	%
Age		
≥ 65-year-old	23	71.8%
< 65-year-old	9	28.1%
Gender		
Male	23	71.8%
Female	9	28.1%
Primary location	Site = 34	
Perianal	4	11.7%
Penoscrotal	17	50.0%
Vulva	6	17.6%
Pubic	5	14.7%
Other	2	5.88%
Associated malignancy		
No	25	78.1%
Yes	7	21.8%
Stage		
Local	28	87.5%
Regional/ distant	4	12.5%
Management		
Surgery	22	68.7%
Radiation	3	9.3%
Chemotherapy	4	12.5%
Immunohistochemical staining	Performed cases = 30 and 29	
CK7	30/30	100%
CK20	7/29	24%

Table 4. summarizes the clinicopathologic characteristics of the patients with sebaceous carcinoma. (N=23)

	N=23	%
Age		
≥ 65-year-old	18	78.2%
< 65-year-old	5	21.7%
Gender		
Male	12	52.2%
Female	11	47.8%
Primary location		
Eyelid	17	73.9%
Head non-eyelid area	4	17.3%
Trunk and limbs	2	8.7%
Recurrence		
No	18	78.2%
Yes	5	21.7%
Initial stage		
0	5	21.7%
I	8	34.7%
II	6	26.0%
III	3	13.0%
IV	0	
Unknown	1	4.3%
Management		
Wide excision	16	69.5%
Intra-operative frozen	7	30.4%
Map biopsy	1	4.3%
Total exenteration	1	4.3%
Radiation	0	
Chemotherapy	0	



**Table 5. Characteristics of malignant adnexal tumor (Total = 82)**

(Porocarcinoma = 7, hidradenocarcinoma = 2, microcystic adnexal carcinoma = 2, endocrine mucin-producing sweat gland carcinoma = 2, adenoid cystic carcinoma = 1, primary cutaneous apocrine carcinoma = 2, primary cutaneous mucinous carcinoma = 2, Mammary Paget's disease = 2, EMPD = 32, sebaceous carcinoma = 23, Proliferating trichilemmal tumor = 7)

Case	Diagnosis	Age Sex	Initial Stage	IHC and pathologic features	Treatment	Outcome
1	Porocarcinoma, right temporal-parietal scalp	58 F	pT2N1M0 Stage III	Depth of invasion (DOI) 22 mm with muscle invasion, ductal structures within the tumor are positive for CEA. Right neck lymph node (3/28)	Tumor wide excision, craniectomy, cranioplasty with bone cement, neck lymph node dissection, and free anterolateral thigh flap reconstruction	A bulging cyst was noted over the flap edge 4 years later, with cytology survey showed no malignant cell. Refused further treatment and lost f/u
2	Porocarcinoma, right posterior thigh	59 M	pT1N0M0, Stage I	CK5/6(+), BerEP4(-), CK7(+), CEA (+), EMA (+, highlights ductal structure), DOI 2 mm to reticular dermis	Wide excision	No recurrence for 5 years and currently keep f/u
3	Porocarcinoma, occipital scalp	71 F	pT2N0M0, Stage II	SOX9(+), BerEP4(-), EMA (+), CEA (-/+), Ki-67(+, 20% focally), NUT (-), DOI 11 mm to reticular dermis	Wide excision	No recurrence for 4 years and currently keep f/u, refuse further treatment due to multiple comorbidities
4	Porocarcinoma, left leg	72 M	pTisN0M0, Stage 0	Ki-67 show increased expression in areas with severe atypia. No dermal invasion	Wide excision	No recurrence for 1 year and currently keep f/u
5	Porocarcinoma, left arm	73 M	pT3N0M0, Stage III	SOX9(+), BerEP4(-), EMA (+), CEA (-/+), Ki-67(+, 20% focally), NUT (-), DOI 2.7 mm to reticular dermis	Total excision without wide excision	Refused further treatment and lost f/u
6	Porocarcinoma, right lateral thigh	94 F	pT1N0M0, Stage I	SOX9(+), p63(+), EMA (+), CEA (-/+), Cam5.2(-), NUT(-), DOI 3 mm	Wide excision	No recurrence for 1 year Keep f/u
7	Porocarcinoma with sebaceous differentiation, left hip	77 F	pT2N1M0, Stage III -> pT3N2bM0, Stage IVA	No deficiency of mismatch repair protein expression (MLH1, PMS2, MSH2, and MSH6), SOX9 (+), EMA and AR (+, focal), BerEP4 (-)	Wide excision, therapeutic left inguinal and external iliac lymph node dissection	No recurrence for 2 years Keep f/u
8	Hidradenocarcinoma, left breast	52 F	pTisN0M0 Stage 0	No IHC stain	Excision without wide excision	No recurrence for 15 years Keep f/u
9	Hidradenocarcinoma, left upper back	47 F	pTisN0M0 Stage 0	No IHC stain	Wide excision	No recurrence for 2 years Keep f/u
10	Microcystic adnexal carcinoma, right axilla	32 M	pT1N0M0 Stage I	p63 (+), S100 (-), GCDFFP15 (-), DOI 7mm	Wide excision	No recurrence for 3 years Keep f/u
11	Microcystic adnexal carcinoma, lower lip	58 F	pT2N0M0, Stage II	SOX9 (+), CK10 (+, focal), adipophilin (-), CEA and EMA highlight ductal differentiation, DOI 6.5mm	Wide excision and bilateral myofasciocutaneous advancement flap	No recurrence for 3 years Keep f/u
12	Endocrine mucin-producing sweat gland carcinoma, left lateral canthus	51 M	pTisN0M0, Stage 0	Synaptophysin (+), chromogranin A (focal +), ER (+), PR (+), CK7 (-), WT-1 (+), CD117 (focal, +), and CK5/6, S-100 and p63 decorate focal lack of myoepithelial cells around the tumor cell clusters	Total excision, without wide excision	No recurrence for 4 years Keep f/u
13	Endocrine mucin-producing sweat gland carcinoma, left lateral canthus	55 F	pTisN0M0, Stage 0	p63 surrounding myoepithelial cell, CK7 (+), synaptophysin (+)	Wide excision and rhomboid flap	No recurrence for 2 years Keep f/u
14	Adenoid cystic carcinoma, right upper eyelid	86 F	Unknown	CK7 (+), surrounded by basal type neoplastic cells with p63 (-) and focal SMA (+), Diffuse SOX10 (+)	Surgery is arranged recently.	Keep f/u
15	Primary cutaneous apocrine carcinoma in situ, scalp	83 M	pTisN0M0 Stage 0	GCDFFP15 (+), CEA and adipophilin (focal +), ER, PR (-). Intact peripheral basal/myoepithelial cell layer, highlighted by p63 and CK5/6, further supports the intraductal (in situ) growth pattern	Wide excision and local flap reconstruction	No recurrence for 2 years Keep f/u
16	Primary cutaneous apocrine carcinoma, low-grade, right axilla	67 M	pTisN0M0 Stage 0	EMA (+, highlighting Toker cells), GCDFFP-15, CEA, CK7 show negative, indicative of no Paget cell	Wide excision	No recurrence for 2 years Keep f/u
17	Primary cutaneous mucinous carcinoma, right lateral canthus	70 M	pT1N0M0, Stage I	No IHC stain	Wide excision (safe margin 0.5cm) and recurrence four years later, with another wide excision (safe margin 0.5cm) and rhomboid flap	No recurrence for 1 year Keep f/u
18	Primary cutaneous mucinous carcinoma, right zygomatic area	56 M	pT1N0M0, Stage I	INSM1(50% of tumor cells), AR (<50% of tumor cells), Her2(-) CD117 (-), S100 (-), synaptophysin (-), Chromogranin (-), CD56 (-), EMA (+), WT-1, GCDFFP-15 (+), CK7 (+) CK20 (-), synaptophysin (-), p63 (-), DOI 9mm	Wide excision with local flap reconstruction	No recurrence for 3 years Keep f/u
19	Mammary Paget's disease of left nipple, secondary to left breast cancer	50 F	Invasive ductal carcinoma, pT2N1M0, Stage IIB	ER (-), PR (-), P53 (-), FISH HER-2 (+)	Modified radical mastectomy and chemotherapy with fluorouracil, epirubicin hydrochloride, cyclophosphamide, docetaxel, radiotherapy	Diagnosis with signet ring cell carcinoma of cecum with peritoneal carcinomatosis, pT4bN2bM1b, Stage IVB, complicated with bilateral hydronephrosis and massive ascites 10 years later.
20	Mammary Paget's disease of left nipple, secondary to left breast cancer	41 F	pTisN0M0, Stage 0	ER (-), PR (-), Ki: 60% Paget cells reveal positive for CK7, EMA, CEA (focally weak) and HER-2	Invasive ductal carcinoma of left breast, status post partial mastectomy and radiotherapy, recurrence 6 years later Paget's disease of left nipple, status post total mastectomy	No recurrence for 5 years following total mastectomy and lost follow-up



21	Primary EMPD, left perianal area	88	F	pTisN0M0, Stage 0	Mucicarmine (+), CK7 (+), CK20 (-)	Wide excision	Suspect recurrence 10 years later, patient refuse diagnostic biopsy, under topical imiquimod for 3 years and lost follow-up
22	Primary EMPD, left scrotum	76	M	pTisN0M0, Stage 0	Mucin (+), Ck7 (+), CK20 (+)	Radiotherapy 48Gy/24 fr (2008), recurrence over ventral penis and scrotum, radiotherapy 60Gy/30 fr (2010), wide excision and FTSG (2011), recurrence over penile shaft under topical imiquimod (2019), lost follow-up for 5 years, currently under topical imiquimod and 5-ALA based photodynamic therapy	
23	Primary EMPD, left pubic area	57	F	pT1N0M0, Stage I	CK7 (+, diffuse positive), CK20 (+, focal positive), dermal invasion, but unknown DOI	Wide excision and island deep inferior epigastric artery perforator fasciocutaneous flap resurfacing	No recurrence for 16 years Keep f/u
24	Primary EMPD, right inner thigh	77	M	pTisN0M0, Stage 0	Mucin (-/+), CEA (+), CK7 (+), CK20 (-), S100 (-)	Diagnostic biopsy	Died 5 years later not due to EMPD
25	Primary EMPD, suprapubic area	63	M	pTisN0M0, Stage 0	Mucicarmine (+), EMA(+), CK7(+), CK20(-)	Wide excision	Lost follow-up after the wide excision
26	Primary EMPD, left vulva	66	F	pTisN0M0, Stage 0	CK7(+), CK20(+), GCDFP15(+), S100 (-)	Simple vulvectomy, recurrence 7 years later, followed by wide excision and bilateral rotation flap reconstruction, and lost follow-up after 1 year	
27	Primary EMPD, left scrotum	72	M	pT2N0M0, Stage II	N/A	Wide excision and intra-operative frozen	No recurrence for 14 years Keep f/u
28	Primary EMPD, penoscrotal area	71	M	pT2N0M0, Stage II	Dermal invasion with 14mm depth	Wide excision and intra-operative frozen, One year later, multiple vertebral and epidural metastasis, status post adjuvant radiotherapy	Died of hospital-acquired pneumonia, acute respiratory failure
29	Primary EMPD, left vulva and pubic area	80	F	pTisN0M0, Stage 0	CK7(+), CK20 (-), GCDFP15(+)	Wide excision and intra-operative frozen recurrence 4 years later, pTis, left pubic area, status post wide excision and local flap, no recurrence for 4 years	
30	Primary EMPD, right scrotum	65	M	pTisN0M0, Stage 0	N/A	Wide excision, intra-operative frozen, STSG	No recurrence for 8 years
31	Primary EMPD, right perianal area	89	M	pTisN0M0, Stage 0	CK7(+), CK20 (-), GCDFP15(+)	Wide excision	Died of respiratory failure 5 years later
32	Primary EMPD, right scrotum and penis	73	M	pT1N0M0, Stage I	CK7(+), CK20(-), CEA (+), BerEP4 (+), mucicarmine (+), S100 (-), DOI < 1mm	Wide excision and intra-operative frozen, recurrence 6 years later over right scrotum and axilla, wide excision again, lost follow-up after 1 year	
33	Primary EMPD, genital, pubic and inguinal area	92	M	Unknown	Mucicarmine (+), PAS (+), CK7(+), CK20(-), CEA(+), Ber-EP4(+)	Refuse treatment	Died 3 years later due to other reason
34	Primary EMPD, right vulva	59	F	pTisN0M0, Stage 0	CK7 (+), CAM5.2 (+), S100 (-), CK5/6 (-), P63 (-)	Vulvectomy, wide local excision of right side vulva and clitoris with local rotation flap reconstruction	No recurrence for 5 years, Keep f/u
35	Primary EMPD, right labia major	64	F	pTisN0M0, Stage 0	CK7 (+), CEA (+), CK20 focal (+), GCDFP15 focal (+); CK5/6 (-), CDX2 (-), S100 (-), SOX10 (-), MelanA (-)	Referred to other hospital for intra-arterial chemotherapy, came back with deep red and erosive lesions on pubic area, refuse surgery and lost f/u	
36	Apocrine carcinoma associated with EMPD, left scrotum	87	M	cT3N2M1, Stage IVB	CK7(+), CK20(-), GCDFP-15(+), EMA (+).	Refused surgery, left neck and supraclavicular lymph node metastases, status radiotherapy	Died of multi-organ failure 2 years later
37	Primary EMPD, bilateral vulva, clitoris	55	F	pT1N2M0, Stage IVA	CK7 (+), GATA3 (+), GCDFP15 (+, focal), P40 (+, focal), CK20 (-), TTF-1(-), Napsin-A (-), unknown DOI	Wide excision and local flap reconstruction, recurrence 2 years later with several lymph nodes enlargement on left neck and supraclavicular area, with multiple LN meta (tumor emboli, CK7 (+), GATA3 (+), GCDFP15 (+, focal), P40 (+, focal), CK20 (-), TTF-1(-), Napsin-A (-), with salvage radiotherapy and lost f/u	
38	Primary EMPD, right preauricular area	88	M	pTisN0M0, Stage 0	CK7(+), CAM5.2(+), BerEP4(+), CEA focal (+), androgen receptor (+), P40 (+), adipophilin (-), SOX10 (-), GCDFP-15(-)	Previously, it was believed to be Bowen's disease, but in April 2019, it was suddenly diagnosed as EMPD. After reevaluation in May 2019, it was identified as actinic keratosis, and cryotherapy has been ongoing since then	
39	Primary EMPD, scrotum	61	M	pTisN0M0, Stage 0	EMA (+), GCDFP15 focal (+), P63 (-)	Wide excision, intra-operative frozen and advanced flap	No recurrence for 4 years and keep f/u
40	Primary EMPD, right pubic	74	M	pTisN0M0, Stage 0	CK7(+), EMA (+), CAM5.2(+), CK20(focal weak+), CD3(-), CD20(-), CK5(-)	Wide excision and advanced flap	No recurrence for 4 years and keep f/u
41	Primary EMPD, right inguinal area to scrotum	87	M	pT1N0M0, Stage I	CK7 (+), CK20 (-), melanin A (-), Sox-10 (-), DOI 3mm	Wide excision and STSG	No recurrence for 2 years and keep f/u
42	Primary EMPD, left inguinal area	60	M	pTisN0M0, Stage 0	CK7 (+), CEA (+), Gata-3 (+), CK20 (-), CDX2 (-)	Wide excision	No recurrence for 2 years and keep f/u
43	Primary EMPD, right inguinal and penile	70	M	pT3N2M0, Stage IVA	CK7 (+) GCDFP15 (+), CK20 (-), DOI: 20mm, ENE(+), LVI(+), PNI(-)	With lymph node metastasis, s/p wide excision of and rhomboid flap + STSG resurfacing on 2022/11/1, s/p right inguinal lymph node dissection on 2022/11/15, s/p adjuvant radiotherapy 60Gy/30fr	
44	Primary EMPD, left peno-scrotum suprapubic	70	M	pT1N0M0, Stage I	CK7 (+), CEA (+), GATA-3 (+), CAM5.2 (+), CK20 (-), CDX2 (-), GCDFP15 (-), DOI 2mm	Wide excision and fasciocutaneous transposition flaps	No recurrence for 2 years and keep f/u
45	Primary EMPD, left inguinal and scrotum	60	M	pT1N0M0, Stage I	CK7 (+), CEA (+), GATA-3 (+), CAM5.2 (+), CK20 (-), CDX2 (-), GCDFP15 (-), DOI 1.5mm	Wide excision and scrotum fasciocutaneous local flap reconstruction	No recurrence for 1 year and keep f/u
46	EMPD, left scrotum associated with tubular adenoma with low grade dysplasia	71	M	pTisN0M0, Stage 0	CK7(+), CK20(-), GCDFP15(+), CDX2(-)	Wide excision and intra-operative frozen	No recurrence for 15 years Keep follow-up
47	EMPD, left scrotum with associated malignancy	61	M	Multiple metastases, Stage IVB	CK7(+), CK20(-), GCDFP (+), unknown DOI	Liver, bone, lymph node metastases, and malignant pleural and pericardial effusion, palliative care	Died one month following diagnosis of EMPD
48	EMPD, perianal area, scrotum, penis with prostate carcinoma	90	M	Unknown	CK7(+), CK20(-), unknown DOI	Prostate carcinoma, cT2cNxM0, Stage II (PSA: 7.28); tubular adenoma with low grade dysplasia, under topical immunomodulator, referred to other hospital for intra-arterial chemotherapy. Tubular adenoma with high grade dysplasia	
49	EMPD, left scrotum, with tubular adenoma with low grade dysplasia	73	M	pT1N0M0, Stage I	CK7(+), CK20(+), GATA3(+), MUC5AC(+), CDX-2(-), ER(-), GCDFP-15(-), S100(-), DOI < 1mm	Wide excision and intra-operative frozen	Died of infectious colitis with sepsis shock one month after surgery
50	EMPD, perianal area with rectal adenocarcinoma and lung metastases	73	F	cT2N1bM1a, Stage IV for rectal adenocarcinoma	CDX2(+), CK20(+), CK7 (+), S100(-), CK5/6(-), unknown DOI	Only diagnostic biopsy. Refused chemotherapy. Capecitabine for 15 cycles.	Keep capecitabine for 15 cycles and died of multi-organ 2 years later

51	EMPD, right scrotum, atypical urothelial cells	81	M	pT1N0M0 Stage I	CDX2(+), CK20(+), CK7 (+), S100(-), CK5/6(-)	Wide excision, intra-operative frozen and advanced local flap	Lost follow-up one month after the surgery
52	EMPD, vulva to perianal area, vaginal mucinous adenocarcinoma	67	F	Mucinous adenocarcinoma, Stage IIIB	CK7(+), CDX2(+), CK20(+), p63(-), D2-40(-), CK5/6(-), PAX8(-), P16(-), dermal invasion, EGFR (+)	Neo-adjuvant chemotherapy with mFOLFOX (2019/11/15, 12/5); mFOLFIRI + cetuximab (12/30, 1/14, 1/31, 2/14, 2/28, 3/16), mFOLFIRI 4/6, 5/11, 6/3), s/p 3D laparoscopic abdominoperineal resection (APR) and bilateral double-J catheters placement, ypT4bN0M0, s/p radiotherapy, complicated with perineal wound poor healing s/p debridement, s/p adjuvant CCRT, now under f/u	
53	Sebaceous carcinoma in situ, right peri-orbital area	65	F	pTisN0M0 Stage 0	Adipophilin (+), CK7 (+), SOX9 (+), BerEP4 (+, focal), SOX10 (-)	2014-2023 Multiple biopsy due to recurrence: sebaceous carcinoma in situ	Multiple biopsy due to recurrence within 10 years, keep f/u
54	Sebaceous carcinoma, multiple, head, neck and chest	47	M	pT3NxMx, at least Stage III	Adipophilin (+), AR (+), SOX9 (+), CK7 (-), CEA (-), EMA (+, clear cell), MLH1 (+), PMS2 (+), MSH2 (-), MSH6 (-), greatest DOI 17mm	Muir-Torre syndrome, with (a) sebaceous carcinoma, multiple, pT3NxMx (patient hesitated about LNs biopsy, Stage to be determined) (b) squamous cell carcinoma, right cheek, well to moderately differentiated, status post complete excision. (c) 7 histologically confirmed sebaceous adenoma over bilateral cheeks. (d) Tubulovillous adenoma with low-grade dysplasia, descending colon. Family history with two sisters, one with cervical/breast cancer, and the other with no cancer history. Mother with breast cancer. Uncle with lung cancer. Father possibly had hepatocellular carcinoma	
55	Sebaceous carcinoma in situ, left lower eyelid	84	M	pTisN0M0, Stage 0	Adipophilin (+), No definite stromal invasion can be identified by AE1/AE3	Wide excision, intra-operative frozen, Tenzel rotational flap reconstruction	No recurrence for 2 years and lost f/u
56	Sebaceous carcinoma, right upper eyelid	78	M	pT1N0M0, Stage I	Adipophilin (+), DOI 3mm	Wide excision, intra-operative frozen, reconstruction with buccal mucosa graft and semicircular flap	No recurrence for 7 years and lost f/u
57	Sebaceous carcinoma, right upper eyelid	42	F	pT2aN0M0, Stage IB	Adipophilin (+), DOI 4mm	Wide excision, intra-operative frozen	No recurrence for 9 years Keep f/u
58	Sebaceous carcinoma, right lower eyelid	68	M	pT2bN0M0, Stage IIA	Adipophilin (+), DOI 9mm	Wide excision, intra-operative frozen, with buccal mucosa graft and transitional flap	No recurrence for 4 years and lost f/u
59	Sebaceous carcinoma, right upper eyelid	70	F	pT3bN0M0, Stage IIA	Tumor thickness 15mm, involves the eyelid to basal layer to palpebral conjunctiva, mitotic activity 36/10 HPF. Adipophilin (+)	Total exenteration	No recurrence for 5 years and lost f/u
60	Sebaceous carcinoma, right lower eyelid	70	M	rpT3aN0M0, Stage IIA -> Stage IV	Adipophilin (+), androgen receptor (+)	Sebaceous carcinoma at right periorbital area with involvement of adjacent right zygoma, right lateral orbital wall and right lacrimal gland s/p wide excision and enucleation of eyeball, pT3bN0M0, stage II s/p free thoracoacromial perforator and fasciocutaneous flap with autologous bone graft, with recurrence s/p wide excision on 2016/06 and 2017/02, with local recurrence and multiple lung metastasis, and hospice care 5 years following first visit	
61	Sebaceous carcinoma, right upper eyelid	68	F	pT2bN0M0, Stage II	First time: tumor invades the subcutis and muscle. Second time: in situ, without invasion	Wide excision, intra-operative frozen, reconstruction with ear cartilage, Cutler-Beard procedure and advancement flap, recurrent 7 years later over right upper, lower lid, map biopsy-confirmed, wide excision, intra-operative frozen and tarsorrhaphy	
62	Sebaceous carcinoma, left lower eyelid	58	M	pT2aN0M0, Stage IB	EMA (+), BerEP4 (+), CK7 (+), and adipophilin (+), DOI 3.5 mm, with tumor invades skeletal muscle	Wide excision, intra-operative frozen, hard palate graft, skin rotational flap, Monoka tube insertion, and tarsorrhaphy	No recurrence for 1 year and lost f/u
63	Sebaceous carcinoma, metastatic, abdominal skin	32	F	cT3N3aM1, stage IV	ER (-), PR (-), Her2 (-). Ki-67 showed increased mitoses	Diagnosed simultaneously with invasive ductal carcinoma of right breast, cT3N3aM1 (skin metastasis), stage IV, status post neoadjuvant chemotherapy with Goserelin injection and lost f/u	
64	Sebaceous carcinoma, right ear	73	F	pT1N0M0, Stage I	EMA (+ intracytoplasmic vacuoles), CD34 (+ stromal cells), Bcl2 (peripheral staining), p16(-), AR (-)	Wide excision and rhomboid flap. Arising from sebaceoma and desmoplastic trichilemmoma	No recurrence for 3 years keep f/u
65	Sebaceous carcinoma in situ, left knee	68	F	pTisN0M0, Stage 0	SOX9 (+), P53 (+), BCL2 (+, focal), D2-40 (-), androgen receptor (-). Ki67 20%.	Breast cancer and lymph nodal metastasis, cT3N2M0, Stage IIIA, status post neoadjuvant chemotherapy with epirubicin and cyclophosphamide, modified radical mastectomy, docetaxel and hereceptin. Mucinous adenocarcinoma of the ascending colon, status post right hemicolectomy, pT3N1bM0, stage IIIB, followed by chemotherapy with mFOLFOX. Tubulovillous adenoma with low grade dysplasia	
66	Sebaceous carcinoma, left upper and lower eyelid	77	M	pT1cN0M0, Stage IA	Adipophilin (+), AR (+), DOI 4.5mm	Wide excision, periostium flap, myocutaneous flap reconstruction, tarsorrhaphy	No recurrence for 1 year keep f/u
67	Sebaceous carcinoma, left occipital scalp	39	M	pT1N0M0, Stage I	Adipophilin (+), DOI 6.5mm	Wide excision	No recurrence for 1 year keep f/u
68	Sebaceous carcinoma, left lower eyelid	85	F	pT1N0M0, Stage I	Ber-EP4 (+), SOX9 (+), EMA (+), CK7 (+), p40 (focal +), adipophilin (focal +), and AR (-)	Excision of left upper and lower lid palpebral conjunctiva, tarsorrhaphy Also with squamous cell carcinoma, poorly differentiated, over left upper eyelid, no recurrence for 1 year and keep f/u	
69	Sebaceous carcinoma, left upper eyelid	68	M	pT1N0M0, Stage I	CK7 (+), SOX9 (+), adipophilin (+), BerEP4 (+), and SOX9 (+)	Pentagonal excision and reconstruction, left upper eyelid	No recurrence for 1 year keep f/u
70	Intraepithelial sebaceous carcinoma, right upper and lower eyelid	88	F	pT3bN0M0, Stage IIA	Adipophilin (+), BerEP4 (+), DOI 4mm	Refused exenteration surgery and other therapy	Recurrence 4 years later, and the family refused surgery, f/u for another 2 years with topical eyedrop as symptomatic relief
71	Sebaceous carcinoma of left lower eyelid	66	M	pT2cN0M0, Stage IIA	Adipophilin (+), EMA (+), tumor involves from dermis to skeletal muscle of eyelid	Wide excision, intra-operative frozen, reconstruction with Hughes tarsal—conjunctival flap transitional dermal muscular flap	No recurrence for 4 years keep f/u
72	Sebaceous carcinoma in situ, left lower eyelid	86	F	pTisN0M0, Stage 0	Adipophilin (+)	Wide excision	No recurrence for 1 year and lost f/u
73	Sebaceous carcinoma of right lower eyelid	72	M	pT2aN0M0, Stage IB	Tumor involves to reticular dermis, DOI 2.3mm, CK7 (+), Ber-EP4 (-), MiTF (-), AR (-)	Wide excision, no recurrence for 7 years, and died of HBV related cirrhosis, ascites, hepatic encephalopathy and septic shock. He also had tubular adenoma with low grade dysplasia, basal cell carcinoma stage I over left nose, thyroid papillary cancer post-operation and I131 treatment, hepatocellular carcinoma post-operation and RFA	
74	Sebaceous carcinoma, lacrimal sac	81	M	Unknown	EMA (+)	Refuse treatment and died one year later due to squamous cell carcinoma, left upper lung, cT2bN1M1b, stage IV, with right adrenal metastasis, s/p cisplatin and gemcitabine, terminal	
75	Sebaceous carcinoma, right upper eyelid	71	F	pTisN0M0, Stage 0	Adipophilin (+), cytokeratin (+)	Wide excision	No recurrence for 10 years and died of septic shock

76	<b>Proliferating trichilemmal tumor, left buttock</b>	65	F	Lobulated proliferation of squamous cells with trichilemmal keratinization and numerous squamous eddies. No cell atypia or increased mitotic activity	Excision and no recurrence for 4 years, later died of advance hepatocellular carcinoma	
77	<b>Proliferating trichilemmal tumor, left foot</b>	63	M	Proliferating trichilemmal tumor, infiltrative border is absent	No recurrence for 14 years and keep f/u	
78	<b>Malignant proliferating trichilemmal tumor, right posterior scalp</b>	34	F	pT1N0M0, Stage I Nests of atypical squamous epithelium showing stromal invasion with desmoplastic reaction, p53 (-), Ki-67 40%, DOI 9mm	Wide excision and local flap reconstruction	No recurrence for 3 years and lost f/u
79	<b>Proliferating trichilemmal tumor, right lower cheek</b>	43	M	Hybrid proliferating trichilemmal tumor and epidermal cyst, ruptured	No recurrence for 1 year and lost f/u	
80	<b>Proliferating trichilemmal tumor, right flank</b>	60	M	Proliferating trichilemmal tumor, infiltrative border is absent	No recurrence for 2 years and keep f/u	
81	<b>Proliferating trichilemmal tumor, atypical, right scalp</b>	81	M	The tumor shows focal infiltrative border around the adjacent stromal tissue.	Wide excision and STSG	No recurrence for 1 year and keep f/u
82	<b>Proliferating trichilemmal tumor, right forehead</b>	45	M	Proliferating trichilemmal tumor, infiltrative border is absent	No recurrence for 3 months and keep f/u	

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**Abstract N°: 1680****Three Cases of Pigmented Epithelioid Melanocytoma (PEM) in Asians**Shihuan Valencia Long<sup>1</sup>, Kong Bing Tan<sup>2</sup>, Adeline Mei Yen Yong<sup>1</sup><sup>1</sup>National University Hospital, Department of Medicine, Division of Dermatology, Singapore, <sup>2</sup>National University Hospital, Pathology, Singapore**Introduction & Objectives:**

Pigmented epithelioid melanocytoma (PEM) is a unique and rare tumor characterised by its significantly pigmented appearance and indolent behaviour. Yet, it can, in cases, demonstrate cytological atypia and metastasise to local lymph nodes. Clinical and histopathological overlap between PEM and its lower or higher-grade mimics can make it difficult to diagnose. It is regarded as a melanocytic tumor of uncertain malignant potential. There is a paucity of literature focused on PEMs arising in Asians. We report 3 cases of PEMs arising from Asia, and review its characteristics and clinical outcomes.

**Materials & Methods:**

We collated the clinical characteristics and demographics of 3 cases of PEM.

**Results:**

We present a 26-year-old female with a 6mm bluish papule on her left forearm that had enlarged over several years (Patient A), a 27-year-old female with a 7mm blue papule on her right forearm that had presented since she was 12 years old (Patient B), and a 26-year-old male with a 4mm blue-green papule on his forehead for 1 year (Patient C). All 3 patients had no family or personal history of skin cancer. Only the 27-year-old female reported frequent sun-exposure without sun-protection. All 3 patients did not demonstrate palpable lymphadenopathy. Patient A elected for 4mm punch biopsy of the lesion, whilst the other 2 agreed for excision with narrow margins (2mm). Histology confirmed a dermal-based heavily pigmented lesion composing of spindle, epithelioid and stellate cells, with a fibrous stroma. No atypia or mitotic activity is noted. No junctional component is noted. Wide local excision (WLE) and sentinel lymph node biopsy was offered for patient A and B, however patient A had declined further surgical interventions and elected for self-monitoring of the lesion. She also declined regular physician-guided surveillance of the lesion. To date, Patient B has been planned for WLE and sentinel lymph node biopsy whilst Patient C successfully underwent wide local excision with 4mm margins with complete clearance of the tumor.

**Conclusion:**

Existing literature on PEMs describes a largely benign clinical course, despite the presence of subclinical deposits in the sentinel lymph nodes of almost a third of patients. Most of the cases of PEMs arise in the Western counterparts. Based on a literature review of 8 PEM cases in Asia, only 1 case of congenital PEM (arising at 5-month-old) demonstrated regional lymph node metastasis by 7-month-old and required bio-chemotherapy. Whether SLNB should be performed as a staging procedure in every case of PEM remains controversial. Longer periods of follow-up with more cases and further molecular studies for PEM are needed to fully delineate the true biological nature of this disease.

**Abstract N°: 1709****Aquaporin 1, 8 and 9 expression: possible correlation with prognosis and clinical outcome on malignant melanoma.**

Lara Camillo<sup>\*1</sup>, Elisa Zavattaro<sup>1, 2</sup>, Elia Esposto<sup>2</sup>, Laura Cristina Gironi<sup>2</sup>, Paola Savoia<sup>1, 2</sup>

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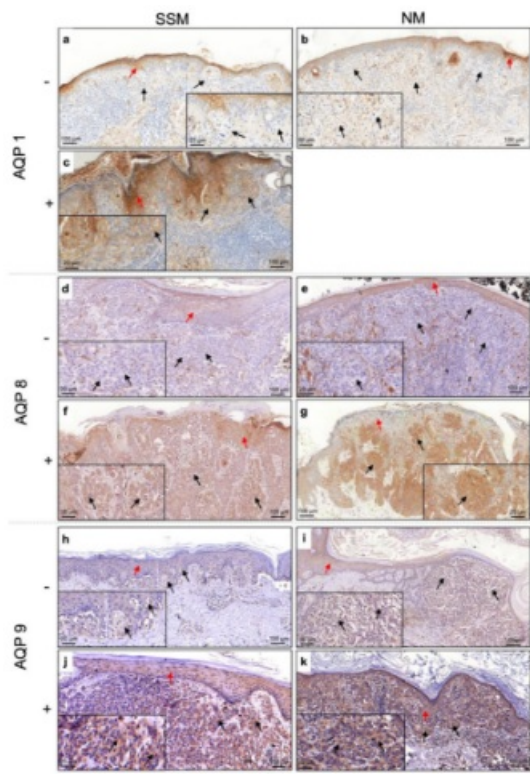
**Introduction & Objectives:** Aquaporins (AQPs) are small transmembrane proteins that facilitate the passive transport of water and small molecules throughout cells. In humans have been identified thirteen isoforms of AQPs across the whole body. Besides the regulation of water homeostasis, AQPs are involved in several cellular processes and have been associated with the development of different tumors. AQPs expression, in particular AQP1 and 3, has been evaluated also on skin cancers, although presenting contrasting results.

Here, we present our work that we recently published (PMID: 38002749) where through a retrospective observational study we find a possible correlation between AQP1, 8 and 9 expression and clinical outcome on 58 patients diagnosed with malignant melanoma (MM).

**Materials & Methods:**

During years 2014-2016, we enrolled 58 patients affected by MM (average age 58 years) of which 44 patients with superficial spreading melanoma (SSM) and 14 with nodular melanoma (NM). Using immunohistochemistry, we evaluated the expression of AQP1, 8 and 9 on FFPE specimens of all patients. We correlated AQP expression with melanoma histotype, Breslow and mitotic index, BRAF mutation, ulcerations, anatomical site, overall survival. Chi-square or Fisher test and *t*-test were performed to find correlation between groups. Kaplan-Meier was used to evaluate disease-free survival rate.

**Results:**



Analyzing the expression of AQPs on SSM and NM, we noted that

not all lesions expressed these proteins. Indeed, we found that all NMs were negative for AQP1 expression (0/14) (Figure 1b), while the 25% of SSMs (11/44) were positive for AQP1 (Figure 1c). On the other hand, AQP8 was expressed by 77.3% (34/44) (Figure 1f) of SSM versus 50% (7/14) of NM (Figure 1g), while AQP9 was positive in 83.7% (36/43) of SSM (Figure 1j) and 57.1% (8/14) of NM (Figure 1k). However, no statistical difference was found ( $p > 0.05$ ).

**Figure 1. IHC analysis of AQP1, 8 and 9 expression on nodular melanoma (NM) and superficial spreading melanoma (SSM).**

Analyzing AQP expression on the total of MM we found that AQP1 expression is statistically correlated with low mitotic index, AQP8 with negative sentinel lymphnode, and AQP9 with low Breslow index and lack of ulceration. We also found that the overall survival rate is improved in presence of AQP expression, although no significant differences were found.

**Conclusion:**

Despite the relative low number of patients enrolled, our study demonstrates for the first time that AQP1, 8 and 9 expression is correlated with better prognosis, low mitotic index, low Breslow index, lack of ulceration and negative lymphnode.







**Abstract N°: 1725**

**Primary cutaneous CD4-positive small or medium T-cell lymphoproliferative disorder – a case report and literature review**

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**Introduction & Objectives:**

Primary cutaneous CD4-positive small or medium T-cell lymphoproliferative disorder (PCSM-LPD) is a fairly recently recognized but nonetheless quite frequent entity. It usually occurs in adults as a solitary nodule or plaque, most commonly in the head and neck region. Histologically, it is defined by the predominance of small to medium-sized CD4+ pleomorphic T-cells without prior or concurrent patches and plaques typical of mycosis. In the 2005 WHO-EORTC classification, it was classified as primary cutaneous CD4+ small/medium pleomorphic T-cell lymphoma. It was considered a rare, poorly defined disease with uncertain malignant potential. In the revised WHO-EORTC classification of 2018, the term “lymphoma” was changed to “lymphoproliferative disorder” due to its benign course. PCSM-LPD is now considered a relatively common cutaneous T-cell lymphoma (CTCL) with a favourable prognosis and no reported risk of secondary lymphomas.

**Materials & Methods:**

We present a case of spontaneous regression of PCSM-LPD after a biopsy in a young man.

**Results:**

A 22-year-old man presented with a solitary skin lesion on the right upper arm that had been present for 2 months. Physical examination revealed a well-demarcated erythematous plaque with a diameter of 23 mm in the proximal third of the lateral aspect of the right upper arm. The patient had no other skin lesions or systemic symptoms.

The biopsy revealed an unremarkable epidermis and a dense, diffuse, mixed-cell inflammatory infiltrate within whole thickness of the dermis. The infiltrate was composed predominantly of small to medium-sized CD3+ T lymphocytes, exhibiting somewhat pleomorphic cell morphology. In the background were less numerous CD20+ B lymphocytes, histiocytes and eosinophilic granulocytes.

The pleomorphic T lymphocytes showed CD3+, CD4+, CD8-, CD30- immunophenotype and were predominantly positive for CD2, CD5, and CD7, indicating only a slight down-regulation of CD2 and CD7 expression. PD1 was expressed by a subset of cells, focally arranged in small clusters. The Ki-67 proliferation index was low (approx. 5%). Molecular genetic analysis revealed monoclonal rearrangement in TcR-gamma gene. B-lymphocytes were polyclonal.

Laboratory tests, including a complete blood cell count with the differential, liver function tests, lactate dehydrogenase level, and serum protein electrophoresis were all within the normal limits. Computed tomography (CT) of the thorax and abdomen ruled out the involvement of other organs. Based on the clinical presentation, histomorphological features, and the immunophenotype of the lymphocytic infiltrate as well as monoclonality of T lymphocytes, the diagnosis of PCSM-LPD was made.

About 1 month after the biopsy, a partial regression of the lesion was observed, and after 3 months it had

completely disappeared. The patient is monitored regularly every 3 months and is currently in clinical remission.

### **Conclusion:**

Currently, PCSM-LPD remains a poorly understood disease with no clear diagnostic or treatment guidelines. In the future, accurate diagnostic criteria and optimal management should be defined to avoid misdiagnosis, potentially unnecessary staging, and unnecessary aggressive treatment. Our case report emphasizes that clinical observation after biopsy could be an initial treatment strategy for PCSM-LPD, as spontaneous regression after biopsy is possible.

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## Abstract N°: 1769

### Advanced basal cell carcinoma: clinical and histological predictors of tumor recurrence after complete response on hedgehog inhibitors

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### Introduction & Objectives:

Advanced basal cell carcinoma (aBCC) represents a complex group of lesions, for which curative surgery and/or radiotherapy is unlikely due to tumor and/or patient-related factors. Hedgehog pathway inhibitors (HHI) represent standard of care for aBCC patients.

The long-term outcomes of aBCC patients who achieve complete response (CR) on HHI have been seldom reported, highlighting major unresolved clinical questions on whether to continue HHI treatment beyond CR, and on the identification of predictors of tumor recurrence.

The aim of our study was to investigate the clinical and histological factors that are associated with aBCC recurrence after CR on HHI.

### Materials & Methods:

We performed a retrospective multicenter observational study at 12 Italian centers from January 1, 2016 to March 1, 2024. Inclusion criteria were as follows: aBCC patients aged  $\geq 18$  years, who achieved CR on HHI along follow-up. Methods to investigate tumor response to HHI included clinical evaluation and histology. Time to CR was defined as the time from the first dose of HHI until CR assessment; time to tumor recurrence was calculated as the time from the first documentation of CR until aBCC relapse. Relapse-free-survival (RFS) was defined as the time from CR assessment until aBCC relapse or death. Patients who did not experience tumor recurrence or death were censored at last follow-up.

Fisher's exact test and Mann-Whitney test were applied to detect differences between relapsing and non-relapsing aBCC patients. Univariate logistic regression was used to investigate the association between aBCC recurrence after CR and clinical and histological factors; results were presented as odds ratio (OR) and 95% confidence interval (CI). Kaplan-Meier method was used to estimate RFS, log-rank test to detect differences between the curves.

### Results:

We enrolled 106 aBCC patients who achieved CR on HHI; 68 patients (64%) were males, and median age was 78 years (28-97). Twelve patients (11.3%) were on vismodegib, and 94 (88.7%) on sonidegib; median HHI therapy duration was 18 months (0-37). Median time to CR was 8 months (0-34), and median time to aBCC relapse after CR was 12 months (0-70). Median duration of HHI treatment beyond CR was 6 months (0-22).

Fourteen patients (13.2%) experienced aBCC relapse after CR, of whom 10 (71.4%) were on HHI therapy. We reported a significant difference in the aBCC histological subtypes between relapsing and non-relapsing patients ( $p: 0.004$ ), with a higher figure for high-risk histological subtypes (morpheiform, basosquamous, infiltrative, and micronodular) in the relapsing cohort (71.4%), versus the non-relapsing cohort (28.3%), Table 1. Median time to CR was significantly longer in aBCC patients recurring after CR (12.5 months [5-39]) versus the non-recurring patients (7 months [1-32]),  $p: 0.04$ , Table 1.

Low risk aBCC histological subtypes (superficial and nodular) were significantly associated with a protective effect towards tumor recurrence (OR: 0.15, 95% CI: 0.04-0.51;  $p: 0.003$ ), Table 2. Time to CR significantly predicted aBCC relapse (OR: 1.07, 95% CI: 1.01-1.15;  $p: 0.04$ ). Accordingly, we assessed a decreased RFS probability for high-risk histology aBCC (hazard ratio [HR]: 4.92, 95% CI: 1.62-14.9;  $p: 0.002$ ), Figure 1B, and a RFS benefit for aBCC patients with shorter time to CR (HR: 0.14, 95% CI: 0.047-0.43;  $p: 0.0003$ ), Figure 1C.

## Conclusion:

Advanced BCC histological subtypes and time to CR predict tumor recurrence after CR on HHI.

**Table 1:** clinical and histological characteristics of recurring and non-recurring aBCC patients

Variable	Tumor recurrence after CR, yes (N=14)	Tumor recurrence after CR, no (N=92)	P value
Age (years), median (range)	77 (51-97)	78 (28-96)	0.73
Gender, N (%)			
Male	8 (57.1)	60 (65.2)	0.56
Female	6 (42.9)	32 (34.8)	
ECOG PS, N (%)			
0-1	12 (85.7)	89 (96.7)	0.12
≥2	2 (14.3)	3 (3.3)	
aBCC location, N (%)			
Head and neck	8 (57.1)	71 (77.2)	0.18
Other	6 (42.9)	21 (22.8)	
aBCC histology, N (%)			
High-risk*	10 (71.4)	26 (28.3)	0.004
Low-risk‡	4 (28.6)	66 (71.7)	
Therapies prior to HHI, N (%)			
Yes	9 (64.3)	51 (55.4)	0.57
No	5 (35.7)	41 (44.6)	
HHI duration (months), median (range)	15 (7-20)	18 (0-37)	0.06
Time to CR (months), median (range)	12.5 (5-39)	7 (1-32)	0.04
Time on HHI beyond CR (months), median (range)	4.5 (0-16)	6 (0-22)	0.14

aBCC, advanced basal cell carcinoma; CR, complete response; ECOG PS, eastern cooperative oncology group performance status; HHI, hedgehog inhibitor therapy; N, number

\*: morpheiform, basosquamous, infiltrative, and micronodular

‡: superficial and nodular

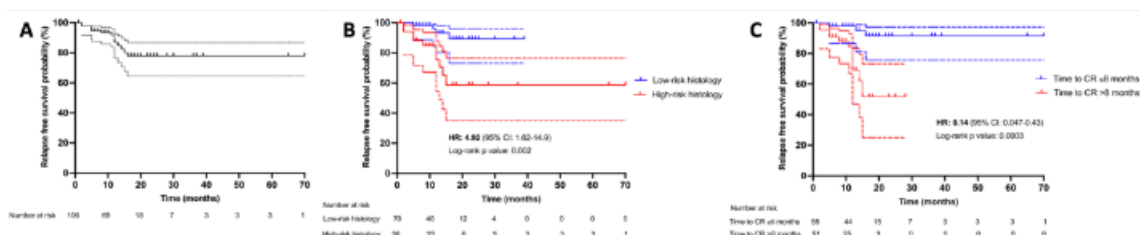
**Table 2:** clinical and histological predictors of aBCC recurrence after CR

Variable	Outcome: Tumor recurrence after CR		P value
	OR	95% CI	
Age (years)	0.99	0.95-1.04	0.73
Gender			
Male	1.40	0.42-4.39	0.55
Female			
ECOG PS	1.35	0.50-3.29	0.51
aBCC location			
Head and neck	2.53	0.76-8.13	0.11
Other			
aBCC histology			
Low-risk <sup>‡</sup>	0.15	0.04-0.51	<b>0.003</b>
High-risk*			
Therapies prior to HHI			
Yes	0.69	0.19-2.16	0.53
No			
HHI duration (months)	0.94	0.86-1.01	0.11
Time to CR (months)	1.07	1.01-1.15	<b>0.04</b>
Time on HHI beyond CR (months)	0.91	0.81-1.00	0.07

aBCC, advanced basal cell carcinoma; CI, confidence interval; CR, complete response; ECOG PS, eastern cooperative oncology group performance status; HHI, hedgehog inhibitor therapy; N, number; OR, odds ratio

\*: morpheiform, basosquamous, infiltrative, and micronodular

‡: superficial and nodular



**Figure 1:** RFS probability of the overall cohort (A); RFS probability stratified according to aBCC histological subtype (high-risk versus low-risk histology) (B); RFS probability stratified according to median time to CR (≤8 months and >8 months) (C)

Abbreviations: CI, confidence interval; CR, complete response; HR, hazard ratio

High-risk histology: morpheiform, basosquamous, infiltrative, and micronodular

Low-risk histology: superficial and nodular



**Abstract N°: 1782****Case series on Merkel cell carcinoma (MCC) – Real world data on management and outcome of MCC from 8 cases diagnosed and treated at a single centre in the UK between 2019 and 2023**

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<sup>1</sup>Princess of Wales Hospital, Dermatology, Bridgend, United Kingdom

Merkel cell carcinoma (MCC) is an uncommon and extremely aggressive form of skin cancer, with a death rate that surpasses that of melanoma. Reported 5-year survival rates range from 30% to 64%. Regrettably, clinical suspicion for diagnosis is infrequent due to the absence of distinctive characteristics. Our hospital encountered eight individuals with Merkel cell carcinoma (MCC) from 2019 to 2023.

We retrospectively reviewed the records of eight patients with Merkel cell carcinoma between 2019 and 2023 in the Dermatology unit of the Princess of Wales Hospital.

There were eight men, with an average age of 80 years (ranging from 64 to 98 years). The lesions were located in the craniofacial area in four patients, the right upper extremity in three patients, and the right axillary lymph node in one patient. Although four of our patients succumbed to comorbidities prior to receiving final therapy for their MCC, the other individuals underwent wide local excision (WLE) and sentinel lymph node biopsy (SLNB). The patient with right axillary lymph node Merkel cell carcinoma had a surgical procedure to remove the lymph nodes and received further radiation therapy. The SLNB results for our patients were negative. Chemotherapy was not administered to any of the patients. Staging computed tomography (CT) was conducted for all four patients, and no signs of metastases were seen. All four patients have been consistently monitored and have not seen any recurrence.

The prevalence of MCC has tripled in recent decades. MCC manifests as an asymptomatic, rapidly growing lesion in older patients (over 50 years old) with pale skin that has been exposed to ultraviolet radiation, and who have a heightened risk of immunosuppression, such as organ transplant recipients. It imitates skin abnormalities such as inflammatory cysts, folliculitis, and lipomas. In a research, over 60% of dermatologists only considered doing a biopsy when requested by the patient. Because of its infrequency, there are just a few evidence-based advice available. Sentinel lymph node biopsy (SLNB) and imaging are crucial for the process of detecting the stage of a disease and predicting its prognosis. The usual surgical method involves removing the primary site with margins of 1-2cm to the investing fascia layer, wherever possible. Detecting individuals with positive micronodular nodal illness and subsequently conducting complete lymph node dissection decreases the likelihood of recurrence. Radiation therapy after surgery is advised for individuals at high risk, which includes those with a primary tumour larger than 1cm, positive surgical margins under a microscope, lymphovascular invasion, a primary cancer in the head and neck, and a weakened immune system. The use of adjuvant chemotherapy, particularly in cases with metastatic MCC, is a subject of debate due to the lack of observed survival benefits. Patients diagnosed with MCC should get regular follow-up appointments, ideally every 3 to 6 months during the initial 2 years, and then every 6 to 12 months thereafter.

A high level of suspicion is necessary for the diagnosis of MCC. A multidisciplinary approach is recommended to provide excellent coordinated care for individuals diagnosed with this rare and challenging condition.





**Abstract N°: 1816**

**Comparison of Convolutional Neural Network and Clinician Expertise in Identifying Naevi on the Right whole Arm from 3D Body Photography**

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**Introduction & Objectives:**

One of the most significant risk factors for melanoma is the presence of many melanocytic naevi. The process of counting naevi is inherently subjective and time consuming, and recent advancements in artificial intelligence and digital imaging have enabled automation of counting naevi.

The study aimed to compare the accuracy of a Convolutional Neural Network (CNN) in the identification of naevi from 3D total-body photography (3D-TBP) of the right arm to that of a clinician.

**Materials & Methods:**

A total of 59 participants (30 females and 29 males) were randomly selected from a large two-year randomised control trial where participants underwent 3D-TBP. The participants in the large study were all melanoma high-risk and >18 years of age. The participants for the current study were randomized by age and sex group (30 females and 29 males; 29 with <40 years of age and 30 with age >40 years) Subjects had been scanned using a 3D-TBP system capturing 92 images simultaneously, which were combined to generate a 3D avatar.

The total number of nevi on the right arm of each participant was counted by a qualified clinician specialized in skin cancer, utilizing the 3D body map avatar of the participants. This count was then compared with the automated naevus count of the same avatar, generated by the integrated CNN in the 3D-TBP system (with cutoff for the confidence level of a lesion to be a naevus set at 80%). For improved repeatability, only lesions  $\geq 3$  mm were considered in the counting. The difference between the clinician count and the automated count was calculated, and compared against zero using the Mann-Whiney U test. The median naevus count by the clinician and the CNN were compared using the Wilcoxon signed rank test in each age group.

**Results:**

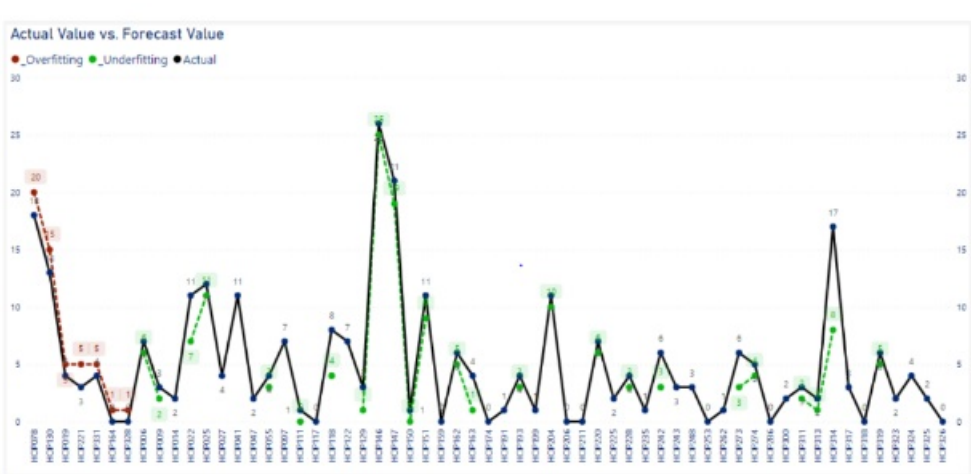
The cohort comprised individuals with Fitzpatrick skin types I-III and all participants had a European ancestry. Across the patients, the clinician recorded a median of 3 lesions (IQR:5.5), while the CNN aslo noted a median of 3(IQR:4). In patients over 40, the clinician observed a median of 2.5 (IQR:5.5), whereas the CNN identified a median f 2.5(IQR:5). Conversely, in patients under 40, the clinician recorded a median of 3 (IQR:5), similar to the CNN's median of 3 lesions (IQR:3). We observed a high level of accuracy between the naevus counts conducted by the clinician and those determined by the CNN. Statistical analyses showed no significant differences in the naevus counts between the two methods for the overall patient dataset ( $p=0.466$ ) and for patients over 40 years old ( $p= 0.627$ ). However, for patients under 40 years old, the Wilcoxon Signed Rank Test revealed a statistically significant difference ( $p= 0.001$ ) between the counts, suggesting some discrepancies in this age group.

**Conclusion:**

In conclusion, no significant differences were found between the clinician's count and the CNN's count across the



entire dataset and in patients above 40 years old, while significant differences were noted in patients under 40 years old. It is noteworthy that the CNN has demonstrated remarkable accuracy and comparability to human expertise. This is promising for enhancing dermatological diagnostics, with implications for improved patient care and early detection of skin cancer.



**Figure1:** Comparison of Clinician and CNN Counts Across the Entire Dataset Actual counts represent those by the clinician. Overfitting and underfitting are the forecast values of the CNN.

**Abstract N°: 1835****Paraneoplastic pemphigus presenting clinically as generalized pustular lesions in a case with lung mesothelioma treated with nivolumab: A rare case report and literature review**Reem Diab<sup>\*1</sup>, Fahimeh Abdollahimajd<sup>1</sup><sup>1</sup>Shohadaye Tajrish Hospital, Tehran, Iran**Introduction & Objectives:**

Immune checkpoint inhibitors have caused a new revolution in treatment of many cancers. Nivolumab is the first-in-human immunoglobulin G4 (IgG4) PD-1 immune checkpoint inhibitor antibody which increase the immune response by rehabilitating the antitumor T cells function. This new treatment had showed its effectiveness in treatment of multiple cancers. This therapy leads to satisfying anti-tumor effects, but on the other hand causes multiple side effects including immune-related adverse events (irAEs). One of the rare immune-related adverse events are autoimmune blistering diseases including pemphigus vulgaris, paraneoplastic pemphigus, and bullous pemphigoid. Pemphigus disease is a very rare irAE presenting after treatment of cancer using immune checkpoint inhibitors.

**Materials & Methods:**

Herein, we present a 70-year-old female patient with lung mesothelioma and liver metastasis who was treated with nivolumab and who developed later paraneoplastic pemphigus (PNP) 2 weeks after drug initiation. We successfully treated her PNP-irAE by the cessation of nivolumab therapy and using low dose-systematic corticosteroids with plasmapheresis.

**Results:**

To our knowledge, only four cases were reported in literature in addition to our case. Our case is the first case in literature for paraneoplastic pemphigus which was treated successfully with plasmapheresis and had complete resolution of symptoms with no recurrence during follow up after 1 year later.

**Conclusion:**

During the treatment with immune checkpoint inhibitors, the oncologist must be aware for any side effect that can be related to immune-related undesirable event of medications in addition to any presentation that can be an adverse effect of the cancer itself.



**Abstract N°: 2022****Squamoid Eccrine Ductal Carcinoma: A Comprehensive Review**

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**Introduction & Objectives:** Squamoid eccrine ductal carcinoma (SEDC) is a rare and aggressive skin cancer originating from eccrine glands, often misdiagnosed as squamous cell carcinoma (SCC). Accurate diagnosis is crucial due to its aggressive behavior and higher risk of recurrence and metastasis compared to SCC. This review aims to provide a comprehensive understanding of SEDC, including its epidemiology, pathophysiology, clinical manifestations, diagnosis, histopathology, immunohistochemistry, treatment approaches, prognosis, and follow-up.

**Materials & Methods:** A systematic literature search was conducted on PubMed using the following keywords: "Squamous/Squamoid Eccrine Ductal Carcinoma". Articles were uploaded to Rayyan and screened based on inclusion and exclusion criteria, including relevance to SEDC and availability in the English language. Duplicate articles were removed, and selected articles underwent full-text review for data extraction.

**Results:** SEDC predominantly affects elderly individuals with a mean age of 69 and a male-to-female ratio of 1.14-to-1. Clinically, it presents as a single dermal nodule ranging from benign appearing to locally destructive, rapidly growing plaques or nodules. Notably affects sun-exposed areas, with the head and neck accounting for 73% of all cases. On histopathology, two distinct zones of differentiation are noted: superficial portions mimic well-differentiated SCC, while deeper components show eccrine ductal differentiation within a poorly circumscribed, infiltrative tumoral extension. Tumor invasion is marked by sheets and islands of atypical keratinocytes, often accompanied by squamous eddies, horn cysts, and sporadic intercellular bridges. Immunohistochemical positive markers include CK5/6, p63, EMA, and CEA, while CK7 and BerEP4 show mixed expressions. Negative markers include S-100 protein and GCDPF-15. Treatment modalities primarily consist of wide local excision (WLE) (67%) and Mohs micrographic surgery (MMS) (27.3%), with smaller proportions undergoing amputation or opting for no treatment. MMS emerged as an alternative approach, demonstrating lower recurrence rates compared to WLE in some studies. Adjuvant therapies, including radiotherapy and hormonal therapy, were implicated in metastatic cases. SEDC exhibited a high recurrence rate of 17% and post-surgical 5-year survival rates of less than 30%. Prognostic factors predictive of poor outcomes included lymphovascular invasion, positive tumor margins, high mitotic count, and tumor depth.

**Conclusion:** SEDC is a rare and aggressive skin cancer with distinctive clinical and histological features. Early diagnosis and aggressive management are essential for optimizing patient outcomes. Close follow-up and radiological investigations are recommended to monitor for recurrence and metastasis. Further research is warranted to elucidate the genetic and molecular characteristics of SEDC and to explore novel therapeutic strategies.





**Abstract N°: 2224****The Medicolegal Risks of Skin Cancer: An Analysis of Canadian Closed Medicolegal Data between 2016 and 2020**Jeffrey Toy<sup>\*1</sup>, Chaocheng Liu<sup>1</sup>, Laura Payant<sup>2</sup>, Richard Liu<sup>2</sup>, Gary Garber<sup>2</sup>, Tashmeeta Ahad<sup>1</sup><sup>1</sup>The Skin Care Centre, Dermatology and Skin Sciences, Vancouver, Canada, <sup>2</sup>Canadian Medical Protective Association, Safe Medical Care Research, Ottawa, Canada**Introduction & Objectives:**

Little is known about the risk of medicolegal cases related to the diagnosis and management of skin cancer (SC) in Canada. Current literature on SC medicolegal risk is predominantly US-based. Understanding medicolegal risk is critical for identifying factors that compromise patient safety.

Objectives \1. Recognize the value of medicolegal research in improving patient safety. \2. Identify common factors associated with diagnostic error and increased medicolegal risk. \3. Recognize methods of mitigating medicolegal risk.

**Materials & Methods:**

Medicolegal case data was extracted from the Canadian Medical Protective Association's (CMPA) national database. Cases (including civil-legal actions, regulatory authority cases, and complaints to hospitals) were included if closed between 01/01/2016-12/31/2020. Associated conditions included melanoma or other malignant neoplasm of the skin (coded with International Statistical Classification of Diseases 10th revision) as the presenting condition, diagnostic assumption, or complication.

**Results:**

Overall, 37,866 cases were closed over 5 years by the CMPA. Of these, 120 cases (<1%) involved SCs (49 melanomas; 63 keratinocyte carcinomas; 8 other SCs). The top three specialties involved were dermatology (28%), family medicine (28%) and plastic surgery (12%). Peer experts noted deficiencies in care in 95/120 SC cases, of which 62 (52%) involved diagnostic errors (misdiagnoses, missed or delayed diagnoses). Among these 62 cases, inadequate monitoring or follow-up, poor documentation, incomplete patient assessments, deviation from administrative procedures, and failure or delay in performing therapeutic or diagnostic interventions, were key contributing factors to diagnostic error and medicolegal risk.

**Conclusion:**

Medicolegal risks in our case sample were mostly associated with inadequate clinical assessment, poor documentation, and shortcomings in continuity of care, including communicating results. Awareness of these issues can lead to improved workflow and patient follow-up which may reduce medicolegal risks and improve patient safety.





Abstract N°: 2371

**Efficacy And Safety of Nivolumab and Ipilimumab Combination Versus Ipilimumab Alone for Skin Melanoma: A Systematic Review and Meta-Analysis**Houriah Nukaly<sup>\*1</sup>, Ali Aleid<sup>2</sup>, Abdulsalam Aleid<sup>3</sup>, Manar Alzahrani<sup>4</sup><sup>1</sup>Batterjee Medical College, Jeddah, Saudi Arabia, <sup>2</sup>Al Ahsa, Saudi Arabia, <sup>3</sup>KING FAISAL UNIVERSITY, Al Hofuf, Saudi Arabia, <sup>4</sup>King Khalid University, Abha, Saudi Arabia**Introduction & Objectives:**

Melanoma is a potentially lethal cancer that is most commonly cutaneous. nivolumab and ipilimumab are Immune checkpoint inhibitors (ICIs) which have entered the treatment paradigm for skin melanoma, but there is a lack of evidence regarding its relative efficacy and safety.

**Materials & Methods:**

We searched 4 electronic databases (Cochrane Central Register of Controlled Trials, PubMed, Scopus and Web of science) up to March 2024 for relevant articles testing the Efficacy and safety of nivolumab and ipilimumab combination versus ipilimumab. The quality of evidence from trials was assessed using ROB1. Data from the included studies was extracted into a uniform online sheet and meta-analysis was conducted using RevMan 5.4.

**Results:**

Results: We identified 3 studies. combination therapy showed statistically significant difference favoring Ipilimumab over combination of ipilimumab and nivolumab regarding overall survival (HR= 0.63, 95% CI [0.48,0.84], p=0.001). Regarding Overall progression free survival, statistically significant difference towards single ipilimumab group over combination treatment was noticed (HR= 0.44, 95%CI [0.37,0.51], p=<0.00001). meta-analysis showed statistically significant difference favoring combination group regarding complete, partial and objective responses to treatment (RR=4.48, 95% CI [2.7,7.42], p=<0.00001), (RR=2.68, 95% CI [2.02,3.57], p=<0.00001), (OR=6.3, 95% CI [4.49,8.85], p=<0.00001) respectively. In safety terms, Results showed increased risk of fatigue in single intervention of ipilimumab compared to combination group (RR=3.43, 95% CI [1.25,9.39], p=0.02). no other statistically significant difference was noticed regarding other safety terms.

**Conclusion:**

Meta-analysis findings indicate that single ipilimumab might provide superior survival outcomes and fewer potential adverse events when compared to combination therapy. However, combination therapy was associated with higher response rates. Thus, We recommend conducting more vigorous and large clinical trials to confirm this evidence.

Keywords: ipilimumab, melanoma, nivolumab, Survival rate





**Abstract N°: 2446**

**Systemic treatment of advanced melanoma - real life experience at a third level hospital.**

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**Introduction & Objectives:** Locally advanced and metastatic melanoma (MM) and cutaneous squamous cell carcinoma (cSCC) have systemic treatment options, such as immunotherapy (ICI) and targeted therapy (TT), which have improved the management of these patients. The aim of the study is to describe our experience with these therapies, emphasizing on adverse effects, management, and survival outcomes.

**Materials & Methods:** A retrospective descriptive study was conducted from October 2018 to January 2024. Demographic and clinical characteristics, oncological history, and treatment-related adverse events (TRAE) with immunotherapy or targeted therapy were analyzed, graded according to the Common Terminology Criteria for Adverse Events (CTCAE) 5.0. Recurrence-free survival (RFS) and distant metastasis-free survival (DMFS) were estimated by Kaplan-Meier.

**Results:** 68 systemic treatments were initiated in melanoma and cSCC, 61 as ICI and 7 as TT. This corresponded to 63 patients, 59 with MM and 4 with cSCC, with 5 changes to second line in patients with MM due to disease progression or TRAE. ICI was initiated in 43 (75.4%) stage III, 7 (12.3%) stage IV and 7 (12.3%) stage II MM, while TT was initiated in 5 (71.4%) stage III and 2 (28.6%) stage IV. The TRAE are described in Table 1. The median follow-up time of melanoma patients since initiation of systemic treatment was 21.5 months ( $\pm$  16.4), while in cSCC the median was 5 months (IQR 15.75). The RFS at 36 months was 54.3% in stage III with pembrolizumab, while at 12 months with nivolumab it was 71.4%. For DMFS, at 36 months with pembrolizumab in stage III it was 69%, while at 12 months with nivolumab it was 68.6%. None of the patients treated with stage IV immunotherapy progressed or died during follow-up. Survival in TT patients and cSCC could not be estimated.

**Conclusion:** The occurrence and severity of adverse effects with ICI was like that described in the literature. This was not the case in TT, probably due to the low sample size in our center. RFS was somewhat lower compared to clinical trials with pembrolizumab, while with nivolumab it was somewhat higher. Finally, with respect to DMFS, at 12 months with nivolumab it was lower than described, while with pembrolizumab at 36 months it was similar.

Table 1. Treatment-related adverse events

TREATMENT-RELATED ADVERSE EVENTS (TRAE)
Immunotherapy (N=90)
Grade 1
51 (56.7%)
Patients receiving ICI (N=61)
TRAE
40 (65.6%)

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**Abstract N°: 2449**

**Trend and prediction of melanoma mortality compared to other common tumors. A time series prediction analysis.**

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**Introduction & Objectives:**

Prevention campaigns and interventions are aimed at leveling off the mortality from cancer. However, the implementations and results obtained in each cancer type are being remarkably different.

The objectives of this study are to compare the mortality trends of melanoma and other common cancer types in Spain and to forecast future mortality.

**Materials & Methods:**

A population-based study to describe mortality trends and to predict future melanoma and other tumors mortality in Spain through mortality time series. Data on causes of death were obtained through the Medical Death Certificate from the Spanish Government's National Institute of Statistics.

**Results:**

During the 2001–2021 period, melanoma showed the widest increase in mortality in general population, and in men. In women, lung cancer showed the largest mortality increase, followed by melanoma, and with breast cancer mortality stabilizing by the end of the period. The mortality predictions showed a clear increase for melanoma and lung cancer within the following 20 years, with a decline of the mortality trend for colorectal cancer, and stabilization of breast cancer mortality.

Limitations: the use of crude mortality data.

**Conclusion:**

Melanoma mortality is not expected to level off, as observed in other cancer types. Prevention interventions should be revisited to consider patient-dependent and tumor-dependent features.





## Abstract N°: 2451

### **Primary radiotherapy in older adults with basal cell carcinoma: results of the prospective, multicenter BATOA cohort study on treatment burden, short-term outcomes and a comparison with surgically treated patients**

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#### **Introduction & Objectives:**

To optimize personalized care in older adults with basal cell carcinoma (BCC), data on treatment burden is needed. However, evidence regarding the (prediction of) treatment burden of radiotherapy (RT) in older patients with BCC is currently lacking. We aimed to evaluate the treatment burden in older adults treated with RT for BCC in the head and neck area, and compare this to surgically treated patients.

#### **Materials & Methods:**

This study used data from the prospective, multicenter Basal Cell Carcinoma Treatment in Older Adults (BATOA) cohort. Patients aged  $\geq 70$  years and treated with primary RT or surgery for BCC in the head and neck area were included. Patient reported data on treatment burden (visual analog scale (VAS), 0-10 cm, higher scores indicate lower treatment burden) and cosmetic outcome ((VAS), 0-10 cm, higher scores indicate better cosmetic results) 2 to 4 months posttreatment and data on adverse events were collected. [Univariate analyses](#) using Student's t test and  $\chi^2$  test were performed.

#### **Results:**

A total of 139 patients treated with RT in 7 centers were included and compared to 539 patients treated with surgery. The treatment burden of RT was low (median VAS score of 8.9; interquartile range (IQR) 7.8-9.6), and cosmetic outcome was good (median VAS score of 9.4; IQR 8.7-9.8). Radiation dermatitis was seen in 119 patients (85.6%). Treatment burden of radiotherapy was slightly lower compared to the surgery group (median VAS score 8.6; IQR 7.3-9.4;  $P=0.001$ ). Short-term cosmetic outcome was generally high in both treatment groups, though better in the RT group (median VAS of 9.4; (IQR 8.7-9.8) compared to the surgery group (median VAS 8.5; IQR 6.7-9.5;  $P<0.001$ ).

#### **Conclusion:**

RT is well tolerated in this cohort of older adults with BCC in the head and neck area. Although the treatment burden was found to be generally low in both treatment groups, it was slightly lower in patients treated with radiotherapy compared to surgery.

## Tables / Figures

**Table 1: Patient-, tumor- and treatment characteristics of older adults (aged ≥70 years) treated for basal cell carcinoma in the head and neck area from the BATOA cohort, including a comparison between patients treated by primary radiotherapy vs. surgery.**

	Treated by RT (n=139)	Treated by surgery (n=539)	P value	95% CI (of the difference)
<b>Patient characteristics</b>				
Age <sup>a</sup> (years), Mean ± SD	81.8 ± 6.2	78.6 ± 5.8	0.338	-4.37 to -2.13
Sex, n (%)				
Male	67 (48.2)	304 (56.4)		
Female	72 (51.8)	235 (43.6)	<0.001	
History of keratinocyte cancer, n (%)	86 (77.5)	324 (60.7)	<0.001	
Previously treated with surgery, n (%)	78 (95.1)	312 (58.5)		
Previously treated with RT, n (%)	6 (5.9)	17 (3.2)		
Charlson Comorbidity Index, Median (IQR)	1 (0-2.25)	2 (0-3)	0.337	-0.52 to 0.674
Polypharmacy <sup>b</sup> , n (%)	77 (61.6)	264 (50.1)	<0.001	
ADL dependent <sup>c</sup> , n (%)	25 (20.0)	112 (21.1)	0.787	
iADL dependent <sup>d</sup> , n (%)	58 (41.7)	222 (42.0)	0.330	
<b>Tumor characteristics</b>				
Previous treatment, n (%)				
No, primary tumor	127 (91.4)	467 (86.6)	0.132	
Yes, recurrent tumor	12 (8.6)	72 (13.4)		
Tumor location, n (%)				
Forehead	14 (10.1)	171 (31.7)		
Peri-ocular	4 (2.9)	34 (6.3)		
Cheek	3 (2.2)	66 (12.2)		
Nose	87 (62.6)	145 (26.9)		
Peri-oral	4 (2.9)	20 (3.7)		
Chin	1 (0.7)	5 (0.9)		
Ear	20 (14.4)	37 (6.9)		
Neck	3 (2.2)	40 (7.4)		
Scalp	3 (2.2)	21 (3.9)	<0.001	
BCC subtype, n (%)				
Mixed	36 (26.3)	156 (28.9)		
Nodular	45 (32.8)	206 (38.2)		
Micronodular	8 (5.8)	66 (12.2)		
Infiltrative	44 (32.1)	103 (19.1)		
Superficial	4 (2.9)	7 (1.3)		
Adenoid	0 (0.0)	1 (0.2)	0.008	
Maximum tumor diameter in mm, Median (IQR)	13 (8-20)	10 (7-15)	<0.001	-5.98 to -2.76
<b>Treatment characteristics</b>				
Type of surgery				
Mohs micrographic surgery	N/A	269 (54.9)		
Conventional excision	N/A	243 (45.1)	N/A	
Number of treatments (fractions)				
Median (IQR)	18 (10-18)	N/A	N/A	
Total dose (in Gray)				
Median (IQR)	54 (44-54)	N/A	N/A	



Type of RT, n (%)				
Conventional photons	10 (7.2)			
Low-energy photons	0 (0.0)			
Electrons	126 (90.6)			
Esteya	2 (1.4)			
Orthovoltage	1 (0.7)	N/A	N/A	
Total duration of the treatment period (days from date first and last visit)				
Median (IQR)	26 (17-30)	N/A	N/A	
Travel distance to treatment center (km)				
Median (IQR)	18.0 (9.0-26.3)	11.0 (6.0-17.0)	0.149	-7.65 to -2.70

Values may not add up because of missing data and rounding.

<sup>a</sup> At the time of treatment.

<sup>b</sup> Defined as the chronic use of  $\geq 5$  medications with different anatomical therapeutic chemical (ATC3) codes.

<sup>c</sup> The Katz index of activities of daily living (ADL), comprising bathing, dressing, transferring, toileting, maintaining continence, and eating. Patients were considered ADL dependent if they were unable to perform  $\geq 1$  activity independently.

<sup>d</sup> Lawton and Brody index of instrumental ADL (iADL) comprising telephone use, grocery shopping, preparing meals, housekeeping, laundering, using transportation, taking medication, and managing finances. Patients were considered iADL dependent if they were unable to perform  $\geq 1$  activity independently.

**Table 2. Experienced treatment burden in older adults (aged  $\geq 70$  years) treated with radiotherapy or surgery for basal cell carcinoma in the head and neck area.**

	Treated by RT	Treated by surgery	P value	95% CI (of the difference)
Treatment burden (VAS, 0-10)				
Median (IQR)	8.9 (7.8-9.6)	8.6 (7.3-9.4)	0.001	-9.21 to -1.16
Cosmetic outcome (VAS, 0-10)				
Median (IQR)	9.4 (8.7-9.8)	8.5 (6.7-9.5)	<0.001	-14.2 to -6.49
Treatment experience, n (%):				
As expected	105 (76.1)	420 (80.2)	0.294	
Longer than expected	2 (1.4)	72 (13.7)	<0.001	
More painful than expected	2 (1.4)	55 (10.5)	<0.001	







**Abstract N°: 2581**

**Primary extramedullary plasmacytoma: a rare case presentation**

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**Introduction & Objectives:**

Plasma cell dyscrasias are a group of clonal disorders characterized by the proliferation of neoplastic plasma cells. Plasma cell neoplasms include three categories: plasmacytoma, manifesting as a single lesion; multiple myeloma, with multiple lesions; and plasma cell neoplasms with associated paraneoplastic syndrome. Plasmacytomas develop primarily in osseous tissue (solitary plasmacytoma of bone) and less frequently in soft tissues (solitary extramedullary plasmacytoma – SEP). Extramedullary plasmacytomas represent approximately 3% of neoplasms of this cell type, manifesting predominantly in the airway and gastrointestinal tract, although other organs and tissues may be affected. Cutaneous involvement is extremely rare, representing approximately 6% of all SEPs.

We herein present a case report of an adult male who developed a primary extramedullary solitary plasmacytoma of sudden onset on his right leg.

**Materials & Methods:**

We present the case of a 66-year-old male who presented to the hospital after the sudden appearance of a lesion on his right leg. The patient denied pain or pruritus associated with the lesion. He exhibited a 8 x 8 mm painless, firm, slightly mobile erythematous-violaceous tumor, located in the right pretibial region. There were no other significant cutaneous lesions or palpable lymph nodes at physical examination. The patient denied other past medical history, did not receive any chronic medication, and did not present systemic symptoms.

A partial punch biopsy of the lesion revealed a dermal infiltration of diffuse mononuclear cells with a basophilic cytoplasm and small central nucleolus, some of which had plasmacytoid appearance. Immunohistochemistry showed an atypical lymphoplasmacytic proliferation, which was CD79a positive, CD138 positive, CD20 negative, and exhibited clonality of lambda light chains.

An extensive workup performed in conjunction with the hematology department ruled out plasma cell myeloma. The results evidenced normal hemogram, serum electrophoretic proteinogram and renal function; a bone marrow biopsy reported slight reactive changes but less than 5% of plasma cells, and flow cytometry showed no abnormalities. A total body PET-scan did not reveal any hypermetabolic foci in the right leg or in other locations. These findings led us to confirm the diagnosis of solitary cutaneous extramedullary plasmacytoma.

The patient received three-dimensional conformal radiation therapy with a dose of 40 Gy over 4 weeks. The patient exhibited complete response and at his last follow up a year after completion of radiotherapy, there was no evidence of plasma cell myeloma or light chain disease.

**Results:**

-

**Conclusion:**

This case is presented due to its extremely rarity, complex clinical and histopathological diagnosis, and the

necessity for strict patient follow-up, as a small percentage of patients may show local or systemic progression and develop multiple myeloma in the future.

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**Abstract N°: 2657****Paget's disease of the male breast: case discussion, literature review and call for action**Shannon Gurley<sup>1</sup>, Camille Strackbein<sup>2</sup>, Vivian Wong<sup>1, 2, 3</sup><sup>1</sup>Chicago Medical School, North Chicago, United States, <sup>2</sup>Skin Wellness Physicians, Naples, United States, <sup>3</sup>NCH Baker Campus, Naples, United States**Introduction & Objectives:**

Mammary Paget's Disease accounts for approximately 3% of breast cancers, and only 2.1% of those have been recorded in males. An underlying breast carcinoma is present in 82% of male cases. The 5-year survival rate for male Mammary Paget's is 70.7%, which is worse than survival rates in females. Clinical diagnosis in males can be difficult as Paget's Disease mimics other dermatological conditions including psoriasis, contact dermatitis, atopic dermatitis, Bowen's disease, and melanoma. We present a case of a 79-year-old man with a 6-month history of redness, pain and drainage from his right nipple with an unremarkable breast ultrasound. He was initially diagnosed with impetiginized dermatitis and minimal response to treatment prior to diagnostic confirmation with histology. In our case CEA, EMA, Pan Keratin CK7, MART-1, SOX10, and CK20 stains in addition to histological analysis were used to arrive at the diagnosis of Mammary Paget's Disease. We also review literature presenting cases of Mammary Paget's Disease in males in the last 24 years.

**Materials & Methods:**

Cases reported since the year 2000 were found by searching "male paget's disease of breast" in PubMed. Case reports were individually screened based on title and their case features were recorded. Secondary supporting articles that emphasized clinical and pathological diagnostic features were also reviewed.

**Results:**

28 cases in males were found during our literature review. We noted patients' ages, laterality of their diseases, duration and type of symptoms, presence of underlying mass on physical exam, presence of underlying tumor on ultrasound or mammography, the underlying cancer diagnosis, immunohistochemical staining used for diagnosis, and treatment. The average age at diagnosis was 69.4 years and the average symptom duration was 18.2 months for the 16 cases that provided this data point. Three cases lacked an underlying ductal carcinoma and presented only with isolated paget's. Positive CK7 and negative S100 and HMB-45 staining in addition to histological presence of Paget's cells were the most commonly used evidence to make the diagnosis of Paget's Disease.

**Conclusion:** Given the rarity of breast cancer in males, Paget's disease is a challenging diagnosis and delays in diagnosis due occur. Attention should be paid to the nipple and areola in elderly patients, including those of the male gender, especially in elderly presenting with suspicious signs and symptoms. Diagnostic modalities should include both tissue biopsy as well as radiographic imaging using mammograms.





## Abstract N°: 2722

### A Case of Primary Cutaneous Anaplastic Large Cell Lymphoma on the Leg in a 65-year-old Filipino Male

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**Introduction & Objectives:** Primary cutaneous anaplastic large cell lymphoma (pcALCL) is a subset of CD30+ primary cutaneous T-cell lymphoproliferative diseases, comprising approximately 25-30% of cutaneous T-cell lymphomas. Typically, it presents as solitary or locoregional reddish-brown nodules and tumors, often ulcerated. It commonly affects individuals aged 50-70, but pediatric and congenital cases have been observed.

Cutaneous ALCL (cALCL) is marked by nodular or diffuse infiltrates of large, anaplastic cells within the dermis and occasionally subcutis. The infiltrate is primarily CD30-positive, with the absence of ALK suggesting pcALCL over systemic ALCL. Differentiation from other conditions like type-C lymphomatoid papulosis and mycosis fungoides with large cell transformation can be challenging due to CD30 expression in all. Therefore, correlating pathologic findings with clinical history is crucial for diagnosis.

First-line therapies for localized pcALCL tumors include complete surgical excision and local irradiation. Multiagent chemotherapy is recommended for extracutaneous dissemination beyond locoregional lymph nodes.

We present a case of pcALCL in a 65-year-old male, highlighting the clinical presentation, diagnostic challenges, treatment options, and the need for close monitoring to manage potential complications.

**Materials & Methods:** A 65-year-old Filipino male presented with a 3-year history of a recurring solitary papule on right leg, now with multiple asymptomatic nodules with crusts started 3 months prior. Histopathology revealed diffuse dermal infiltrate of atypical lymphoid cells with numerous mitotic figures and prominent nuclei. Immunohistochemistry showed diffuse CD30/CD3 positivity and partial CD20/CD45/CD5/CD7/S100 positivity, with negative ALK.

**Results:** Systemic workup showed subcutaneous isoechogenic lesions with no significant vascularity on the right axilla and antecubital, and bilateral distal femoral areas. Cervical and inguinal lymph nodes were unenlarged, with no evidence of extracutaneous disease. The patient was diagnosed with ALK-negative pcALCL.

The patient received 12 cycles of chemotherapy using Gemcitabine, 1g every session weekly and radiotherapy of 3000cGy, 200cGy at each treatment for a total of 15 fractions. A post-chemotherapy PET scan revealed no evidence of tumor recurrence or residual in the right leg. The patient was advised for close monitoring for potential relapse, dissemination, and extracutaneous spread.

**Conclusion:** Poor prognostic factors for pcALCL include extensive limb disease, age over 60 years, and extracutaneous disease. Moreover, tumors located on the lower extremity might be linked to either a weakened antitumor response or an increase in tumor growth. This case involved a 65-year-old male with extensive limb disease presenting with multiple nodules on the lower extremity who underwent a combination of single agent systemic chemotherapy and radiotherapy. Patients presenting with these factors may benefit from more aggressive treatments due to their poorer prognosis. A single agent chemotherapy, Gemcitabine, with its modest toxicity profile and easy schedule of administration make it an ideal agent. Timely intervention with an aggressive approach considering factors like toxicity and compliance, is the key to save lives in this locally aggressive clinical behavior to avoid amputation, dissemination, extracutaneous spread, or even death.





## Abstract N°: 2748

### ultrasound in the diagnosis of skin cancer

Anber Tanaka<sup>1</sup>, Barbara Klein<sup>1</sup>, Cristiane Gruber<sup>1</sup>, Franciane Moro<sup>1</sup>, Graziela Crescente<sup>1</sup>, Karina Medeiros<sup>1</sup>, Luciana Ballardín<sup>1</sup>

<sup>1</sup>Mackenzie Evangelical University Hospital, Curitiba, Paraná, Brazil

### Introduction & Objectives:

Basal cell carcinoma (BCC) is known to be the most prevalent skin cancer in humans. The nodular-cystic subtype is a rare entity, accounting for less than 3% of cases, considered a low-grade variant, with few cases described in the literature. On dermoscopy, it can present the classic finding of arboriform vessels, but without the other features that strongly suggest the diagnosis of BCC. This atypical presentation can lead to the incorrect diagnosis of an appendage tumor, such as a hidrocystoma or eccrine syringofibroadenoma. The main objective of this study is to alert medical colleagues that atypical presentations of basal cell carcinomas may be erroneously diagnosed as benign adnexal tumors. In these cases, the management may not take into account excision with adequate margins, which could favor tumor progression. And in this context, the ultrasonographic study can provide valuable additional information that increases the degree of diagnostic suspicion

### Materials & Methods:

A case report of an 88-year-old male patient is presented, whose main complaint was a lesion in the right supraclavicular region that had appeared about 8 years ago. He reported having undergone excision of a lesion with similar characteristics in the same topography several years ago and complained of local recurrence, denying associated symptoms. On physical examination, a well-defined, lobulated, pink-colored nodule with a smooth and shiny surface, translucent, and prominent vessels on ectoscopy were observed, corroborating arboriform vessels on dermoscopy. In this same initial appointment, an ultrasonographic study of the aforementioned nodule was then performed using the portable Logic E GE device with a high-frequency linear probe (18 MHz). The ultrasonographic study showed a circumscribed lesion with a central cystic component and a surrounding solid component, without color Doppler uptake. An incisional biopsy was indicated, confirming the histopathological diagnosis of solid-cystic BCC. Thus, a surgical approach was planned and excision with 4mm safety margins was performed. Skin closure was achieved primarily, in layers. There were no perioperative or postoperative complications

### Results:

A solid-cystic basal cell carcinoma was successfully diagnosed via ultrasonographic analysis and confirmed through incisional biopsy. The entire context allowed for the precise diagnosis of a likely recurrent BCC, enabling appropriate therapeutic intervention. Due to the lesion presented by the patient bearing a close resemblance to benign adnexal tumors, without proper suspicion and the aid of the conducted imaging examination, there would have been a chance to opt solely for tumor monitoring or to perform excision without appropriate safety margins, which could lead to local recurrence, tumor progression, and even in a more dramatic context, tumor metastasis.

### Conclusion:

Solid-cystic basal cell carcinoma, arising likely from nodular BCC necrosis, demands clinical vigilance due to its resemblance to benign tumors. Awareness among dermatologists is crucial given its metastatic potential. Misdiagnoses, especially in regions like the lower eyelid, can lead to inadequate surgical planning and local

recurrences. Literature on imaging methods for diagnosis is sparse. Early ultrasound assessment in our case prompted biopsy and curative intervention.

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**Abstract N°: 2768****Rapidly progressing hypopigmented mycosis fungoides - case report**Agnieszka Kimak<sup>\*1</sup>, Ewa Robak<sup>1</sup>, Tadeusz Robak<sup>2</sup>, Anna Wozniacka<sup>2</sup><sup>1</sup>Medical University of Lodz, Department of Dermatology and Venereology, Łódź, Poland, <sup>2</sup>Medical University of Lodz, Department of Hematology, Copernicus Memorial Hospital, Łódź, Poland**Introduction & Objectives:**

The hypopigmented variant of mycosis fungoides (HMF) is a rare subtype of mycosis fungoides typically associated with a favorable prognosis. Initial treatment often involves phototherapy. However, we present a case of a 48-year-old otherwise healthy patient with Fitzpatrick II phototype, who exhibited hypopigmented lesions consistent with mycosis fungoides. These lesions progressed rapidly to the erythrodermic form accompanied by lymphadenopathy.

**Materials & Methods & Results:**

The patient had a nine-month history of hypopigmented and erythematous plaques with subtle desquamation primarily on the trunk and in skin folds, along with intense pruritus. Additionally, there was a six-month history of generalized slight erythema. Despite prior treatment attempts with systemic antifungals and topical steroids no improvement was obtained. Two biopsies were performed—one from a hypopigmented plaque and another from an erythematous lesion. Both biopsies revealed perivascular infiltration with dispersed atypical lymphocytes with enlarged nuclei, characterized by the phenotype CD3+, CD4+, CD8-, CD7-, CD5-, GATA3+, CD23-, CD20-, bcl6-, PD1-. The diagnosis of mycosis fungoides was made. Treatment consisting of systemic and topical steroids along with phototherapy using ultraviolet A1 (UVA1) was initiated, although the patient's adherence to the phototherapy regimen was inconsistent due to work commitments.

After approximately three months, the patient developed generalized erythema with slightly yellowish undertones and peripheral lymph nodes enlargement. Leukopenia with neutropenia was noted in a full blood count. A lymph node biopsy confirmed mycosis fungoides infiltration with a lymphocyte phenotype consistent with the disease (CD3+, CD4+, CD8-, TIA1-, GATA3+, CD10-, CD20-, CD56-, ICOS+, bcl6-, CD25+[5%], CD30+[40%], Ki67 ~45%). Active areas were identified in a PET (positron emission tomography) scan, encompassing the skin, subcutaneous tissue, and axillary, inguinal, and iliac lymph nodes. Reactive alterations without malignant involvement were observed in a bone marrow biopsy. Treatment with methotrexate (25mg weekly) and topical steroids was initiated, with the patient now under close follow-up at an ambulatory clinic.

**Conclusion:**

This case challenges the common notion that hypopigmented mycosis fungoides progresses slowly, instead demonstrating its potential for rapid advancement to more aggressive forms. The absence of CD8+ cells may serve as an indicator of accelerated progression in HMF, suggesting their potential role in disease suppression. Consequently, all patients with mycosis fungoides, irrespective of clinical variant, should receive effective treatment and regular monitoring.





**Abstract N°: 2780****Clinical-epidemiological and histopathological correlation of cutaneous malignancies in a tertiary care facility in Eastern India: A cross-sectional study**Shini Choubey<sup>\*1</sup>, Debasmita Behera<sup>1</sup>, Chinmoy Raj<sup>1</sup><sup>1</sup>Kalinga Institute of Medical Sciences (KIMS), Bhubaneswar, India

**Introduction & Objectives:** In India, 1%–2% of all diagnosed cases of cancer are cutaneous malignancies. NMSCs, or non-melanoma skin cancers, include squamous cell carcinomas (SCC) and basal cell carcinomas (BCC). The others are sarcomas, cutaneous lymphomas, and melanoma. UV radiation exposure is thought to be the primary risk factor for skin cancers, while there are other variables that may possibly be involved. These tumours are uncommon in dark skin phenotypes but widespread in white-skinned people. Data on the risk factors, histopathologic categorization, and prognosis of non-malignant skin cancer (NMSCs) originating from the Indian subcontinent are also sparse. The aim of the study to find the clinic-epidemiological and its histopathological correlation of all cases of cutaneous malignancies presenting to an outpatient set up in a tertiary care centre in Eastern India.

**Materials & Methods:** This study is a cross-sectional study conducted in the department of Dermatology, in a tertiary medical centre and college in east India. All cases of patients with suspected cutaneous malignancies over a period of March 2022- February 2024 were included in the study. Skin biopsy was done to confirm the diagnosis. The patients without a confirmed histopathology and those not willing to give informed consent were excluded from the study. The clinical and histological findings in these cases were correlated and an attempt was made to include the immunohistochemistry details supporting the histopathological diagnosis, in the clinically suspected cases.

**Results:** There were 26 cutaneous tumor patients at the Dermatology and Venereology Outpatient department between 2022-24. Overall, there were more male patients (75%) with those aged 0-45 year (70.4%). Cutaneous tumors more commonly presented as plaque (54.2%), single (87.5), pigmented (58.3%), asymptomatic lesions (50%), with time from onset of more than 24 months (66.7%) and location on the head and neck (45.8%). Malignant cutaneous tumors showed significant differences, including predominantly male sex, presenting with pigmented lesions with time of onset of more than 24 months. BCC was the most common NSC reported in our study. The most common Cutaneous T cell lymphoma was more common than B-cell lymphoma. Majority of the reported cases (83%) had a history of prolonged sun-exposure for a long time.

**Conclusion:**

This study highlights NMSCs with BCC as the most prevalent cutaneous cancers, with a preponderance of men. Increased sun exposure is linked to a higher incidence of cutaneous cancers. An older age and pigmented lesions with a longer history are linked to a higher risk of malignant transformation. According to the variation in incidence rates and clinical profiles of melanoma and non-melanoma skin cancers between the eastern and northern India which remarking a regional variation, where the skin phenotype, altitude and geographical variance may be the cause.



**Abstract N°: 2801****Immune checkpoint inhibitor in immunocompromised patient with metastatic non-melanoma skin cancer: clinical insights**

Pedro Naranjo Álamo<sup>1</sup>, Paula Díaz Morales<sup>1</sup>, Gabriel Suárez Mahugo<sup>1</sup>, Ana Felipe Robaina<sup>1</sup>, Ana Rebolledo Ruiz<sup>1</sup>, Elena Castro Gonzalez<sup>1</sup>, Irene Castaño González<sup>1</sup>

<sup>1</sup>University Hospital of Gran Canaria Dr. Negrín, Dermatology Department, Las Palmas de Gran Canaria, Spain

**Introduction & Objectives:** Treatment with immune checkpoint inhibitors (ICI) has shown promising results in patients with locally advanced and/or metastatic cutaneous squamous cell carcinoma (cSCC), but data regarding their efficacy and safety in patients with concurrent hematological disorders are limited. We present a case of metastatic cSCC treated with pembrolizumab with a good response in a patient with T-cell prolymphocytic leukemia (T-PLL).

**Case Report:** An 82-year-old male presented with a left parietal tumoral lesion compatible with poorly differentiated cSCC, invading up to the subcutaneous tissue and perineural invasion) in contact with the deep margin, undergoing contact radiotherapy for 1 month. After 4 months, recurrence of the parietal lesion with an adjacent subcutaneous nodule was detected, biopsied with results of cSCC with vascular invasion and satellite lesions, respectively. Surgical rescue was decided, without achieving clear margins. In the following weeks, multiple nodules appeared on the flap edges and ipsilateral hemiface, along with a 3 cm cervical mass evidenced on CT scan. At that moment, it was considered not curable with surgery or radiotherapy, a candidate for immunotherapy. Initial blood work showed leukocytosis with a blood smear compatible with chronic lymphoproliferative syndrome. After consensus with Hematology, pembrolizumab 200 mg every 3 weeks was initiated. Cutaneous lesions and cervical mass regressed after five infusions, but with progression of leukocytosis. Prior to the sixth cycle, the patient was admitted due to clinical deterioration in Hematology completing the study. He was diagnosed with T-PLL and died within a month.

**Discussion:** Advanced CSCC presents a high mutational burden, with ICI being effective in its management, achieving overall response rates of up to 52% and complete remission after 4-6 cycles. However, patients with hematological disorders present worse outcomes (26.7%) due to greater tumor aggressiveness and dysfunctional immune system. The relationship between ICI and the development of hematological neoplasms is debated, although the loss of T-cell suppression by PD1 could play a role. The aggressiveness and lethality of T-PLL make it difficult to determine the influence of ICI on this condition.

**Conclusion:** Immune checkpoint inhibitors have shown to be an effective treatment for inoperable cSCC, but further studies are needed to evaluate efficacy and safety in patients with hematologic conditions.



**Abstract N°: 2834****Cutaneous metastasis revealing breast cancer**

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<sup>1</sup>University Hospital Center Lamine Debaghine, Department of Dermatology, Algiers, Algeria, <sup>2</sup>University Hospital Center Lamine Debaghine, Department of Pneumology, Algiers, Algeria, <sup>3</sup>Faculty of Medicine, University of Algiers 1, Algiers, Algeria, <sup>4</sup>University Hospital Center Lamine Debaghine, Department of Anatomopathology, Algiers, Algeria

**Introduction:**

Invasive ductal carcinoma, also known as non-specific invasive carcinoma, is the most common histological form of breast cancer. Its usual metastatic sites are bone, lung and liver. A secondary cutaneous site is uncommon, often developing after diagnosis of the primary tumour, very rarely before. We report a case of invasive ductal carcinoma of the breast with cutaneous revelation.

**Case presentation:**

A 42-year-old woman with a history of arterial hypertension presented with papulo-nodular skin lesions of the upper left half of the thorax that had appeared 4 months previously in a context of asthenia, weight loss not quantified and a nagging cough. On examination, the papulo-nodules were firm, erythematoviolaceous, erosive and necrotizing in some areas, extending from the axillary fossa to the left breast, with extension to the homolateral shoulder and back. A left axillary adenopathy was palpable. Cutaneous histopathology showed malignant tumour proliferation consistent with a secondary location of an adenocarcinoma of breast origin. Ultramammography revealed a tissue lesion in the upper outer quadrant of the left breast, classified as ACR 5. Pathological examination was consistent with invasive ductal carcinoma with the presence of vascular emboli. The thoracic radiography showed a balloon release image. A thoracic-abdominal-pelvi scan revealed multiple secondary sites in the lungs, liver and bones. The patient died before starting the first course of multidrug therapy.

**Discussion:**

Cutaneous metastases may occur in between 3% and 10% of all cancers combined. In around 0.5% of cases, they are the revealing sign of the neoplasia. The most frequently incriminated primary tumours are breast and lung. There are several distinct routes of metastatic spread to the skin. Direct invasion by contiguity, often found in breast cancer. Extension via blood or lymphatic vessels. Iatrogenic neoplastic implantation during surgery or a medical procedure is also a possible means of dissemination. Secondary cutaneous localisations of breast cancer can take several clinical forms: nodules, as in our case, herpetiform erythematous lesions, erysipeloid inflammatory plaques, or even sclerotic lesions. The preferred site is the chest and abdominal wall. They generally have a poor prognosis, with limited treatment options.

**Conclusion:**

Cutaneous metastasis revealing breast cancer are rare, often reflecting an aggressive neoplastic profile. It is therefore essential to know how to detect them, in order to ensure early and appropriate oncological management.





**Abstract N°: 2862**

### **Mechanical Force Promotes the Progression of Acral Melanoma via Piezo1**

Juanmei Cao<sup>1, 2</sup>, Juan Pan<sup>3</sup>, Yu Shao<sup>4</sup>, Ting Wu<sup>1</sup>, Yifan Jin<sup>1</sup>, Yuqing Wang<sup>1</sup>, Jinshan Zhan<sup>1</sup>, Naming Wu<sup>1</sup>, Liang Zhang<sup>5</sup>, Liu Yang<sup>1</sup>, Li Zhu<sup>1</sup>, Yue Qian<sup>1</sup>, Siyuan Chen<sup>1</sup>, Yusong R Guo<sup>6</sup>, Changzheng Huang<sup>\*1</sup>

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#### **Introduction & Objectives:**

Acral melanoma (AM) is a rare and distinct subtype of melanoma, which is the most serious type of skin cancer, only be found on non-hair bearing skin (palms, soles and nails). Previous studies have long emphasized that mechanical force contributes to the development of AM, but sufficient data to determine the pathogenesis are lacking. Piezo1-mediated mechanochemical transduction (MCT) seems to be the key to unveiling the relationship between mechanical forces and AM tumor progression.

In this study, we aim to investigate the clinical and pathological features correlating mechanical pressure values and the progression of melanoma tumors, as well as to explore the expression of Piezo1 in melanoma tissues and its relevance to the prognosis of skin cutaneous melanoma (SKCM).

#### **Materials & Methods:**

279 AM patients (137 men and 144 women) were collected who received treatment at the hospital between January 2011 and December 2021. 64 Plantar AM (PAM) patients (40 men and 24 women) were collected and matched for further analysis. The diagnosis was histopathologically confirmed in all the patients, and lesions that developed primarily in the subungual and periungual areas were excluded from the analysis. The study was approved by the institutional review board at the school.

The plantar standard mask and plantar pressure zoning standard mask were developed using Python, and the tumor lesions of each patient were located in the plantar standard mask based on their anatomical location. The lesion area and infiltration depth were statistically analyzed and visualized as a heatmap using R language.

Paraffin specimens and fresh tissue specimens of AM, non-AM (NAM) and normal pigmented nevus (Nevus) patients were collected and prepared, and the differences in Piezo1 expression among different patients were determined by RT-PCR, Western blot, immunohistochemistry and immunofluorescence staining. The correlation between the Piezo1 expression level in patients with MM from the TCGA database (the SKCM study) and the prognosis of their survival was analyzed using the Xena software.

#### **Results:**

AM was the main subtype of SKCM (279 AM cases, 65.96% of SKCM), with lesions concentrated in areas of high-pressure area such as the plantar, heel, lesser toes, and thumbs. Breslow depth of tumor lesions in AM (105 cases) was located mainly in the areas of high-pressure area such as the heel, thumbs, and lesser toes. PAM (64 cases)

lesions were concentrated in the high-pressure area of the plantar foot (Fig. 1A), and Breslow depth of the lesions was located in the high-pressure area of the plantar foot (Fig. 1B). The center of mass of bipedal lesions was highly fitted to the trajectory of the plantar center of pressure (COP) (Fig. 2), and the number of center of mass was significantly correlated with the peak plantar pressure (PPP) ( $P < 0.05$ ). The expression level of Piezo1 was significantly elevated in AM tissues (Fig. 3-4). Overall survival (OS) was significantly lower in patients with high Piezo1 expression compared to those with low expression ( $p = 7.6 \times 10^{-6}$ ) (Fig. 5).

**Conclusion:**

Mechanical force is an important trigger for the progression of AM, especially PAM. Patients with lesions located in the high-pressure area of the plantar peduncle have a deeper Breslow depth and later stage. Piezo1 is highly expressed in AM and is significantly negatively correlated with SKCM prognosis.

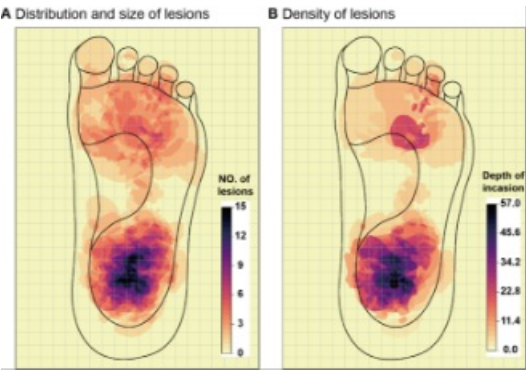


Fig.1

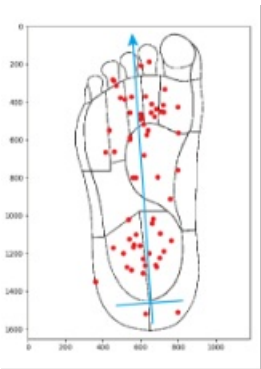


Fig.2

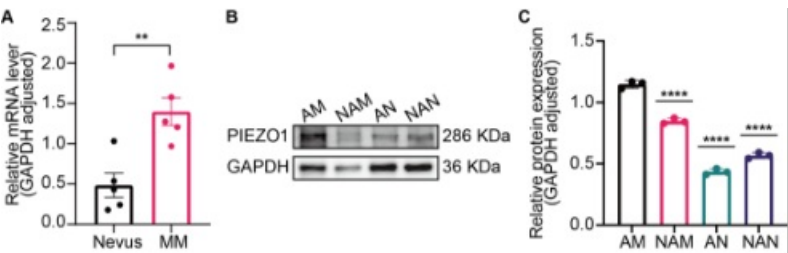


Fig.3

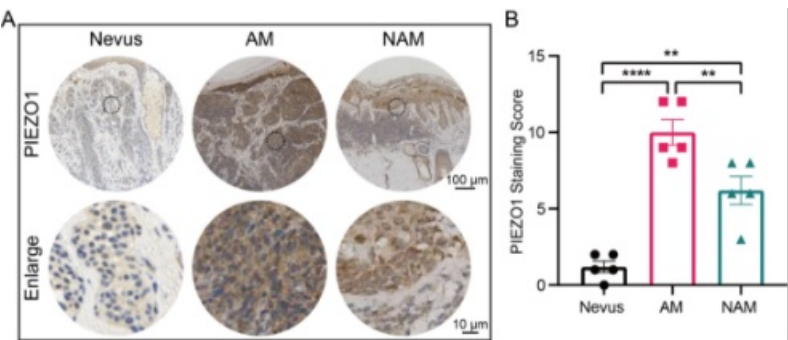


Fig.4

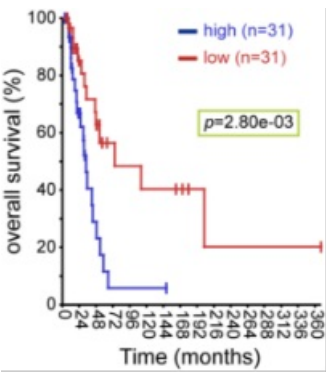


Fig.5





**Abstract N°: 2867**

**PIEZO1 Regulates Mechanoregulated Melanoma Cell Proliferation and Invasion by Mediating Ca<sup>2+</sup> Influx and YAP1-VEGF Signalling Pathway Activation**

Juanmei Cao<sup>1, 2</sup>, Juan Pan<sup>3</sup>, Yu Shao<sup>4</sup>, Ting Wu<sup>1</sup>, Yifan Jin<sup>1</sup>, Yuqing Wang<sup>1</sup>, Jinshan Zhan<sup>1</sup>, Naming Wu<sup>1</sup>, Liang Zhang<sup>5</sup>, Liu Yang<sup>1</sup>, Li Zhu<sup>1</sup>, Yue Qian<sup>1</sup>, Siyuan Chen<sup>1</sup>, Yusong R Guo<sup>6</sup>, Changzheng Huang<sup>\*1</sup>

<sup>1</sup>Department of dermatology, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China, <sup>2</sup>Department of dermatology, The First Affiliated Hospital of Shihezi University, Shihezi, China, <sup>3</sup>Department of pathology, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China, <sup>4</sup>School of Software Technology, Dalian University of Technology, Dalian, China, <sup>5</sup>Department of dermatology, Wuhan First People's Hospital, Wuhan, China, <sup>6</sup>Department of Biochemistry and Molecular Biology, School of Basic Medicine, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China

**Introduction & Objectives:**

Malignant melanoma (MM) is one of the most aggressive and deadly forms of skin cancer, known to its rapid proliferation and widespread metastasis. Piezo1 is a mechanosensitive ion channel that has been found to play a crucial role in various cellular processes, especially in the regulation of cell division and movement in mechanochemical transduction (MCT). However, the regulatory mechanism of Piezo1 in melanoma is still unclear. This study aims to investigate the role of Piezo1 in melanoma cells and its impact on cell proliferation, invasion, and metastasis. Specifically, it seeks to understand the influence of Piezo1-mediated calcium influx and related signaling pathways on melanoma cell behavior under mechanical stretch. Additionally, the study aims to assess the in vivo effects of Piezo1 response to mechanical pressure on melanoma growth and metastasis.

**Materials & Methods:**

In vitro experiments utilized siRNA and shRNA to silence PIEZO1 gene expression and FlexCell stretching as well as Yoda1 activation to modulate it. Validation methods included RT-PCR, Western blot, and calcium flux imaging. Functional effects on tumor cells were evaluated through various assays including CCK8, colony formation, EDU incorporation, Transwell migration, flow cytometry, and cell cycle analysis. Analysis of TCGA data examined the correlation between PIEZO1 and YAP1 in melanoma. Transcriptomic analysis and in vitro experiments verified potential signaling pathways. Mechanical stimulation was simulated using localized compression on magnetic disc tumor spheroids. In vivo experiments involved xenograft models in mice to assess the effects of PIEZO1 modulation on melanoma growth.

**Results:**

MM cell lines exhibited high PIEZO1 expression (Fig.1). Knockdown of PIEZO1 reduced tumor cell proliferation (Fig.2), invasion (Fig.3), and migration (Fig.4). Yoda1 activation of PIEZO1 showed dose-dependent effects on cell behavior, promoting proliferation at low concentrations and inhibiting it at high concentrations (Fig.2-4). Yoda1 did not induce apoptosis but could enhance apoptosis after PIEZO1 silencing (Fig.5). Activation of PIEZO1 led to G1/G2 phase arrest, while its silencing resulted in G1 arrest (Fig.6). PIEZO1 correlated highly with YAP1 and VEGF expression, affecting downstream signaling (Fig.7-8). Modulation of PIEZO1 influenced the expression of proliferation and epithelial-mesenchymal transition (EMT) markers (Fig.9). In vivo experiments demonstrated that PIEZO1 silencing inhibited tumor growth and metastasis in mice, but traumatic mechanical compression did not promote tumor proliferation in situ (Fig.10).



**Conclusion:**

PIEZO1 significantly influences the functional phenotype of melanoma cells: silencing PIEZO1 suppresses proliferation, migration, and invasion, while its activation enhances these processes. Mechanistically, PIEZO1 regulates cellular functions through calcium influx, leading to YAP1-VEGF pathway activation, promoting proliferation and angiogenesis. In vivo experiments confirmed the inhibitory effect of PIEZO1 silencing on tumor growth and metastasis. Collectively, PIEZO1 acts as an oncogene in melanoma cells, providing a potential therapeutic target for preventing the development of melanoma through regulatory techniques.

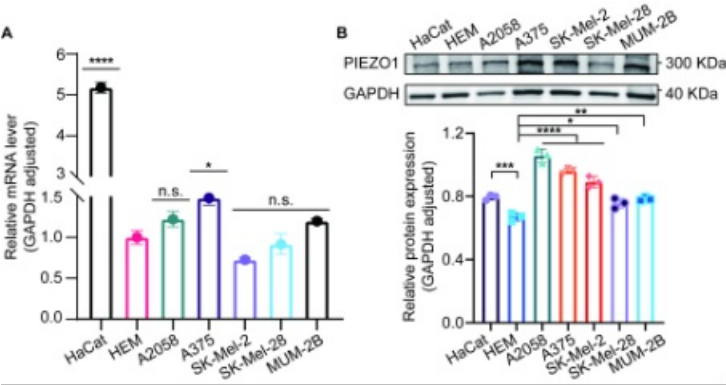


Fig.1

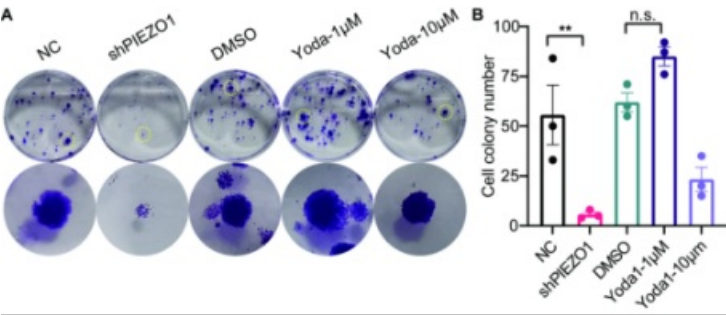


Fig.2

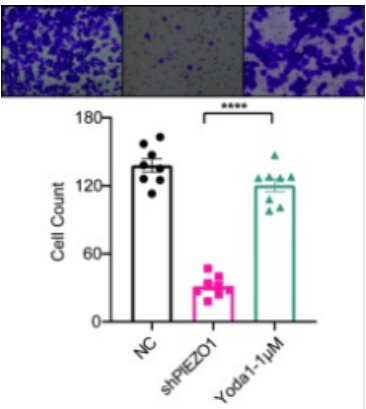


Fig.3

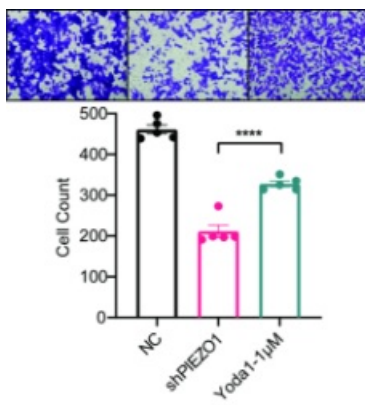


Fig.4

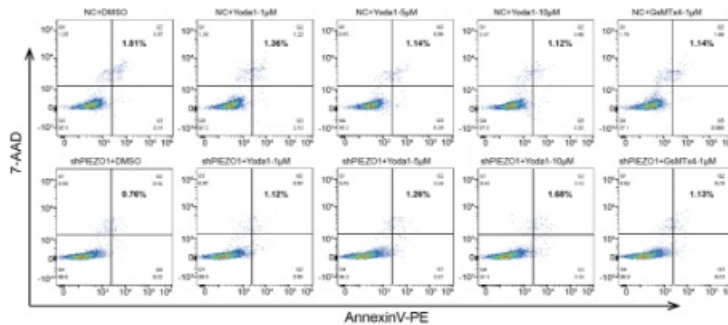


Fig.5

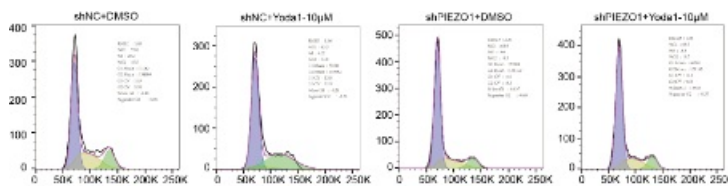


Fig.6

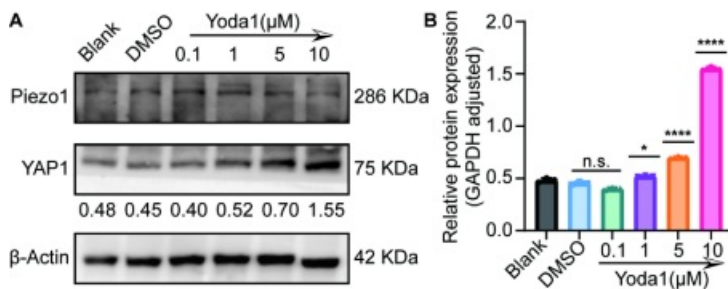


Fig.7

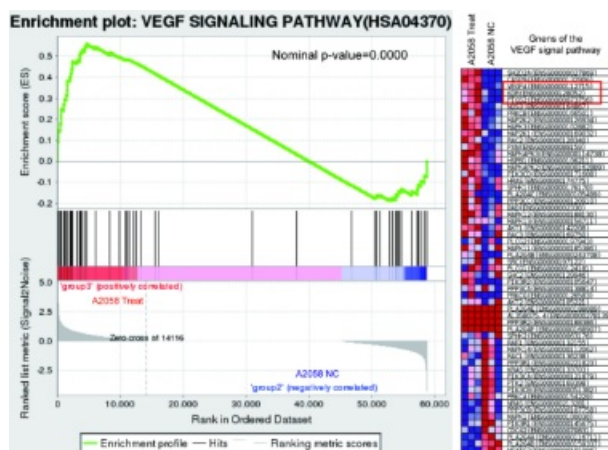


Fig.8

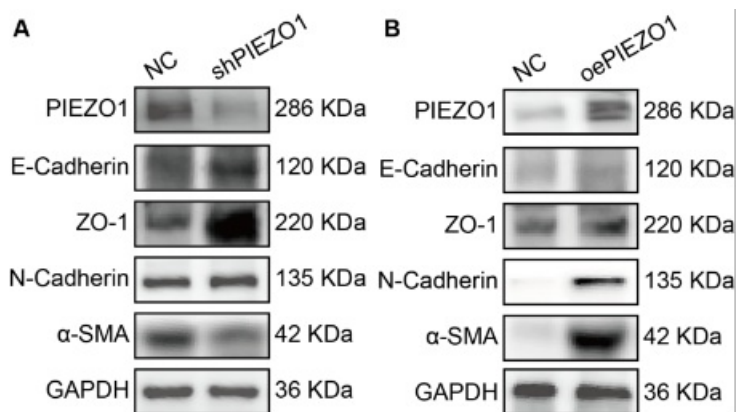


Fig.9

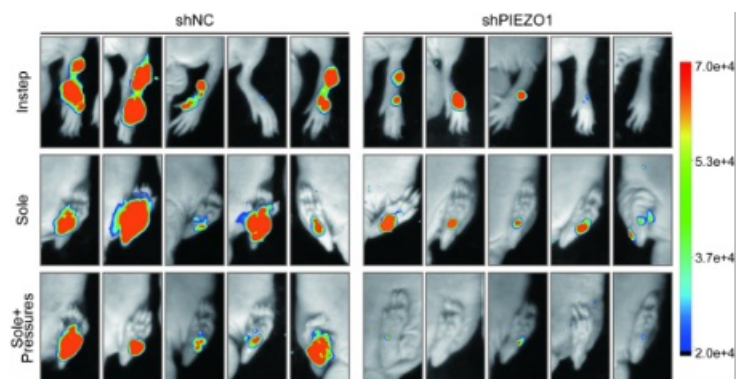


Fig.10





## Abstract N°: 2870

### **Positive MITF genetic testing for familial melanoma in a patient without melanoma: Should we lower the suspicion threshold?**

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<sup>1</sup>Hospital de la Santa Creu i Sant Pau, Dermatology, Barcelona, Spain

#### **Introduction**

Familial melanoma (FM) accounts for 10-15% of cases of melanoma. Genetic testing (GT) is recommended in Europe in patients with melanoma and family history of melanoma or pancreatic cancer. However, no clear recommendations are made for patients with high-risk phenotypes and family history of melanoma. We present a case of a patient with atypical mole syndrome and family history of melanoma who tested positive for MITF prior to the diagnosis of her first melanoma.

#### **Clinical case**

A 36-year-old woman, phototype II, born in Manchester, was under follow-up in our Dermatology department in a Spanish hospital because of atypical mole syndrome. She referred high recreational and occupational sun exposure with 2nd degree blisters in childhood. Both her father and paternal uncle had a history of melanoma; no other cancers were reported in her family.

Although she did not fulfill regional criteria for screening of FM, GT was performed due to her phenotype, risk factors and family history. Results yielded an heterozygous mutation of the MITF gene (c.952G>A, p.(Glu318Lys). Thus, closer monitoring (every 6 months) and periodic abdominal ultrasound were initiated. During the following two years, digital dermoscopy allowed the identification of subtle changes in three nevi; after excision, two showed severe dysplasia and one was a superficial spreading melanoma (Breslow thickness of 0.5mm).

#### **Discussion**

Individuals with FM face a lifetime risk of melanoma of 52-84%, compared to the worldwide average of 3%. FM mutations predispose to earlier melanoma onset, multiple primary melanomas, and other malignancies, such as pancreatic cancer (CDKN2A), renal cell carcinoma (MITF, BAP1), mesothelioma or uveal melanoma (BAP1).

Criteria for GT vary widely among different institutions and countries. In regions with low incidence like Europe, it is recommended in individuals with  $\geq 2$  invasive melanoma, or in families with  $\geq 2$  first- or second-degree relatives with melanoma and/or pancreatic cancer. High-incidence countries require a higher threshold of 3-4 affected family members. However, studies focus mainly on CDKN2A screening, and the genetic panel differs depending on the guideline.

Intensive monitoring (every 3–12 months) is suggested in mutation carriers, as well as screening for related cancers in CDKN2A, BAP1 and MITF mutations. GT improves adherence to primary and secondary prevention strategies (sun-protective behavior, clinical skin examinations and skin self-examinations).

The present case highlights the complexity in recommending GT in high-risk individuals. Deep phenotyping studies combining genetics, risk factors, family history, total body imaging and dermoscopy will yield valuable data on this issue.

#### **Conclusion**

- There is still a lack of well-established guidelines to standardize both the selection of individuals and the genetic panel.
- Close monitoring, digital dermoscopy and a low threshold for skin biopsies allow early melanoma detection in FM patients.

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**Abstract N°: 2893****Ectopic extramammary Paget's disease. A rare entity**

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**Introduction & Objectives:** Extramammary Paget's disease (EMPD) is a rare form of adenocarcinoma that affects apocrine gland-bearing skin, such as vulva, scrotum and penis. Its occurrence in areas devoid of apocrine glands is infrequent and it is called ectopic EMPD (E-EMPD).

**Materials & Methods:** A 52-year-old male, with no medical record, consulted due to a lesion on his left forearm which had been present for 2-years. He reported that it had been gradually growing, itching with episodes of spontaneous bleeding. Clinical examination showed an erythematous plaque, 1.5 cm in diameter, with a scaly surface and well-demarcated margins. No regional lymph nodes were palpable. With the suspicion of basal cell carcinoma, the lesion was excised. Histological examination revealed large, pale, rounded cells with nuclear atypia proliferating within the epidermis and pagetoid spread, leading to duct-like structures and foci of cells infiltrating the dermis. Immunohistochemical staining showed CK7 positive cells, weak positivity for CK20, and negative staining for p40, p63, SOX 10, CEA and GCDPF-15. An extension study with total body CT and colonoscopy found no pathological findings. We diagnosed the lesion as primary E-EMPD. Currently, the patient is being followed-up, remaining recurrence-free 12 months after excision.

**Results:** E-EMPD is a rare subtype of EMPD that appears in areas devoid of apocrine glands. It was described in 1987 by Saida. There has been a total of 51 cases published in the literature. Its etiology is uncertain. It is believed that Paget's cells could be originated from pluripotent ones within the epidermis. Clinical and histological presentation is indistinguishable from common EMPD. E-EMPD is characterized by erythematous macules or plaques associated with whitish scaling and erosions, frequently associated with pruritus, which may affect the trunk, face, scalp or the extremities. It affects mainly people from middle age onwards, with no gender predilection. Immunohistochemistry is indispensable to distinguish EMPD from a pagetoid spread of cutaneous and extracutaneous neoplasms, such as squamous cell carcinoma in situ, melanoma in situ or pagetoid reticulosis. Exclusive CK7 positivity is a useful marker for the diagnosis of EMPD. The association of EMPD with underlying malignancies worsens the prognosis. However, the association with E-EMPD is not well defined. Only one case associated with sweat gland carcinoma has been reported. Treatment is not standardized. Screening for neoplasia and excision by wide excision or Mohs surgery is recommended.

**Conclusion:** We present a case of E-EMPD found on the upper extremity. E-EMPD may appear in any location, so it should be considered in the differential diagnosis of erythematodesquamative lesions. In addition, immunohistochemical analysis is essential in the study of neoplasms with pagetoid spread.



**Abstract N°: 2923****The combination of AI and LC-OCT to improve diagnostics in actinic keratosis grading - a systematic review**Shengyang Bertrand Lian<sup>1</sup>, Choon Chiat Oh<sup>1</sup><sup>1</sup>Singapore General Hospital, Dermatology, Singapore, Singapore**The combination of AI and LC-OCT to improve diagnostics in actinic keratosis grading - a systematic review****Introduction & Objectives:**

Identifying lesions at highest risk of transformation or invasiveness remains challenging for actinic keratosis. Invasiveness has been defined with basal proliferation (PRO) scoring or degree of cellular atypia, but all require histopathologic examination. The advent of line-field confocal optical coherence tomography (LC-OCT) has allowed improved penetration depth and image resolution when compared to reflectance confocal microscopy and optical coherence tomography respectively. Together with the rise of artificial intelligence (AI), this has given clinicians the opportunity to evaluate AKs both non-invasively and efficiently. The objective of this study is to systematically analyze the existing literature and gaps regarding LC-OCT in assessment of grading AKs and its integration with AI.

**Materials & Methods:**

A systematic search was performed using key words: LC-OCT, actinic keratosis, and artificial intelligence. The search was performed on MEDLINE, Cochrane, PubMed, and google scholar databases, in accordance with PRISMA guidelines, for peer-reviewed studies published in English that integrated LC-OCT and AI in the context of AKs up until April 2024.

**Results:**

A total of 3 studies involving 20,159 LC-OCT images of 374 lesions were included. The use of AI-based convolutional neural networks, applied to LC-OCT images were able to rapidly grade the PRO score of actinic keratoses accurately and objectively when compared to expert visual gradings. The model also demonstrated better discriminative power in identifying keratinocyte atypia. Limitations include a misinterpretation rate of up to 29% of scores by the AI-model, but is expected to improve with increased training images with time.

**Conclusion:**

The integration of imaging tools such as LC-OCT and AI-based models holds the potential of automating and optimizing conventional diagnostic algorithms for actinic keratoses. Further studies are required to better understand the applicability of LC-OCT and AI-based models to different skin cancer types and their impact on real-world outcomes.





**Abstract N°: 2926****Cutaneous metastasis as the initial presentation of metastatic lung carcinoma: A rare case report**Rajaa Bousmara<sup>\*1</sup>, Mohamed Dridba<sup>2</sup>, Annie Vermersch Langlin<sup>1</sup><sup>1</sup>HC Jean Eric Techer , Dermatology and Venereology , Calais, France,<sup>2</sup>HC Jean Eric Techer , Anatomical Pathology, Calais, France**Introduction & Objectives:**

Skin metastases are unusual presenting symptoms of lung cancer. The clinical features are varied and can present as erysipeloid, bullous, sclerodermoid, or alopecia. We report a case of a solitary large skin ulcerated lesion as a first manifestation of a lung adenocarcinoma.

**Results:**

A 54-year-old woman with a 15-year history of smoking and no familial history of cancer was admitted to our dermatological department for a nodular lesion located on the inner aspect of the right thigh, that appeared 7 months before admittance, initially presenting as a nodular lesion, the evolution was characterized by rapid enlargement in size and volume, accompanied by central ulceration and bleeding.

On physical examination, the swelling presented as a round elevated nodule, measuring approximately 8 cm in diameter, surrounded by erythematous brownish skin, prone to bleeding from a central ulcerated area. Histopathological examination showed a dermal tumor proliferation, tubuloglandular architecture with fairly abundant fibrovascular stroma. Tumor cells have a large, well-defined, basophilic cytoplasm and fairly irregular nuclei, strongly nucleolated or in mitosis. In immunohistochemistry, tumor cells were positive for cytokeratin-7 (CK7), thyroid transcription factor-1 (TTF1), and negative for cytokeratin-20 (CK20), carcinoembryonic antigen (CEA). According to the clinical and pathological features, cutaneous metastatic lung adenocarcinoma was made. Chest x- and computed tomography (PET-scan) were consistent with a left perihilar mass invading the lumen of the left main bronchus associated with mediastinal lymphadenopathy and metastases in the skin, and cervical vertebrae. Magnetic resonance imaging confirmed vertebral metastases.

Her history was significant for intermittent dry cough associated with shortness of breath and low grade fever. She was initially misdiagnosed as covid-19 infection and was prescribed antibiotics, but was recommended to avoid attending hospital for an X-ray because of the pandemic.

She was started on a combination of chemotherapy and immunotherapy with carboplatin, alimta, and pembrolizumab with analgesic radiotherapy for vertebral metastases. Despite five courses of treatment, the patient's disease progressed, and she died six months after the appearance of the cutaneous metastases.

**Conclusion:**

Cutaneous metastasis from primary visceral malignancy and especially lung carcinoma is an uncommon entity. Despite their rarity, unusual skin lesions should always be taken seriously, especially in patients with risk factors.





**Abstract N°: 2939****Adequacy of non-melanoma skin cancer treatment guidelines to the elderly population**

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**Introduction & Objectives:**

Non-melanoma skin cancer (NMSC) has a high incidence that increases with age. Given the progressive aging of the population, we are frequently facing patients with multiple comorbidities and NMSC. Given the low aggressiveness of this kind of tumors, we wonder about the adaptability of current treatment guidelines to this specific population.

**Materials & Methods:**

A retrospective observational study was conducted with patients aged  $\geq 75$  years old who underwent surgery with hospitalization for NMSC in our Center from January 1st 2018 to December 31st 2019. Clinical, histological and evolutive data were collected.

**Results:**

A total of 102 patients with 220 lesions were included: 66.6% with basal cell carcinoma (BCC) and 31.82% with squamous cell carcinoma (SCC). The mean age was 88.8 years. 96.3% of patients had at least one cardiovascular, neurological, oncological or respiratory comorbidity. 38.4% were on anticoagulant treatment and 7.84% had pacemakers. 63.73% of the patients died in the period studied with a medium time of 17 months after surgery. None of them died from a cause related to their skin tumor.

**Conclusion:**

Our study corroborates the low lethality of NMSC and the high competitive mortality in this age group. On the other hand, the high percentage of comorbidities and the undesirable consequences of surgical treatment (complications of surgery, use of antibiotics, primary and secondary costs derived from cures and travel of the patient and their families to the health center) make us reflect on the adequacy of clinical guidelines to this patient profile. We believe that BCC management in patients with multiple comorbidities who require complex reconstruction to perform a complete oncological surgery, should consider other less aggressive alternatives, ranging from conservative surgeries to active surveillance programs. Our study could be a basis for future research to determine the adequacy of current therapeutic guidelines in this age range, putting into context the type of tumor and comorbidities of each patient.



**Abstract N°: 2963****Melanoma on Mal de Meleda : Rare association with significant consequences.**

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<sup>1</sup>La Rabta hospital, dermatology, <sup>2</sup>La Rabta hospital

**Introduction & Objectives:**

Mal de Meleda is a rare genodermatosis, initially described by Luca Stulli (1772-1828). It is an autosomal recessive palmoplantar keratoderma that is endemically prevalent on the Adriatic island of Meleda. The occurrence of melanoma in this context is an exceptionally rare association.

**Materials & Methods:**

Case report.

**Results:**

the case of a 53-year-old patient who was monitored for hereditary palmoplantar keratoderma (MDM). The patient was born of consanguineous marriage and had four similar cases in her family. Despite therapy with acitretin, the disease progressed severely. She presented with a 4 cm firm, infiltrated, and hyperpigmented nodule on the dorsal side of the left thumb. A biopsy confirmed the diagnosis of melanoma with a Clark level equal to four. A thoraco-abdomino-pelvic scan revealed metastatic involvement of the left axillary lymph nodes. Thumb amputation was recommended. A subsequent scan, performed after the patient's general condition had deteriorated, showed multiple cerebral, pulmonary and osseous metastases. The patient passed away a few months later.

**Conclusion:**

MDM represents a rare palmoplantar keratoderma with an estimated prevalence of 1/100000. It manifests as a thick, yellowish palmoplantar keratoderma with an erythematous border, extending to other areas such as the dorsal surfaces of the hands and feet, knees, elbows, and the perioral region. Nail involvement is often associated, presenting as subungual hyperkeratosis and koilonychia. MDM is caused by a mutation in the ARS B gene located on chromosome 8q24.3. This gene encodes the SLURP1 protein, which is involved in homeostasis, epidermal differentiation, and immunity. Eleven cases of melanoma occurring on MDM lesions were reported until 2023. These cases shared common characteristics, such as upper limb localization, occurrence on pathological skin, and a high Breslow index. It has been suggested that this association may be explained by local immune dysregulation rather than chronic inflammatory processes.



**Abstract N°: 2968****High frequency ultrasonography in monitoring treatment response to chlormethine in mycosis fungoides.**

Adriana Polanska<sup>1</sup>, Tomasz Stein<sup>1</sup>, Katarzyna Korecka<sup>1</sup>, Paulina Cieplewicz-Guźla<sup>1</sup>, Anna Wiśniewska<sup>1</sup>, Nina Łabędź<sup>1</sup>, Ryszard Żaba<sup>1</sup>, Aleksandra Dańczak-Pazdrowska<sup>1</sup>

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**Introduction & Objectives:**

Topical chlormethine, also known as mechlorethamine, is as an effective skin-directed chemotherapeutic agent for treating early-stage mycosis fungoides (MF), the most common type of cutaneous T-cell lymphoma (CTCL). In the form of gel, this agent, is currently endorsed by international guidelines for use as first-line therapy in adult patients with MF. In high- frequency ultrasonography (HF-USG, 20 MHz) the subepidermal low echogenic band (SLEB) beneath the entrance echo can be observed in MF plaques, and corresponds to the subepidermal infiltration of atypical T lymphocytes, a histopathologic indicator of the infiltrativum stage of MF.

The aim of this study is to present the possibility of noninvasive monitoring of early stage MF during the chlormethine gel treatment.

**Materials & Methods:**

The course of disease and response to treatment to topical chlormethine, in MF patients (stage IA- IIA) were monitored every month for a period of 4 months by modified Severity Weighted Assessment Tool (mSWAT) and HF-USG. The assessed HF-USG parameter was the mean diameter of SLEB (mm) measured within lesional skin. The diagnosis of MF was histopathologically and immunochemically confirmed in all cases.

**Results:**

In HF-USG examination MF lesions revealed the presence of SLEB, the thickness of which varied between patients and the response to therapy. The decrease in SLEB thickness was related to clinical improvement.

**Conclusion:**

Skin ultrasonography can be valuable monitoring method in MF, however it is not a diagnostic tool. Additionally it cannot distinguish contact dermatitis, that may accompany chlormethine treatment. The lack of SLEB in previously lesional skin of MF can serve as a marker of complete response.



**Abstract N°: 2970****Angiomatoid fibrous histiocytoma arising on a Spitz nevus : A puzzling collision tumor**

Eya Rihani<sup>1</sup>, Malek Ben Slimane<sup>1</sup>, Faten Rabhi<sup>1</sup>, Kahena Jaber<sup>1</sup>, Mohamed Abderraouf Dhaoui<sup>1</sup>

<sup>1</sup>Military hospital of Tunis, dermatology

**Introduction & Objectives:**

Angiomatoid fibrous histiocytoma (AFH) is an under-recognized soft tissue tumor with intermediate malignant potential and unclear cellular origin, typically arising in the superficial extremities in children and young adults.

**Materials & Methods:**

Case report.

**Results:**

A 25-year-old female patient with no significant medical history consulted in dermatology for a pigmented tumor on the left flank that had been evolving since a young age, with the secondary appearance of satellite nodules in the past few months.

The clinical examination revealed, on the left flank, a well-defined, mobile tumor with a firm consistency and pigmented surface measuring 4 cm in its longest axis, along with two pigmented, erythematous, sessile nodules on healthy skin, satellite to the tumor.

The draining lymph nodes were clear, and the rest of the physical examination was unremarkable.

Laboratory findings showed a hypochromic microcytic iron-deficiency anemia.

An initial skin biopsy within the tumor concluded it was a Spitz nevus.

A second skin biopsy from a nodule revealed features of an angiomatoid fibrous histiocytoma with no melanocytic proliferation.

The patient underwent staging investigations for secondary locations, which returned normal. Surgical excision was performed, and the final pathology report described a biphasic tumor proliferation consistent with a collision tumor combining a Spitz nevus and an angiomatoid fibrous histiocytoma.

No signs of recurrence were observed during one year of follow-up.

**Conclusion:**

Angiomatoid fibrous histiocytoma (AFH) is an uncommon soft tissue neoplasm with intermediate malignancy, uncertain differentiation, and low metastatic potential. It often occurs in children and young adults on the extremities and trunk and may be associated with systemic manifestations such as chronic anemia or fever.

Recently, It has been linked to three distinct gene fusions - EWSR1-CREB1 and EWSR1-ATF1, found as well in other tumors and is now being identified in a growing range of locations with diverse and unique histological characteristics.

Diagnosis is typically histopathological, requiring anatomoclinical correlation.



**Abstract N°: 2977****Angiosarcoma: report of five cases and literature review.**

Mélissa Mendes de Carvalho<sup>1</sup>, Ana Gusmão Palmeiro<sup>1</sup>, Margarida Moura Valejo Coelho<sup>1</sup>, Rui Bajanca<sup>1</sup>, Isabel Viana<sup>1</sup>

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**Introduction & Objectives:**

Angiosarcomas are rare and aggressive endothelial tumors. Three types of angiosarcoma have been identified: primary, associated with chronic lymphedema, and post-radiation. The most common type is primary angiosarcoma (idiopathic or Wilson-Jones), which mainly affects Caucasian men over 70 years old. It often presents as a lesion resembling an innocent hematoma, which can evolve into an edematous and nodular lesion, with approximately half of the cases affecting the head and neck regions. Angiosarcoma associated with chronic lymphedema (Stewart-Treves) manifests as firm violaceous nodules or hardened plaques on a background of non-pitting edema. More than 90% of these cases are associated with mastectomy and lymph node dissection in women with breast cancer, with the inner aspect of the arm being the most commonly affected region in these cases. The duration of lymphedema preceding the appearance of angiosarcoma varies from 4 to 27 years. The incidence of post-radiation angiosarcomas is increasing due to the technique of conservative mastectomy followed by radiotherapy. These manifest as infiltrating plaques or nodules in or near the irradiated area, approximately 6 years after treatment.

We aim to review the clinical and histopathological characteristics of angiosarcoma cases diagnosed in our department.

**Materials & Methods:**

We present a retrospective observational study, reviewing the clinical and histopathological characteristics of angiosarcoma cases diagnosed over a period of 9 years in a Dermatology Department of a tertiary hospital in Lisbon, Portugal.

**Results:**

We identified five cases of angiosarcoma (two idiopathic, two associated with chronic lymphedema, and one post-radiation), diagnosed in three female and two male patients, aged 57-92 years. The tumors were found in various locations including the breast, trunk, limbs, and scalp, presenting as erythematous and violaceous nodules and plaques. Four out of the five patients included in this study died during the follow-up period.

**Conclusion:**

Given the very poor prognosis of angiosarcomas, with early radical surgery being crucial for most long-term survivors, the authors stress the critical importance of maintaining a high suspicion level in such cases. This is particularly significant given the varied clinical presentations of these endothelial tumors.



**Abstract N°: 2985****Cutaneous metastases of renal cell carcinoma: report of two clinical cases.**

Mélissa Mendes de Carvalho<sup>1</sup>, Bernardo Pimentel<sup>1</sup>, Margarida Moura Valejo Coelho<sup>1</sup>, Rui Bajanca<sup>1</sup>

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**Introduction & Objectives:**

The approach to cutaneous metastases (CM) is a crucial topic in Dermatology, despite their low incidence, that is estimated to be less than 10%, not only because of the diversity of clinical presentations, which can mimic benign and malignant lesions and pose a diagnostic challenge, but also because of their prognostic implications.

CM from renal cell carcinoma (RCC) are rare, occurring in 3% of cases of metastatic disease. It usually presents as single or multiple erythematous-violaceous, highly vascularized, rapidly growing, asymptomatic nodules. The head and neck regions are the most frequently affected. Although uncommon, they are clinically significant due to their prognostic implications and diagnostic challenges, particularly the differential diagnosis with benign and malignant tumors. The development of CM in patients with RCC generally accompanies the progression of visceral disease, with up to 90% of patients presenting with concomitant metastases in internal organs.

The recommended therapy for solitary CM is surgical excision, but a multidisciplinary approach is essential.

CM is associated with a very poor prognosis, and although it varies according to the primary tumor, the estimated 6-month survival rate is around 50%. In the case of patients with RCC and distant metastases, including CM, the 5-year survival rate is around 12%.

**Materials & Methods:**

We conducted a retrospective observational study using information from patients' clinical records.

**Results:**

We present the cases of two male patients aged 79 and 80 years, diagnosed with stage IV RCC under immunotherapy with ipilimumab/nivolumab and nivolumab, respectively, who developed rapidly growing erythematous single nodules on the face, treated surgically. Histopathological examinations confirmed the diagnosis of RCC metastases.

**Conclusion:**

By reporting these cases, the authors aim to highlight the importance of maintaining a high level of suspicion for CM in patients with a history of solid or hematological neoplasms presenting with new skin lesions, as these imply the need restaging of the underlying disease and close dialogue with Oncology.





**Abstract N°: 3034****Incidence and patterns of newly developing pigmented lesions in adults at high risk for melanoma**Anna Katharina Wolber<sup>\*1, 2</sup>, Dilki Jayasinghe<sup>3</sup>, Hans Peter Soyer<sup>1</sup>, Harald Kittler<sup>2</sup><sup>1</sup>Frazer Institute, The University of Queensland, Dermatology Research Centre, Brisbane, Australia, <sup>2</sup>Medical University of Vienna, Dermatology, Vienna, Austria, <sup>3</sup>Faculty of Medicine, The University of Queensland, Centre for Health Services Research, Brisbane, Australia

## Incidence and patterns of newly developing pigmented lesions in adults at high risk for melanoma.

**Introduction & Objectives:**

Little information exists regarding the frequency and characteristics of newly appearing pigmented lesions in adults who are at a high risk for melanoma. With the growing availability of total body photography, there is a pressing need and potential for improved understanding of the patterns of occurrence of these lesions.

The aim of this study was to explore the incidence and anatomic distribution of newly developing pigmented lesions in a population at high risk for melanoma, and to examine possible associations with patient-related factors.

**Materials & Methods:**

Individuals at high risk of developing melanoma were monitored over a 24-month period using 3D total-body photography. Newly evolved pigmented lesions were identified and mapped, along with measurements of their diameter, growth rate, number of adjacent lesions and an assessment of surrounding photodamage.

**Results:**

We enrolled 145 patients, with an average age of 51 years (range: 20-85, 59% females). Out of the 145 participants in the study, 56 developed a total of 119 new pigmented lesions, resulting in an average of 0.8 new lesions per person. The anatomical distribution of these new pigmented lesions appeared random, with no discernible pattern, spanning all body sites. Two new lesions that appeared on chronically sun-damaged skin on the back were histopathologically diagnosed as melanomas.

**Conclusion:**

The appearance of new pigmented lesions in adults at high risk seems to occur randomly and is poorly predicted by patient characteristics. Most evolving lesions are benign; however, new lesions that appear on chronically sun-damaged skin should be approached with greater caution.





**Abstract N°: 3216****Examining melanoma Breslow thickness in relation to age, sex and body site**Muaad Eghlileb<sup>\*1</sup>, Sam Johnson<sup>2</sup>, Ausama Atwan<sup>3</sup>, Caroline Mills<sup>3</sup><sup>1</sup>Cardiff University, Medical school, Cardiff, United Kingdom, <sup>2</sup>Cardiff and Vale Health Board, Internal Medicine, Cardiff, United Kingdom, <sup>3</sup>Aneurin Bevan Health Board, Dermatology, Newport, United Kingdom**Introduction & Objectives:**

Melanoma is a serious form of skin cancer. Prognosis largely depends on the depth of invasion, Breslow thickness (BT). Therefore, early detection is crucial. The aim of this study is to examine melanoma BT in different anatomical sites in relation to the affected individuals' age and sex.

**Materials & Methods:**

This retrospective cohort study analysed data from 1,730 patients diagnosed with primary melanoma in our institution between 2012 and 2022. Atypical naevi, lentigo maligna, in-situ melanoma and metastatic melanomas were excluded. Melanoma locations were categorised into five groups: head & neck, anterior trunk, posterior trunk, upper limbs and lower limbs. Analysis used 2-tailed Mann-Whitney tests and for multiple groups Kruskal-Wallis test with Dunn's corrections.

**Results:**

883 males and 847 females (median ages 70 and 64 respectively) were analysed, with the most common location being posterior trunk for males and lower limb for females. Investigations into the relationship between BT and melanoma location revealed significant differences across various anatomical sites. Melanomas located on the head & neck exhibited greater BT compared to those on the posterior thorax and limbs ( $p < 0.05$ ). Males in their 20s and 30s exhibited greater BT compared to females in the same age group ( $p = 0.0425$ ), while females predominated in thicker melanomas over 80 years old ( $p = 0.0247$ ). Additionally, melanomas in patients 60-80 years old displayed substantially thicker BT compared to other age groups ( $p < 0.05$ ). Overall, men tended to have thicker melanomas than women ( $p < 0.001$ ). The location profile analysis suggested a prevalence of lower limb melanomas seemingly peak incidence across 40-80 years of age, whereas all other anatomical melanoma locations peak among individuals in the 60-80 age range. However, age analysis indicated that head & neck cancers are most common in the >80 years old ( $p < 0.05$ ).

**Conclusion:**

Our findings underscore the heterogeneity of melanoma characteristics, with notable differences observed in BT across anatomical sites and age groups. Notably, BT appears to be higher in older individuals, particularly on the head and neck and posterior trunk, while disparities in thickness between genders were evident across different age brackets. By elucidating these factors, this study provides insights into the multifaceted presentation of melanoma in different age groups.



**Abstract N°: 3259****LC-MS/MS metabolomics reveal serum metabolic signature of chronic actinic dermatitis**

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**Introduction & Objectives:**

To investigate metabolomics in patients with chronic actinic dermatitis (CAD), and to search for serum diagnostic biomarkers of CAD.

**Materials & Methods:**

A retrospective analysis was conducted. Serum samples were collected from 46 patients with CAD and 16 age- and gender-matched healthy controls in the Guangzhou Institute of Dermatology from April 2011 to December 2021. Changes in serum metabolomics and expression were assessed by LC-MS/MS Analysis.

Principal component analysis, partial least squares discriminant analysis, and orthogonal partial least squares discriminant analysis were performed to screen differential biomarkers, Kyoto Encyclopedia of Genes and Genomes (KEGG) pathway enrichment analysis was used to screen metabolic pathways, and receiver operating characteristic (ROC) curve analysis was conducted to screen diagnostic markers. Comparisons of the age and gender distribution between groups were performed using t test and chi-square test, respectively.

**Results:**

The 46 CAD patients were aged from 30 to 84 ( $60.39 \pm 10.52$ ) years, including 41 males and 5 females; the 16 healthy controls were aged from 50 to 89 ( $59.81 \pm 10.72$ ) years, including 14 males and 2 females; there were no significant differences in the age or gender distribution between the two groups (age:

$t = 0.19$ ,  $P = 0.853$ ; gender:  $\chi^2 = 0.03$ ,  $P = 0.859$ ). A total of 1,873 metabolites were identified in the serum samples, with 174 differential metabolites between the two groups of CAD patients as well as healthy controls, of which 36 metabolites were up-regulated and 52 metabolites down-regulated in the positive ion mode, and 23 metabolites were up-regulated and 63 metabolites down-regulated in the negative ion mode. Differential metabolites were mainly enriched in protein digestion and absorption, central carbon metabolism in cancer, aminoacyl-tRNA biosynthesis, choline metabolism in cancer, glutathione metabolism. 15 metabolites such as 1-oleoyl-sn-glycero-3-phosphocholine (LPC) and artemisinin, had areas under the ROC curve (AUCs) were all  $> 0.95$  when used as diagnostic markers.

**Conclusion:**

There were significant differences in metabolism between CAD patients and healthy controls groups, LPC and artemisinin and 15 other metabolites have good diagnostic efficacy for CAD.





## Abstract N°: 3318

### **A case of anaplastic large cell lymphoma presenting with multiple nodules resembling inflammatory granuloma: A diagnostic challenge**

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<sup>1</sup>West China hospital, Sichuan University, Dermatology and Venereology, CHENGDU, China

#### **Introduction & Objectives:**

Primary cutaneous anaplastic large cell lymphoma (PcALCL) is a relatively common cutaneous T-cell lymphoma that belongs to the spectrum of cutaneous CD30+ T-cell lymphoproliferative disorders. PcALCL typically manifests as a solitary and localized nodule that may ulcerate, with a predilection for the head, neck, and extremities. However, multifocal lesions, as observed in this case, are uncommon. Here, we present a rare case of PcALCL with multiple lesions, posing a diagnostic challenge.

#### **Materials & Methods:**

#### **Results:**

A 57-year-old man presented with a two-year history of multiple papules, plaques, nodules, and ulcers on the trunk and extremities, accompanied by significant itching and pain. Notably, constitutional symptoms such as fever, night sweats, diarrhea, or weight loss were absent. He was otherwise in good health. The patient's medical history included exposure to a region with a high incidence of leprosy, and he mentioned prior contact with a sewer. On physical examinations, numerous papules, plaques, and nodules of varying sizes were noticed on the trunk, buttocks, and extremities, with a high skin temperature, elevated borders, and central ulcerations. The initial diagnoses, including leprosy and lymphoma, were considered. A skin biopsy revealed proliferative changes around dermal fibrous tissue and small blood vessels, along with infiltrates of inflammatory cells, including scattered Langerhans histiocytes and eosinophils. Immunohistochemical staining (IHC) of Langerhans histiocytes demonstrated positivity for S100, CD1a, and langerin (focal), while being negative for CD163, CD20, and CD3. The proliferation index of Ki-67 (MIB-1) was approximately 10%. The BRAF V600E mutation was negative for PCR testing. Initial consideration for Langerhans cell histiocytosis was ruled out, leading to suspicion of a non-typical mycobacterial infection following interdisciplinary discussion. Treatment with levofloxacin, clarithromycin, and rifampicin was administered consistently for three months, resulting in minimal improvement. A subsequent biopsy of a lesion on the left forearm revealed mild epidermal hyperplasia and a diffuse infiltrate of numerous histiocytes, lymphocytes, eosinophils, neutrophils, and nuclear dust in the reticular dermis and subcutaneous tissue. Large cells with transparent cytoplasm and occasional mitotic figures were noted, showing positive expression for CD2, CD3, CD5, CD43, CD4, LCA, and strong CD30 (≈75%) expression, while negative for ALK, EMA, and EBER. T cell receptor gamma gene rearrangement was detected. The pathology of bone marrow aspiration and flow cytometry were unremarkable. The DUSP22-IRF4 gene translocation was not found. PET/CT scan revealed elevated 18F-fluoro-deoxyglucose uptake in skin and subcutaneous lesions. Combined with the medical history and laboratory tests, the diagnosis of PcALCL (T4NxM0) was established. Treatment with Brentuximab Vedotin at a dosage of 1.8 mg/kg every 3 weeks was initiated, and the patient is under regular follow-up.

#### **Conclusion:**

This challenging case emphasizes the diagnostic complexities encountered in distinguishing PcALCL from other conditions with similar clinical features, highlighting the pivotal role of repeat skin biopsies, IHC examinations, and clonal gene rearrangement analyses. It also alerts physicians and dermatologists that medical history might lead

to a pitfall of diagnosis.

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**Abstract N°: 3353**

**Unveiling Cutaneous Angiosarcoma: A Case Report of Extensive Lesions in an Elderly Female with Diagnostic Delays**

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**Introduction & Objectives:** Cutaneous angiosarcomas are rare aggressive vascular malignancies with a propensity for extensive local and systemic spread. Clinically, they can mimic cellulitis, hematoma, and other infectious or inflammatory conditions, leading to diagnostic delays. Here, we present a case of a 79-year-old female presenting with asymptomatic lesions on the scalp and left ear.

**Materials & Methods:** We describe the clinical presentation and diagnostic evaluation of a 79-year-old female with a four-month history of extensive lesions on the face.

**Results:**

An otherwise healthy woman, Fitzpatrick phototype III, presented with asymptomatic extensive erythematoviolaceous plaques with areas of alopecia covering the entire scalp, frontal region, and left ear. Despite treatment with multiple oral antibiotics, no improvement was observed. Laboratory evaluation was unremarkable, and head CT scan revealed marked soft tissue thickening of the frontal, temporal and parietal areas, extending to the left preseptal and periauricular area. A punch biopsy confirmed the diagnosis of angiosarcoma characterized by epithelioid cells (ERG, CD31, and podoplanin positive) with a high proliferative index (Ki-67 ~60%). Staging showed no distant metastasis, but the tumor was deemed unresectable. Pegylated liposomal doxorubicin was recommended, but the patient passed away before treatment initiation.

**Conclusion:**

This case highlights the exuberance of the cutaneous lesions, revealing a tumor with a poor prognosis. The complexity of the differential diagnosis led to multiple empirical therapeutic attempts by the attending physician, without success, underscoring the crucial role of Dermatology in achieving early definite diagnosis to improve prognosis. Timely recognition is imperative for prompt intervention.



**Abstract N°: 3356****Efficacy of tirbanibulin in sensitive facial areas. Serie of cases.**

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**Introduction & Objectives:**

Tirbanibulin is an approved treatment for non hypertrophic actinic keratosis (AK). Its mechanism of action involves interrupting the cellular cycle and inducing apoptosis. One of the main advantages of this new treatment is good tolerance. The objective of this study was to evaluate its efficacy and safety in special locations.

**Materials & Methods:**

An unicentric, prospective and observational study was performed. Thirty patients with non-hypertrophic AK in the periocular, perioral, and nasal areas refractory to other topical treatments that came to the clinic were included. All patients were included regardless of their age, sex or comorbidities. Photographs were taken before and 50 days after treatment. Irritative symptoms were analyzed objectively using scales and subjectively by patients.

Response was described as the total response, where no clinical lesions were observed. Partial responses were obtained when some of the remaining were residuals. No response; patients with no improvement from baseline.

**Results:**

None of the patients experienced severe or moderate reactions. Only mild and moderate erythema were observed. All patients responded both completely and partially. A complete response rate of 45% and partial response rate of > 70% were obtained.

**Conclusion:**

Tirbanibulin has a mechanism of action different from that of previously commercialized topical treatments. The reported data showed few side adverse effects, mild irritative symptoms, and high efficacy. This new study is consistent with previous studies in terms of the efficacy and safety in sensitive facial areas.





**Abstract N°: 3361**

**Basosquamous Carcinoma: A Study on Current Management across the UK**

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**Basosquamous Carcinoma: A Survey Study on Current Management across the UK**

**Introduction & Objectives:**

**Introduction:** Basosquamous carcinoma is a rare, aggressive non melanoma skin cancer with overlapping histological features that lie between Basal cell carcinoma (BCC) and Squamous cell carcinoma (SCC). Genetic studies have shown that basosquamous carcinoma likely originate as a BCC which has undergone squamous differentiation via ARID1A mutations and RAS/MAPK pathway activation. They are difficult to diagnose clinically therefore histopathological analysis is the gold standard for early recognition. Basosquamous carcinomas have a tendency toward local recurrence and propensity to metastasise. There has, however, been controversy around classification, pathophysiology, and management.

**Objectives:** The aim of our study was to gather information on clinicians' experience and current management practice with basosquamous carcinoma across the UK.

**Materials & Methods:**

**Method:** A questionnaire was developed, using SurveyMonkey®, consisting of 10 multiple choice questions with sections for additional comments. This was circulated by email to members of the BAD in April 2024

**Results:**

**Results:** Most of the respondents were consultant dermatologists. Variation with disease categorisation and approach to counselling this diagnosis to patients was observed. 77% of responders discuss cases of basosquamous carcinoma at MDT. Optimal histological margins ranged from 1 to 10mm (Mean: 2mm). Factors felt to be associated with poor disease related outcomes included site, lesion size, immunosuppression and perineural invasion. The most common treatments were wide surgical excision, Mohs micrographic surgery and radiotherapy. Cemiplimab and hedgehog pathway inhibitors were used in some centres. Pronounced differences in follow up duration were noted: 13% discharge patients, 39.1% offer 1 face to face appointment and 26% follow up for 2 years. 31% had witnessed recurrence and 20% had seen metastases. No centres had guidelines regarding the treatment of basosquamous carcinoma.

**Conclusion**

**Discussion:** The management of basosquamous carcinoma is a contentious area with wide variation in management. Prospective studies comparing various treatment options, including study of optimal surgical margins, are warranted to reach a consensus regarding ideal management. There is a need for treatment guidelines and dedicated patient information leaflets on this condition.





**Abstract N°: 3420****granulomatous mycosis fungoides associated to knee prostheses**

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**Introduction & Objectives:**

Lymphomas associated with prosthetic implants represent a rare but emerging area of concern in medical research. This report highlights a novel case of granulomatous mycosis fungoides (MF) potentially triggered by a knee prosthesis, discussing the implications for diagnosis and management.

**Materials & Methods:**

Presentation of a case and literature review.

**Case Presentation:** An 87-year-old woman with ischemic heart disease and a knee replacement (Triathlon CS type total right knee prosthesis) 3 years ago, presented exclusively with an erythematous arcuate rash and some little nodules in her right knee. The postoperative period and rehabilitation after the prosthesis developed without any complications.

Despite negative tests for infection and traditional allergic reactions, biopsies revealed non-necrotizing granulomas with epidermotropism. Immunohistochemistry showed a T-cell pattern consistent with mycosis fungoides, including positive CD4, CD8, and positive T-cell receptor rearrangements in skin and blood, suggesting a diagnosis of granulomatous MF linked to the knee prosthesis. Stains for mycobacterias were negative and sarcoidosis was also ruled out.

**Discussion:** The occurrence of lymphomas associated with implants, particularly prosthetic-related sarcomas and lymphomas, is a poorly understood phenomenon. This case contributes to the limited reports of cutaneous T-cell lymphomas emerging in the context of chronic inflammation induced by prosthetic materials. The diagnosis challenges and management complexities underscore the need for heightened surveillance and a tailored therapeutic approach in such patients.

**Conclusion:**

This case serves as a potentially first reported instance of granulomatous mycosis fungoides associated with a knee prosthesis, emphasizing the need for awareness among clinicians about lymphomas linked to prosthetic implants. Multi-disciplinary cooperation and further research into the pathophysiological mechanisms driving these associations are essential for developing effective prevention and treatment strategies.





**Abstract N°: 3448****Cryotherapy, a less-recognized option for treatment of cutaneous lymphomas**Shahab Babakoochi<sup>1</sup><sup>1</sup>Atrium Health Levine Cancer Institute, Wake Forest School of Medicine , Charlotte, United States

**Introduction & Objectives:** Cutaneous lymphomas are broadly classified based on the cell of origin, mainly B-lymphocytes and T-lymphocytes. Non-cutaneous organ involvement, diffuse cutaneous involvement, or large tumoral lesions frequently demand systemic therapies; However, in a significant portion of patients, the disease is only limited to a few areas of skin with unpredictable recurrences. Skin-directed therapies do not have well-established effective options in the literature. Surgery as an effective modality is not suitable for the patients with frequent recurrences at different sites. Here, we present a case series of eight patients with primary cutaneous lymphomas successfully treated with cryotherapy.

**Materials & Methods:** Eight patients with lymphomatoid papulosis (1), primary cutaneous marginal zone lymphoma (3), cutaneous lymphoid hyperplasia (1), CD4+ small-medium T-cell lymphoproliferative disorder (1), anaplastic large cell lymphoma (1), and primary cutaneous follicular center lymphoma (1) were treated for a limited number of lesions (1 to 3) with two freezing cycles of 10 to 15 seconds.

**Results:** All the patients tolerated the treatment well and showed a complete response to the selected lesions after one or two treatments. No complications were observed. The most common side effects were erythema and pain during cryotherapy.

**Conclusion:** Cryotherapy is a safe and effective office-based modality to treat localized cutaneous lymphomas.



**Abstract N°: 3456****Cutaneous metastases of lung adenocarcinoma**

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<sup>1</sup>Basurto University Hospital, Dermatology, Bilbao, Spain

**Introduction & Objectives:** Cutaneous metastasis (CM) from a primary visceral malignancy is a relatively uncommon entity. In the majority of the patients, CM develops in the late course of the disease, however, in a few cases this can be the initial presentation. Clinically, CM often manifests as single or multiple painless erythematous nodules, although the clinical presentation might be highly variable, which is why they are easily mistaken for other dermatological conditions.

**Materials & Methods:** We report a clinical case of cutaneous metastasis of lung adenocarcinoma with an unusual clinical presentation.

**Results:** A 75-year-old man who was previously diagnosed with lung adenocarcinoma T4N3M0, stage IIIB, and chronic spontaneous urticaria presented to the dermatology department with a one-month history of erythematous and pruritic skin lesions. On examination, the cutaneous eruption consisted of violaceous-to-erythematous patches and plaques with an urticarial appearance located on the back, flank and abdomen, with progressive extension. A skin biopsy was performed. In immunohistochemistry, tumor cells were positive for CK7 and TTF1 and negative for CK20 and GATA3. These results were compatible with neoplastic infiltration of lung adenocarcinoma.

**Conclusion:** We present a case of CM secondary to lung adenocarcinoma with an atypical presentation. Although initially the skin lesions could have been attributed to the patients dermatological condition, the histological examination, especially immunohistochemistry, were essential to reach the correct diagnosis.



**Abstract N°: 3460****Periocular sebaceous carcinoma: do we need a genetic study?**

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**Introduction & Objectives:** Sebaceous carcinoma is an uncommon but potentially aggressive cutaneous malignancy. In 75 % of the cases, it is found in the periocular area, arising from the sebaceous glands. The remaining 25% is located in extraocular regions, mainly head and neck.

**Materials & Methods:** We describe the case of a 57-year-old male, diagnosed with human immunodeficiency virus (HIV) infection with inappropriate adherence to antiretroviral therapy in the past and a history of renal tumor successfully removed. There were no internal malignancies in his family. He presented to our clinical setting because of a rapidly enlarging mass at the right periocular region. The examination revealed a well-demarcated slightly bright pink plaque greater than 1 centimeter in diameter, which was located in proximity to the inner corner of the eye.

**Results:** A punch-biopsy was performed, with a final diagnosis of sebaceous carcinoma. A loss of mismatch repair protein expression on the immunohistochemistry profile was not observed. A blood analysis and a body computer tomography were carried out without significant findings. Therefore, a complete circumferential peripheral and deep margin assessment (CCPDMA) was undertaken, with complete removal of the lesion, which healed by secondary intention. Meanwhile, a colonoscopy was performed, showing no neoplasms.

**Conclusion:** Sebaceous carcinoma can be related to Muir-Torre syndrome (MTS), an autosomal dominant genodermatosis which encompasses the association of sebaceous gland tumors and visceral neoplasms with familial inheritance. Although extraocular sebaceous carcinoma occurring below the neck is strongly associated with MTS and requires genetic testing for MTS if the Mayo MTS risk score is 2 or higher, the genetic screening is not recommended for periocular sebaceous carcinoma. Immunosuppressed states, such as HIV infection, might predispose our patient to periocular sebaceous carcinoma. Surgery by CCPDMA or Mohs micrographic surgery is the first-line treatment for localized lesions whereas chemotherapy or immunotherapy are the alternative in metastatic cases. In conclusion, the universal screening by immunohistochemistry or genetic study is not recommended in all sebaceous carcinomas.



**Abstract N°: 3499****Marjolin's Ulcer on burn scars: A 17 Case series of a Delayed Complication**

Kmar Turki<sup>1</sup>, Rim Chaabouni<sup>1</sup>, Madiha Mseddi<sup>1</sup>, Khadija Sellami<sup>1</sup>, Hamida Turki<sup>1</sup>

<sup>1</sup>CHU Hedi Chaker, Dermatology department, Sfax

**Introduction & Objectives:**

Marjolin's ulcer (MU) refers to all malignant tumors developed on old unstable scars, most commonly burn scars. The aim of our study is to investigate the epidemiological, clinical, therapeutic, and evolutionary characteristics of MU on burn scars.

**Materials & Methods:**

A retrospective study over a 26-year period (1997-2023) was conducted at our dermatology department, including all patients who developed MU on a burn scar. Histological confirmation and staging were performed in all cases.

**Results:**

We collected data from 17 patients with 18 MUs. The average age of the patients was 48 years. The sex ratio (M/F) was 1.8. Only 5 patients (29.4%) received adequate initial burn care. The average latency period between the burn and the development of MU was 18.5 years. The tumor presented as ulcerative-budding in 15 cases (83.5%), ulcerative in 1 case (5.5%), budding in 1 case (5.5%), and as a heterogeneous plaque with ulcerative-budding center in 1 case (5.5%). The most common localization was the extremities, found in 11 patients (66.7%). Histopathological examination revealed squamous cell carcinoma (SCC) in 15 patients (83.3%), basal cell carcinoma in 2 cases (11.1%), and melanoma in one case (5.5%). Extension assessment revealed nodal metastases in 1 case (5.8%) and distant metastases in 5 cases (30%). Surgical treatment was performed in 16 patients (88.8%): wide excision in 14 cases (87.5%) and amputation in 2 cases (11.1%). Tumor recurrence was noted in 3 patients (16.6%) with an average interval of 4.3 years.

**Conclusion:**

MU was first described in 1828 by François Marjolin. Its incidence is rare, estimated at 2% of cutaneous cancers. In the series of literature, the ulcerated form is the most common. In our series, the ulcerative-budding form was the most frequent. Limbs, particularly flexion creases, are the preferred site of degeneration as shown in our series. This is probably due to repeated friction and trauma.

Histologically, it mainly consists of SCC. Carcinological surgical treatment remains the treatment of choice for MU. The prognosis of MU remains reserved due to its high metastatic potential and recurrence risk ranging from 6% to 53% of cases according to studies, similar to the rates observed in our studies.

Improving the prognosis primarily requires a preventive approach, which involves early skin grafting and regular care of any burn scar.



**Abstract N°: 3510****Induced basal cell carcinoma of the scalp by radiation therapy for tinea capitis: 195 cases**

Lina Bessaad<sup>1</sup>, Sonia Boudaya<sup>1</sup>, Khadija Sellami<sup>1</sup>, Fatma Hammemi<sup>1</sup>, Emna Bahloul<sup>1</sup>, Mariem Amouri<sup>1</sup>, Abderrahmen Masmoudi<sup>1</sup>, Madiha Mseddi<sup>1</sup>, Hamida Turki<sup>1</sup>

<sup>1</sup>Hedi Chaker University Hospital, Dermatology

**Introduction & Objectives:**

Radiation therapy (RT), that once was the first line treatment for tinea capitis (TC), is known to increase the risk of basal cell carcinomas (BCC). Our objective was To specify the epidemiological and histological particularities of radiation-induced BCC of the scalp.

**Materials & Methods:**

Retrospective study during 27 years (1995-2021), in the dermatology department of Hedi Chaker hospital, collecting patients with a history of RT for TC presenting at least one BCC of the scalp confirmed histologically.

**Results:**

We enrolled 195 patients (sex ratio (M/F)= 4.2). The mean age was 56.7 years. The mean age at irradiation was 9.7 years. The mean time from RT to BCC onset was 46 years. Sixty patients had multiple BCC (2 to 11 lesions per patient). The number of lesions was 323 BCC.

These BCC were nodular (48.3%), maculopapular (35%), ulcerated (10.2%), vegetant (4%) and morpheaform (1.6%). They were pigmented in 47.1% of cases and mostly located in the occipital (34.4%) and parietal (27.6%) regions. The average size was 1.3 cm.

Histologically, nodular aspect was predominant (75.5%), associated with an ulcerated (17.7%), pseudocystic (7.7%), adenoid (6.8%), infiltrating (2.2%), pilar (5.88%) or keratinizing (0.9%) differentiation. The other aspects were: adenoid (11.5%), ulcerated (4.6%), ulcerated adenoid (2.1%), pagetoid and metatypical each in (1.9%).

**Conclusion:**

Our series joins the literature on epidemioclinical and histological features of radiation-induced BCC: the young age of onset of BCC, the male predominance explained by the greater sun exposure and the higher rate of schooling in boys in the 1960s, the predominance of the nodular subtype, occipital and parietal localizations and the average number of BCC per patient. However, the pigmented lesions and multiple BCC were more frequent in our series. Prolonged clinical surveillance is necessary for patients with RT history for TC because of the risk of new BCC and recurrences.





## Abstract N°: 3529

### Early detection of melanomas using circulating tumour-specific antibodies

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### Introduction & Objectives:

Melanoma has a high mutation rate, leading to the generation of immunogenic tumour antigens that trigger a cognate cellular and humoral immune response against cancer cells.

The cancer-testis antigen (CTAg) family comprises over 90 structurally and functionally diverse proteins that are aberrantly expressed in melanoma. This expression triggers the production of specific antibodies towards the relevant CTAg. Consequently, certain patterns of CTAg specificity can serve as valuable early diagnostic markers for melanoma, as well as prognostic biomarkers for disease outcomes. Our collaborators at the Olivia Newton John Cancer Research Institute have developed a novel cancer-specific array capable of detecting and quantifying anti-CTAg antibodies against over 100 tumour antigens.

The aim of this study is to validate whether these circulating antibodies can reliably aid the early detection of melanoma, including plasma samples from patients with melanoma in-situ, stage I, and stage II. Additionally, this study investigates the use of blood cards to collect drops of blood as an alternate and accessible blood collection method.

### Materials & Methods:

This study used blood samples from two distinct patient cohorts. *Cohort 1* comprised 264 patients diagnosed with melanoma in-situ, stage I and stage II, while *cohort 2* included 108 healthy individuals without melanoma. Patients in *cohort 1* had a blood sample collected at their initial diagnosis, within 30 days after curative-intent surgery of the primary tumour. For the profiling of antibodies present in plasma, two different CTAg microarray platforms were used: the CT100+ and the Sengenics CTA Protein Microarrays. Samples were assayed on these arrays, as per prior published methods.

### Results:

Thus far, we have utilized the CT100+ array to assay a total of 199 plasma samples corresponding to stage I and stage II melanoma patients in cohort 1. This antibody profiling was then compared with results obtained from 38 healthy individuals in cohort 2. We have identified specific IgG antibodies against 3 tumour antigens as promising diagnostic biomarkers for early-stage melanomas, with univariate area under the curves ranging from 0.857 to 0.981 in the discovery cohort, and from 0.824 to 0.985 in the internal validation cohort. We are currently assaying the remaining plasma samples using the Sengenics CTA Protein arrays to validate our diagnostic signature. Moreover, we are assessing whether blood cards can be used for downstream antibody profiling assays.

### Conclusion:

In this study, we identified circulating antibodies against tumour antigens in stage I and stage II melanoma plasma samples. Therefore, early-stage melanoma can be detected through the presence of tumour-specific antibody

profiling, which is not observable in healthy individuals. Future research will be necessary to further validate our findings and incorporate them into the clinical setting.

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**Abstract N°: 3547****Beta-blockers and Cutaneous Melanoma Outcomes: A Systematic Review and Meta-Analysis.**

Nicholas Muller<sup>1, 2</sup>, Samuel Tan<sup>1, 2</sup>, Nisal Vipulaguna<sup>1</sup>, Chenhao Zhou<sup>1</sup>, Maria Celia Hughes<sup>1</sup>, Lena von Schuckmann<sup>1, 2</sup>, Hans Peter Soyer<sup>1, 2</sup>, Kiarash Khosrotehrani<sup>1, 2</sup>

<sup>1</sup>The University of Queensland, Dermatology Research Centre, Frazer Institute, Brisbane, Australia, <sup>2</sup>Princess Alexandra Hospital, Dermatology, Brisbane, Australia

**Introduction & Objectives:**

This systematic review and meta-analysis investigates the potential role of beta-blockers in cutaneous melanoma management. Beta-adrenoceptors are upregulated in cancers, including melanoma, and beta-blockers – particularly the “pan-selective” variety – have been shown to inhibit angiogenesis and tumour cell migration in melanoma models. However, clinically relevant evidence for their use in modulating melanoma patients’ outcomes remains sparse.

**Materials & Methods:**

Our PRISMA-adherent meta-analysis included eleven independent cohorts across twelve articles, comprising 4,904 beta-blocker users and 16,678 non-users. Primary outcomes included disease-free (DFS), recurrence-free (RFS), melanoma-specific (MSS), and overall survival (OS). The main effect size was the adjusted hazard ratio (aHR) with 95% confidence interval (95% CI). Risk of bias was assessed using the Cochrane ROBINS-I tool. Nine cohorts included Cox regression models and were included in the random effects pooled meta-analysis.

**Results:**

No significant associations were found between beta-blocker use and either MSS or OS. However, a remarkable beneficial association was found with DFS, though we approach these results cautiously as they were all retrieved from studies by the same group. The study designs were largely observational and varied in disease stage, beta-blocker selectivity, and timeframe. In modern practice, most beta-blocker prescriptions are cardio-selective, which may have obscured the benefit of pan-selective beta-blockers in this meta-analysis.

**Conclusion:**

Our findings do not demonstrate a survival advantage for beta-blocker use in cutaneous melanoma. However, there is preliminary evidence that pan-selective beta-blockers specifically may be protective, and this should be investigated through further randomised controlled trials. Future prognostic studies should delineate exposure by beta-blocker type and consider adjustments for competing risks and immortal time bias if applicable.





**Abstract N°: 3573**

**Acral melanoma with “regression phenomenon”: A case report.**

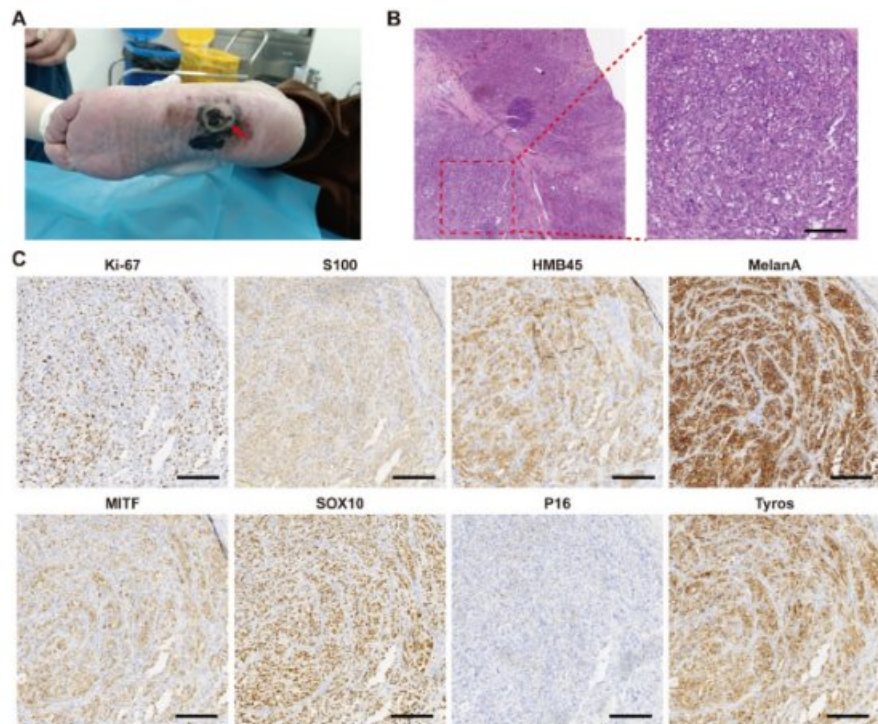
Jiashe Chen<sup>1</sup>, Yejiang Liu<sup>1</sup>

<sup>1</sup>Shanghai Skin Disease Hospital, Dermatopathology Department, Shanghai, China

**Background:** Malignant melanoma represents the most lethal manifestation of skin cancer, and its global incidence has exhibited a notable escalation over recent decades. Acral melanoma (AM) constitutes a distinct subset of melanoma, disproportionately affecting individuals of Asian descent despite its rarity among Caucasians. Characterized by a comparatively diminished survival rate relative to other forms of cutaneous melanoma, AM poses formidable challenges in clinical management.

**Case presentation:** We present a case of a 96-year-old female with AM concurrently demonstrating the “regression phenomenon.” The regression phenomenon, also termed pseudo-regression or hypopigmentation in medical parlance, manifests as the emergence of depigmented patches atop the melanoma lesion. While superficially suggestive of amelioration, these white patches may portend a graver prognosis. Currently, the precise pathophysiological underpinnings of melanoma regression remain elusive. Some scholars speculate that the regression phenomenon may indicate the occurrence of lymphatic metastasis in melanoma, leading to immune cell infiltration and the killing of melanoma cells within the tumor. The histopathological examination of the tumor tissue in this patient substantiates the presence of active lymphocytic infiltration. Nonetheless, no ascertainable evidence indicates metastasis of the patient’s tumor to distant sites.

**Conclusion:** This case elucidates the imperative for heightened vigilance towards the emergence of the regression phenomenon in melanoma diagnosis and treatment paradigms, underscoring the necessity for meticulous clinical appraisal supplemented by specialized diagnostic modalities. Besides, a thorough investigation into the mechanisms underpinning the regression phenomenon is imperative, as it may serve as a harbinger of melanoma metastasis to remote locales.



Clinical and pathologic manifestations of the case. (A) Representative images of skin lesions skin lesion on the left plantar of the patient. (B) HE staining showed an invasive tumor, scale bar = 200  $\mu$ m. (C) Representative Immunohistochemistry images of Ki-67, S100, HMB45, MelanA, MITF, SOX10, P16 and Tyrosinase of tumor tissue, scale bar = 200  $\mu$ m. The red arrow points to the white spot after the melanoma has regressed.





Abstract N°: 3594

**Dermal melanocytic tumor with CRTC1-TRIM11 fusion: Report of one case Resembling Clear Cell Sarcoma.**

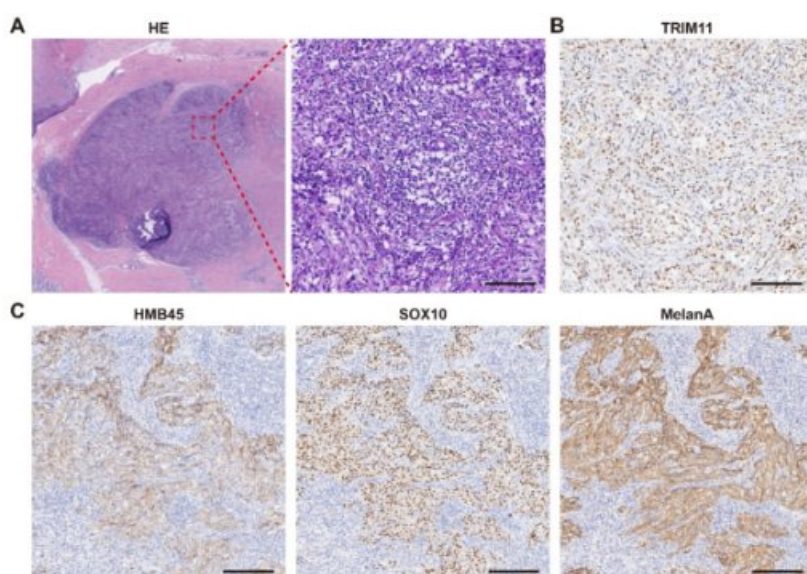
Jiashe Chen<sup>1</sup>, Yeqiang Liu<sup>1</sup>

<sup>1</sup>Shanghai Skin Disease Hospital, Shanghai, China

**Background:** Cutaneous Melanocytic Tumor with CRTC1::TRIM11 Fusion (CMTCT), known as a newly recognized potential disease entity, typically presents as dermal nodules affecting the head, neck, limbs, and trunk of adult patients. To date, only 48 cases of CMTCT have been documented in the existing English literature. While CMTCT is often perceived as a relatively benign tumor, its propensity for metastasis warrants meticulous scrutiny. Therefore, further comprehensive research is warranted to refine the classification of such tumors. Optimal disease management typically entails complete surgical excision followed by vigilant long-term surveillance.

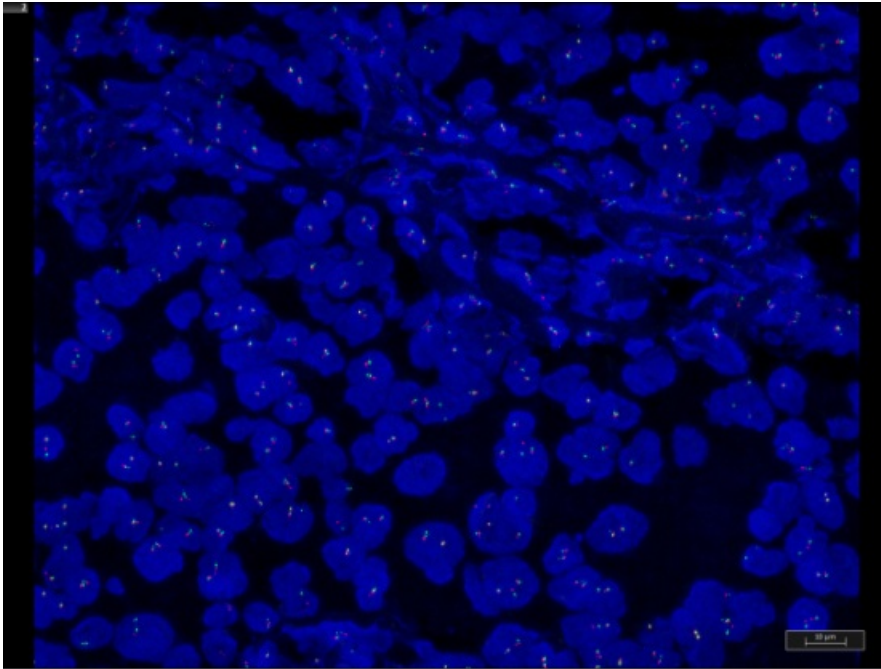
**Case presentation:** Herein, we present a case of cutaneous melanocytic tumor with a novel CRTC1-TRIM11 fusion phenomenon located on the left waist back. Histological analysis revealed predominance of clear epithelioid cells with discernible cellular atypia. However, immunohistochemical profiling demonstrated characteristic melanocytic markers, including Melan A (+), HMB45 (+), SOX-10 (+), and MITF (+). Initial diagnosis leaned towards cutaneous clear cell sarcoma. Subsequently, through the utilization of next-generation sequencing (NGS) technology, we identified a CRTC1::TRIM11 fusion gene, corroborated by fluorescence in situ hybridization (FISH) technique confirming CRTC1 gene rearrangement. Consequently, the definitive diagnosis was revised to dermal melanocytic tumor with CRTC1::TRIM11 fusion.

**Conclusion:** This case underscores the imperative of a comprehensive diagnostic approach in instances of discordance between clinical, microscopic, immunohistochemical, and molecular findings. It emphasizes the necessity to incorporate diverse diagnostic modalities in clinical practice to ensure accurate assessment and tailored management of patient conditions.



- A. The HE staining of the tumor tissue. Low magnification reveals a densely packed cellular nodule within the dermis. High-power microscopy reveals clusters of unpigmented melanocytes, characterized by round or oval nuclei, prominent nucleoli, and abundant cytoplasm, scale bar = 100  $\mu$ m. (B) TRIM11 immunohistochemistry showed strong nuclear staining, scale bar = 100  $\mu$ m. (C) Representative immunohistochemistry images of

HMB45, SOX10 and MelanA of tumor tissue, scale bar = 200  $\mu$ m.



The fluorescence in situ hybridization (FISH) analysis revealed a positive gene break rearrangement, wherein the CRTC1 gene (red) and the centromere of chromosome 19 (green) within tumor cells exhibited a distinct two-color separation fluorescence signal.

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## Abstract N°: 3628

### Establishment of cultured giant nevus malignant melanoma cells and animal models

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**Introduction & Objectives:** Therapeutic options for melanoma arising in giant congenital melanocytic nevi (GCMN) remain markedly constrained in children. Presently, treatment strategies for pediatric melanoma predominantly rely on data from adults. The lack of preclinical models impedes the advancements in researching malignant melanoma in pediatric giant nevus. In this study, we present primary GCMN malignant melanoma cell (GNMMC) lines obtained from children.

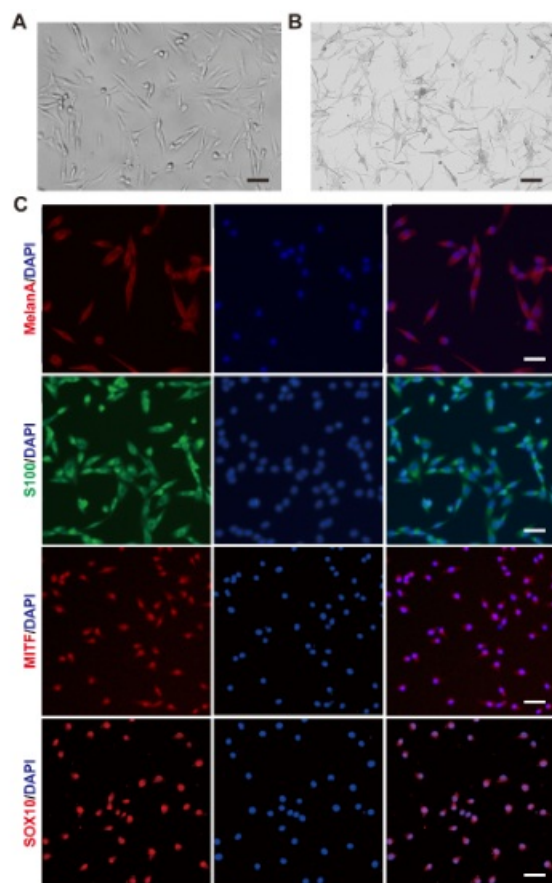
**Materials & Methods:** We measured the expression of melanoma marker proteins, including MelanA, S100, MITF, and SOX10 through immunofluorescence staining. The proliferative capacity of primary giant nevus malignant melanoma cells was investigated using the CCK8 assay and a colony-formation experiment. And exome sequencing was conducted to elucidate the mutational spectra of primary melanoma cell lines for future targeted applications.

**Results:** The giant nevus malignant melanoma cells (GNMMC) were successfully isolated utilizing a one-step digestion technique. And the protein expressions of MelanA, MITF, and SOX10, were evaluated with positive results in the two GNMMC cell lines. Besides, primary cells have a robust proliferation capacity *in vitro* and *vivo*. However, it was observed that none of the primary cell lines exhibited mutations in NRAS or BRAF.

**Conclusion:** We report a comprehensive protocol for cultivating GNMMCs and establishing corresponding animal models. This methodology provides a potent research instrument for investigating drug responses and facilitating personalized treatment strategies for melanoma patients with GCMN origins.

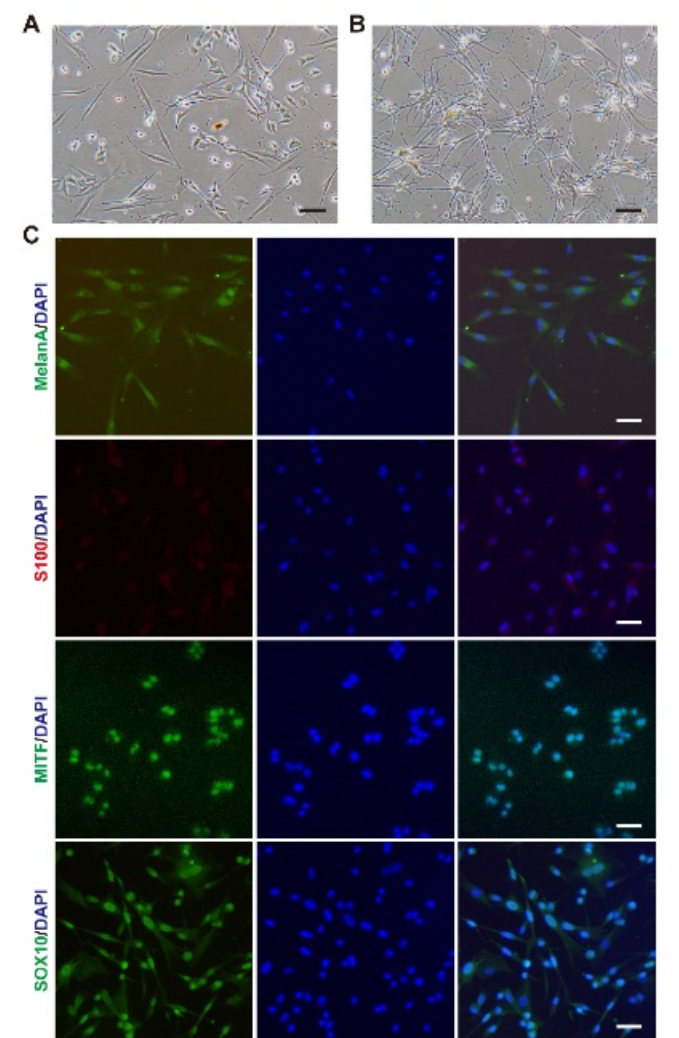
**Table 1** Clinical characteristics of the patients

Cell	Nationality	Sex	Age	Source	Primary site
GNMMC-1	Chinese	Male	6-year-old	Primary tumor	Lumbar back
GNMMC-2	Chinese	Male	5-year-old	Lymph node metastasis	Lumbar back

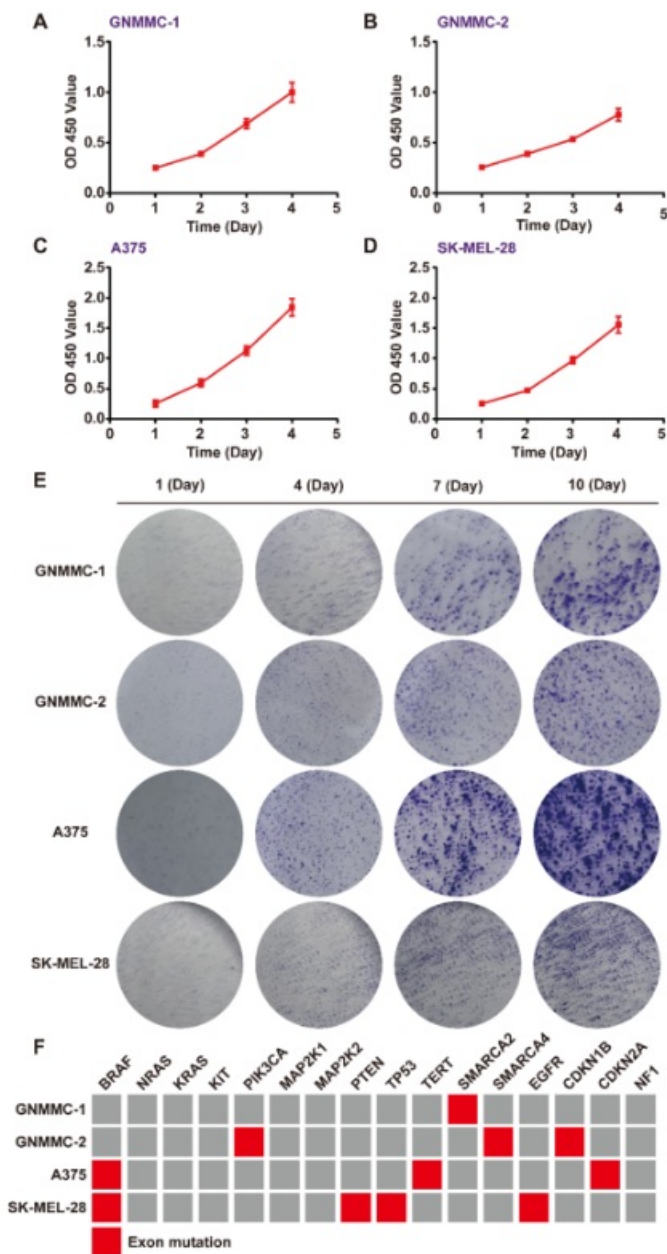


**Fig. 1** (A) Images of primary melanoma cells GNMMC-1, scale bar = 100  $\mu\text{m}$ . (B) Images of primary giant nevi cells, scale bar = 100  $\mu\text{m}$ . (C) Immunofluorescence microscopic images of MelanA, S100, MITF and SOX10-labelled primary melanoma cells, scale bar = 100  $\mu\text{m}$ .

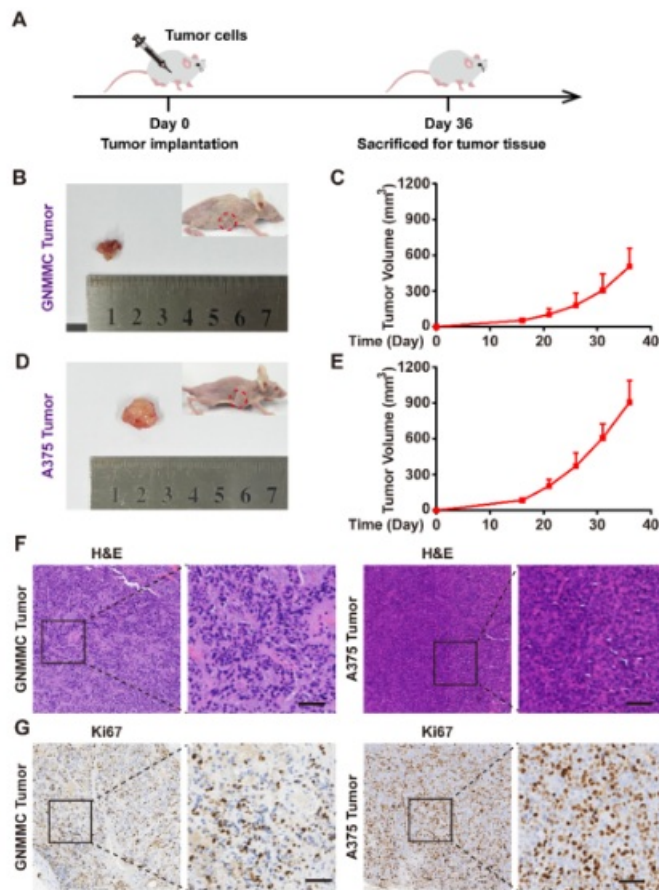




**Fig. 2** (A) Images of metastatic melanoma cells GNMCMC-2, scale bar = 100  $\mu\text{m}$ . (B) Images of primary giant nevi cells, scale bar = 100  $\mu\text{m}$ . (C) Immunofluorescence microscopic images of MelanA, S100, MITF and SOX10-labelled metastatic melanoma cells, scale bar = 100  $\mu\text{m}$ .



**Fig. 3** (A-D) The proliferative capacity of CNMMC-1 cells, CNMMC-2 cells, A375 cells and SK-MEL-28 cells were assessed through the CCK8 assay. (E) Colony formation assay conducted with CNMMC-1 cells, CNMMC-2 cells, A375 cells and SK-MEL-28 cells. (F) Exon mutation of CNMMC-1 cells, CNMMC-2 cells, A375 cells and SK-MEL-28 cells. Genetic aberrations were denoted through distinct colorations across 16 potential mutations (BRAF, NRAS, KRAS, KIT, PIK3CA, MAP2K1, MAP2K2, PTEN, TP53, TERT, SMARCA2, SMARCA4, EGFR, CDKN1B, CDKN2A, NF1). \*\*



**Fig. 4** (A) The illustrative diagram of the procedure of tumor implantation in an animal model. (B) Representative image of the collected CNMMC-1 tumor. (C) Tumor growth curves of GNMCMC-1 tumor-bearing mice. (D) Representative image of the collected A375 tumor. (E) Tumor growth curves of A375 tumor-bearing mice, scale bar = 50  $\mu$ m. (F) H&E staining of the CNMMC tumor tissue and A375 tumor tissue. (G) Representative Immunohistochemistry images of Ki67 in CNMMC-1 tumor tissue and A375 tumor tissue, scale bar = 50  $\mu$ m.



**Abstract N°: 3655****International Survey on Training of Dermatology Residents in Supportive Oncodermatology: the RESCUE study**

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**Introduction & Objectives:** Dermatologic management of cancer patients with cutaneous adverse events, acquired during and after oncologic treatments, is known as supportive oncodermatology. This subspecialty within dermatology includes the prevention, early identification, and mitigation of dermatologic toxicities affecting the skin, hair, nails, and mucous membranes resulting from chemotherapy, targeted therapies, immunotherapy, endocrine therapies and radiation therapy. Interdisciplinary collaboration between oncologists and dermatologists is becoming increasingly important. A perceived clinical need drives several hospitals to develop specific dermatologic care programs for oncologic patients.

**Materials & Methods:** The European Academy of Dermatology and Venereology (EADV) Task Force "Dermatology for Cancer Patients," in partnership with the US Oncodermatology Society conducted this international questionnaire-based study RESCUE (RESIDENTS SURVEY ON TRAINING OF DERMATOLOGY RESIDENTS IN SUPPORTIVE ONCODERMATOLOGY), aiming to evaluate the current state of knowledge and training in supportive oncodermatology for dermatology residents in Dermatology throughout the world, and their expectations for improving their ability/skills to manage these patients with dermatological toxicities.

**Results:** 20 countries participated in the RESCUE study (Europe, USA, South America, Asian countries). 442 dermatology residents completed the survey. Main results showed that:

- Dermatology residents are less trained in supportive oncodermatology (only 41% received complete training) compared to immunodermatology (75%), cutaneous oncology (75%), dermoscopy (64%) and dermatologic surgery (50%)
- The majority did not receive practical training in the management of skin (44%), hair (71%), nails (65%) or oral (58%) toxicities
- Only 17% of residents feel comfortable dealing with dermatological toxicities of anticancer treatments, the most common including acneiform eruption, toxic erythema of chemotherapy and immune-related dermatitis
- Residents are less trained in the management of dermatological toxicities of endocrine therapies (28%) compared to chemotherapy (57%), targeted therapy (62%), immunotherapy (66%) and radiotherapy (54%)
- They feel less qualified in nail (only 12% receive complete training), hair (14%) and oral toxicities (14%)
- 98% of residents consider that improving training on dermatological toxicities of anticancer therapies is

important during residency

- Residency training program (49%), educational course or lectures (45%) and specialised supportive oncodermatology clinic (42%) would be the most suitable forms of training for residents
- Finally, 97% of responders found the RESCUE study useful

**Conclusion:** The RESCUE study is designed to evaluate the education of residents in Dermatology, enabling future generations of dermatologists to take better care of oncologic patients. A specific dedicated residency program including a more practical approach, together with an extended training in endocrine therapies, as well as hair, nail and oral toxicities, would improve the skills of dermatology residents in the management of cutaneous adverse events of anticancer therapies.

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**Abstract N°: 3708**

**clinicoepidemiological study of premalignant and malignant lesions among patients attending the dermatology OPD in a tertiary care centre in puducherry- a retrospective cross sectional study**

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**CLINICOEPIDEMIOLOGICAL STUDY OF PRE MALIGNANT AND MALIGNANT LESIONS AMONG PATIENTS ATTENDING THE DERMATOLOGY OPD IN A TERTIARY CARE CENTRE IN PUDUCHERRY -A RETROSPECTIVE CROSS-SECTIONAL STUDY**

**Introduction:**

The growing prevalence of skin cancer worldwide can be understood as the result of increased exposure to ultraviolet radiation. Fitzpatrick skin type 1 and 2 are identified as groups at risk of developing skin cancer. 1 Actinic skin alterations in Asians and Africans are poorly studied. Skin cancers are the most common malignant tumors accounting for 20%-30% of neoplasms in Caucasians and 2%-4% in Asians. The incidence of non-melanoma skin cancer like basal cell carcinoma, squamous cell carcinoma has increased by 4%-8% per year since 1960 worldwide. Three million cases of non-melanoma skin cancer and 132 thousand melanomas are diagnosed worldwide every year. Actinic keratosis is a precancerous lesion with a 0.1%-20% conversion rate to squamous cell carcinoma. It occurs frequently in Caucasian skin that are chronically exposed to UV radiation. The index of suspicion for the atypical presentations by the dermatologists helps in early diagnosis and management.

**Objectives:**

To study the profile of patients with premalignant and malignant skin lesions from January 2021 to December 2023 among patients attending the dermatology OPD in a tertiary care centre in Puducherry

**Materials & Methods:**

Case records of 57,316 patients who attended the dermatology OPD during these three years were studied. 82 case records of premalignant and malignant skin lesions were reviewed and analysed using SPSS software. The prevalence of premalignant lesions including actinic keratosis, keratoacanthoma, leukoplakia and Bowen's disease and malignant skin lesions including squamous cell carcinoma and basal cell carcinoma were calculated and also their distribution among age, gender and race was analysed.

**Results:**

Over the 3 years study period, 82 cases with 93 premalignant and malignant skin lesions were recorded. 77.4% (n=72) were premalignant lesions and 22.5% (n=21) were malignant lesions. The overall commonest premalignant lesion was leukoplakia (n=38, 52.78%) followed by actinic Keratosis (n=31, 43.05%), keratoacanthoma (n=2, 2.78%) and Bowens disease (n=1, 1.39%). Leukoplakia (n=26, 76.47%) was the commonest tumor among Indians and actinic keratosis (n=23, 60.52%) was the commonest among Caucasians. The commonest malignant tumor in the study was basal cell carcinoma (n=12, 57.14%), followed by squamous cell carcinoma (n=9, 42.86%). Basal cell carcinoma was the commonest malignant lesion among Caucasians (n=9, 75%) and squamous cell carcinoma (n=4, 44.4%) was the commonest among Indians. There were no melanomas or lymphomas reported during our study period.

**Conclusion:**

A prompt identification of the premalignant and malignant skin lesions can aid in the selection of appropriate treatment modality and thereby reducing their associated morbidity and mortality.

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**Abstract N°: 3749****Cutaneous horns : the tip of the iceberg**

Emna Mnif<sup>\*1</sup>, Fatma Hammemi<sup>1</sup>, Khadija Sellami<sup>1</sup>, Bouhamed Mariem<sup>2</sup>, Boudawara Tahia<sup>2</sup>, Emna Bahloul<sup>1</sup>, Hamida Turki<sup>1</sup>

<sup>1</sup>CHU hedi chaker, dermatology, sfax, <sup>2</sup>CHU Habib Bourguiba, Anathomopathology, sfax

**Introduction & Objectives:**

A cutaneous horn (CH) is a rare, hyperkeratotic epithelial lesion, originating from basal keratinocytes. CH can hide both benign or malignant lesions. We aim to describe the histopathologic lesions on the basis of CH and to investigate if specific clinical features can predict malignancy.

**Materials & Methods:**

A retrospective study over 10 years (2014-2023), encompassing histologically confirmed cases of CH. Epidemiologic, clinical, and histologic data were analyzed using SPSS version 26 software.

**Results:**

A total of 98 patients were included (64 M – 34 F). The mean age was 63.2 years (9 – 90 years). Fitzpatrick I or II phototype was found in 4.1%. The average time of clinical evolution was 1.3 years (10 days to 15 years). Lesions were located in a sun-exposed area (79.6%). The cephalic region was most affected (64.3%). The mean base diameter of CH was 6.1 mm (1- 20 mm), and the mean height was 7.74 mm (1-50 mm). Basal erythema was present in 25.5% and infiltration on palpation in 42.9%. Histopathological analysis considered 71.7 % of the lesions as benign and 28.3% as pre-malignant or malignant. Within the group of pre-malignant or malignant lesions, keratoacanthoma (KA) was found in 7.1%, actinic keratosis (AK) in 6.1%, squamous cell carcinoma (SCC) in 5.1%, Bowen's disease in 3.1%, verrucous carcinoma in 3.1%, Kaposi's sarcoma in 2%, basosquamous carcinoma in 1%, and proliferating trichilemmal cyst in 1%. For benign lesions, histology concluded benign epithelial hyperplasia (37.8%), common wart (14.3%), seborrheic keratosis (9.2%), inverted follicular keratosis (4.1%), remodeled epidermal cyst (3%), simple actinic elastosis (1%), verrucous hamartoma (1%) and fibrous papule of the nose (1%).

The analytic analysis showed no correlation between skin phototype and malignancy ( $p=0.08$ ). The group of pre-malignant or malignant had an older age ( $p=0.001$ ). A long time of clinical evolution didn't correlate with malignancy ( $p=0.2$ ) nor did sex ( $p=0.8$ ). The base size didn't correlate with malignancy ( $p=0.2$ ) nor did a low ratio Height/Base size ( $p=0.2$ ). Base erythema (25.5%) and infiltration (42.9%) were significantly associated with malignancy ( $p=0.0001$ ).

**Conclusion:**

Our study confirms the diverse etiologies of CH. Although mostly benign, premalignant and malignant lesions are observed in 38 to 51%. Previous studies appointed a positive correlation between the length of time of clinical evolution, the age, the diameter of the base, and the histologic malignancy. A recent study indicates that a low height-to-base ratio, base erythema, horn pain, and the absence of « terrace morphology » on dermoscopy are predictive factors of invasive SCC.



**Abstract N°: 3754****Kaposi Sarcoma in a kidney transplant surgical scar : A case report**

Emna Mnif<sup>\*1</sup>, Rim Chaabouni<sup>1</sup>, Saadia Makni<sup>2</sup>, Abderrahmen Masmoudi<sup>1</sup>, Boudawara Tahia<sup>2</sup>, Hamida Turki<sup>1</sup>

<sup>1</sup>CHU hedi chaker, dermatology, sfax, <sup>2</sup>CHU Habib Bourguiba, Anathompathology, sfax

**Introduction & Objectives:**

Kaposi sarcoma (KS) is a rare, polyclonal angioproliferative mesenchymal neoplasm caused by human herpes virus type-8 (HHV-8). The occurrence of KS in a kidney transplant surgical scar is extremely rare.

**Materials & Methods:**

We report a case of cutaneous and visceral KS in a kidney transplant patient presenting cutaneous lesions on the surgical scar.

**Results:**

A 36-year-old woman underwent right kidney transplant one and a half years ago, under immunosuppressive regimen consulted for nodular lesions in the abdomen with asthenia evolving for 3 months. The dermatological examination revealed the presence of well-defined purplish-blue nodular lesions non-pruritic and non-painful along the kidney transplant surgical scar measuring 0.5 to 2cm. General examination revealed bilateral inguinal and cervical lymphadenopathy as well as a poorly defined mass painless and indurated extending from the left iliac fossa to the hypogastrium. The diagnosis of KS was suspected clinically and a skin biopsy confirmed it. The immunohistochemical study showed the positivity of anti-HHV8 antibodies in the tumor cells. A thoraco-abdomino-pelvic computed tomography scan showed the presence of multiple intraperitoneal masses associated with hepatic and pulmonary nodules. The diagnosis of cutaneous and visceral KS was made. The treatment was based on the reduction of the immunosuppressive treatment and the introduction of an inhibitor of the mTOR protein (SIROLIMUS). The patient was also treated with systemic chemotherapy. The evolution under treatment was marked by the disappearance of the skin lesions.

**Conclusion:**

KS is common in kidney transplant recipients. It is 500 times more common in this group of patients compared to the general population. It results in cutaneous-mucosal or visceral lesions which the extent depends on the level of immunosuppression. In the different series of the literature, the time to onset can vary from 2 months to 22 years after transplantation and this risk is maximum during the first two years. The occurrence of Kaposi disease lesions on the surgical scar is extremely rare. This observation can be attributed to the Koebner phenomenon. The skin trauma caused by the surgical procedure promotes the release of basic fibroblast growth factor (b-FGF) which stimulates the local replication of HHV8 and increases the expression of binding proteins. It promotes also the release of angiogenic growth factors and cytokines including vascular endothelial growth factor (VEGF). The presentation is identical to the lesions occurring at sites other than scars. The diagnosis is confirmed by skin biopsy and immunohistochemical study. The treatment consists of the reduction of immunosuppressive treatment as well as the introduction of an mTOR inhibitor due to its anti-tumor properties. Systemic chemotherapy is indicated in progressive diseases and forms with visceral involvement.

**Abstract N°: 3757****Merkel cell carcinoma: an observational unicenter study of 60 cases**

Itziar Muelas Rives<sup>1</sup>, Adrián Diago Irache<sup>1</sup>, Beatriz Clemente Hernández<sup>1</sup>, Leticia Ollero Domenche<sup>2</sup>, Marcial Álvarez Salafanra<sup>1</sup>, Tamara Gracia Cazaña<sup>1</sup>, Maria Carmen Gómez Mateo<sup>2</sup>, Yolanda Gilaberte Calzada<sup>1</sup>

<sup>1</sup>Miguel Servet University Hospital, Dermatology, Zaragoza, <sup>2</sup>Miguel Servet University Hospital, Pathological Anatomy, Zaragoza

**Introduction & Objectives:** Merkel cell carcinoma (MCC) is a rare and aggressive cutaneous neuroendocrine tumor, with an increasing incidence worldwide. The aim of this study is to describe the sociodemographic characteristics of patients diagnosed with MCC in a tertiary hospital; additionally, the main risk factors, both clinical and histological, that influence prognosis and mortality are analyzed.

**Materials & Methods:** We conducted a retrospective, analytical observational study in which sociodemographic, clinical, histopathological and treatment data were collected for patients diagnosed with MCC between January 2000 and December 2022. A descriptive statistical analysis was performed using SPSS statistical software.

**Results:** In 22 years 60 patients with MCC were diagnosed, with a significant increase in the incidence in the last 2 years (35% between 2020 and 2022). The mean age was 81.3 years (SD 9.8), with a male predilection (63.3%). Twenty percent of the patients were immunosuppressed at the time of diagnosis. MCC located in the head and neck were 63.3%, followed by those in lower extremities (18%). Furthermore, 46.1% of the patients presented a localized stage at diagnosis (stage I and II), while 25.6% debuted with distant metastases (stage IV). Forty-seven patients underwent local surgery of the primary skin tumor (82.5%). After surgery, 26 patients received adjuvant radiotherapy, 7 received adjuvant chemotherapy and 6 received immunotherapy with Avelumab. A total of 73.9% progressed to advanced disease and 61.5% died specifically from MCC (median survival: 10 months).

**Conclusion:** The diagnosis of MCC has increased markedly in our population in recent years. Males over 80 years of age, not immunosuppressed, predominate in our sample. Although almost half of them were diagnosed at a localized stage, more than half died from the tumor despite treatment. The association between therapeutic, clinical and histological factors and the prognosis will be also analyzed.



**Abstract N°: 3768****Anti-aging effects of Tirbanibulin 1% ointment: two birds with one stone? A Real-Life Experience.**

Federica Li Pomi<sup>1</sup>, Lucia Peterle<sup>2</sup>, Andrea D'aloja<sup>2</sup>, Antonio Di Tano<sup>2</sup>, Mario Vaccaro<sup>2</sup>, Francesco Borgia<sup>\*2</sup>

<sup>1</sup>University of Palermo, Department of Precision Medicine in Medical, Surgical and Critical Care (Me.Pre.C.C.), Palermo, Italy, <sup>2</sup>University of Messina, Department of Clinical and Experimental Medicine, Section of Dermatology, Messina, Italy

**Introduction & Objectives:** Tirbanibulin 1% ointment has been licensed to treat non-hyperkeratotic actinic keratosis (AKs) on the face and scalp in adults to ensure excellent patient tolerability due to the mild side effects and the brief application time compared to other topical therapies on the market. A growing body of evidence suggests that, beyond their primary function, the treatments for AKs and the cancerization field may inadvertently confer substantial cosmetic benefits to patients.

**Materials & Methods:** We report a single center retrospective case series of patients, observed between February 2023 and March 2024, seeking treatment for AKs in the context of photodamaged areas in which the application of tirbanibulin 1% ointment induced, besides clearance of AKs, anti-aging effects on both skin texture and solar lentigos.

**Results:** Ten patients affected by Olsen grade 1-2 AKs experienced a powerful rejuvenating effect in the treated areas, with a marked efficacy in skin lightening and clearance of solar lentigo.

**Conclusion:** Tirbanibulin 1% ointment seems able to improve skin aging as a desirable side effect at the application site for AKs on chronic photodamaged skin. Such preliminary observation needs further confirmation in real-life studies on larger cohorts of patients, trying to explain the pathogenic mechanisms responsible for such aesthetically relevant results.





## Abstract N°: 3777

### **Polymorphic lymphoproliferative disorder (post transplant-like) linked to EBV induced by deoxycholic acid.**

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<sup>1</sup>Department of Dermatology, Faculty of Medicine and Pharmacy of Agadir, Ibn Zohr University, Agadir, Morocco., Agadir, Morocco

#### **Introduction & Objectives:**

The Post-Transplantation Lymphoproliferative disorders (PTLD) groups gather different types of proliferation of lymphocytes, mainly B, ranging from simple to fatal proliferations, very close to classic lymphomas.

Besides, Epstein-Barr virus plays an important role in the pathogenesis of lymphoproliferative syndromes.

#### **Materials & Methods:**

We report the case of a female patient hospitalized for a polymorphic lymphoproliferative disorder (post-transplant like) related to EBV induced by deoxycholic acid.

#### **Results:**

A 35-year-old woman, who had undergone an injection of deoxycholic acid three months prior to her admission for the aesthetic purpose of a "double chin", was hospitalized for cervical cellulitis after an interval of one month and a half following her injection, complicated by respiratory distress requiring a rescue tracheotomy. The clinical examination revealed a painful indurated collection measuring 10cm at the cervical level without detectable entry site.

The biological assessment was in favor of a predominantly neutrophilic hyperleukocytosis at 22850 / mm<sup>3</sup>. Viral serologies, notably HIV, syphilis, HBV and HCV, were negative.

A cervical-thoracic-abdominal-pelvic CT-Scan showed a tissue infiltration of the oral floor encompassing the submandibular glands with diffuse thoraco-abdominal muscle involvement, associated with retroperitoneal fibrosis responsible for an important uretero-hydronephrosis, which may be related to an IgG4 fibro-sclerosing involvement.

A skin biopsy objectified a lymphoid proliferation of diffuse architecture. Immunohistochemistry confirmed the diagnosis of a polymorphic lymphoproliferative disorder (post-transplant-like) linked to EBV, with anti-CD20+ Antibodies (AB), anti-CD3+ AB, anti-Ki67+ AB, anti-Bcl2+ AB, anti-CD30+ AB and anti-LMP1+ AB possibly entering into the iatrogenic framework known in the patient.

The patient was referred to hematology for additional management, where she died due to respiratory distress.

#### **Conclusion:**

Post-transplantation lymphoproliferative disorder can result from various factors, including immunodeficiency or iatrogenic treatment such as deoxycholic acid. The complex pathophysiology of this affection, primarily linked to Epstein-Barr virus infection, requires a multifactorial management approach, combining immune response restoration and targeted interventions. Although EBV serological profiling is useful for diagnosis, its absence in our case raises questions about its use prior to deoxycholic acid injection.





**Abstract N°: 3782****Biomarkers of the Tumor Immune Micro-Environment for Management of Anal Pre-Cancers**

Fernando Dias Goncalves Lima<sup>\*1</sup>, Marieke Ijsselsteijn<sup>2</sup>, Rinske Verkerk<sup>3</sup>, Kirsten Rozemeijer<sup>3</sup>, Timo Ter Braak<sup>3</sup>, Jan Prins<sup>4</sup>, Rosalie Luiten<sup>1</sup>, Noel de Miranda<sup>2</sup>, Renske Steenbergen<sup>3</sup>, Henry de Vries<sup>1</sup>

<sup>1</sup>Amsterdam UMC, locatie AMC, Dermatology, Amsterdam, Netherlands, <sup>2</sup>Leiden University Medical Center (LUMC), Pathology, Leiden, Netherlands, <sup>3</sup>VU University Medical Center, Pathology, Amsterdam, Netherlands, <sup>4</sup>Amsterdam UMC, locatie AMC, Internal Medicine, division of Infectious Diseases, Amsterdam, Netherlands

**Introduction & Objectives:**

Anal high-grade squamous intraepithelial lesions (HSIL) are the human papillomavirus-induced precursor of anal squamous cell carcinoma. They present a dichotomy in their risk of progression to malignancy, categorized into low-risk HSIL, with minimal progression risk, and advanced HSIL, with a high risk. Currently, all HSIL is treated, which results in overtreatment of low-risk HSIL, imposing burdensome consequences on patients and the health care system. This underscores the urgent need for tailored therapeutic approaches guided by objective biomarkers.

**Materials & Methods:**

This study aims to dissect the tumor immune micro-environment (TIME) differences between low-risk and advanced HSIL. We performed a comparative analysis through multiplex imaging mass cytometry (CYTOF), examining TIME characteristics in 9 HSIL samples that progressed to cancer, 10 that showed spontaneous regression, 4 anal cancer samples, and 1 normal tissue sample, using a targeted 40-marker panel. Promising biomarkers are currently undergoing validation in a larger, cross-sectional series of 60 HSIL samples using multispectral fluorescence microscopy. These samples are stratified into low-risk and advanced HSIL, using methylation marker analysis as a surrogate for cancer risk stratification.

**Results:** CYTOF analysis revealed increased densities of M2 macrophages in HSIL cases that progressed to cancer, along with more frequent macrophage cell interactions in this group. Validation of four candidate markers is ongoing.

**Conclusion:**

Our preliminary data indicate that variations in TIME across low-risk and advanced HSIL subclasses. TIME biomarkers that could improve HSIL management strategies, reducing overtreatment and enhancing patient outcomes.





## Abstract N°: 3807

### Diagnosis and treatment of patients with actinic keratosis in France: REAKT study.

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### Introduction & Objectives:

Actinic keratosis (AK) is a chronic skin disease caused by cumulative sun exposure that presents as recurrent rough skin lesions and may evolve into squamous cell carcinoma with a probability of 10% over 10 years. This study aimed to evaluate access to care of patients with AK in the general population in France and to describe AK treatments.

### Materials & Methods:

The REAKT survey was performed in the METASKOPE panel of 15,246 individuals aged  $\geq 40$  years representative of the French general population in November and December 2022. A specific questionnaire on disease diagnosis and manifestations, treatment and patients' life and habits with AK was sent by post to participants and completed at home.

### Results:

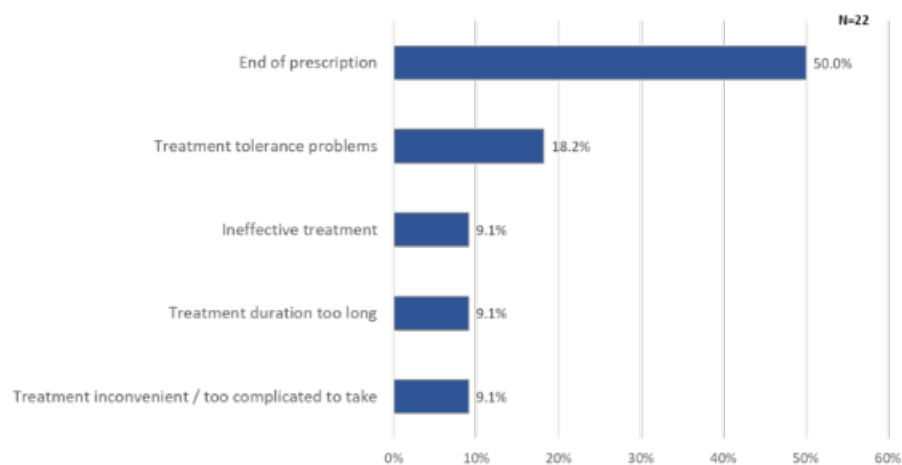
A total of 639 participants declared a physician diagnosis of AK in their lifetime: by a general practitioner (GP) in 111 cases (17.4%), by a dermatologist following referral by a GP in (N=104; 16.3%) and by a dermatologist directly (N=417; 65.3%). The mean age was  $69.6 \pm 10.6$  years; 462 (72.3%) were aged  $\geq 65$  years and 296 (46.3%) were men. The diagnosis was made  $\geq 3$  years previously in 301 patients (47.1%); the median interval between 1st symptoms and diagnosis was 17.1 months [IQR:5.0–40.0]. The waiting time to see a dermatologist was considered too long by 545 participants (85.3%), 88 (13.8%) reported that multiple consultations were necessary before diagnosis and 109 (17.1%) did not receive an effective treatment as soon as they were diagnosed.

397 participants (62.1%) reported been treated at least once and 71 participants were being treated at the time of survey (19.5%). However, 239 participants (37.4%) reported never having received a treatment. Treatments were prescribed mainly by dermatologists in 87.6% of cases or by a GP in 5.3% of cases. This involved non-pharmacological treatment in 305 cases (76.8%) (cryotherapy: 61.7%; photodynamic therapy: 4.5%; laser therapy: 9.1%; curettage: 7.8%; surgery: 3%) and topical treatment in 116 cases (29.2%) (5-fluorouracil: 12.1%; imiquimod: 11.3%; sodium diclofenac: 5.0%; 5 aminolaevulinic acid: 2.0%; mebutate ingenol: 1.8%). 241 (60.7%) of participants were treated with non-pharmacological treatments only, 56 (14.1%) with topical treatment only and 66 (16.6%) with both. For treated patients, the mean number of topical treatments prescribed was  $2.2 \pm 1.5$ . The median topical treatment duration was 23 days. 142 patients (35.8%) received at least one subsequent treatment, mainly due to lesion recurrence (40.9%), to prevent lesion recurrence (27.5%) or because lesions had not healed (17.6%). 14.8% of topical treatments were stopped before lesions had healed (**Figure 1**). Switching between topical and non-pharmacological treatments was less common than remaining within the same class (**Figure 2**).

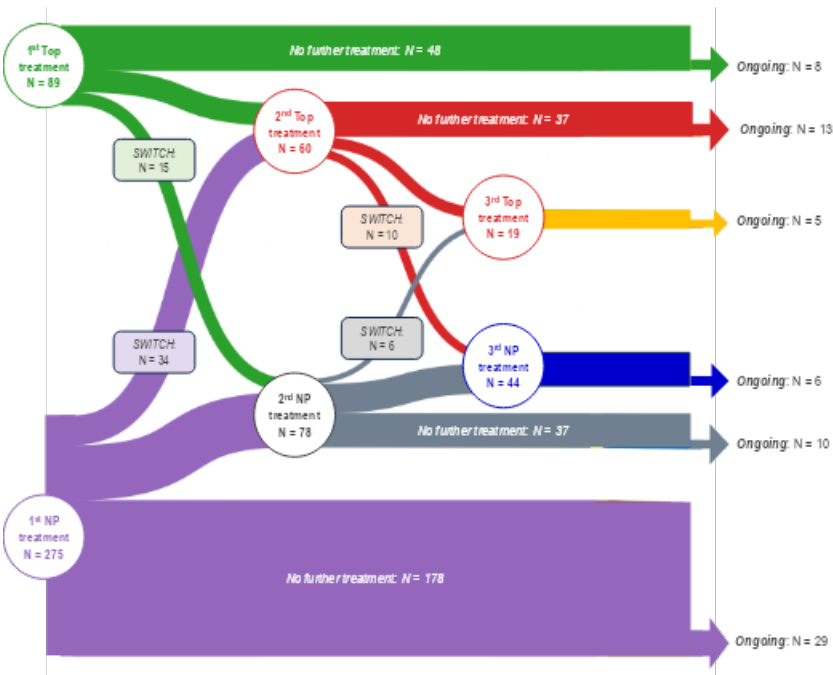
### Conclusion:

In participants with diagnosed AK, 37.4% never received treatment. Repeat prescriptions were received by 35.8% of patients. Access to treatment for this treatable dermatological condition in France needs to be improved.

**FIGURE 1: Reasons for treatment discontinuation before lesions heal**



**FIGURE 2: Treatment sequences**





## Abstract N°: 3825

### Actinic keratosis in France: an avoidable risk of skin cancer, unexpectedly also for people aged under 65 years (REAKT study)

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#### Introduction & Objectives:

Actinic keratosis (AK) is a chronic disease caused by cumulative sun exposure that presents as recurrent rough lesions on UV-exposed skin. AK is a marker of sun damage and increases the risk of squamous cell carcinoma (SCC) by 10% over 10 years. The objective of this study was to describe the epidemiology of AK in the general population in France and to describe the characteristics of affected patients.

#### Materials & Methods:

REAKT is an observational survey conducted between November and December 2022 in a panel of 15,246 individuals aged  $\geq 40$  years and representative of the general population in France. This postal survey consisted of a specific questionnaire on disease diagnosis and manifestations, treatment and patients' life and habits with AK.

#### Results:

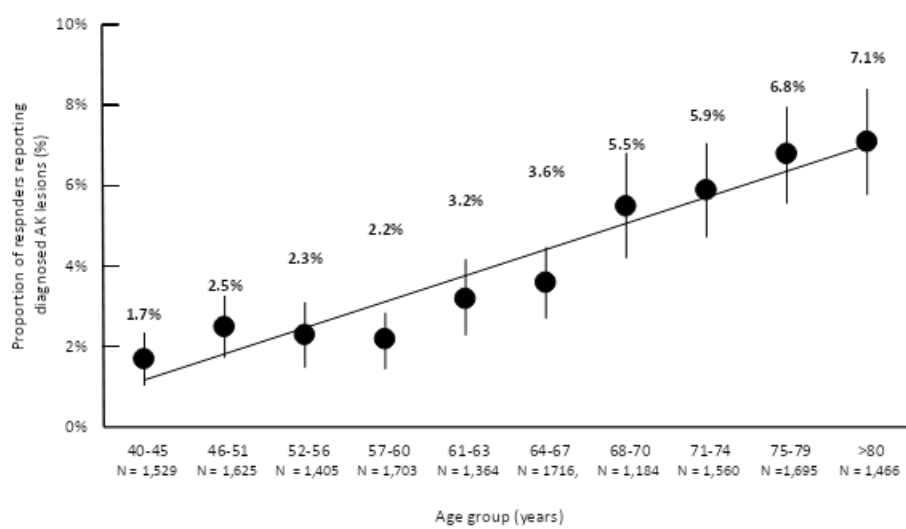
A total of 639 participants reported having AK diagnosed by a physician. The mean age was  $69.6 \pm 10.6$  years and 296 (46.3%) were men, 177 (27.7%) were aged  $< 65$  years. The adjusted lifetime prevalence of AK was 4.03% [95%CI: 3.73 – 4.35] (4.3% in men and 3.8% in women). Prevalence increased with age from 1.7% in the 40-45 year age group to 7.1% in the  $\geq 80$ -year age group (**Figure 1**). Prevalence was higher in coastal regions (5.7% in the South-east region vs. 2.9% in the Centre-Loire Valley region) (**Figure 2**). 366 participants (57.3%) reported a Fitzpatrick phototype I/II, 239 reported phototype III/IV and only one phototype V/VI. The time since diagnosis was  $\geq 3$  years in 301 participants (47.1%). 200 participants (31.3%) no longer had any lesions at the time of the survey. Of the 432 (67.6%) participants reporting lesions at the time of the survey, 103 (23.8%) reported a single lesion and 50 (11.6%) reported  $> 10$  lesions. These lesions were located on the face or neck in 326/420 participants (77.6%). Of the 639 participants diagnosed with AK, one-fifth (20.9%) had a previous history of treatment for skin cancer at the time of the survey (11.8% in participants aged  $< 65$  years).

#### Conclusion:

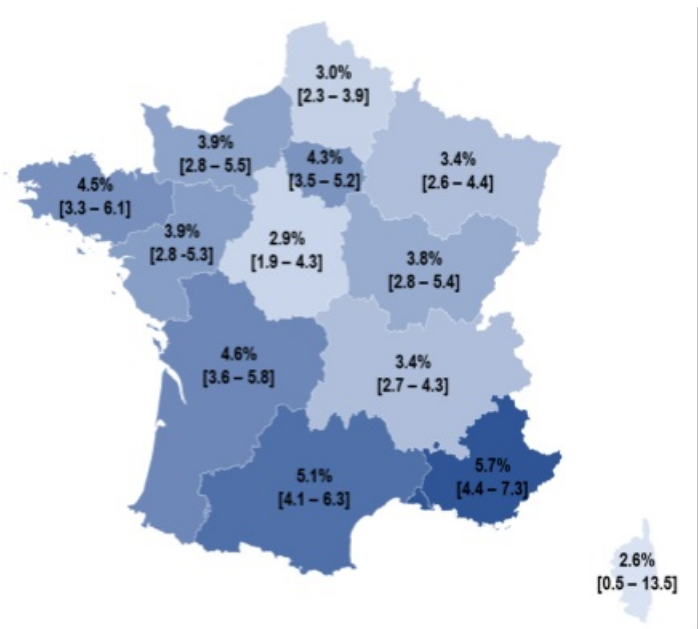
In our study, around 4% of a representative sample of the French population aged  $\geq 40$  years reported current or healed AK lesions (corresponding to around 1.5 million people affected nationwide). This proportion varied from 2.4% among participants aged 40-64 to 5.9% among participants aged  $\geq 65$ . Higher prevalence rates have been reported in previous European studies, usually conducted in dermatology practice. Our findings may suggest that prevalence in the general population is inferior to that observed in patients consulting dermatologists. AK awareness in the general French population needs to be improved. Prevalence was higher in coastal regions. Unexpectedly, around one quarter of participants with AK were aged  $< 65$  years. Given current life-expectancy, younger individuals aged  $< 65$  years represents a considerable reservoir of patients at risk for developing SCC,

particularly given the relatively large proportion of younger participants with a history of skin cancer, underlining the importance of developing effective strategies for prevention.

**FIGURE 1. Prevalence of actinic keratosis as a function of age**



**FIGURE 2. Prevalence of actinic keratosis by region**



**Abstract N°: 3835****Measuring health-related quality of life in patients with keratinocyte carcinoma: A multicenter cross-sectional study in Belgium and the Netherlands**

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**Introduction & Objectives:**

Keratinocyte carcinoma (KC) represents 90% of all skin cancers and despite its relatively low mortality rate, it may affect patients' health-related quality of life (HRQoL). Studies examining the impact of KC on HRQoL are limited and often only use generic measurement instruments. The objective is to measure the impact of KC on HRQoL using generic instruments and a disease-specific questionnaire, while comparing these instruments in a Belgian/Dutch cross-sectional study.

**Materials & Methods:**

HRQoL of patients with KC was measured using the Basal and Squamous Cell Carcinoma Quality of Life (BaSQoL) questionnaire, the EuroQol 5-Dimension 5-level (EQ-5D-5L), visual analog scale (VAS), 15-dimensions (15D) and time trade-off (TTO). Scores were stratified by patients with single KC and multiple KC. Generalized linear models assessed differences in mean HRQoL scores across KC groups, adjusting for relevant covariates.

**Results:**

715 patients were included in this study; 332 with single KC and 383 with multiple KC. BaSQoL subscores for single and multiple KC patients ranged from 0.44 and 0.52 for the 'appearance' to 1.16 and 1.27 for the 'other people' subdomain. Indicating a low-to-moderate impact on HRQoL. Patients with multiple KC showed significantly higher impact on BaSQoL 'worries' subdomain ( $p=0.002$ ) and worse perceived health measured with the EQ-5D-5L ( $p=0.004$ ) compared to patients with single KC. No significant differences were observed in VAS, 15D or TTO scores between patients with single and multiple KC.

**Conclusion:**

Both disease-specific and generic instruments suggest a minimal impact of KC on HRQoL. Patients with multiple KC experienced a higher impact on HRQoL in subdomain worries and a worse perceived health measured with the EQ-5D-5L.






**Abstract N°: 3900**
**Clear cell acanthoma on the nipple and areola**

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**Introduction & Objectives:**

Clear cell acanthoma (CCA) is recognized as a rare benign epidermal tumor. Its etiopathogenesis remains unclear, recent research suggests an inflammatory basis for this lesion. Typically solitary, and predominantly found on the lower extremities, we present a case of a CCA with an unusual localization affecting the nipple and complete resolution after topical treatment.

**Clinical case:**

A 19-year-old female with a medical history of allergic rhinitis who presented with a one-year pruritic lesion on the right nipple and areola. She had irregularly used steroid, antifungal, and antibacterial combination creams with no response.

The physical examination revealed an erythematous, scaly, verrucous-looking plaque on the right nipple, with minimal exudation and no signs of scratching. No breast or axillary masses were found upon the evaluation. With suspicion of atopic eczema or Paget's disease, a biopsy was performed showing a psoriasiform epidermal hyperplasia, along with pale cytoplasm keratinocytes and eosinophilic exocytosis, positive staining for cytokeratins AE1, AE3 and EMA, negative for cytokeratin 7, S100 and CEA. Thus, the diagnosis of clear cell acanthoma was established. It was treated with medium-potency topical corticosteroids and antibiotics twice daily for 2 weeks, leading to complete resolution. She remains lesion-free to date, using moisturizing creams as maintenance therapy.

**Discussion:**

CCA, first described by Degos in 1962, is a benign epidermal tumor often found on the lower limbs in middle-aged individuals. It presents as a solitary, slow-growing, asymptomatic, reddish papule or nodule with a "pearl-necklace pattern" in dermoscopy, treated with surgical intervention.

However, atypical sites, multiple lesions, and spontaneous regression have been reported. Histopathologically, CCA exhibits psoriasiform epidermal hyperplasia, pale periodic acid-Schiff (PAS) positive staining cytoplasm keratinocytes, neutrophilic exocytosis, and an inflammatory infiltrate with eosinophils, suggesting that this pathology could be a reactive hyperplasia to chronic inflammation.

Areola and nipple localization has been reported previously, mostly in younger Asian women with atopic dermatitis in 25% to 43% of the cases. Differential diagnosis must include Paget's disease, erosive adenomatosis of the nipple, or nipple and areola hyperkeratosis, among other causes of nipple eczema.

**Conclusion:**

The association of CCA with atopic dermatitis, its response to topical corticosteroids and the histological findings suggests that it should be considered a non-neoplastic inflammatory disease and avoid surgical procedures in these localization.



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**Abstract N°: 3903****a integrated clinico-dermoscopic risk score model for the differential diagnosis of atypical melanocytic lesions of the soles: the idscore-plantar**Linda Tognetti<sup>1</sup><sup>1</sup>Siena University Hospital, dermatology unit, Siena

**Introduction & Objectives:** Melanoma is the more aggressive form of skin cancer and plantar melanoma is the most frequent form in non-white populations, including Asians and Africans. In Europeans it's rare but very aggressive, often late diagnosed due to the special site location and the challenging appearance. Indeed, plantar melanocytic lesions (PMLs) including acquired and congenital nevi, intermediate entities and plantar MM, in Caucasians are still less investigated by dermoscopy compared with facial or body pigmented lesions, and the referring terminology is otherwise rather confused. Dermoscopic examination helped increasing the diagnostic accuracy in detecting clear-cut malignant and benign PMLs: however, there is a quote of atypical PMLs (aPMLs) that exhibit equivocal clinical and dermoscopic features: in this subset of difficult "borderline" lesions, dermoscopy alone cannot reach adequate diagnostic accuracy, and further parameters should be taken into account. We thus aimed to develop and test an integrated clinic-dermoscopic risk scoring model (iDScore) to distinguish atypical nevi (AN) from early melanomas of the soles.

**Materials & Methods:** We collected a database of clinically and dermoscopically difficult 490 aPMLs (98 MM + 392 AN) from 17 European Centres composed by: definite histological diagnosis, one dermoscopic standardized picture, the maximum diameter value, the age and sex of the patient and the specific plantar area among 8 subareas (Anterior lateral eminence of the sole, Anterior medial eminence of the sole, Central eminence of the sole, Heel, Interdigital spaces, Lateral surface of the fingers, Plantar arch, Plantar surface of the fingers). A total of 156 participants from 17 countries performed a blinded tele-dermoscopic pattern analysis over 20 cases, through a specifically realized web platform. A total of 33240 dermoscopic evaluations were obtained and analyzed together with the above mentioned objective data to build the risk scoring model.

**Results:** The iDScore plantar model obtained an AUC of 0.916 in the training set (i.e., 2295 evaluations) and of 0.915 in the testing set (i.e., 575 evaluations) and was composed by 5 items: i) maximum diameter 12-13mm (score 1)/maximum diameter over 13mm (score 10); ii) age over 50 years (score 7); iii) location on the plantar surface of the fingers (score 3)/location on the heel (score 6); iv) presence of the asymmetry of colors pattern (score 5); v) absence of lattice-like pattern (score 3). The scale risk range was 0 to 28 points, and was so composed: low-risk: 0-8; medium-risk: 9-18; high risk: 19-28. The score threshold for sensitivity 100% was set up at 9 points. Each risk range is associated with a specific suggestion: follow-up/biopsy/complete excision.

**Conclusion:** The integrated clinic-anamnestic-dermoscopic iDScore plantar model is proposed as an easy and rapid-to-use tool to help European clinicians -in real time- in orienting their diagnostic suspect in front of difficult atypical plantar lesions and to support them in management decisions.





## Abstract N°: 3923

### Cutaneous metastasis of a rare tumor: case report

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### Introduction & Objectives:

This report describes the case of a 39-year-old male patient diagnosed with cutaneous metastasis of atypical lung carcinoid tumor. We present the clinical evolution, diagnosis, and treatment, highlighting the uniqueness of this scenario.

Atypical lung carcinoid tumor is a rare neuroendocrine neoplasm accounting for 1-2% of lung cancers and 1-5/100,000 of all cancers, with its incidence increasing in recent decades. Skin metastases occur in 0.6% to 10.4% of patients with non-dermatological cancer, however, when it comes to cutaneous metastases of atypical lung carcinoid tumor, there are only a few case reports in the literature. In this work, we describe one of these rare cases of a patient with atypical lung carcinoid tumor with skin metastasis.

### Materials & Methods:

Clinical description and a thorough review of the patient's medical records were conducted. A literature review, covering publications since the year 2000, was conducted using the PubMed database with the following keywords: Cutaneous metastasis, atypical lung carcinoid tumor, case report.

### Results:

A 39-year-old man, native and resident of Rio de Janeiro-RJ, former smoker, with a 6-month history of lower back pain, dyspnea, and weight loss. Denies fever. Chest CT scan showing a mass in the left upper lobe invading the left pulmonary hilum. Bronchoscopy biopsy and histopathology with immunohistochemistry revealed atypical lung carcinoid tumor positive for chromogranin. After 1 year of evolution, the patient complained of two normochromic to erythematous nodules, with hardened consistency, mobile, approximately 1 cm in size, painful to palpation, located in the anterior parietal region near the midline, without drainage or cervical lymphadenopathy.

Given the patient's history, lesion characteristics, and the need to include cutaneous metastasis in the differential diagnosis of nodules, a biopsy of the lesion was performed. Skin biopsy by 4mm punch from the center and edge of the nodule for histopathological analysis revealed dermis diffusely infiltrated by undifferentiated neoplastic cells with hyperchromatic, round or oval nuclei, which were positively stained for chromogranin. Synaptophysin and CD56, as well as Ki67 with approximately 20% positivity, and CKPool, TTF1, and Melan A were negative; consistent with cutaneous metastasis of neuroendocrine tumor.

### Conclusion:

This case report of lung carcinoid tumor reaffirms the literature data demonstrating that the diagnosis of cutaneous metastasis of solid tumors rarely precedes the diagnosis of the primary tumor and is typically associated with a high probability of visceral metastases. This report emphasizes the need to consider cutaneous metastases in patients with atypical lung carcinoid tumor. Multidisciplinary contributions are crucial for managing cases like the one reported.

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**Abstract N°: 3982**

**Initial results from an open-label phase 1b/2 study of RP1 oncolytic immunotherapy in solid organ transplant recipients with advanced cutaneous malignancies (ARTACUS)**

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**Introduction & Objectives:**

Skin cancers are common post-transplant malignancies in solid organ transplant (SOT) recipients. The use of immune checkpoint inhibitors has improved outcomes in the general patient population but is associated with a high risk of allograft rejection in transplant recipients. RP1 is an oncolytic immunotherapy that expresses a fusogenic glycoprotein (GALV-GP-R-) and granulocyte-macrophage colony-stimulating factor (GM-CSF). The purpose of this study is to assess the safety and efficacy of single-agent RP1 in SOT recipients with skin cancer (NCT04349436).

**Materials & Methods:**

The trial will enroll up to 65 transplant recipients with histologically confirmed advanced cutaneous squamous cell carcinoma (CSCC) and up to 10 patients with advanced non-CSCC skin cancer in 2 parts. Part A (completed) enrolled kidney and liver transplant recipients until safety was established, and Part B is enrolling kidney, liver, heart, and lung transplant recipients. Patients must have stable allograft function and Eastern Cooperative Oncology Group performance status  $\leq 1$ . Patients with visceral metastases are excluded. Patients receive an initial RP1 dose at  $1 \times 10^6$  plaque-forming units (PFU)/mL followed by  $1 \times 10^7$  PFU/mL after 2 weeks and continuing every 2 weeks until prespecified study endpoints are met. Tumor biopsies are collected for biomarker analyses and HSV-1 serostatus is monitored.

**Results:**

At the data cutoff (Sept 18, 2023), 27 transplant recipients were enrolled (kidney,  $n = 22$ ; liver,  $n = 4$ ; lung,  $n = 1$ ) with a median (range) age of 68 (48–86) years; 24 patients had CSCC and 3 had Merkel cell carcinoma. At study baseline, 56% of patients had locally advanced and 44% had metastatic disease. The investigator-assessed objective response rate (ORR) for efficacy-evaluable patients was 35% (8/23); 22% of patients (5/23) had complete response (CR). Most responses were ongoing. The most common (>20%) treatment-emergent adverse

events were fatigue (33%), chills (26%), and pyrexia (26%). There was no evidence of allograft rejection. Eight deaths were reported; none were related to RP1. Immunohistochemistry from tumor biopsies indicated influx of CD8+ T cells and upregulation of PD-L1 expression after RP1 treatment.

**Conclusion:**

This is the first trial assessing single-agent RP1 activity in SOT recipients with advanced cutaneous malignancies. RP1 monotherapy showed compelling antitumor activity (ORR 35%; 22% CR) in evaluable patients. Additionally, RP1 monotherapy was well tolerated, and the safety profile was similar to non-immunocompromised patients with advanced skin cancers (IGNYTE study).

Part of this data has been previously presented at the Society for Immunotherapy of Cancer (SITC) 2023 and American Association of Cancer Research (AACR) 2024 annual meetings.

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## Abstract N°: 4025

### successful treatment of lichenoid reaction with a pde4 inhibitor in an oncological patient.

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### Introduction & Objectives:

We present the case of a 69-year-old man with a personal history of stage IV lung adenocarcinoma and type II diabetes who receives treatment with Pembrolizumab, a programmed cell death receptor-1 (PD-1) inhibitor for his oncological disease.

### Materials & Methods: Clinical case

### Results:

Following the third cycle with Pembrolizumab (2.7 Mg/kg) the patient develops very pruritic skin lesions on his trunk consisting of small desquamating violaceous plaques, as well as white streaks and erosion on the buccal mucosa, and white plaques with paraphimosis on the glans.

A skin biopsy of a lesion on the abdomen was performed, showing a florid lichenoid interface dermatitis, dyskeratotic keratinocytes, acanthosis and hyperkeratosis. A diagnosis of anti PD1 related lichenoid reaction was made.

Pembrolizumab was not discontinued, and the patient was treated with oral and topical corticosteroids without control of the symptoms, followed by acitretin 10mg/day and eight ReUVB phototherapy sessions. With this treatment, there was an improvement of the lesions and the pruritus for approximately 6 months, but the effect was temporary, and the lichenoid reaction worsened. It began to affect palms and soles showing erythematous desquamating plaques with fissures and ungual involvement in the form of dystrophy.

It was then when the decision to start apremilast, a phosphodiesterase-4 (PDE-4) inhibitor, was made. Treatment with 60mg/day of apremilast showed good tolerance with scarce adverse effects and optimal control of the dermatological symptoms. At the moment, the patient has completed one year of apremilast treatment and no progression of the oncological disease has been noticed.

Skin toxicities are one of the most common immune-related adverse events (irAE) of immune checkpoint inhibitors (ICI) such as pembrolizumab. Maculopapular rash and lichenoid reactions are the most frequent skin irAE. Usually treatment with corticosteroids (CE) is enough to control the symptoms, and discontinuation of the ICI is not necessary. However, if worsening of the skin toxicity takes place regardless of CE, additional treatments such as apremilast might be necessary. There is scientific literature about the use of this drug in psoriasiform reactions to PD1 inhibitors, but very scarce evidence about successful use in the treatment of lichenoid reactions in this context. This drug has shown safety regarding malignancy progression in previous case reports and has proved effective in the treatment of lichenoid reactions like the one presented in this case. However, clinical trials testing apremilast for side effects related to anti-PD-1 drugs should take place to better understand this effect.

### Conclusion:



In summary, the case presented shows a successful use of apremilast for a lichenoid reaction following a PD1 inhibitor in an oncological patient, with control of the dermatological symptoms and no progression of malignancy

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**Abstract N°: 4035****Metastatic pediatric melanoma: two exceptional and challenging case reports**

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**Introduction & Objectives:**

Paediatric melanoma poses unique challenges due to its rarity and distinctive clinical behaviour compared to adult cases. Despite efforts to establish diagnostic algorithms, such as the modified ABCD, identifying paediatric melanoma remains challenging. We present two paediatric melanoma cases to highlight the difficulty in early recognition, as initial clinical suspicion pointed towards benign conditions.

**Materials & Methods:**

Presentation of two cases and literature review.

**Results:**

Case 1: A 13-year-old male presented with a bleeding pink lesion near the external malleolus, evolving over one month. Examination revealed an erythematous-violaceous nodule with a scaly collar at the periphery. Dermoscopy showed no pigment remnants. Suspecting pyogenic granuloma, the lesion was excised, revealing ulcerated nodular melanoma with a Breslow thickness of 2.8 mm. Sentinel lymph node biopsy was positive, leading to lymphadenectomy, detecting three pathological nodes. Staging found no other suspicious lesions (Stage IIIC). The patient received adjuvant pembrolizumab for 12 months. Currently, 33 months post-diagnosis and 16 months post-immunotherapy, the patient remains disease-free. A genetic test revealed a heterozygous pathogenic mutation in the ataxia-telangiectasia gene.

Case 2: A 15-year-old female presented with an asymptomatic lesion on the occipital scalp, growing progressively for six months. Examination revealed a 3 cm indurated nodule, not adherent to deep planes. Ultrasound suggested trichilemmal cyst or pilomatrixoma. Surgical excision revealed desmoplastic melanoma with Breslow thickness of 11 mm. Initial extension study found no other suspicious lesions and sentinel lymph node biopsy was negative for malignancy (Stage IIB). However, 6 months post-diagnosis, positron emission tomography revealed multiple hypermetabolic lesions in the lungs and colon (Stage IV). Pembrolizumab was initiated, and 6 months after starting treatment, partial response was achieved. Genetic testing found no pathogenic mutations related to melanoma development.

**Conclusion:**

These cases illustrate the deceptive clinical nature of paediatric melanoma. Clinicians should be vigilant and consider melanoma even in lesions clinically suggestive of benign conditions. Emphasizing histological scrutiny and tailored therapeutic strategies is crucial for navigating complexities associated with paediatric melanoma, influencing patient outcomes. Further research and awareness are vital for advancing our understanding of this rare malignancy in the paediatric population.

**Abstract N°: 4045****Porocarcinoma: a retrospective single-centre study of epidemiological, clinical, histological and prognostic factors over 12 years**

Pablo Díaz-Calvillo<sup>1</sup>, Daniel Muñoz-Barba<sup>1</sup>, Carmen García Moronta<sup>1</sup>, Francisco Vilchez-Marquez<sup>1</sup>, Antonio Martínez Lopez<sup>1</sup>, Salvador Arias-Santiago<sup>1</sup>

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**Introduction & Objectives:**

Porocarcinoma (PC) is an aggressive cutaneous adnexal tumor, with a 31% metastasis rate at diagnosis and a 35% recurrence rate after surgery. Due to its low incidence, specific guidelines for PC are lacking. The aim of this study is to evaluate the epidemiological, clinical, histological and prognostic characteristics of patients diagnosed with PC over the last 12 years in our centre.

**Materials & Methods:**

Patients histologically diagnosed with PC at the Virgen de las Nieves University Hospital from 2012 to the present were retrospectively included. Epidemiological data (age, sex), clinical data (location, suspicion diagnosis, treatment), histological data (size, depth of invasion, ulceration) and prognostic data (follow-up time, recurrence, PC-specific death) were collected.

**Results:**

Forty-eight tumors in 47 participants were included, with 55.3% women and a median age of 79 years (range 42-100). The most affected areas were the lower limbs (41.7%) and the head (25.0%). The most common initial suspicion was squamous cell carcinoma (50%), followed by basal cell carcinoma (22.9%). Only 2 cases (4.2%) were initially suspected as PC. The mean size was 21.0 mm, and the depth of invasion was 3.9 mm excluding in situ PC. 35.4% were in situ. 31.3% were ulcerated. 91.7% of PC tumors underwent wide local excision (WLE) and 8.3% underwent Mohs micrographic surgery. 2 cases (4.2%) required lymphadenectomy. 12.5% underwent adjuvant radiotherapy and 1 case required systemic chemotherapy. The mean follow-up was 65 months. 2 tumors treated with WLE recurred (4.2%). 3 patients developed metastases (6.4%), 2 at the time of diagnosis and 1 during follow-up. 6.4% died due to PC complications.

**Conclusion:**

Contrary to classical perception, our study reveals a less aggressive course of PC. Improvement in histological detection may have contributed to a higher number of diagnoses and earlier detection, questioning the idea that PC is a rare and aggressive tumor. Given the aging population, an increase in PC incidence is expected and, in this regard, improving our understanding of this tumor and developing treatment guidelines will impact better survival outcomes.



**Abstract N°: 4059****Erosive adenomatosis of the nipple :3 cases**

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<sup>1</sup>Hedi Chaker Hospital, dermatology, Sfax, Tunisia

**Introduction & Objectives:**

Erosive adenomatosis of the nipple (EAN), also called florid papillomatosis of the nipple ducts, is an uncommon benign epithelial tumor of the lactotrophic ducts. The clinical presentation is polymorphous and not specific and can lead to misdiagnosis. Herein, we report 3 cases of EAN.

**Materials & Methods:**

Report of 3 cases of EAN documented in our departement

**Results:**

Three women, aged respectively 41,42 and 39 years old, presented with a nodule of the left nipple (case1) and an erosion of the right nipple (case2 and 3). The lesions had been evolving respectively for 1, 2 and 10 years. On examination, we noted a 1 cm diameter erosive and painless nodule at the lateral side of the nipple (case1) and an erosive, oval, painless lesion at the center of the nipple (case 2 and 3). There was no local inflammation signs and no mammary discharge. Examination of the contralateral breast was normal in all cases.

Skin biopsy revealed a proliferation of glands with variable size and shape, sometimes dilated and focally separated by sclerosis. These glands were lined by a regular cell layer filling the glandular lumen or sometimes describing endoluminal micropapillary projections. All 3 lesions were excised.

**Conclusion:**

EAN is a benign epithelial tumor arising in the lactiferous sinuses then in the nipple. It was first reported in 1951 by Haagensen et al. It affects middle-aged women but was also reported in men and children.

The lesion is usually unilateral and painless. It generally presents as an erosive or crusted, erythematous nipple patch, often eczematous in appearance. A serous or sero-sanguinous discharge may be observed, or even a small fleshy nodule or palpable nipple mass.

The main differential diagnosis is Paget's disease.

Histological examination shows mixed papillary and adenomatous lesion. The lesion has a double cellular structure made up of an inner layer of epithelial cells bordering the lumen and an outer layer of peripheral myoepithelial cells. The anti-actin antibody shows constant labelling of myoepithelial cells in the peripheral structures, enabling a differential diagnosis with a well-differentiated galactophoric carcinoma. Regarding options of treatment, surgery is the gold standard and consists of complete removal of the lesion with plastic reconstruction of the nipple.



**Abstract N°: 4106****Skin metastasis due to papillary carcinoma of the male breast**

Ivanith Perozo<sup>1</sup>, Natalia Diaz-Zhamaldinova<sup>1</sup>, Cintia Arias<sup>1</sup>, Irene Sorin<sup>1</sup>

<sup>1</sup>Buenos Aires, Buenos Aires, Argentina

**Introduction & Objectives:**

Male breast cancer is a very rare entity that represents less than 1% of all breast cancers, however, an increase in its incidence has been observed in recent decades with an average age of presentation between 65 and 67 years with a prevalence at 70 year of age, highlighting that less than 10% present in those under 50 years of age. Greater risk and worse prognosis are observed in black men. Of the histological subtypes, papillary is manifested in 5% of cases

**Materials & Methods:**

We present a case of a male patient who presents a skin metastasis due to a papillary carcinoma of the breast.

**Results:**

An 84-year-old male patient with a history of arterial hypertension, benign prostatic hyperplasia, erosive esophagitis with chronic gastropathy, oropharyngeal and enolist candidiasis, treated with valsartan + hydrochlorothiazide, dutasteride + tamsulosin.

He was referred to the Gastroenterology service for presenting in EGD esophageal ulcerations associated with asymptomatic lesions in the axillary region of 5 months' duration.

Upon physical examination revealed right gynecomastia with great asymmetry in relation to the left, nipple with erythema and edema without pain, with telorrhea of serohematic content, without lymphadenopathy. Impetiginized erythematous plaque is observed in the left axilla.

Laboratory tests and breast ultrasound showed no alterations.

We performed an incisional biopsy of the nipple, and histological study revealed a poorly differentiated atypical neoformation with ulceration of the superficial epidermis.

Immunohistochemistry: ck7: positive, cat 3: positive, vimentin: positive, ck cocktail (clone AE1/AE3): positive. Immunohistochemical profile corresponding to solid papillary carcinoma of breast origin.

We decided to start topical treatment with fusidic acid 2 times a day for 7 days in the axillary region.

We requested computed axial tomography of the head, neck, abdomen and pelvis for staging and to continue management by the Oncology and Breast Pathology service.

**Conclusion:**

Male breast cancer is a very rare entity with a very low prevalence in men in daily medical practice. It is important to know this disease as a clinical suspicion to optimize the study time, make an early diagnosis and timely management before its spread occurs. As well as the importance of multidisciplinary work with other specialties for better treatment.

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**Abstract N°: 4109****a case of primary cutaneous anaplastic large cell lymphoma with excellent response to brentuximab**Sara Al Janahi<sup>1</sup>, Raghda Saeed M S Almaashari<sup>\*2</sup><sup>1</sup>Sheikh Khalifa Medical City, Dermatology, Abu Dhabi, United Arab Emirates,<sup>2</sup>Cleveland Clinic Abu Dhabi, Dermatology, Abu Dhabi, United Arab Emirates

**Introduction & Objectives:** Primary cutaneous anaplastic large cell lymphoma (pc-ALCL), a CD30+ T-cell lymphoproliferative disorder, is the second most common cutaneous T-cell lymphoma following mycosis fungoides. Classic presentation is rapidly growing red to violaceous solitary nodules. A rare presentation, as seen in our case, is multi-focal nodules. Localized lesions can be managed by surgical excision or radiation. Methotrexate, bexarotene or brentuximab vedotin (brentuximab) are options for widespread disease, with multi-agent chemotherapy reserved for systemic disease. When refractive to chemotherapy, allogeneic or autologous stem cell transplantation are possible options. Brentuximab, an anti-CD30 antibody conjugated to monomethyl auristatin E, was FDA-approved in 2017 for use in pc-ALCL and CD30-expressing Mycosis Fungoides that had been previously treated with at least one systemic therapy. We aim to share this interesting case, discuss differential diagnoses of pc-ALCL, and explore the clinical and histologic overlap between psoriasis and cutaneous lymphomas. We also share our impressive results, demonstrating the patient's excellent response to brentuximab. Furthermore, we would like to highlight the need to biopsy any worsening, atypical, or non-responsive skin lesions.

**Materials & Methods:** A 55-year-old female with an 8-year history of skin lesions affecting the face, neck, and extremities. Clinical examination revealed erythematous, indurated plaques and nodules, some with an annular configuration and raised border. The trunk was spared, and mucosal surfaces and nails were not involved. Additionally, edema, ulceration with hemorrhagic and serous crust of the left thumb was noted, which failed to respond to multiple courses of systemic antibiotics. She was previously diagnosed with psoriasis and was treated with topical and systemic agents, the latest being methotrexate.

**Results:** Histopathology revealed an infiltrate of atypical hematopoietic cells, with pleomorphic and anaplastic morphology, with Hodgkin-Reed Sternberg cells. Immunohistochemical staining revealed an infiltrate of atypical T-cell lymphocytes, expressing CD3, CD2, and CD8 positivity, with co-expression of CD30 and MUM1. There was loss of CD4, CD5, CD7 and CD8, with a CD4: CD8 ratio of 3:1 in background cells. ALK1 was negative. The results were consistent with a mature T-cell lymphoproliferative neoplasm. A PET scan revealed uptake in the left breast, right thigh, and left axillary lymphadenopathy. The patient received IV dexamethasone and a total of six cycles of brentuximab. There was marked improvement in the edema on the left hand after the first 2 cycles alone and complete resolution after the 4th cycle. A PET scan at her 6-month follow-up appointment revealed no clinical evidence of disease progression.

**Conclusion:** Thorough evaluation of pc-ALCL is crucial, as systemic involvement usually indicates a poor prognosis. Patients with multifocal skin lesions and involvement of regional lymph nodes show a similar prognosis to those with cutaneous lesions alone. ALK-1 positivity is often positive in systemic ALCL and negative in pc-ALCL. However, it cannot be solely relied upon, as rarely ALK-1 positive variants of pc-ALCL may exist. We also must consider that systemic immunosuppressive therapies administered for psoriasis, such as methotrexate, cyclosporine and mycophenolate mofetil may increase the risk of lymphoproliferative disorders.





**Abstract N°: 4123****undifferentiated round cell melanoma : about one case**Emelie Simone Okouango<sup>\*1</sup>, Hali Fouzia<sup>1</sup>, Baghdad Bouchra<sup>1</sup>, Chehab Soumiya<sup>1</sup><sup>1</sup>CHU Ibn Rochd, Dermatology-Venereology, Casablanca, Morocco**Introduction & Objectives:**

Undifferentiated round cell melanoma is a rare histological type of melanoma with different clinico-pathological characteristics. Its clinical diagnosis is complex and non-specific, and it may mimic other cutaneous malignancies. Histological diagnosis is based on the presence of undifferentiated round cells and the absence of pigment, confirmed by immunohistochemistry. Treatment depends on the stage of the disease, with surgical biopsy and excision in the early stages. Its ability to metastasize makes it life-threatening. We report the case of an 80-year-old woman with an immunohistochemically confirmed undifferentiated round cell melanoma.

**Case report :** This is an 80-year-old patient, phototype III, with a history of nevus of the left hallux and no personal or family dermato-oncological history. Known hypertensive and on triple therapy for 20 years. For approximately 3 years, she had presented with a painless, blackish, hyperpigmented nodular lesion of the left hallux, progressively increasing in size, with no notion of bleeding, trauma, or functional discomfort on walking, and evolving in a context of preserved general condition. An excisional biopsy with histological study was carried out in a liberal structure, concluding in an irritated dermal melanocytic nevus with junctional and intra-epidermal activity without cytonuclear atypia and mitotic activity. The evolution was marked six months later by the appearance of a painless left inguino-crural tumefaction. Clinical examination revealed: a nodular swelling opposite the medial border of the left hallux, normal skin color, painless, surmounted by a hyperpigmented, heterochromatic macular lesion, a nodular placard located at the left inguino-crural level; two painless left inguinal adenopathies. Surgery by amputation, disarticulation, and curage of the inguino-crural mass was indicated. Histological examination of the inguino-crural mass revealed fibro-adipose tissue with diffuse, richly vascularized tumor proliferation. The tumor cells were of intermediate size, with an anisokaryotic nucleus that was sometimes nucleolated and sparse, eosinophilic cytoplasm. No tumor necrosis was observed, but rather a few mitotic figures. Microscopy of the hallux revealed a proliferation of the same appearance as above, located in the deep dermis and hypodermis; the epidermis opposite was acanthotic and surmounted by orthokeratosis; the superficial dermis showed fibrous remodeling and a moderate inflammatory infiltrate of mononuclear cells; and the bone opposite was free of tumor proliferation. Immunohistochemistry shows that the cells of the tumor proliferation described above express S100 protein and Melan A and do not express HBMB 45, cytokeratin AE1/AE3, CK7, or CK20.

**Conclusion:**

Our case illustrates a condition rarely reported in the literature. Melanoma is the most aggressive cutaneous tumor, developed at the expense of melanocytes. Undifferentiated round cell melanoma is a rare histological type. The positive diagnosis of undifferentiated round cell melanoma is made after anatomopathological and immunohistochemical studies. Our most likely clinical diagnosis was desmoplastic melanoma. However, histological examination showed tumor proliferation with undifferentiated round cells positive for S100 protein and Melan A on immunohistochemistry, confirming the diagnosis of undifferentiated round cell melanoma.



**Abstract N°: 4135****In head and neck cutaneous squamous cell carcinoma the absence of both p-s6 and p21 predicts nodal metastasis, tumor related death and overall survival.**

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**Introduction & Objectives:**

Cutaneous squamous cell carcinoma (cSCC) is the second most common form of skin cancer. Ribosomal protein S6 (p-S6) and the p21 protein (p21) are two proteins that play central roles in other cancers. These proteins may be equally important in cSCC, and together, these could constitute a good candidate for metastasis risk assessment of these patients. We investigate the relationship of p-S6 and p21 expression with the impact on the prognosis of head and neck cSCC (cSCCHN)

**Materials & Methods:**

We investigate the relationship of p-S6 and p21 expression with the impact on the prognosis of head and neck cSCC (cSCCHN). p-S6 and p21 expression was analyzed by immunohistochemistry on paraffin-embedded tissue samples from 116 patients with cSCCHN and associations sought with clinical characteristics. Kaplan–Meier estimators and Cox proportional hazard regression models were also used.

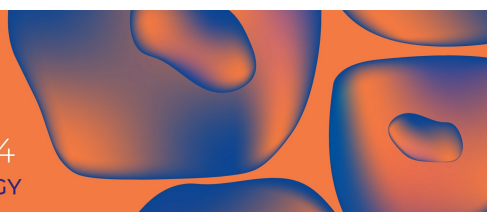
**Results:**

Statistically significant differences were also found when comparing p-S6 and p21 double-positive patients and their double-negative counterparts. Kaplan–Meier survival estimates of nodal metastasis-free survival ( $p < 0.001$ ), tumor-related death ( $p = 0.002$ ) and overall survival ( $p = 0.024$ ) after resection of cutaneous squamous cell carcinoma for the p21 and p-S6-positive and p21 and p-S6-negative groups.

**Conclusion:**

We found statistically significant differences when studying the co-expression of the two proteins in the development of metastasis. This is similar to the findings of Llanos S et al., who described the expressions of p21, p-S6, and the combination of the two, as being associated with greater disease-free survival in laryngeal and hypopharyngeal tumors, especially in patients with squamous cell carcinoma of the head and neck without lymphatic involvement at the time of diagnosis.




**Abstract N°: 4197**
**Neoplastic Evolution of Jadassohn's Sebaceous Nevus: A Rare Case of Basal Cell Carcinoma Overlying a Congenital Lesion**

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**Introduction & Objectives:**

Sebaceous nevus, also known as organoid nevus, Jadassohn nevus, or pilosebaceous nevus, is characterized as a rare congenital hamartoma, non-hereditary, resulting from the hyperplasia of epithelial, sebaceous, follicular, and apocrine elements of the skin<sup>1,2</sup>. Epidemiologically, 0.3% of newborns present a sebaceous nevus, and the incidence is equal in both sexes. It generally appears as a solitary lesion at birth but may not be identifiable until after puberty, once its classic wart-like appearance has fully developed<sup>2</sup>. It is mainly located on the scalp and face, manifesting as a well-circumscribed, rounded or oval plaque with a rough surface and yellowish color<sup>3</sup>. Mehregan and Pinkus described in 1965 three different stages during the clinical course of the organoid nevus: infantile, pubertal, and tumoral. In the last stage, the tumoral stage, benign or malignant neoplasms may occur, with papillary syringocystadenoma and basal cell carcinoma being the most frequent respectively<sup>4</sup>.

The objective is to present the case of a 35-year-old male patient who consulted for the development of a new lesion over a scalp lesion he had since birth.

**Materials & Methods:**

Case report.

**Case report:**

A 35-year-old male patient with no relevant medical history consulted for a scalp lesion of several months' duration that was located on a lesion he had since birth.

On physical examination, a yellowish, raised, warty lesion was observed on the left parietal scalp, with soft consistency. At the anterior pole of this lesion, a nodular erythematous lesion with a pearly appearance was observed, which on dermatoscopy showed arboriform vessels. Additionally, multiple hyperpigmented macules with focal hypertrichosis were observed on the right deltoid area.

With the impression of a basal cell carcinoma versus papillary syringocystadenoma sitting on a Jadassohn nevus on the scalp, a shave biopsy was performed. The report confirmed basal cell carcinoma, leading to a referral to the surgery department for Mohs surgery. Clear margins were obtained in the second layer.

**Conclusion:**

Jadassohn's sebaceous nevus is a well-known entity that in its natural evolution can lead to the development of benign or malignant neoplasms. The literature agrees in pointing out papillary syringocystadenoma as the most frequently associated benign tumor with sebaceous nevus<sup>3-6</sup>. However, there are case series describing viral warts as the most common benign lesion, as well as trichoblastoma<sup>3,7</sup>. The risk of malignant degeneration may appear in adulthood, after the age of 30, and exceptionally in childhood<sup>8-10</sup>. The most frequently described malignant neoplasm associated with sebaceous nevus is basal cell carcinoma. Its frequency varies from one series to another, mainly due to differences in interpretation in the definition of basal cell carcinoma versus trichoblastoma<sup>7,11</sup>.

Prophylactic surgery is not recommended in childhood due to the low probability of lesion malignization at this stage, while periodic follow-up and excision are suggested in cases located in exposed areas for aesthetic reasons or in the presence of surface changes suggestive of benign or malignant lesion development.

The case is presented because, although the association of the organoid nevus with malignant neoplasms is known, it continues to be uncommon.

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**Abstract N°: 4224**
**Total body mapping and artificial intelligence dermoscopy follow up of a patient with giant congenital melanocytic nevus, plexiform pigmented schwannoma and compound heterozygous variants in MC1R gene**

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**Introduction & Objectives:**

Giant congenital melanocytic nevi (GCMN) are defined as greater than 20 cm in diameter, and the estimated incidence ranges from 1 in 20 000 to 1 in 500 000, with a reported female-to-male ratio ranging from 1.17:1 to 1.46:1. There are two potentially serious complications in patients with GCMN, namely malignant melanoma and neurocutaneous melanosis (NCM), which is due to central nervous system involvement. The risk of transformation of GCMN to malignant melanoma varies between 0 and 3.8%. The established common germline genetic alterations are found in the NRAS and BRAF genes.

**Materials & Methods:**

We present a case of a 55-year-old woman with bathing-suit GCMN and multiple satellite nevi with diameter of 0.5-7 cm on the face, trunk and extremities from birth. The patient has had two seizures in the age of 38 and 43 but without pathological changes on CT scans. Due to the risk of development of NCM, she has had multiple CT scans and electroencephalograms (EEG) since the age of 41. In 2023 three slow growing pigmented soft-elastic tumor formations with overall diameter of 28 cm in the lumbar region were found.

**Results:**

The dermatological examination with a Total body mapping and artificial intelligence dermoscopy device has not found manifestations of malignant melanoma. The lesions were excised. Histopathological examination revealed multinodular, plexiform and nonencapsulated tumor formation, constructed by oval and spindle cells, affecting the epidermis, dermis and deep subcutaneous fat tissue. The Immunohistochemical analysis showed low mitotic activity and low Ki-67 index, S100 and SOX10 positivity, focal Melan A positivity in the pigmented areas. The tumor was diagnosed as Plexiform pigmented schwannoma. In order to determine the genetic diagnosis for further follow up and treatment, the patient was referred to a genetic counselor who recommended a genetic germline test using next generation sequencing (NGS). The genetic test revealed two common variants in MC1R (Arg151Cys and Arg160Trp) in compound heterozygous state, while no pathogenic variants were detected in the NRAS and BRAF genes. The patient is being followed up.

Plexiform pigment schwannoma could be a part of schwannomatosis. In individual cases in the literature a malignant course of the disease or transformation into a malignant tumor originating from the peripheral nerve sheaths has been reported.

**Conclusion:**

Clinical and genetic diagnosis are important for personalized treatment and prognosis in such patients, taking into

account the age of the patient, the size and location of the lesions, the risk of development of malignant melanoma and NCM.

Total body mapping and artificial intelligence dermoscopy devices are useful for the follow up of patients with GCMN. These machines memorize the clinical and dermatoscopic appearance of the lesions and compare them in every follow up, so that minor changes are registered. This contributes for early diagnosis of skin malignancy.

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## Abstract N°: 4269

### Increased risk for second malignancies in patients with Mycosis fungoides and Sézary syndrome in Croatia

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#### Introduction & Objectives:

Primary cutaneous T-cell lymphomas (CTCL) are part of non-Hodgkin lymphomas. The most common CTCL is Mycosis fungoides (MF) and Sézary syndrome (SS). Patients with MF and SS have a higher risk for the development of other lymphomas, especially Hodgkin's lymphoma and lymphomatoid papulosis, as well as the development of other primary cancers. Compared to the standard population, patients with CTCL have an increased relative risk for development of a second primary malignant disease which is between 1.04 and 2.4, in comparison to standard population. In previous studies, it has been shown that men are more likely to develop a second primary cancer that appears several years after the diagnosis of CTCL, approximately between 2.1 and 5.4 years.

#### Materials & Methods:

We performed a monocentric, retrospective study which included 84 subjects (n=84) who were diagnosed with CTCL in 15-years period. The follow-up time of each subject was at least five years.

#### Results:

In this study, 16 subjects (19.05%) had at least one secondary primary malignancy. Of these 16, four subjects (25%) had two or more other primary malignancies in addition to CTCL. Three subjects were female and all three had breast cancer as one of the other primary malignancies. Of all other primary malignancy, haematological neoplasms were the most prevalent and accounted for 50%. Of all other primary malignancy, the second most common were breast cancers (n=5) which were present in 5.95% of all subjects with CTCL. Other cancers include: papillary carcinoma, endometrial carcinoma, prostate carcinoma (2 subjects), sublingual squamous cell cancer, lung cancer and kidney cancer. In our study, no patient had melanoma, and 5 subjects had non-melanoma skin cancer (NMSC) (5.95%). Second primary malignancy was preceded by CTCL in five subjects. The median age of developing a second primary cancer was 60.5 years, with a range between 34 and 82 years. Subjects developed a second primary malignancy an average of 6 years after confirmation of the diagnosis of CTCL (median 54.50 years).

#### Conclusion:

Further research is needed on the connection between CTCL and other primary malignancies. Although the association between CTCL and other primary malignancies was proven more than 40 years ago, possible risk factors for their development haven't still been discovered. The hypothesis of a single causative factor for development of both neoplasms is less likely due to the heterogeneity of the second primary malignancy. It is more likely that the cause is a tumorigenic microenvironment and an altered immune response that led to the development of the first neoplasm. In our study, as in most previous studies, a higher risk for the development of a second primary neoplasm was demonstrated, but additional tests for early detection of cancer outside of routine age- and sex-appropriate examinations have not yet been included in the guidelines. Regular controls and a multidisciplinary approach are necessary. We believe that this research will also help to introduce a procedure for



patients with CTCL, according to which all patients will be systematically examined with the aim of early detection of other primary malignancies. In addition, our research also showed the importance of regular clinical and dermoscopic examinations of pigmented and non-pigmented tumor formations with the purpose of early detection of NMSC and melanoma, which should also be part of the guidelines for monitoring patients with primary skin lymphomas.

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**Abstract N°: 4276**
**atypical darier-ferrand dermatofibrosarcoma: about 3 cases**

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**Introduction & Objectives:**

Darier-Ferrand dermatofibrosarcoma is a fibrous skin tumor with slow growth, high local malignancy and a high risk of recurrence. It usually occurs on the trunk and extremities and presents clinically as a firm reddish plaque or nodule. We report 3 patients with atypical clinical form of Darier Ferrand dermatofibrosarcoma.

**Cases report:**

**Case 1:** A 65-year-old patient, presented a left breast mass for which he had undergone two prior surgeries. Clinical examination revealed an erythematous nodular lesion, firm and slightly painful to palpation, measuring 8 cm, with no retraction, nipple discharge or orange-peel appearance. Breast MRI revealed a left parietal mass with extensive central necrosis and infiltration of both pectoral muscles, with no bone signal abnormalities. PET SCAN showed no secondary lesions, and LDH levels were normal. Pathology confirmed Darier-Ferrand dermatofibrosarcoma, with a positive CD34 marker. The patient underwent tumor resection with 3 cm superficial margins, pectoral muscle resection, skin graft coverage and adjuvant radiotherapy, which is still ongoing.

**Case 2:** A 32-year-old patient, chronic smoker, presented with a multi-nodular tumoral mass on the scalp, gradually increasing in size over 10 years, accompanied by chronic headaches. Clinical examination revealed a firm, multi-nodular, erythematous-violaceous tumor mass, measuring 20 cm, located at the center of the vertex. Brain CT scan revealed a hyper vascularized tumor encroaching upon the outer table of the left parietal bone without evidence of bone lysis or intracranial extension. Further assessment for metastasis did not reveal secondary lesions. Histology and immunohistochemistry confirmed a Darier-Ferrand dermatofibrosarcoma protuberans. The patient underwent wide excision of the tumor, removal of the outer table, and skin grafting, with good recovery observed after an 8-month follow-up period.

**Case 3:** A 47-year-old patient consulted for a painful tumoral lesion in the abdomen over 18 months, accompanied by a decline in overall health. Upon clinical examination, a nodular, polylobed, ulcerating mass of

15 cm was identified, which was firm and bled upon contact. The mass was located on the left flank and hypochondrium, extending to the umbilicus. It was surrounded by an infiltrated papulo-nodular plaque and associated with multiple bilateral inguinal lymphadenopathies. A thoraco-abdomino-pelvic CT scan revealed several subcutaneous masses on the anterior parietal left flank, infiltrating the right abdominal muscle without evidence of secondary lesions. Pathological analysis confirmed the diagnosis of Darier-Ferrand dermatofibrosarcoma protuberans, and the patient was initiated on palliative chemotherapy.

### **Conclusion:**

The originality of our patients lies in the exceptional location in the breast in the first case, which may suggest a breast cancer with cutaneous extension, and in the scalp in the second case, where the main differential diagnosis is a malignant proliferating trichilemmal tumor. In the third case, the exception lies in the unusual size and lymph node involvement. The diagnosis of Darier-Ferrand protuberans in these cases is not easy. Histological examination leads to the diagnosis. Wide surgical excision is the standard treatment. Given the risk of local extension, early diagnosis is essential for appropriate treatment.




**Abstract N°: 4385**
**Actinic keratosis in France: disease perceptions, expectations, and behaviours of patients (REAKT study).**

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**Introduction & Objectives:**

Actinic keratosis (AK) is a chronic skin disease caused by cumulative sun exposure, which may evolve into squamous cell carcinoma (SCC) with a probability of 10% over 10 years. Despite this risk, the disease does not have a high visibility with the public. The REAKT study was conducted to obtain information on behaviours, perceptions and beliefs of people diagnosed with AK, and its impact on quality of life.

**Materials & Methods:**

The REAKT survey was carried out between November and December 2022 in the METASKOPE panel of 15,246 individuals aged  $\geq 40$  years, representative of the French general population. The postal survey consisted of a specific questionnaire on disease manifestations and treatment, and on perceptions and behaviours towards AK. Participants were asked to rate the impact of their AK lesions on their quality of life on a numerical scale from 0 (no impact) to 10 (very significant impact).

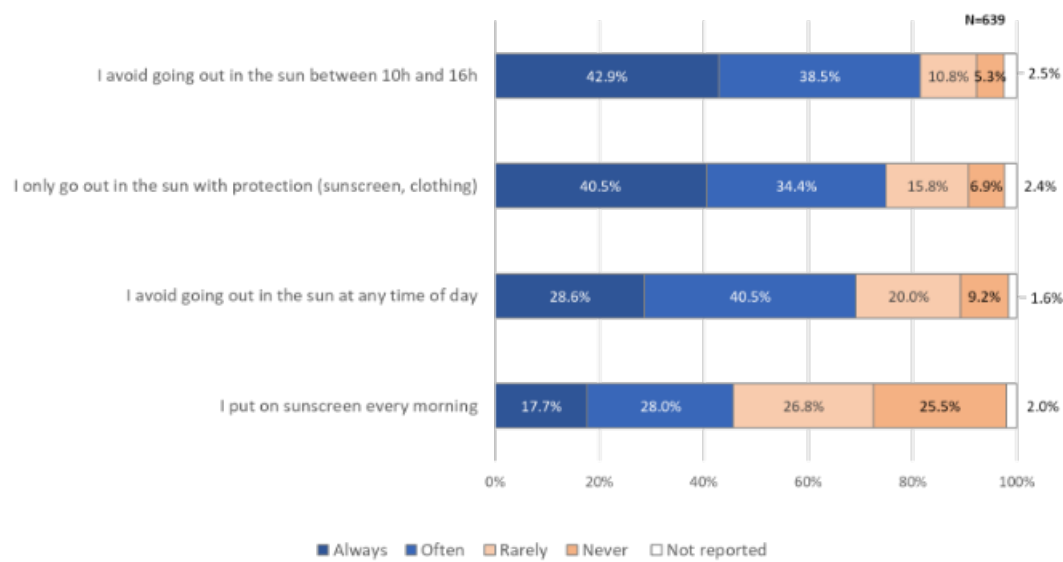
**Results:**

A total of 639 participants (4.2%) reported a lifetime diagnosis of AK (mean age:  $69.6 \pm 10.6$  years; 296 men). 239 participants (37.4%) had received no treatment since diagnosis. 522 patients (81.7%) were aware that these lesions were caused by lifetime UV exposure and 455 (71.2%) that they were precursors of skin cancer. In addition, 507 (79.3%) thought that developing AK was inevitable with ageing. However, most participants (76.7%) felt that they did not know much about AK treatments and a similar proportion (79.1%; N=505) wanted explanations or advice about their lesions. Moreover, 545 participants (85.3%) considered that the waiting time to see a dermatologist was too long and 88 (13.8%) that multiple consultations were necessary before diagnosis. Treatments were considered effective by 237 participants (37.1%) and inconvenient to use for 123 participants (19.3%). The most important treatment expectations were ease of use (82.0% of patients), efficacy on lesions (82.6%), minimal side effects (68.4%) and short treatment duration (64.5%). 298 participants (46.6%) noted that their lesions recurred no matter what was done. A moderate to high impact of AK lesions on quality of life was reported more frequently in patients who received treatment ( $p < 0.001$ ) compared to untreated participants. Participants who experienced AK lesions included prevention behaviors in their daily routine to protect themselves from UV exposure which are responsible for AK lesions (**Figure**). In this way, 520 (81.4%) always or often avoid going out in the sun between 10h and 16h, 479 (74.9%) only went out in the sun with protection (sunscreen or clothing), but only 113 (17.7%) applied sunscreen every day.

**Conclusion:**

Many people with AK do not consider themselves well-informed about their disease or do not consider AK treatments efficacious or convenient. Ensuring better patient information and responsible behavior may be a useful strategy to reduce the risk of development of SCC in AK patients.

FIGURE. Sun protection behaviors



**Abstract N°: 4428****Tirbanibulin 1% Ointment for Actinic Keratosis: Results from a Real-Life Study**

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**Introduction & Objectives:** Tirbanibulin 1% ointment is a novel synthetic anti-proliferative agent that inhibits tubulin polymerization. It is approved for treating actinic keratosis (AK) on the face and scalp in adults. It has demonstrated good efficacy, an adequate safety profile and excellent patient adherence in phase 3 clinical trials, however, data about its real-life efficacy and safety are lacking.

**Materials & Methods:** We performed a spontaneous open-label, prospective non-randomized study to assess the effectiveness and safety of tirbanibulin 1% ointment for the treatment of 228 AKs in the face and scalp of 38 consecutive patients—28 males (73%) and 10 females (26%)—aged between 52 and 92 years (mean age: 72 ± 8.92 years). Lesions Olsen's grade 1 has been detected in 37% of lesions, grade 2 in 51% of lesions and grade 3 in 12% of lesions.

**Results:** Total clearance was recorded in 51% of lesions, while partial clearance was recorded in 73% of lesions. According to the clinical grade, total clearance was observed in 60% of grade 1 AKs, in 49% of grade 2 AKs and 29% of grade 3 AKs. A significantly higher prevalence of complete responses was observed in grade 1 group compared to grade 3 group (60% vs. 29%;  $p = 0.01$ ), whereas no significant differences were observed between the other groups (grade 1 vs. grade 2 and grade 2 vs. grade 3). Partial clearance was observed as follows: 78% in grade 1 AKs, 72% and 55% in grade 2 and 3 AKs, respectively. A significantly higher prevalence of complete responses was observed in grade 1 group compared to grade 3 group (78% vs. 55%;  $p = 0.02$ ), while no significant differences were observed between the other groups (grade 1 vs. grade 2 and grade 2 vs. grade 3). An excellent tolerability profile and high compliance rate were observed, with no treatment discontinuation due to the onset of adverse events.

**Conclusion:** Our real-life experience confirms the effectiveness and safety of tirbanibulin ointment for treating AKs.



**Abstract N°: 4438****When topical treatment surprises: A case report of a patient with Bowen's disease in the perianal region**Bepa Pavlič<sup>1</sup>, Lina Miric Kovacevic<sup>1</sup>, Ana Stipić<sup>1</sup>, Mara Drnas<sup>1</sup>, Maja Pavic<sup>1</sup>, Mirjana Sekulovski<sup>1</sup>, Josipa Mićunović<sup>1</sup><sup>1</sup>Clinical Hospital Center Split, Department of Dermatovenereology, Split, Croatia**Introduction & Objectives:**

Perianal Bowen's disease is a rare, slow-growing, intraepidermal squamous cell carcinoma (carcinoma in situ) affecting the anal canal and/or perianal skin. The disease is often associated with cervical and vulvar intraepithelial neoplasia, with human papillomavirus (HPV) being a common causative agent. It equally affects men and women, with the highest prevalence between the ages of 55 and 75 years. Symptoms of the disease are nonspecific and typically include pain, itching, bleeding, and the presence of a palpable mass. Surgical excision, laser therapy, cryotherapy, and topical therapy with imiquimod or 5-fluorouracil are among the most common treatment modalities.

**Materials & Methods:**

A 71-year-old woman, presented to the Clinic for Skin and Venereal Diseases of the University Hospital Center Split due to several months of progressive changes in the perianal region. The patient had self-treated with various topical preparations, which resulted in no improvement but rather further progression. From her medical history, she had received chemotherapy for diffuse large B-cell non-Hodgkin's lymphoma with adjuvant radiotherapy three years ago. She is currently in remission and under regular follow-up. She is on chronic therapy with perindopril and bisphosphonates for arterial hypertension and postmenopausal osteoporosis.

Upon admission to our clinic, a punch biopsy of the lesion was performed, and the histopathological analysis confirmed the diagnosis of Bowen's disease. HPV typing revealed an infection with HPV type 16. Treatment was initiated with 5% imiquimod for 11 weeks with intermittent breaks due to irritation and pain. On follow-up examination, significant improvement was observed with regression of verrucous plaques, leaving only discrete plaques in the intergluteal fold area. The remaining plaques were treated with 5-fluorouracil for 4 weeks.

**Results:**

At the follow-up examination one year after diagnosis, excellent outcomes and complete regression of the disease were observed.\*\*

**Conclusion:**

The availability of various treatment modalities underscores the importance of an individualized approach depending on the characteristics of the lesions and the patient's overall condition. In the case of our patient, surgical treatment, which would have required a mutilating operation and colostomy placement, was also considered. However, in agreement with the patient, the decision of the multidisciplinary team was to proceed with local therapy along with regular clinical monitoring, which proved to be a safe, non-invasive, and effective treatment method.





**Abstract N°: 4513****Anaplastic large cell lymphoma (ALCL) CD30+ in a six-year-old child: Systemic or primary cutaneous?**

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**Introduction & Objectives:**

Systemic Anaplastic Large Cell Lymphoma (S-ALCL) is a subtype of CD30+ T-cell non-Hodgkin lymphoma. S-ALCL typically expresses the ALK protein and may affect the skin secondarily. On the other hand, Primary Cutaneous Anaplastic Large Cell Lymphoma (PC-ALCL), an entity that belongs to the spectrum of CD30+ lymphoproliferative skin disorders, is usually ALK negative and commonly affects elderly patients, being pediatric cases exceptional.

**Materials & Methods:**

We present the case of a six-year-old child with a two-month evolving cutaneous lesion, consisting of a 5 cm tumor located on the inguinal area. Given the high suspicion of malignancy, a biopsy was performed, revealing a dense infiltrate composed of polymorphic and atypical lymphoid cells with high proliferative activity and positivity for T markers, as well as CD30 and ALK, consistent with the diagnosis of ALCL. Extension studies were completed with a PET-CT, which detected a second lesion located in subcutaneous tissue underlying the primary tumor, as well as a lymphadenopathy with malignant metabolic characteristics in the left external iliac territory. Due to the proximity of these structures and the absence of disease at other locations, PC-ALCL was considered as the primary diagnostic option, without being able to rule out the possibility of S-ALCL. Given the positivity for ALK and the fact that the latter entity is much more common in the pediatric population. Finally, it was agreed with Pediatric Oncology to initiate a chemotherapy regimen with dexamethasone, methotrexate, cytarabine, and etoposide, with good tolerance and achieving complete remission of the disease after 6 months of treatment.

**Results:**

When a diagnosis of ALCL from cutaneous lesions is performed, it is essential to achieve a correct staging study to rule out secondary involvement of ALCL-S, since prognosis and management differ from primary cutaneous forms. Correlation between clinical findings, histopathology, and immunopathology is fundamental, especially ALK expression. Nevertheless, there are cases with particular difficulty in differentiating both entities and deciding on the most appropriate therapeutic approach, such as the present case.

**Conclusion:**

ALCL presents diverse clinical manifestations, highlighting the importance of accurate diagnosis and staging to differentiate between systemic and primary cutaneous forms. Collaboration between specialties is crucial for tailored treatment strategies and improved outcomes.





**Abstract N°: 4552**

**Angiolymphoid Hyperplasia with Eosinophilia: A Series of 17 Cases**

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**Introduction & Objectives:**

Angiolymphoid hyperplasia with eosinophilia (HALE) is a rare eosinophilic dermatosis with a treatment that remains poorly defined.

**Materials & Methods:**

Our study was retrospective and included all cases of HALE collected over a period of 20 years (2004-2023). Diagnosis was based on clinical and histological findings.

**Results:**

We collected 17 cases of HALE. The mean age was 45 years (range: 25-68 years). The male-to-female ratio was 0.6. The consultation delay varied from 1 month to 10 years. Cutaneous lesions consisted mainly of erythematous or violaceous papules or nodules (94%). Two female patients had infiltrated, hyperpigmented plaques on the face. Ten patients had multiple lesions. They were located on the forehead (5 cases), scalp (8 cases), face (4 cases), upper limb (2 cases), and ear, trunk, pubic area, or breast, each in one case. HALE was associated with alopecia and hypothyroidism in a 43-year-old man and with uterine leiomyoma in a 48-year-old woman.

Histopathological examination showed vascular proliferation with a turgid epithelioid appearance of endothelial cells. Lymphoid follicles were present in 9 cases.

Several therapeutic approaches were adopted. Surgical excision was proposed for patients with small and few lesions (8 cases), with complete remission in 66% of cases without recurrence over a follow-up period of 1 to 9 years. Five patients received treatment with topical corticosteroids combined with pentoxifylline. Remission was achieved in only one of these patients. Cryotherapy, corticosteroid injections, and tacrolimus were each used in 2 cases without efficacy. Oral corticosteroids, isotretinoin, and interferon alpha were each used in one patient without improvement. Propranolol (40 mg/day) for 6 months was effective in two patients and disappointing in one. One patient experienced spontaneous remission after two years of evolution.

**Conclusion:**

HALE is a rare benign vasoproliferative disorder of unknown origin. Trauma, infections, and hormonal factors (hypothyroidism, pregnancy, etc.) are considered probable causes. HALE often affects middle-aged individuals with a female predominance. The clinical and histological presentation of our patients is consistent with the literature.

The hyperpigmentation observed in 2 of our patients could be explained by the chronicity of the lesions.

Our study suggests that surgical excision may be sufficient for small and few lesions. However, other therapeutic modalities (corticosteroids, tacrolimus, cryotherapy, pentoxifylline, isotretinoin, interferon alpha) have poor efficacy. Propranolol, effective in two of our patients, likely due to its anti-angiogenic and antiproliferative effects.

In conclusion, our study demonstrates that although HALE is a benign epithelioid vascular tumor, it represents a

diagnostic and therapeutic challenge.

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**Abstract N°: 4557****Unusual case of disseminated classic Kaposi's sarcoma in a HIV-negative patient: A Case Report**

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**Introduction & Objectives:** Kaposi's Sarcoma (KS) is a rare angioproliferative neoplasm that originates from the endothelial cell lineage, associated with human herpesvirus 8 and HIV infection. The four clinical variants of KS include classic, endemic, iatrogenic and epidemic type. The classic KS (CKS) typically manifests itself in elderly men originating from the Mediterranean region in the sixth decade of life, occurring as small, violaceous papules and macules, which are primarily found on the lower limbs. The condition is chronic and gradually progressing. The authors present an unusual case of immunocompetent patient with CKS and analyze the current evidence concerning diagnostic and therapeutic approach.

**Materials & Methods:** 63-year-old patient was admitted to the internal medicine department, presenting with macular, papular, and nodular lesions in the forearms, feet, thighs and hands, rapidly forming during the preceding few weeks. The patient's medical history also included type 2 diabetes mellitus, arterial hypertension, thrombocytopenia, previous episode of acute pancreatitis and purulent inflammation of the right elbow joint; he was treated with insulin, pantoprazole, valsartan, hydrochlorothiazide, bisoprolol, folic acid, amlodipine, potassium chloride, calcium carbonate and magnesium. Due to mediastinal lymphadenopathy, the patient underwent numerous radiological, laboratory and clinical tests, that excluded possible oncological diagnosis. During hospitalization, a dermatological consultation was conducted and revealed brown-red spots, nodular tumors and ulcers, with the most severe manifestations occurring on the plantar side of the right foot and red-brown nodules on the left forearm. The diagnosis of Kaposi's sarcoma and angiokeratoma was deemed probable due to clinical and dermatological examination, in which blue-red areas, white shiny lines, white clods and polychromatic color areas were visible. In order to verify the diagnosis, a biopsy was taken. The microscopic appearance was in accordance with the diagnosis of Kaposi's sarcoma (ERG (+), CD31 (+), HHV8 (+), Ki67 (+) in 25% of the cells). The patient was treated with topical steroids, antiseptics and emollients. Also, the authors conducted literature research in the PubMed database, including articles published from the inception until March 2024 in order to analyze current evidence on CKS treatment.

**Results:** A significant improvement in clinical outcomes was achieved. During the treatment, the lesions became flatter and the nodular formations disappeared. Regular follow-up visit to the dermatology clinic were scheduled, with the possibility of phototherapy if skin lesions were exacerbated.

**Conclusion:** If KS is suspected, a thorough physical examination and skin biopsy of the tumor is recommended; the treatment approach should be individualized. This case report illustrates the significance of acknowledging that CKS, which was first described nearly 150 years ago, can persist in immunocompetent middle-aged men. Classic form of Kaposi sarcoma is a rare entity and constitutes a diagnostic challenge.



**Abstract N°: 4588****Assessment of knowledge, attitudes and behaviors regarding skin cancer and sun protection in patients diagnosed with non-melanoma skin cancer**

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**Introduction & Objectives:** Basal cell carcinoma and squamous cell carcinoma are the most common types of non-melanoma skin cancers (NMSC), in which ultraviolet exposure, sunbathing habits, and aging are the main underlying factors. In the present study, we aimed to assess the knowledge, attitudes, and behaviors of patients with NMSC regarding skin cancer and sun protection.

**Materials & Methods:** This study was conducted as a single-center, descriptive, survey-based research at the dermatology clinic of a tertiary university hospital. A total of 125 adult patients diagnosed with NMSC and 125 healthy individuals were enrolled. The “Skin Cancer and Sun Knowledge Scale” (SCSKS), “Sun Protection Behavior Scale” (SPBS), and a questionnaire developed by the researchers were administered to all participants.

**Results:** The study included a total of 250 participants, consisting of 125 patients diagnosed with NMSC (49 females, 76 males) and 125 healthy individuals (48 females, 77 males). The average age in the patient group was 62.6±10.7 years, while it was 61.6±9.1 years in the control group. There was no statistically significant difference between the groups regarding the SCSKS scores ( $p>0,05$ ). Both groups had little knowledge about skin cancer and the sun. The scores on the SPBS scale of patients were significantly higher than those of the control group ( $p<0.05$ ). The sunscreen use and hat-wearing habits did not differ substantially between patients and healthy subjects ( $p>0.05$ ). Overall, both patients and controls had low SPBS scores

**Conclusion:** Our study’s results show that both patients and healthy individuals have inadequate sun protection awareness and behaviors.



**Abstract N°: 4617****Incidence and Risk Factors for Skin Cancers in Liver Transplant Recipients: A Systematic Review**

Rachel Simpson<sup>\*1</sup>, Emma S McGinnis<sup>1</sup>, France Song<sup>1</sup>, Balraj Singh<sup>1</sup>, Jack Yang<sup>1</sup>, Natnaiel Dubale<sup>1</sup>, Abi Chandran<sup>1</sup>, Omar Zaher<sup>1</sup>

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**Introduction & Objectives:**

Despite the fact that skin cancer is the most common cancer in the United States<sup>1</sup>, and represents a known complication of liver transplantation, there is no current consensus on the incidence of melanoma and non-melanoma skin cancers (NMSCs) following liver transplant. Similarly, with regards to risk factors, there is no current consensus on which patient risk factors increase the likelihood of development of skin cancers post-liver transplantation. Our research aims to systematically review the incidence and risk factors for melanoma and NMSCs following liver transplantation to improve screening, education, identification and management of skin cancers in this patient population.

**Materials & Methods:**

This review was conducted in accordance with PRISMA statements. A search was performed using CINAHL, EMBASE, MEDLINE, ClinicalTrials.gov, and ProQuest Dissertations & Theses databases. Keywords included: liver transplantation, skin cancer, melanoma, basal cell carcinoma, squamous cell carcinoma, and merkel cell cancer. Duplicates and non-English language articles were excluded. Final information extracted included the last name of the first author, year of publication, study location, study design, total sample size, mean age of participants, duration of follow-up, and percentage of female participants. Data on outcome measures included incidence, standardized incidence ratios, and risk factors.

**Results:**

628 potentially relevant articles were identified. 69 met all inclusion and exclusion criteria and were used in the final review (n= 293 765). The mean (SD) of all incidence rates of skin cancers was 942.2 (1074.93) cases per 100 000 patient-years. The standardized incidence rates (SIRs) ranged from 1.2 to 60 depending on the type of skin malignancy studied. Melanomas had the lowest range of SIRs (1.2-10.1), and squamous cell carcinoma had the highest (6.4-60). With regards to risk factors, the most frequently reported risk factors were older age, male sex, fair skin, alcohol use, sun exposure and previous malignancies (Table 2).

**Conclusion:**

This study is the largest systematic review to our knowledge assessing skin cancer incidence and risk factors in liver transplant recipients. The mean incidence of melanoma and NMSCs was higher than the global incidence of 79.10 per 100,000 P-Y2, suggesting that the skin cancer incidence post-liver transplant is greater than the general population and thus requires dedicated dermatology screening and follow-up. With respect to risk factors, higher-risk individuals (older, male, fair skin, previous malignancies) can be identified post-transplant for dedicated dermatology screening and follow-up. Patient education points have been identified (reduce alcohol use and sun exposure) to improve the management and prevention of skin cancers post-liver transplantation.





## Abstract N°: 4667

### Intravascular metastasis of a serous ovarian carcinoma with skin involvement

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#### Introduction & Objectives:

Cutaneous metastases (CM) occur in 0.6% – 10.4% of all patients with cancer, representing 2% of all skin tumors. They exhibit a wide range of clinical presentations, often resulting in poor prognosis. CM of ovarian carcinoma (OC) are uncommon. Moreover, distant metastasis via hematogenous spread is extremely rare. We present two cases of highly infrequent intravascular metastasis of OC with skin involvement.

**Case 1:** A 77-year-old woman with stage IV serous ovarian carcinoma presented with a sudden onset of erythematous lesions on her abdomen persisting for 2 months despite topical treatment. Examination revealed a 20 cm urticarial plaque on the right flank, non-infiltrated and asymptomatic.

The skin biopsy revealed multiple dilated dermal vascular channels, occupied by atypical cells with psammoma bodies, without extravasation into the interstitium. These cells showed positive expression for CK7 and WT1, while being negative for CK20 and estrogen receptors.

**Case 2:** A 22-year-old woman with a one-year history of mucinous ovarian carcinoma, carrying the CHEK2 gene mutation, developed asymptomatic, poorly demarcated erythematous macules with progressive evolution affecting the inguinal area, abdomen, both breasts, and sides.

A skin biopsy revealed cutaneous lymphovascular infiltration by ovarian adenocarcinoma, showing positivity for CK7, MUC1, MUC5, and MUC6, and negativity for hormone receptors. The extension study showed progression with peritoneal, hepatic, and mediastinal implants. The patient passed away two months after the cutaneous presentation.

#### Discussion:

CM in patients with OC are uncommon, occurring in 0.9% to 5.8%, but their incidence may be rising due to improved survival rates. Although CM in cancer often represent a late manifestation, in OC they are frequently the initial sign. Clinical manifestations vary widely, with umbilical involvement such as Sister Mary Joseph nodule or affecting surgical scars being common. Other manifestations may include multiple small nodules, herpetiform lesions, or dermatitis-like conditions predominantly affecting the abdomen. The intraperitoneal route of dissemination is the most common way of spread but OC may also metastasize through the lymphatic vessels and the hematogenous route.

Four main histopathological patterns of CM involving the dermis are recognized: nodular, infiltrative, diffuse, and intravascular. The intravascular invasion pattern has been studied in other tumors such as telangiectoid carcinoma in breast cutaneous metastases. However, no cases of intravascular metastasis of ovarian cancer have been found in the literature.

**Conclusion:** We present two very rare cases of intravascular metastasis of ovarian carcinoma with skin



involvement, emphasizing the necessity of maintaining a high clinical suspicion when rapid-evolving cutaneous symptoms arise in patients with a previous history of cancer.

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**Abstract N°: 4718**
**Are two chemoprevention agents better than one?**

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**Introduction & Objectives:**

Solid organ transplant recipients (SOTRs) are at a 250-fold increased risk of developing squamous cell carcinoma (SCC) with an aggressive biological behavior, relative to the general population. Following an initial SCC many patients subsequently develop multiple SCCs, and the risk of metastasis and death is significantly increased compared to the general population. Therefore, secondary prophylaxis is essential specifically in this high-risk population.

We and others have previously shown that secondary prevention of non-melanoma skin cancer (NMSC) with mammalian target of rapamycin inhibitors (mTORi) or with systemic retinoids (acitretin) is effective in this patient population. However, to the best of our knowledge the concomitant use of both chemopreventive agents was not studied before.

Our aim is to evaluate the effectiveness of combined chemoprevention with mTORi together with low dose acitretin among SOTRs compared to each individual chemoprevention and to no chemoprevention at all.

**Materials & Methods:**

A retrospective case-cross over study, between 9/2012-03/2021. The follow-up period was at least a year without any chemoprevention, at least a year on a single chemo-preventive agent i.e., mTORi or low dose acitretin treatment and at least a year under combined treatment.

Setting: A specialized dermatology clinic for SOTRs, at the Rabin Medical Center

Participants: SOTRs with a prior history of at least 1 histologically proven NMSC.

**Results:**

35 continuously treated individuals were included (83% men and 17% women, mean age of 55.9 years).

Among all 35 participants, a time-standardized mean decrease of 2.34 NMSCs was observed during treatment with a single chemoprevention agent (mTORi or acitretin), compared to the period without prophylactic treatment, ( $p < 0.0001$ ). In patients treated with two prophylactic treatments, compared to the absence of any prophylactic treatment, the number of NMSCs decreased significantly by an average of 1.83 ( $P = 0.02$ ).

However, only among a subgroup of 10 SOTRs (80% men and 20% women, mean age: 56 years; mean period on a single chemoprevention agent 52.14 months, mean period on both chemoprevention agents: 38.04 months), the time-standardized mean number of NMSCs was significantly reduced: 9 under one chemoprevention to a mean of 2.4 tumors ( $p = 0.05$ ) under the combined treatment. (See table 1)

**Conclusion:**

A single chemoprevention agent (mTORi or acitretin), as well as combined chemoprevention reduced the average number of NMSCs compared to the period without prophylactic treatment in our study population, However, only,

in a subgroup of SOTRs the combined chemoprevention treatment was superior to a single chemoprevention in reducing NMSCs.

The exploratory, retrospective, and small sample nature of our cohort limited our ability to better characterize this subgroup. Further studies might identify the patients who may benefit from this combined regimen.

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**Abstract N°: 4721****Angiosarcoma of head neck face and scalp of the elderly: history of trauma delays consultation**

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**Introduction & Objectives:** Angiosarcoma is an aggressive malignant and rare tumor of the vascular endothelial cells. Its incidence is 0.15 per 100.000 persons per year. It can represent 1- 2% of soft tissue sarcomas and less than 1% of adult malignant diseases. It can involve any anatomic site, being the skin the most common. They are classified as: angiosarcoma of the head, neck, face and scalp of the elderly (HNFCS), chronic lymphedema associated angiosarcoma (Stewart-Treves syndrome), post-radiotherapy angiosarcoma and visceral angiosarcomas with cutaneous involvement. The HNFCS primarily affects fair-skinned elderly men. There are some risk factors for the development of this tumor, such as exogenous toxins such as orthopedic prostheses, mutations in the BRACA1 or BRACA2 gene, among others.

In most cases, pathologist make diagnosis, with positive CD31, CD34 and Factor VIII immunohistochemical studies. Since this tumor is rare and known, it goes unnoticed, which delays diagnosis. Treatment is based on staging, surgical resection, radiotherapy, and/or chemotherapy are considered. It has been observed that patients with tumors smaller than 5 cm and that are surgically operable have a better prognosis.

**Materials & Methods:** A 82 year old female with three months of evolution of small itching indurated papule that grew centrifugally in her scalp, the patient reports the lesion appeared after a mild head trauma. She didn't complain of any constitutional symptoms. As personal medical history she is in treatment for hypertension, Sjögren syndrome, hypothyroidism, and osteoporosis. She also had a right hip prosthesis and her mother died of a breast cancer. On clinical examination, a tumoral indurated plaque of 2.5 x 2.5 cm in her frontoparietal scalp, multiple yellowish hyperkeratosis areas with a purplish margin until 4.5 cm. In her left frontal scalp, a satellite purplish macula and in the upper half of the forehead she had a brownish and purpuric pigmentation with islands of healthy skin color. Dermoscopy showed a purpuric and red macule, some areas of hyperkeratosis in the scalp.\*\* the lesion was not ulcerated and not painful to the touch, but it was adhered to the underlying plans. There were no loco-regional lymphadenopathies. A 3.5-mm punch biopsy obtained. Immunohistochemical studies CK, CK7, CK20, PSA, TTF1, MELAN A and AC7 all negative. Strong positive staining for CD31, CD34, ERG, FLI-1 and D2-40. In some blood vessels Factor VIII was positive. Ki67 of 40%. The final diagnosis was an angiosarcoma of scalp and face of the elderly with a high proliferation index.

**Conclusion:** Angiosarcoma of the head, face and neck of the elderly is a rare tumor which has high recurrence rates, and 5-year survival is less than 20%. We decide to present this case because it is an uncommon pathology which can be overlooked, delaying the diagnosis, its treatment and therefore worsening the prognosis of patients who suffer from it. Also, it is less common in woman (male to female ratio 2:1) and it is noteworthy that the patient has a history of orthopedic prosthesis and a maternal history of breast cancer that increased the risk of presenting this type of tumor. It's important to consider this pathology when observing compromise of vascular predominance at dermoscopy, since it allows us to think of a lesion of vascular origin. In this case, having had a history of mid head trauma delayed the consultation 3 months, making the tumor impossible to surgically resect due to its size and making her prognosis worse.





## Abstract N°: 4765

### **A case of recurrent giant basal-cell carcinoma of the upperface treated with palliative radiotherapy**

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### **Introduction & Objectives:**

Basal cell carcinoma (BCC) is the most common cancer in humans and it develops in various clinical subtypes on the sun-exposed skin of elderly people. While metastases are rare, the greatest danger of BCC results from local invasion of the skin and the surrounding soft-tissue. The therapeutic approach consists of standard surgical excision, Mohs micrographic surgery, curettage and electrodesiccation, cryosurgery, topical treatment, photodynamic therapy or radiation therapy. Invasive and/ or neglected BCCs of the face show a higher risk of recurrence after treatment and may result in massive skin, soft tissue and bone destruction with severe disfigurement, blindness and even death.

### **Results:**

We report the case of an 85-year-old female patient with a history of cataract causing severe right eye vision impairment and of repeated surgeries for a BCC of the right temple and its local recurrences (wide local excision in 2010; re-excision and reconstruction with skin graft in 2017), who accused the progressive growth and extension of the skin tumor. Upon examination, it was observed an irregular, erythematous plaque, with multiple ulcerations on the surface (the largest one on the left temple 4/3cm), extending from one temple to another, over the forehead, on the margins of the surgical skin graft, with invasion of the upper left eyelid with a protruding mass out of the orbit.

Given the difficult clinical scenario, the complex anatomical location and potential morbidity associated with surgery, after complete evaluation of the case, the patient was considered suitable for radiotherapy. The patient refused the surgical intervention, as well as the radiotherapy procedure of the left orbit, to preserve eyesight, since on the right side it was already severely impaired. The radiotherapy protocol involved CT-based simulation to precisely delineate the target area while reducing radiation exposure to adjacent sensitive structures. A volumetric modulated arc therapy (VMAT) technique was used, delivering a dose of 70 Gy in 35 x 2 Gy time fractions, 5 days per week for 7 weeks. The patient showed good tolerance to treatment, with mild radiodermatitis managed topically, and a satisfactory therapeutic response with clinical and radiological evaluations demonstrating the substantial regression in size of the lesion and no substantial toxicities.

### **Conclusion:**

This case highlights the successful use of palliative radiotherapy in a patient with recurrent giant basal cell carcinoma of the upperface with orbital invasion, with good clinical results and the preservation of left eyesight. Radiotherapy is emerging as a valuable treatment option for recurrent basal cell carcinoma with difficult anatomic locations, but careful monitoring and rigorous treatment planning are essential to achieve favourable outcomes while minimizing side effects.

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**Abstract N°: 4801****Cutaneous metastasis of vulvar squamous cell carcinoma with molluscum-like presentation**

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<sup>1</sup>Mackenzie Evangelical University Hospital

**Introduction & objectives:**

Vulvar squamous cell carcinoma (VSCC) is rare, representing 3-5% of low genital tract malignancies. The incidence increases with age and peaks in the seventh decade of life. Symptoms include pruritus, pain and local burning, bleeding, nodulation, dysuria and vaginal discharge. Metastases are rare (6%) and occur via local spread, lymphatic or hematogenous, usually lung and liver, with lower incidence for bones, skin, lymph nodes and kidney. The recommended treatment is local excision with or without radiotherapy and chemotherapy. The 5-year life expectancy is 15% for metastatic cases. The objective of this paper is to report the case of a middle-aged female patient with a history of VSCC who developed skin lesions of a mollusk-like pattern.

**Materials & methods:**

Articles were selected from Pubmed, Lilacs and Capes journals. Information regarding the case was obtained by reviewing medical records. The patient underwent clinical evaluation and skin biopsy for diagnostic elucidation.

**Results:**

Female patient, 64 years old, with hypothyroidism, type 2 diabetes mellitus and systemic arterial hypertension. She was admitted in 2022 with pain, pruritus and sensitivity in the vulvar region for one year. Vulvar biopsy showed well-differentiated, keratinizing, ulcerated and invasive SCC. Surgical resection was performed by vulvectomy with left lymphadenectomy. Pathology (AP) of surgical specimen confirmed moderately differentiated invasive VSCC with compromised urethral margin. Tomography showed retroperitoneal lymph nodes and in the left external iliac chain. We opted for radiotherapy (Rt) and oncological follow-up, with no plan of new surgical resection. One month after the end of Rt, the patient returned due to complaints of skin lesions. The dermatological clinical evaluation identified multiple erythematous papules of varying sizes, with central umbilication, hard consistency and painful on palpation, in a molluscum-like pattern, in the inguinal region and proximal third of the left thigh. Skin biopsy was performed with the hypothesis of mollusk and sweet's syndrome. In the following month, the patient was evaluated with hyperemic pustular lesions draining fetid yellow secretion in the left inguinal region. At the time she was informed about the AP report (moderately differentiated SCC, infiltrating to the deep reticular dermis). The patient was lost to follow-up and died a few months after the last hospitalization.

**Conclusion:**

We conclude that this was a case of cutaneous metastasis of VSCC, which, although uncommon, is likely to occur. The outcome presented reinforces the importance of recognizing the severity of the condition during oncological follow-up and possible complications. It is important to include the diagnostic hypothesis of cutaneous metastasis in patients with a previous history of VSCC, especially in cases of worsening associated with the appearance of suspicious and atypical skin lesions.

**Abstract N°: 4813****Clinico-pathological characteristics of multiple primary melanoma patients and correlation with personal and familial malignancies: data from a Greek Melanoma Center**

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**Introduction & Objectives:** Patients with melanoma have an approximately 10-fold increased risk of developing a subsequent melanoma compared with the general population, particularly during the first years after diagnosis. Knowledge of specific risk factors for multiple primary melanomas (MPM) help to refine the follow-up protocols for these patients. We aimed to investigate the clinico-epidemiological characteristics associated with MPM in our cohort and to record co-existence with other personal and familial malignancies.

**Patients & Methods:** Our cohort includes 3411 melanoma patients with complete clinical and epidemiological data. Next generation sequencing (NGS) genotyping data are available for a subset of patients.

**Results:** 141 out of 3411 (4.13%) of melanoma patients were MPM patients, 53 females (37.6%) and 88 (62.4%) males. The mean age of MPM patients was 52.1 years. Twenty-five patients (17.8%) had a history of at least three primary melanomas, while the rest only developed two primary melanomas. In 55 MPM patients the melanomas were synchronous, in 45 subsequent melanomas developed within a four-year period, while in 38 patients subsequent melanomas were diagnosed in a period of 5 to 25 years after the initial melanoma diagnosis. In 31 MPM patients the first melanoma was in situ, while in 110 patients it was invasive with mean Breslow of 1.08 mm. Regarding second melanomas, 66 were in situ and 75 were invasive with mean Breslow of 0.42 mm. In most cases, both primary (in 71 patients) and subsequent melanomas (in 65 patients) developed on the trunk. Other neoplasias recorded in MPM patients included 8 BCCs, and 9 internal malignancies (2 breast, 3 thyroid, 1 cervical, and 3 prostate cancers). Twenty-two (15.6%) of our MPM cohort were also familial melanoma patients. Sixty MPM patients were genotyped for *CDKN2A* gene, and 11 of them (18.3%) harbored pathogenic *CDKN2A* variations.

**Conclusion:** The incidence of MPM in our cohort was 4.13%. The majority of MPM patients developed two primary melanomas, mainly located in the trunk. Subsequent melanomas were more likely to be in situ or thinner than the first melanoma, mostly diagnosed at the same time or within 4 years from the initial lesion. 6.3% were diagnosed with an internal malignancy. A significant proportion (15.6%) had a family history of melanoma, while 18.3% of tested MPM patients were carriers of a pathogenic *CDKN2A* variation, highlighting the value of genetic testing in these patients.



**Abstract N°: 4830****Primary cutaneous gamma/delta T-cell lymphoma: A rare entity with a fatal outcome in a young woman**

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**Introduction & Objectives:** Primary cutaneous gamma/delta T-cell lymphoma (PCGD-TCL) is a rare and aggressive type of primary cutaneous lymphomas characterized by the expression of gamma/delta T-cell receptors on neoplastic cells. The clinical behavior of PCGD-TCL can vary, depending on the extent of skin involvement, presence of extracutaneous disease, and response to treatment. However, the overall prognosis is generally poor, with a reported 5-year survival rate of around 10%.

**Materials & Methods:** A 28-year-old woman was admitted with a history of multiple deep ulcerations with eschar on her upper and lower extremities. The skin lesions appeared approximately 18 months before admission, and she was treated in a regional hospital as *Pyoderma gangrenosum* with systemic corticosteroid therapy, antibiotics, and immunosuppressive agents (cyclophosphamide, azathioprine, methotrexate). We excluded leishmaniasis and tuberculosis. Histopathology (HP) evaluation of two skin specimens showed the dermal invasion with small-to-medium atypical lymphocytes. The immunophenotypic profile suggested gamma/delta T-cell lymphoma (CD3+, Granzyme B+, sparse expression of CD4 and CD8, and CD30-). In serum, lactate dehydrogenase and beta-2 microglobulin levels were three times higher than reference values. Soft tissue ultrasound and MSCT of the thorax and abdomen showed no abnormalities. Sternal puncture showed reactive bone marrow. Chemotherapy was advised, but the patient's condition rapidly deteriorated shortly after, and the treatment was not initiated.

**Results:** Gamma/delta T-cell lymphomas can be classified as PCGD-TCL and hepatosplenic T-cell lymphoma. They typically occur in older people with multiple comorbidities. Variable clinical presentation, ranging from epidermotropic to dermal and subcutaneous patterns, contributes to the complexity of diagnosing PCGD-TCL. Conventional chemotherapy and radiotherapy have shown limited effects. The presence of CD30 expression provides a potential therapeutic target, although the prognosis remains linked to a pronounced resistance to chemotherapy and radiotherapy.

**Conclusion:** We present the case of an extremely rare condition, PCGD-TCL, which manifested at an unusually early stage in life. Given the diagnostic complexity and the need for more defined treatment strategies due to the disease's rarity, a multidisciplinary approach is often required. Despite its low prevalence, due to its severity, it should always be considered as a differential diagnosis across all age groups.



**Abstract N°: 4850****Angiosarcoma mimicking localised Bullous Pemphigoid**Zandile Mazibuko<sup>1</sup><sup>1</sup>Bedfordshire Hospitals Trust, Dermatology, Bedford, United Kingdom**Introduction & Objectives:** Case Report**Materials & Methods:****Results:**

A 78-year-old Caucasian female presented for the first time in the dermatology department with a solitary 5 cm tense bulla below and medial to the left knee. It had been present for a few months. She had been wheelchair and bed bound for a few years with bilateral pitting and non-pitting oedema of the legs. She had a history of remitting and recurring legs ulcers for a number of years. This was the first episode of a blister appearing. There were no other blisters on her skin

A diagnosis of Bullous Pemphigoid was made and a differential diagnosis of a traumatic bulla.

Urgent Punch biopsies for H&E and direct immunofluorescence were done

**PMHx:** Hypertension, no history of malignancy or radiation therapy

**Age 66:** Adult onset epilepsy- age 66

**Age 71:**

Left hip pain due to severe osteoarthritis secondary to Developmental Delay of the Hip (DDH)

Total hip Replacement

Dislocation of hip replacement 3 weeks later requiring 2 orthopedic surgeries to repair

Patient is discharged walking with a frame, improving to using a single stick a year later

**Age 75- 77:** recurrent falls resulting in mobilizing with a frame

**Age 76:**

sinus bradycardia, paroxysmal atrial fibrillation (A.F.)- started on Edoxaban& Amiodarone

Obesity (BMI 40)

Bilateral pedal edema

R leg ulcer from a trauma-induced haematoma: spontaneous resolution

**Histology(Bulla) left lower leg:**

Marked increase in dermal vascularity with vascular spaces lined by hobnailed and cytologically atypical/hyperchromatic endothelial cells.

Epithelial change of the atypical cells forming trabeculae(dermis)

Promontory sign seen in areas

Occasional mitotic figures

No features of bullous pemphigoid

**Direct immunofluorescence:**

negative for IgM, IgG, IgA, C3 and fibrinogen

**\*\*Immunohistochemistry:**

Strong positivity with: CD34, ERG and CD31 (atypical cells)

Negative for: MNF116 and AE1/3 (cytokeratin stains)

HHV-8: negative

Ki 67 showed a very high proliferating index (more than 90%)

Features entirely consistent with a local origin aggressive/ high- grade angiosarcoma

**CT scan neck, thorax, abdomen and pelvis**

No malignancy detected

**MRI legs**

No bone or bone marrow abnormality detected

**Sarcoma MDT recommendation:**

Palliative Radiotherapy (completed 9 months after first consultation)

**Starting four months post radiotherapy**

Multiple emergency department visits& admissions: ITU; generalized body pain; constipation& cognitive decline.

**14 months after diagnosis** CT scan liver and brain metastases

The patient sadly died 18 months after the initial dermatology consultation

**Conclusion:**

Angiosarcoma is a rare but aggressive malignancy of endothelial cells. It can occur in any organ but is more common in the skin and subcutaneous tissues.

Risk factors include lymphoedema; radiotherapy; exposure to certain chemicals and genetic syndromes such as neurofibromatosis; Maffucci syndrome; Klippel- Trenaunay syndrome and the *BRCA1*& *2* genes.

This patient had no history of malignancy or radiotherapy treatment. Her Developmental Dysplasia of the Hip (DDH) was detected in late adulthood (age 72) when she presented with hip pain of the same leg that went on to develop angiosarcoma seven years later. She only had one child and the mode of delivery and obstetric history is unknown. DDH is not mentioned as a cause of angiosarcoma.

This case is a good reminder of an uncommon skin malignancy

Histology and patient photographs will be included in the poster



## Abstract N°: 4875

### Blastic Plasmacytoid dendritic cell neoplasm and Down Syndrome

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<sup>1</sup>Mexico City, SEDENA, Miguel Hidalgo

#### Introduction & Objectives:

Blastic plasmacytoid dendritic cell neoplasm (BPDCN) is a rare and aggressive hematologic malignancy that affects older males but is seen in younger populations. According to the World Health Organization, it is classified among histiocytic/dendritic cell neoplasms.

#### Materials & Methods:

We present a 29-year-old female with Down Syndrome presents a dermatosis affecting the head and trunk segments, involving the preauricular region, shoulders, and lumbar region, characterized by erythematous-violaceous infiltrated nodules and plaques measuring 1 to 5 cm in diameter, defined edges, asymptomatic, one month of evolution, which began as a papule with posterior radial and vertical growth until forming plaques. We performed an incisional skin biopsy and complementary studies such as Gammagram and Bone Marrow Aspirate (BMA). Histologically with dense inflammatory infiltrate, with plasmacytoid, pleomorphic appearance, the immunohistochemistry CD123+, CD56+, Bcl2+, Vimentin+, CD68+, CD3+, CD4+, S100+, CD30-, CD1A- Granzyma-. The gammagram showed activity in the skin and in axillary, mediastinal, inguinal, and pre-aortic lymph nodes; BMA showed a cellularity of 60%, 2 megakaryocytes per field, M:E ratio 2.4 to 1, 2% promyelocytes, 8% myelocytes, 14% metamyelocytes, 16% bands, 15% segmented, 15% plasm cells, therefore the diagnosis of BPDCN is concluded. In joint management with hematology, Hyper CVAD phase B chemotherapy was started, with an unfavorable clinical course, developing febrile neutropenia and septic shock of abdominal focus, with subsequent respiratory deterioration, which led to the death of the patient.

#### Results:

Based in the findings the diagnosis of Blastic plasmacytoid dendritic cell neoplasm is made in our patient coexisting with down Syndrome, from this, the possible treatment for our patient are hyperCVAD and CHOP, though with poor results. The most promising therapies are directed to CD123, tagraxofusp, which is expressed in 100% of patients, with a survival of 59% and 52% at 18 and 24 months, respectively, however, this therapy is not available in our country.

#### Conclusion:

The diagnosis of this entity is complex and does not have specific histopathological features, so it usually requires immunohistochemical staining for the expression of CD123, CD4, CD56, CD303, TCF4, and TCL1 by neoplastic cells and the absence of markers of other myeloid neoplasms and NK lymphocytes.

The prognosis is poor, with a median survival of 8 to 16 months, and treatment is complex, characterized by resistance to standard chemotherapy. Treatment options are hyperCVAD and CHOP, which are therapeutic options for Acute Myeloid Leukemia, Acute Lymphoblastic Leukemia, or Lymphoma. Hematopoietic stem cell transplant is reported to have a remission of 40% at 10 years and 58% at 3 years, associated with conventional therapies.

Patients with Down syndrome present an increased frequency (10 to 20 times higher) of myeloid and lymphoid leukemias compared to the general population; in the literature, there are no reports about Down syndrome and

this neoplasm.

BPDCN is a rare pathology; due to its fast progression, it presents a diagnostic and therapeutic challenge, requiring multidisciplinary management. It usually presents a fatal outcome, and immunohistochemistry is the key to the diagnosis.

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**Abstract N°: 4879****Efficacy of mangosteen pericarp extract (MPE) cream in the treatment of UVB-induced erythema**

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**Introduction & Objectives:**

Sunburn results from excessive ultraviolet (UV) exposure and is a risk factor of skin cancer. Despite being a prevalent condition, treatment options are limited. Mangosteen is a tropical fruit and xanthenes contained in the mangosteen pericarp extract (MPE) have been shown to harbor anti-inflammatory and antioxidative properties. This study aimed to assess the efficacy of MPE cream in the treatment of UVB-induced erythema.

**Materials & Methods:**

This double-blind randomized controlled clinical trial was conducted at Hasanuddin University Hospital, Makassar, Indonesia, on December 2019. This study was a continuation of our previously published work where we examined the protective effect of MPE against UVB-induced erythema. All protocols were conducted in compliance with the Declaration of Helsinki guideline. Healthy subjects 20-45 years old with Fitzpatrick skin type III and IV and no history of recent intense UV exposure were recruited. Six squares were allocated on the back of each participant and the  $a^*$  score was calculated using Chromameter®. A UVB exposure of 2 MED was then irradiated to five squares. Subsequently, 10 mg of 5%, 10%, and 20% MPE cream, and base cream was applied to square 1-4, respectively, leaving the fifth square untreated. The sixth square was not exposed to UVB nor treated. The  $a^*$  score of each square was reassessed 24 hours later and the increase of  $a^*$  score ( $\Delta a^*$ ) was compared between groups.

**Results:**

The highest and least  $\Delta a^*$  was shown by the UVB group (1.80) and the 10% cream group (0.24), respectively. The  $\Delta a^*$  of the 10% group was significantly lower compared to all treatment groups, base cream, and UVB group ( $p < 0.05$ ) but was not significantly different to the untreated group ( $p > 0.05$ )

**Conclusion:**

The 10% MPE cream was effective in the treatment of UVB-induced erythema. This result opens a new field in the development of a novel agent in treating UVB-induced erythema.





Abstract N°: 4933

**VAV1 regulates cell growth in cutaneous t-cell lymphoma via the BAMBI/BMF signaling pathway**Yimeng Wang<sup>\*1</sup>, Chunlei Zhang<sup>1</sup><sup>1</sup>Peking university third hospital, Dermatology, Beijing, China

**Introduction & Objectives:** Cutaneous T-cell lymphomas are a heterogeneous group of tumors originating from the cutaneous infiltration of clonal malignant T cells. VAV1 is a hematopoietic signal transducer and an oncogene in various cancers. However, the relevance of aberrant VAV1 expression in cutaneous T-cell lymphoma pathogenesis remains unclear. This study aimed to evaluate the expression patterns and underlying pathogenic mechanisms of VAV1 in cutaneous T-cell lymphomas.

**Materials & Methods:** The expression of VAV1 protein in CTCL tumor tissues was determined by immunohistochemistry. CTCL cells were transfected with lentiviral-based VAV1 gene knockdown vectors. We determined the effects of VAV1 knockdown on cell proliferation and apoptosis in CTCL cells by MTS assay and flow cytometry. Transcriptomic sequencing was performed to detect the direct downstream targets of VAV1 silencing. Reverse transcription quantitative real-time polymerase chain reaction and western blot analysis were applied to verify the results of the transcriptomic analysis.

**Results:** High expression of VAV1 was observed in cutaneous T-cell lymphoma tissues (n = 23) compared to benign inflammatory dermatoses (n = 21) using immunohistochemistry. VAV1 knockdown in the two cutaneous T-cell lymphoma cell lines decreased cell proliferation and increased the percentage of apoptotic cells, as determined by the MTS assay and flow cytometry. Moreover, the mRNA and protein expression of the Bcl-2 modifying factor was increased, whereas that of bone morphogenetic proteins and activin membrane-bound inhibitor was downregulated in VAV1-silenced cutaneous T-cell lymphoma cells.

**Conclusion:** VAV1 silencing induces apoptosis and inhibits cell growth by upregulating Bcl-2 modifying factor expression and downregulating bone morphogenetic proteins and activin membrane-bound inhibitor expression. Therefore, VAV1 may be a potential tumor marker and therapeutic target for cutaneous T-cell lymphomas.



**Abstract N°: 4954****Coincidence or Shared Origin?**

Irene Loizate Sarrionandia<sup>1</sup>, Eduardo De La Rosa Fernández<sup>1</sup>, José González Rodríguez<sup>1</sup>, Elsa Benítez García<sup>1</sup>, Maria Herrero-Moyano<sup>1</sup>, Hector Morales Moreno<sup>1</sup>, Fernando Rodriguez Garcia<sup>1</sup>, Ricardo Fernandez-DE-Misa Cabrera<sup>1</sup>

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**Introduction & Objectives:** Mastocytosis comprises a heterogeneous group of rare diseases with an incidence of 9 cases per 100,000 individuals per year, characterized by the proliferation and accumulation of pathological mast cells (MC) in various tissues. These are clonal disorders of the hematopoietic system, commonly associated with mutations in the membrane-bound mast cell receptor KIT in the majority of affected adults. Systemic involvement is observed in over 90% of adult cases, although the disease course tends to be indolent. Conversely, lymphomatoid papulosis (LP) is a primary cutaneous CD30+ lymphoproliferative disorder presenting as recurrent outbreaks of papules or nodules that tend to ulcerate. It represents 15% of all cutaneous T-cell lymphomas with an incidence of 1.2-1.9 per million inhabitants. Its etiology remains unknown. We describe the coexistence of these two rare disorders in the same patient.

**Materials & Methods:** A 61-year-old male diagnosed with systemic mastocytosis based on bone marrow biopsy, persistently elevated serum tryptase (129ng/ml), and c-kit mutation (KITD816V), under hematological follow-up, was referred to Dermatology due to recurrent lesions on the extremities evolving over a year. Physical examination revealed violaceous papules and nodules with superficial crusts on the legs and arms.

**Results:** Skin biopsy on three occasions demonstrated a CD30+ T-cell lymphoproliferative disorder: CD3+, CD20-, CD30+, CD4+, CD8-, Graniza B -, TIA1-, ALK-, resembling a primary cutaneous CD30+ anaplastic large cell lymphoma. No clonal rearrangement was found for the TCR gene. Clinical and histological findings were consistent with type C LP.

PET/CT scan revealed homogeneous and patchy bone marrow uptake in limb roots, as well as uptake in supra-diaphragmatic, lateral cervical, axillary, mediastinal, infra-diaphragmatic, celiac, hepatic hilar, retroperitoneal, and inguinal lymph nodes; increased uptake was also noted in the spleen and liver. Biopsy of cervical lymph nodes showed an increase in mast cells. The diagnosis of T3N0M0 type C LP was established.

To manage CD30+ cutaneous involvement, treatment with methotrexate 15mg/week was initiated with good tolerance and resolution of skin lesions.

**Conclusion:** Our patient presents with systemic mastocytosis alongside lymphomatoid papulosis, both rare diseases, and the coexistence of both in the same patient is exceedingly rare. Literature reports only one case of such co-occurrence. The association may be coincidental, although another hypothesis is the shared presence of pathogenic mutations in both cell lineages. It is known that up to 30% of systemic mastocytosis cases are associated with hematological neoplasms, typically myeloid neoplasms, although any lymphoid neoplasm can manifest as a secondary hematological malignancy.

Furthermore, patients with lymphomatoid papulosis are at risk of developing other hematological disorders, with prevalence ranging from 9.4% to 61%, most commonly associated with mycosis fungoides followed by lymphoma. This case underscores the rare coexistence of two hematopoietic disorders and raises the hypothesis of a potential common pathogenesis.



**Abstract N°: 4977****Potential role of cold atmospheric plasma as an adjuvant treatment for targeted therapy for melanoma**Cong Yan<sup>1</sup>, Songmei Geng<sup>1</sup>, Kun Guo<sup>1</sup><sup>1</sup>Xi'an Jiaotong University Second Affiliated Hospital, Department of Dermatology**Introduction & Objectives:**

Targeted therapy is first-line strategy for melanoma patients with *BRAF* mutations, while drug resistance constrains efficacy and long-term benefit. Cold atmospheric plasma (CAP) is a promising technology, which shows therapeutic effect in anti-infection, wound healing and tumor treatment research. Recent studies demonstrate that CAP could promote anti-tumor effect of chemotherapeutic agents and alleviate drug resistance. Based on clinical challenges of melanoma treatment, we are intended to explore potential role of CAP as adjuvant treatment in combination with targeted therapy agents.

**Materials & Methods:**

Human melanoma cell line A2058 and A375, which harbour *BRAFV600E* mutation, were employed in this study. Cell viability was detected by CCK-8 after CAP and drug treatment. Half maximal inhibitory concentration (IC<sub>50</sub>) and combination index (CI) were calculated to quantify drug sensitivity and combination effect. Cell microstructure damage was detected by transmission electron microscopy. Cell derived subcutaneous xenografts of A2058 cells in BALB/c nude mice were constructed. Mice models were treated by CAP for 20 s and 40 s respectively. Efficacy was quantified by tumor volume, tumor weight and immunohistochemical staining of Ki-67. Safety concerning cell activity and structure of epidermis and subcutaneous appendages was evaluated by Ki-67 staining and immunofluorescence staining of Claudin-1 and Occludin. Subsequently, models were treated by targeted therapy, GSK2118436 30 mg/kg/d plus GSK1120212 0.6 mg/kg/d, CAP and CAP plus drugs respectively. Efficacy of combined therapy was evaluated.

**Results:**

CAP pretreatment promoted sensitivity of melanoma cells to GSK2118436 and GSK1120212, especially for A2058 cells which is resistant to GSK2118436. IC<sub>50</sub> values of targeted therapy agents were reduced. Combined strategy of CAP and targeted therapy agents showed more significant cell activity inhibition and led to more serious microstructure damage. By quantification of CI, we confirmed that the benefit of combined therapy is synergetic rather than additive. Further, CAP treatment was proved effective for subcutaneous tumor, and exhibited good safety profile for tumor covered epidermis and subcutaneous appendages. Combined therapy of CAP plus targeted therapy agents significantly inhibited subcutaneous tumor and worked more effective than drug therapy. Extension of CAP in combined therapy contributed to anti-tumor effect.

**Conclusion:**

Combination of CAP and targeted therapy agents benefit a lot for melanoma treatment with good safety. CAP may work as adjuvant treatment for targeted therapy for melanoma by augmenting anti-tumor efficacy and alleviating drug resistance.



**Abstract N°: 5037****Leukaemia Cutis: A Systematic Literature Review.**Oluwamayowa Aboluwarin<sup>\*1</sup>, Emmanuel Odega<sup>2</sup>, Kashini Andrew<sup>3</sup><sup>1</sup>Royal Derby Hospital, Dermatology, United Kingdom, <sup>2</sup>Royal Derby Hospital, United Kingdom, <sup>3</sup>Warwick Hospital, United Kingdom**Introduction & Objectives:**

Leukaemia cutis (LC) is the invasion of the skin by neoplastic leucocytes or their precursors, resulting in clinically identifiable lesions. LC has a wide range of cutaneous presentations including macules, papules, plaques, bullae, nodules, and ulcers. The diagnosis of LC is based on the clinical presentation, histopathological and immuno-histochemical evaluation of skin biopsy. LC carries a poor prognosis therefore early diagnosis has important prognostic implications. Treatment is often directed at eradicating underlying haematological malignancy via systemic chemotherapy. Here, we present a systematic review of the literature on Leukaemia cutis.

**Materials & Methods:**

PubMed and ScienceDirect database was searched for “leukaemia cutis”, “leukaemia specific skin lesions” or “aleukaemic leukaemia cutis”. Full text case reports and case series written in English Language from inception of each database to July 2021 was included in this review.

**Results:**

A total of 116 biopsy proven leukaemia cutis cases were identified. Leukaemia cutis occurred mostly in patients with acute myeloid leukaemia (AML 53.4%, 62/116). The male:female ratio was 1:1 and the mean age at diagnosis ( $\pm$ SD) was 55 ( $\pm$ 21) years. The most common clinical presentation was multiple nodules (multiple 75%, nodules 49.1%). Lesions favoured the extremities (33.6%). Most cases presented simultaneously with LC lesions and systemic leukaemia (42%, 49/116). The most common treatment modality used for management of LC was systemic chemotherapy (68.1%, 79/116). The overall prognosis of patients with LC was poor. In the cases identified, 40.5% (47/116) of patients died

**Conclusion:**

Leukaemia cutis has an equal predilection for both sexes. Lesions manifest commonly as multiple cutaneous nodules located on the extremities. Treatment is often centered around targeting the underlying haematological malignancy with systemic chemotherapy. LC portends poor prognosis therefore early diagnosis can help mitigate the morbidity and mortality associated with this condition.



**Abstract N°: 5069****an ace up your sleeve: radiotherapy in locally advanced cutaneous squamous cell carcinoma**

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<sup>1</sup>Hospital Universitario Fundación Alcorcón

**Introduction & Objectives:** Locally advanced squamous cell carcinoma can be a therapeutic challenge, especially in elderly people. In this work we present a case of a 93-year-old man diagnosed with cutaneous squamous cell carcinoma in the left temporal region. Since the patient rejected surgery intervention due to his age, he experienced bleeding and progressive growth of the tumor. For this reason, radiotherapy was proposed as a therapeutic option, with success. This work supports the role of radiotherapy, which can be used as an alternative or as an adjuvant or palliative treatment in certain cases of squamous cell carcinoma, especially in those that are locally advanced.

**Materials & Methods. Clinical case:** A 93-year-old man diagnosed with cutaneous squamous cell carcinoma in the left temporal region, initially measuring 5 by 3 cm, refused treatment due to his age. Six months later, he went to the emergency department due to growth and bleeding from the lesion, revealing a 12 by 8 cm tumor with active bleeding. Surgical control of the bleeding was performed by ligation of the superficial temporal artery. However, surgical treatment of the tumor was ruled out and radiotherapy was indicated. His dermatological history included surgery for lentigo maligna melanoma on the scalp, several basal cell epitheliomas, a squamous cell carcinoma, and an atypical fibroxanthoma. He received a total dose of 30Gy in 5 fractions at 6 Gy per fraction, 2 sessions per week, with good tolerance.

**Results:** The patient experienced practical macroscopic resolution of the tumor, presenting absence of local recurrence two years after treatment. Subsequently, new tumor lesions developed in other locations that were treated surgically. Although surgery is the basis of the treatment of squamous cell carcinoma, certain factors can lead to using radiotherapy as primary therapy. It can be used with curative intent in cases of rejection of surgery, unresectable tumors, inoperable patients or in regions where the cosmetic-functional result is better than that of surgery. However, given the lack of margin control, recurrences are not uncommon. A meta-analysis observed 5-year recurrence risks of 6.7% and 10% after radiotherapy in primary and recurrent squamous cell carcinoma, respectively. On the other hand, radiotherapy can also be used as an adjuvant therapy in cases of perineural involvement and/or involvement of surgical margins (if reintervention is not possible); or as palliative treatment in large or bleeding lesions. Those locally advanced tumors have a higher risk of recurrence. In these cases, the combination with immunotherapy could offer new perspectives.

**Conclusion:** In this work we present a case of therapeutic success in relation to the radiotherapy treatment of locally advanced squamous cell carcinoma. Treatment with radiotherapy, either as an alternative or as an adjuvant or palliative treatment, is useful and is an appropriate option in certain cases of squamous cell carcinoma, especially in those that are locally advanced.





**Abstract N°: 5078****management of columellar squamous cell carcinoma**Hajer Touil<sup>1</sup><sup>1</sup>UHC Mahdia**Introduction & Objectives:**

The nose is an important landmark of the face and its shape and beauty is of significant concern. The columella is one of the smallest subunits of the nose, but the loss of this structure has important esthetic and structural implications. This report describes a one-stage technique for reconstruction of the columella following a squamous cell carcinoma resection.

**Materials & Methods:**

We present a patient with columellar and membranous septum defect, due to oncological resection. The histology was in favour of a squamous cell carcinoma. The reconstruction was designed using composit conchal graft.

**Results:**

At 6 month follow up, the patient has good nasal contour and projection.

**Conclusion:**

Squamous cell carcinoma of the columella is a rare condition. This subunit provides support and projection to the nasal tip and has functional role in nostrils, as well as aesthetic, and columellar deficiency is one of the most complex nasal subunits to reconstruct because of its narrow horizontal dimension, its tenuous vascularity and limited availability of adjacent tissue. Furthermore, scarring of this region is very subtle. Composit conchal graft remains a method which provides very satisfactory aesthetic result with minimum patient morbidity and discomfort.





## Abstract N°: 5137

### **Prognosis of Atypical Intradermal Smooth Muscle Neoplasms, Dermal Leiomyosarcoma and Subcutaneous Leiomyosarcoma: Local Recurrence, Metastasis, and Overall Survival in a Nationwide Cohort of 661 Patients**

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#### **Introduction & Objectives:**

Cutaneous leiomyosarcomas (LMS) are rare mesenchymal smooth muscle neoplasms and can be subclassified into atypical intradermal smooth muscle neoplasms (AISMN), dermal leiomyosarcomas (dLMS) and subcutaneous leiomyosarcomas (scLMS). The prognosis of these tumors remains uncertain due to small cohorts and insufficient follow-up in prior studies. This study aimed to investigate the clinicopathological features and estimate the 5- and 10-year rates of local recurrence, metastasis, and overall survival in patients with cutaneous LMS.

#### **Materials & Methods:**

All patients diagnosed with a cutaneous LMS in Denmark between 1980-2022 were included. AISMN was defined as LMS strictly confined to the dermis, dLMS as dermal LMS with subcutaneous infiltration, and scLMS as LMS originating from the subcutis. The risks of local recurrence, metastasis and overall survival were estimated for AISMN, dLMS and scLMS using age- and sex-standardized stratified Cox-regression and cause-specific Cox-regression with all-cause mortality as a competing risk.

#### **Results:**

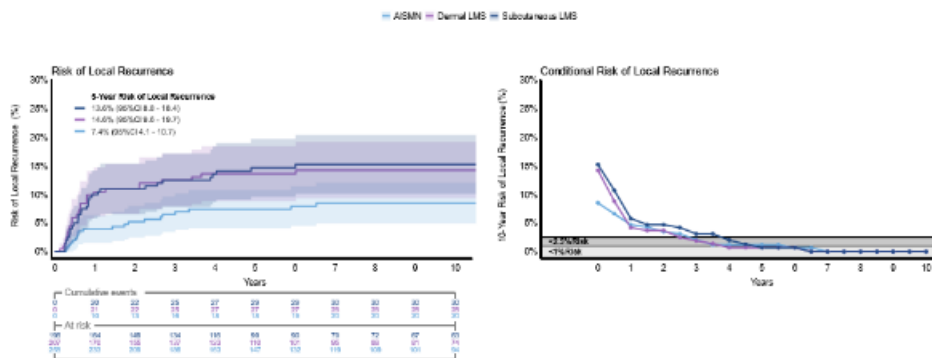
We included 258 patients with AISMN, 207 patients with dLMS and 196 patients with scLMS. The median age at diagnosis for all subtypes was 62 years (IQR 54-76). Most of the patients with AISMN and dLMS were males (71%), whereas patients with scLMS had a more balanced gender distribution. The median follow-up time was 13 years (IQR 6-23) for AISMN patients, 16 years (IQR 7-23 years) dLMS patients and 17 years (IQR 8-24 years) for scLMS patients.

The anatomic distribution of the tumors was similar in all three subclassifications of LMS. Tumor size was associated with increasing depth so that patients with AISMN had the smallest tumor diameters (12 mm) followed by dLMS (16 mm) and scLMS (35 mm),  $p < 0.001$ . Invasion through the deep fascia was seen in 13 patients with dLMS (6%) and in 27 patients with scLMS (14%). Perineural and intravascular invasion was more frequent in patients with subcutaneous LMS (6%) compared with dLMS (2%),  $p < 0.001$ . The frequency of necrosis and the mitotic grade were also associated with increasing tumor depth, with 49% of the scLMS having necrosis present in the tumor and 40% of the scLMS having a mitotic grade 3,  $p < 0.001$ .

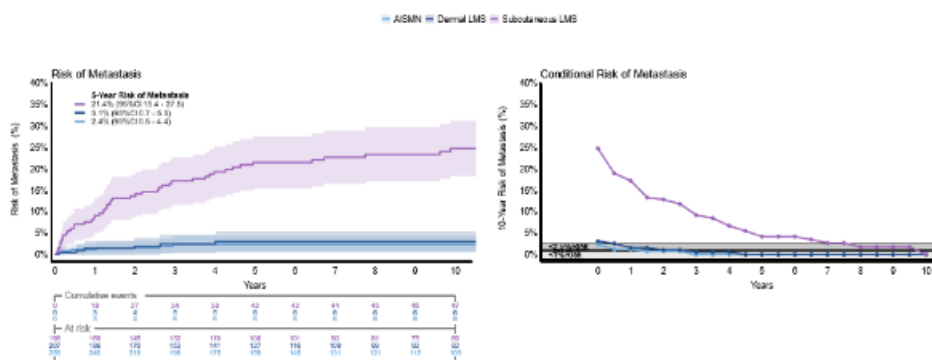
The 10-year risk of local recurrence was 9% for AISMN which was lower compared to 14% for dLMS ( $p = 0.06$ ), and

15% for scLMS ( $p=0.03$ ). AISMN and dLMS had similar low 10-year risks of metastasis ( $<3\%$ ), whereas patients with scLMS had a significantly higher 10-year risk of metastasis (25%,  $p<0.001$ ), of which 62% were distant metastases. The 10-year conditional risk of metastasis decreased to  $<1\%$  for both AISMN and dLMS within two years after primary surgery, whereas for scLMS, 10-year risk of metastasis gradually decreased to 2.5% after 10 years. The 10-year overall survival was lower for patients with scLMS (56%) compared with dLMS (65%,  $p = 0.03$ ) and AISMN (64%,  $p = 0.05$ ).

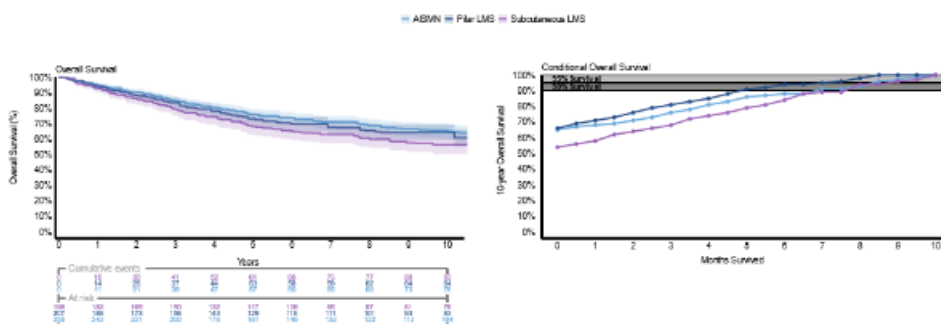
**Conclusion:** The 10-year risk of local recurrence was lower in patients with AISMN compared with dLMS and scLMS, but the risks of metastasis in both AISMN and dLMS were low compared to the substantial risk of metastasis in scLMS.



**Figure 1:** Age- and sex-standardized cumulative incidences (left) and conditional time-to-event analysis (TTE, right) of the risk of local recurrence



**Figure 2:** Age- and sex-standardized cumulative incidences (left) and conditional TTE analysis (right) of the risk of metastasis



**Figure 3:** Age- and sex-standardized Kaplan-Meier plots (left) and conditional TTE analysis (right) of the overall survival




**Abstract N°: 5186**
**Cryotherapy as a forgotten weapon in management of skin tumors**

 Amr Ammar<sup>\*1</sup>, Mahmoud Rageh<sup>1</sup>, Mohamed El-Khalawany<sup>1</sup>
<sup>1</sup>Al-Azhar university, dermatology and venereology

**Cryotherapy as a forgotten weapon in the management of skin tumors**
**Amr Mohammad Ammar, MD, Mahmoud A Rageh, MD, Mohammad El-Khalawany, MD.**
**Introduction & Objectives:**

The National Comprehensive Cancer Network guideline for the treatment of local, low-risk SCC is complete surgical excision with at least 4 to 6mm safety margins, or Mohs micrographic surgery if feasible. Alternative treatments may be required for patients who are not suitable for or refuse surgery. Cryosurgery has been used for different benign, premalignant, and malignant skin lesions by different application methods such as cotton-tipped applicator, cryoprobe, superficial spray, and intralesional.

Although surgery is not always the preferred solution for patients for many reasons, including the fear of disfigurement after surgery, incomplete removal or recurrence of the lesion, on the other hand, many cases of BCC occur in the elderly who may suffer from chronic diseases that may hinder surgical procedures, so it was necessary to find practical solutions that prevent the increase in the size of the tumor and lead to proper treatment of malignant tumors especially in high risk areas. On the other hand, Dermatologists may encounter some problems, some types of types may be very deep or aggressive and may require strong and sometimes aggressive procedures for treatment, so it was necessary to find a compromise that allows access to the base of the tumor without a negative impact on the surrounding healthy tissues to avoid complications.

**Materials & Methods:**

Cryosurgery is a cytodestructive technique that involves using a liquid nitrogen spray or probe to induce cell necrosis by exposing tissue to low temperatures, and treatment may be monitored by thermocouples. It is commonly reserved for tumors with well-defined borders, and two freeze-thaw cycles with a tissue temperature of  $-50^{\circ}\text{C}$  are recommended

We presented and discussed some cases which was diagnosed clinically, dermoscopically and confirmed histopathologically with medium to high risk BCC and squamous cell carcinomas in which surgery was refused by patients or contraindicated, a cryotherapy sessions was done in those cases with clinical, dermoscopic and histologic follow up showed marked improvemnt up to 100%.

**Results:**

Although surgery is not always the preferred solution for patients for many reasons, including the fear of disfigurement after surgery, incomplete removal or recurrence of the lesion, on the other hand, many cases of BCC occur in the elderly who may suffer from chronic diseases that may hinder surgery or may be refused by the patient or his relatives, so it was necessary to find practical solutions that prevent the increase in the size of the tumor and lead to proper treatment of BCC in such dangerous areas.

a cryotherapy sessions was done in those cases with clinical, dermoscopic and histologic follow up showed marked improvemnt up to 100%.

**Conclusion:**

Cryotherapy may be a good option in management of high, medium, and low risk skin tumors especially if other treatment procedures were contraindicated or refused by the patients and the procedure of cryotherapy is done in the correct way.

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**Abstract N°: 5195****Periungual basal cell carcinoma: case report of a rare presentation**

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<sup>1</sup>Santa Casa de Misericórdia do Recife, Centro de Estudos Dermatológicos do Recife - CEDER, Recife, Brazil

**Introduction & Objectives:** Basal cell carcinoma (BCC) is the most prevalent type of skin malignant neoplasm, caused mainly by chronic sun exposure. Around 85-90% is located in the head and neck, followed by back and limbs. Nail involvement is rare. We present a case of a BCC in a uncommon and rarely site.

**Materials & Methods:** case report.

**Results:** A healthy 70-year-old female patient, phototype III, presented with an asymptomatic erythematous plaque with areas of exulceration on the proximal nail fold of the 2nd right finger. Dermoscopy of the lesion revealed arboriform vessels, linear vessels, and the hypothesis of basal cell carcinoma was raised. An incisional biopsy was performed, which confirmed the diagnosis. The patient underwent complete excision of the lesion, with a safety margin and no functional damage to her finger.

**Conclusion:** Periungual basal cell carcinoma is a rare variant that, due to its atypical location and generally asymptomatic presentation, can be delayed in diagnosis and even confused with other nail pathologies and tumors. Dermoscopy is important and has great diagnostic value in these cases, identifying suggestive findings of BCC. Among the therapeutic options, conventional surgical excision and Mohs micrographic surgery are the most employed treatments, with a lower recurrence rate in Mohs surgery. Histopathological study is mandatory for definitive diagnosis. Early diagnosis is essential for the functional and esthetic preservation of the nail structures.



**Abstract N°: 5196****A Fading Impression: Hypopigmented Mycosis Fungoides in a Young Girl**Rey Tristan Joshua Unay<sup>1</sup>, Mark Gerald Serrano<sup>1, 2</sup>, Jolene Kristine Dumlao<sup>1, 2</sup><sup>1</sup>Southern Isabela Medical Center, Santiago, Philippines, <sup>2</sup>Philippine Dermatological Society, Quezon City, Philippines**Introduction & Objectives:**

Hypopigmented mycosis fungoides (HMF) is a rare variant of cutaneous T-cell lymphoma (CTCL) characterized by its atypical presentation of hypopigmented macules or patches, often masquerading as benign dermatoses. This variant poses a diagnostic challenge due to its subtle clinical features, leading to frequent misdiagnosis and delayed treatment initiation. We present a case highlighting the diagnostic journey, histopathological findings, and therapeutic considerations in managing this intriguing manifestation of mycosis fungoides. Through this report, we aim to enhance awareness and understanding of HMF among clinicians, facilitating timely recognition and optimized management of this uncommon yet significant dermatological entity.

**Materials & Methods:**

We reported a case of a 4-year-old female who presented a 3-year history of generalized slightly erythematous to hypopigmented macules and patches. There was no history of prodromal symptoms, pain nor pruritus. Past medical, family, and social history were non-contributory. Dermoscopic findings revealed the presence of a patchy, amorphous white-pink areas and loss of natural pigment network. The histopathological examination showed basketweave orthokeratosis, few lymphocytes along the dermoepidermal junction with focal collection within the epidermis, and a moderately dense superficial perivascular infiltrate composed of lymphocytes and melanophages.

**Results:**

She was treated initially with topical corticosteroids with minimal improvement seen. Patient underwent NB-UVB full body cabinet phototherapy sessions as adjunctive treatment thrice a week and consequently with satisfactory results.

**Conclusion:**

This report presents a case of a rare variant of mycosis fungoides. Frequent misdiagnosis and delayed treatment is common due to its subtlety. Hence, a strong clinical suspicion and confirmatory biopsy tests prove to be crucial for appropriate management.





**Abstract N°: 5248****Spontaneous Remission of Classic Kaposi Sarcoma in an Elderly Filipino Female**MA. Bernadette Sedano<sup>1</sup>, Mark Gerald Serrano<sup>1</sup>, Jolene Kristine Dumlao<sup>1</sup><sup>1</sup>Southern Isabela Medical Center, Department of Dermatology and Venereology, Santiago, Philippines**Introduction & Objectives:**

Kaposi sarcoma (KS) is a lymphoangioproliferative condition linked to human herpesvirus-8. KS presents in four clinical variants: classic, iatrogenic, endemic, and AIDS-related. The classic type has a chronic course and primarily affects people of Eastern European Jewish or Mediterranean heritage, with a higher incidence in males. Approximately 70% of patients respond partially or satisfactorily to treatment, 20% experience recurrence, and 10% show progression despite treatment. Furthermore, there have been documented cases of self-regression in the classic type of KS.

**Materials & Methods:**

We report a case of a 74-year-old, Filipino, female, who has no known comorbidities, presented with a one-year history of multiple, non-pruritic, non-tender, violaceous, firm, nodules, widely disseminated ranging from 0.5 cm to 1 cm in its widest diameter which showed spontaneous regression. The histopathological analysis revealed spindle cells within collagen bundles and an associated vascular proliferation, which is indicative of Kaposi Sarcoma. Immunostaining with CD31 highlighted the presence of vascular channels within these collagen bundles. HIV test showed negative result. The patient was referred to oncology service for further treatment but was non-compliant.

**Results:**

She followed up ten months later which showed resolution of previously noted KS lesions. Upon investigation, patient denied any treatment done for her condition signifying spontaneous resolution of KS

**Conclusion:**

We present a rare case of spontaneously resolved, immuno and histopathologically confirmed case of Classic Kaposi Sarcoma in an elderly Filipino female.



**Abstract N°: 5301****Mutational profiling in cutaneous melanoma using droplet digital PCR**

Monica Neagu<sup>\*1, 2, 3</sup>, Dobre Elena-Georgiana<sup>2, 3</sup>, Carolina Constantin<sup>1, 3</sup>, Munteanu Adriana<sup>3</sup>, Mihaela Surcel<sup>3</sup>, Sabina Zurac<sup>1, 4</sup>

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<sup>3</sup>Victor Babeş National Institute of Pathology, Immunology, Bucuresti, Romania, <sup>4</sup>Carol Davila University of Medicine and Pharmacy, Oral Pathology, Bucharest, Romania

**Introduction & Objectives:** Cutaneous melanoma is still a skin neoplasm whose pathogenesis has unknown genetic dimensions. The purpose of our study was to evaluate the genetic alterations that could affect the EGFR-RAS-RAF pathway in search of new druggable genetic targets.

**Materials & Methods:** Paraffin embedded samples from patients diagnosed with skin melanoma (n=22) were evaluated using droplet digital PCR (ddPCR) in comparison to benign nevi (n=15) and normal skin samples (n=15). Samples were diagnosed using histology and immunohistochemistry (IHC) evaluation. The study was operated in accordance with the principles of the Declaration of Helsinki (according to Annex 4, National Law 104/2004 and application HG451/2004, amended in 2013), and with the approval of the Local Ethics Committee of Colentina Clinical Hospital, Bucharest, Romania (approval no. 25/2017). Patients and control subjects were informed of the study protocol and provided written informed consent prior to enrollment. Their personal data was maintained confidential. The mutational status of healthy skin, nevi and melanoma specimens was assessed by ddPCR using BRAF V600, NRAS G12/G13, NRAS Q61, KRAS Q61 and EGFR exon 19 deletions Screening Assays according to manufacturer's instructions.

**Results:** We found that acquired melanocytic nevi are characterized by hotspot alterations in the MAPK signaling pathway, affecting BRAF or NRAS genes. The co-existence of BRAF V600E and NRAS G12/G13 mutations in both melanomas and melanocytic nevi was found. Moreover we found that the majority of the investigated benign nevi (over 80%) have driver mutations in the MAPK signaling pathway. Analyzing this highly mutagenic profile of nevi we evaluated also the expression of cell cycle proteins. We found that p16 protein expression in the investigated nevi samples was high, proving that, although they have a high mutational burden, the cell cycle is in an arrested stage. We have identified BRAF V600 mutations in 54% of cutaneous melanomas, and NRAS G12/G13 mutations in 50% of the analyzed melanoma samples. BRAF mutations associated significantly with Breslow index (BI) and tumor infiltrating lymphocytes, whereas NRAS mutations correlated with BI and the mitotic index. Particularly, malignant transformation to a BRAF wild-type melanocytic tumor occurred in one of our cases involving a benign nevus with BRAF V600 positivity.

**Conclusion:** The ultrasensitive technology of ddPCR can detect NRAS G12/Q61 and BRAF V600 mutations even in normal skin, benign nevi and melanomas, therefore our study aids the molecular profiling of skin cancers.




**Abstract N°: 5391**
**Extensive cutaneous extramammary Paget's disease of the anogenital region**

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<sup>1</sup>CHU Mustapha, Dermatology, Algiers, Algeria, <sup>2</sup>Private Anatomopathology Laboratory, Algiers

**Introduction & Objectives:**

Extramammary Paget disease (EMPD) is a rare, intraepithelial adenocarcinoma that affects anatomic regions with abundant apocrine sweat glands. The most commonly affected sites are the vulva, perineum, perianal region, scrotum, penis, or pubic area. EMPD is associated with an increased risk of internal malignancy. We present a case of an extensive non-invasive EMPD of the vulva, perineum and perianal region without associated malignancy.

**Materials & Methods:**

A 49 years-old woman presented with a large erythematous and erosive plaque of the anogenital region that enlarged over 6 years. She had been prescribed corticosteroids and antifungals, none of which were effective. Physical examination revealed a large, irregularly shaped, reddish erosive plaque affecting the vulva and extending to inguinal folds forward and to perineum up to the perianal region backward. There was significant pruritus. Biopsy specimens obtained from several sites, confirmed the diagnosis of EMPD without dermal invasion. The patient underwent a workup including a mammography, cervical smear, colonoscopy, abdomino-pelvic magnetic resonance, all of which were negative for malignancy. A wide surgical resection was refused by the patient because of potential functional impairments. Topical medications were impractical, at which point, radiation therapy was preferred.

**Results:**

Extramammary Paget Disease (EMPD) is a rare intraepithelial adenocarcinoma that commonly occurs on apocrine rich skin and usually affects anogenital area or the axilla. Less than 40% of EMPD have an associated underlying internal malignancy. A recent theory suggests that Toker cells may be the precursor cells in EMPD. Clinically, it presents as an erythematous plaque with typical white scaling known as "cake-icing scaling". It is a clinical chameleon due to its variety of manifestations, with often non-specific symptoms like itching or burning sensation. Histopathology shows intraepidermal proliferation of "Paget cells", characterized by vesicular nuclei with prominent nucleoli and abundant pale cytoplasm. Immunohistochemistry is often helpful in diagnosis. Most cases stain positive for CK7, CK20, and CEA. Surgical excision remains the mainstay of treatment of EMPD, allowing for precise margin control with reduced recurrence rates. Alternative treatments include topical imiquimod, photodynamic therapy, laser vaporization, chemotherapy but data are limited.

Radiotherapy has been used as a primary treatment option for patients with invasive and non-invasive EMPD who were not eligible for surgery or who refused surgery, as a treatment option for patients with recurrence after surgery, and as adjuvant post-operative therapy. Our patient had an exceptionally large disease. That's raises the question of the multifocal nature of EMPD as to whether it grows in a contiguous pattern or with field cancerization and multiple foci. Although her extensive and long-history disease, the assessment of patient for invasion or associated malignancy were negative, which bodes a good prognosis. Nevertheless, long-term follow-up shows high recurrence rates after radiotherapy depending on location.

**Conclusion:**

The wide variety of clinical manifestations of EMPD leads to significant delays in diagnosis and treatment. Extensive cutaneous forms of EMPD are very rare which leads to raise questions about their pathogenesis and management. Radiotherapy could be a suitable option for such cases.

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**Abstract N°: 5462****Male breast cancer masked with herpes zoster**Gulsen Akoglu\* , Sema Nur Çoban<sup>1</sup>, Gülşen Akoğlu<sup>1</sup>, Aysu Sadioğlu<sup>2</sup><sup>1</sup>University of Health Sciences, Gulhane Training and Research Hospital, Dermatology and Venereology, Ankara, Türkiye, <sup>2</sup>University of Health Sciences, Gulhane Training and Research Hospital, Pathology, Ankara, Türkiye

**Introduction:** Male breast cancer is a rare disorder with a characteristic presentation of painless subareolar mass. Male breast cancer accounts for approximately 1% of all cancers and results in about 0.1% of cancer-related deaths in male patients.

**Case report:** A 71-year-old male patient was referred from the emergency department to our outpatient clinic with a preliminary diagnosis of herpes zoster. According to the patient's history, he had been experiencing redness and pain extending from the left half of his body to his back for the past three days. During the physical examination, vesicular lesions on an erythematous base, consistent with the T4-T5-T6 dermatome distribution on the left half of the trunk, were observed. An irregular infiltrated nodular lesion measuring 6x4 cm was palpated on the left nipple, which the patient had noticed for approximately four months. Personal medical history revealed hypertension and a past cerebrovascular event, and family history was unremarkable. A 4 mm punch biopsy was performed from the nodular lesion. Histopathological examination showed malignant epithelial tumor infiltration in the dermis. The tumor showed positive expression of estrogen and progesterone receptors but the expression of c-erbB-2 was negative. The positron emission tomography (PET-CT) scan revealed involvement of left axillary lymph nodes only. No distant organ metastasis was detected. Genetic testing of the patient revealed positive findings for BRCA-1 and BRCA-2 mutations. The patient was evaluated by the oncology and general surgery departments and received 16 cycles of neoadjuvant chemotherapy treatment. Subsequently, radical mastectomy of the left breast and resection of the left axillary lymph node were performed. Following 3 months of radiotherapy, the patient is currently being follow up with letrozole and abemaciclib treatment.

**Conclusion:** Physicians should be aware of male breast cancer in male patients with a painless breast mass. It should be noted that additional inflammatory diseases may mask breast cancer nodules.



**Abstract N°: 5464****Expression of cytokine signaling pathway molecules in unaffected skin and in the lesions in patients with early stages of Mycosis fungoides**

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**Introduction & Objectives:**

Mycosis fungoides (MF) is the most common variant of cutaneous T-cell lymphoma (CTCL). It has been shown that in tumor diseases, including CTCL, an imbalance of cytokine signaling pathways is observed. Based on this, the aim of our study was to assess changes in the expression levels of the JAK-STAT signaling pathway and transcription factors in patients with MF in unaffected skin and in the lesion in comparison with healthy controls.

**Materials & Methods:**

The study included 46 patients with MF in the early stages and 14 healthy volunteers. Biopsies of unaffected skin and lesions from patients with MF were used for analysis, as well as samples from control group. The expression levels of genes *JAK1*, *JAK2*, *JAK3*, *STAT1*, *STAT2*, *STAT3*, *STAT4*, *STAT5A*, *STAT5B*, *STAT6*, *NFKB1*, *FOXP3*, *GATA3* and *IRF4* were measured with real-time quantitative reverse transcription PCR using *GAPDH* as endogenous control. Statistical analysis was conducted using the R programming language and the  $2^{-\Delta\Delta C_t}$  method.

**Results:**

The study revealed a multidirectional pattern of changes in the expression levels of several genes in the JAK-STAT signaling pathway and transcription factors in both unaffected skin and the lesions of patients with MF compared to a control group. In unaffected skin, there was an increase in the expression of the genes *JAK3*, *STAT2*, *STAT6* and *GATA3* by 1.9-, 1.5-, 1.6-, and 1.5-fold, respectively, while the expression of *JAK2* decreased by 2.9-fold. In the lesions there was also an increase in expression of the genes *JAK3*, *STAT1*, *STAT2*, *FOXP3* and *IRF4* by 4.4-, 2.8-, 1.7-, 3.4-, and 2.2-fold, respectively. Additionally, the expression of genes *JAK2* and *GATA3* decreased by 3.5- and 1.6-fold, respectively.

**Conclusion:**

It should be noted that there is a statistically significant increase in the expression of the *JAK1*, *STAT6* and *GATA3* genes in unaffected skin compared to their levels in the lesion. This may indicate that protective mechanisms are initially activated in unaffected skin, but their depletion leads to the clinical manifestations of the disease.



**Abstract N°: 5503****Maculopapular cutaneous mastocytosis with pseudoxanthomatous nodules of the vulva in an adult patient**Agnieszka Kaszuba<sup>1</sup><sup>1</sup>Gdańsk, Department of Dermatology, Venereology and Allergology, Gdańsk**Introduction & Objectives:**

Mastocytosis is a heterogeneous group of diseases associated with excessive proliferation and accumulation of mast cells (MSc) in different organs. Purely cutaneous mastocytosis (CM) is the most common form of mastocytosis in children, whereas indolent systemic mastocytosis (ISM) with skin involvement is the most common in adults. CM encompasses maculo-papular cutaneous mastocytosis (MPCM), diffuse cutaneous mastocytosis (DCM) and mastocytoma. Pseudoxanthomatous lesions can be observed in patients with DCM as well as in those with other forms of CM. Pseudoxanthomatous lesions presents as yellowish to brownish papules and nodules varying in size resembling xanthomas. Darier's sign is usually negative. Histology shows dense infiltrate of mast cells in the deep dermis. Diagnosis is based mainly on histopathological findings.

**Materials & Methods:**

We report a rare case of pseudoxanthomatous nodular lesions of vulva in 2 adult patient. A 24-year-old and 26-year-old woman were consulted at our department due to nodular, asymptomatic lesions on vulva. Patient suffered from MPCM, which was diagnosed at the age of 12 years. After puberty there was no spontaneous regression of CM. Therefore, the patient was checked for SM. Finally, SM was excluded. Clinical examination showed well-defined, round to oval, yellowish nodules on the labia majora bilaterally. Darier's sign of these lesions was negative. Moreover, brownish maculopapular lesions typical for MPCM were observed on the trunk and limbs. Dermoscopy of nodular lesions showed central white-yellowish structureless areas and brownish blotches at the periphery. A biopsy of a nodular lesion of vulva was taken and histology revealed diffuse MC infiltration in the dermis. The infiltrating cells were positively stained for CD117. Based on clinical presentation and histological findings, the diagnosis of MPCM with presence of pseudoxanthomatous nodular lesions of vulva was established.

**Results:**

xxx

**Conclusion:**

So far, only three case reports of pseudoxanthomatous mastocytosis of the vulva have been published. In all cases the lesions occurred in children. In the literature there is no data on the tendency to spontaneous regression of this type of CM lesions around puberty. We present the first case report of pseudoxanthomatous mastocytosis of vulva in an adult patient.







**Abstract N°: 5542**

**Association between local skin reactions and efficacy with 4% 5-FU in actinic keratosis: a post-hoc analysis of two randomized clinical trials**

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**Introduction & Objectives:**

Topical 5-Fluorouracil (5-FU) cream 4% is an antimetabolite drug recommended among first-line treatments for single or multiple actinic keratosis (AK) and the field of cancerization (FC) (1-2).

Local skin reactions (LSR) are expected and transient responses to the treatment with 5-FU (1). They appear during treatment, especially at 2 weeks, with a peak at 4 weeks and resolve completely after the end of treatment (3). They can lead to treatment discontinuation when severe.

This study aimed to investigate whether the intensity of LSR is associated with better clearance of lesions, by analyzing the severity of reactions at week 2 (W2), then at week 4 (W4), and the clearance 4 weeks after completing treatment.

**Materials & Methods:**

This post-hoc analysis pooled the data of two blinded, multi-arm, multicentric, randomized clinical trials (3). We considered only subjects treated by once-daily 4% 5-FU for 4 weeks. Safety population was considered in this analysis. It included all subjects randomized with documented use of at least one application of study medication and at least one post-baseline assessment.

Clearance of the lesions were evaluated 4 weeks after the end of treatment. The response was categorized into complete clearance (CC), partial clearance (PC) and no clearance (NC). CC was defined as a clearance of all the lesions, PC was defined as a clearance of at least 75% of the lesions. Otherwise, the patients were considered with NC.

Analyzed LSR were erythema, scaling, edema, crusting, erosions, stinging and pruritus. LSR were categorized into severe, moderate, mild (reference modality) and none, with standardized definitions (4).

Unadjusted and adjusted logistic regression models evaluated the association between each LSR at W2 and at W4 and the treatment response 4 weeks after the end of treatment (W8 LOCF). This analysis compared patients with a CC or a CC/PC to patients with NC. Adjustment set was composed of sex, age and AK severity at baseline.

**Results:**

397 patients were included. 4 weeks after the end of treatment, 51.4% patients had a CC, 29.5% a PC and 19.1% a NC. Socio-demographic characteristics were similar between subjects with CC/PC and with NC (table 1). Patients who reached CC/PC had at baseline a higher number of lesions, a more severe disease and preferentially on the ears and face than subjects with NC.

In adjusted analyses, all recorded LSR at W4 were associated with a CC/PC (figure 1). Erythema, edema, crusting

and stinging/burning at W2 were associated with a CC/PC.

At W2 and at W4, when we compared mild and severe reactions, only severe erythema was associated with more likely clearance. Occurrence of severe erythema increased the probability of achieving CC/PC to 4.7-fold and to 11.6-fold at W2 and at W4, respectively.

## Conclusion:

LSR, particularly erythema, are the reflection of the pharmacological mechanisms of the treatment. They are a step toward clearance of AK and FC. Our analysis showed that the intensity of LSR during the treatment with 4% 5-FU is associated with a higher clearance rate. Even when occurring, severe LSR do not compromise the treatment efficacy.

Because LSR can be unpleasant, therapeutical solutions must be evaluated to relieve the patients, while continuing the treatment application. Experts' recommendations must also be established to help physicians to concomitantly manage AK and LSR if necessary, during 4% 5-FU treatment.

**Table 1.**  
Description of population

Statistics	Clearance $\geq$ 75% (N=321)	Clearance < 75% (N=76)	Total (N=397)
<b>Socio-demographic Characteristics</b>			
<b>Age (years)</b>			
Mean (SD)	67.5 (9.8)	68.3 (11.1)	67.7 (10.0)
<b>Sex - n(%)</b>			
Female	60 (18.7)	15 (19.7)	75 (18.9)
Male	261 (81.3)	61 (80.3)	322 (81.1)
<b>Race - n(%)</b>			
White	318 (99.1)	74 (97.4)	392 (98.7)
Other	3 (0.9)	2 (2.6)	5 (1.3)
<b>Disease-related Characteristics at Inclusion</b>			
<b>Number of lesions</b>			
Median (Q1; Q3)	12.0 (8.0; 20.0)	8.5 (6.0; 15.5)	11.0 (7.0; 18.0)
<b>Disease severity - n(%)</b>			
Mild	136 (42.4)	45 (59.2)	181 (45.6)
Moderate	140 (43.6)	22 (28.9)	162 (40.8)
Severe	45 (14.0)	9 (11.8)	54 (13.6)
<b>Fitzpatrick skin type - n(%)</b>			
I	73 (22.7)	15 (19.7)	88 (22.2)
II	162 (50.5)	32 (42.1)	194 (48.9)
III	76 (23.7)	23 (30.3)	99 (24.9)
IV, V, VI	10 (3.1)	6 (7.9)	16 (4.0)
<b>Lesion localisations - n(%)</b>			
Ears	139 (43.3)	23 (30.3)	162 (40.8)
Face	298 (92.8)	58 (76.3)	356 (89.7)
Scalp	144 (44.9)	44 (57.9)	188 (47.4)
<b>Treatment- and Study-related Characteristics</b>			
<b>Total doses*</b>			
Mean (SD)	26.3 (4.4)	25.3 (7.5)	26.1 (5.2)
<b>Number of treatment days*</b>			
Mean (SD)	26.6 (4.4)	25.5 (7.5)	26.4 (5.1)
<b>Compliant - n(%)</b>			
Yes	310 (96.6)	68 (89.5)	378 (95.2)
No	9 (2.8)	6 (7.9)	15 (3.8)
Missing, Unknown	2 (0.6)	2 (2.6)	4 (1.0)

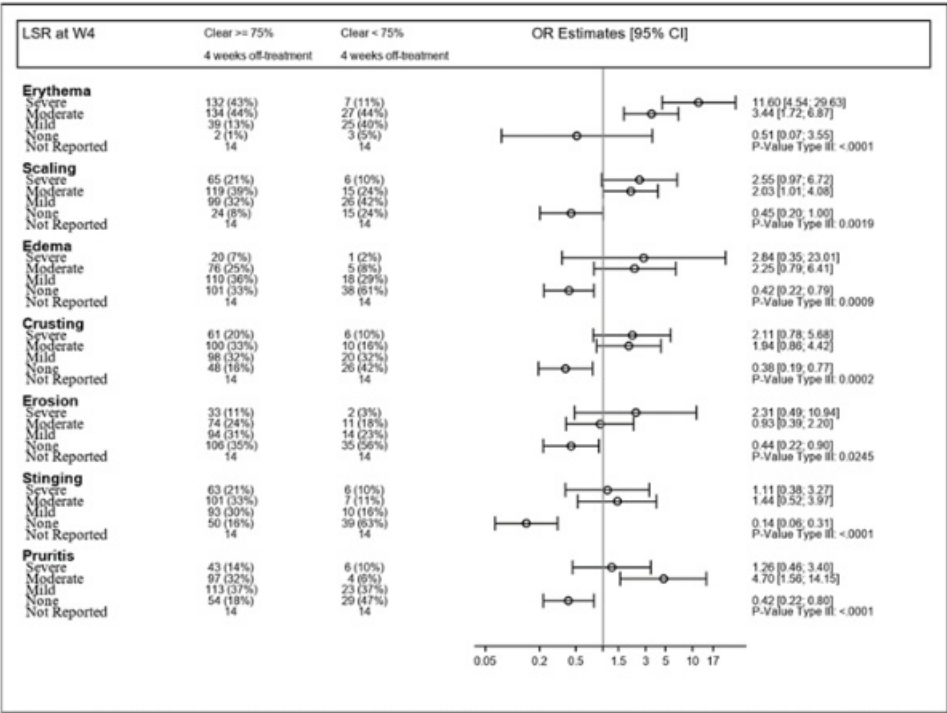
Mild disease severity was defined as 5–10 lesions, moderate as 11–25 lesions and severe as >25 lesions.

Modality 'Other' for Race includes 'Other' and 'American Indian/Alaska Native'.

A patient can have several localizations for lesions. The sum of percentages per column can so be greater than 100%.

\*Missing data for 2 patients in each group

**Figure 1.** Forest plot of adjusted odds ratios (OR) estimates of the association between clearance 4 weeks after the end of treatment and LSR at W4



**References:** **1.** 5-FU 40 mg/g cream SmPC; **2.** Kandolf et al. J Eur Acad Dermatol Venereol. 2024;00:1–24; **3.** Stockfleth et al. Dermatol Ther (Heidelb). 2022 Feb;12(2):467-479; **4.** Rosen et al. Dermatol Ther (Heidelb). 2014 Dec;4(2):207-19

**Abstract N°: 5579****Silencing exosomal circ102927 inhibits foot melanoma metastasis via regulating invasiveness, epithelial-mesenchymal transition and apoptosis**Huiying Wan<sup>\*1</sup><sup>1</sup>Sichuan Provincial People's Hospital , Dermatology, Cheng Du, China

**Introduction & Objectives:** Exosomes contain abundant circular RNAs (circRNAs), playing an important role in intercellular communication. However, the function and underlying molecular mechanism of exosomal circRNAs in foot metastatic melanoma remains unclear.

**Materials & Methods:** Differently expressed circRNAs were identified between Six patients with metastatic and Six primary foot melanoma through high-throughput sequencing. circRNA102927 expression level was detected by the real-time reverse transcriptase-polymerase chain reaction (RT-qPCR). The diagnostic performance in serum was evaluated by the receiver operating characteristic (ROC) curve. Enzyme-linked immunosorbent assay (ELISA) was employed to assess IL-10, IL-4 and IL-17 levels. Exosomes, regulatory T cells (Tregs) and epithelial-mesenchymal transition (EMT)-related proteins were measured by Western blot. circRNA102927 roles in vitro were evaluated through Cell Counting Kit-8 (CCK-8), wound healing, transwell, and flow cytometry assays.

**Results:** We screened 12 differentially expressed circRNAs . circRNA102927 was highly expressed in both foot melanoma and their released exosomes. Additionally, circRNA102927 expression was higher in metastatic melanomas than in primary melanomas and could be used as the biomarker to differentiate them. Moreover, melanoma-secreted exosomes induced the differentiation of CD4<sup>+</sup> T cells into Treg cells and promoted tumor metastasis, evidenced by a significant elevation in IL-10 levels and increased protein expression of FOXP3 and TGF- $\beta$ . Functionally, circ102927 silencing inhibited proliferation, EMT, migration, and invasion in A2058 cells, while promoting apoptosis.

**Conclusion:** Our investigation suggests that silencing exosomal circ102927 may suppress foot melanoma metastasis by inhibiting invasiveness, EMT, and promoting apoptosis.



**Abstract N°: 5605****Cutaneous B lymphoma with rapid regression: case report**Maryam Ghaleb<sup>1</sup>, Ouiame El Jouari<sup>1</sup>, Salim Gallouj<sup>1</sup><sup>1</sup>Centre Hospitalier Universitaire Mohammed VI, Service de dermatologie et vénérologie , Tanger**Introduction & Objectives:**

Cutaneous primary B-cell lymphomas are non-Hodgkin's lymphomas that present in the skin without evidence of extracutaneous involvement at the time of diagnosis. There are 3 types of primary cutaneous B-cell lymphoma: primary cutaneous lymphoma of the marginal zone, primary cutaneous lymphoma of the center of the follicle and primary cutaneous diffuse large B-cell lymphoma, leg type.

Primary cutaneous follicular center lymphoma (PCFL-CF) is the most common cutaneous B-cell lymphoma. It occurs most frequently on the head, neck or upper chest. Lesions appear as pink or red nodules, or slowly growing tumors. They rarely become ulcerated. Some patients have nodules in more than one part of the body. But most patients have a single tumor or a small group of nodules.

**Materials & Methods:**

We report here an extraordinary case of multiple primary cutaneous LCPB-CF with rapid regression.

**Results:**

A 64-year-old man with no previous pathological history presented with nodular masses on the chin and under the chin, which had been evolving for 2 months in a context of apyrexia and preservation of general condition, with no other associated signs. Clinical examination revealed rounded nodules, the largest of which was 10 cm in diameter, on the chin and under the chin, erythematoviolet in color, hard in consistency, with fine telangiectasias, warm to palpation, painless, infiltrated, fixed in relation to the superficial and deep planes. No palpable cervical, axillary or inguinal adenopathies.

Biopsy of the mass was consistent with a centrofollicular lymphoma of primitive appearance, with positive immunohistochemical anti-CD20, anti-Bcl 2, anti-Bcl 6, anti-CD10 and anti-Ki67 antibodies. Anti-CD3 and anti-CD5 antibodies were negative.

Thoracoabdomino-pelvic CT scans showed no secondary thoracic, abdominal or pelvic localization. The patient was referred to haematology for medical management with R-CHOP polychiomoithérapie combining rituximab, cyclophosphamide, doxorubicin, vincristine and prednisone.

**Conclusion:**

Over half of all cutaneous B-cell lymphomas are primary cutaneous lymphomas of the follicular center. This is a low-grade lymphoma that develops over months or years without spontaneous regression.



**Abstract N°: 5645**

**Could flow cytometry findings be associated with disease stage in Mycosis Fungoides and Sezary Syndrome?**

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**Introduction & Objectives:** Mycosis fungoides (MF) and Sezary Syndrome (SS) are the two most studied primary cutaneous T cell lymphomas (CTCL). To date, the tumor-node-metastasis-blood (TNMB) staging system serves as the major predictor for the prognosis of MF and SS patients with blood classification defined as B0, B1 or B2 using an absolute count of CD4+CD26-, CD4+CD7- or other aberrant lymphocyte population identified by flow cytometry (FC). T regulatory cells (Tregs) are a subset of CD4+ T cells playing a crucial role in the peripheral tolerance. To date, there are no literature data regarding the correlation between peripheral Tregs and MF stage. The aim of this study was to assess the utility of immunophenotyping of peripheral blood using FC in the disease burden of MF and SS. The examined variables were CD4/CD8 ratio, blood classification (B0, B1, B2) and Treg population.

**Materials & Methods:** In total 24 patients (21 with MF and 3 with SS) were included. Peripheral blood samples were taken of the patients during the first visit. The immunophenotyping of T cells was performed with FC using CD45, CD3, CD4, CD8, CD7, CD26, FOXP3 monoclonal antibodies. The Tregs were identified as CD4+,CD25+FoxP3+ T cells and their percentage in CD3+ T-cells was calculated. The association of the variables with disease stage was performed using separation of patients into early staged (stage IA, IB, IIA) and advanced staged (stage IIB,IIA,IIIB, IVA, IVB).

**Results:** From the 24 MF/SS patients, 16 were male and 8 were female with a male:female ratio of 2 and a mean (SD) age of 61.7 (11.6) years. The majority of patients (n=16) had early stage and the rest (n=8) had advanced stage. Regarding blood burden 10 out of 24 patients had B0 disease, 11 out of 24 patients were B1 and 3 patients were B2. The median Treg proportion was 2.8% of CD3+ T cells. The median CD4 to CD8 ratio was 1.8 and 3.3 for early and advanced stages, respectively. The mean percentage proportion of Tregs was similar for early and advanced staged MF, 3.6 and 3.0 respectively. Based on the statistical tests used to compare unadjusted differences between the study groups comparisons as well as after examining, individually for their significance, all variables of interest for their association with stage, no statistically significant association was found. There is an indication that CD4 to CD8 ratio is related. After controlling for possible confounding factors, CD4/CD8 ratio may increase the possibility of developing an advanced stage of MF compared to early stage (OR:1.32, 95%CI: 0.94, 1.85), a finding that is however marginally statistically significant.

**Conclusion:** MF and SS are staged by assessing each of the four disease compartments (skin, blood, lymph nodes and viscera). Validated tools for the assessment of disease burden remain limited. Most patients are diagnosed with an early stage (Stage IA-IIA) while the B0 or B1 classification of blood involvement does not upgrade the disease stage in the early MF. Accordingly, we found no correlation between blood involvement and disease

burden. Our data suggest that the elevated ratio of CD4/CD8 may be related with advanced stage. However, this finding was based upon a relatively small sample of patients. There is an increasing interest regarding Tregs in oncology. However, peripheral Tregs has not been investigated in CTCL. In this study Treg population was not associated with disease stage. Despite its limitations our study supports some of the benefits using FC in MF staging.

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Abstract N°: 5689

**The rare type of mycosis fungoides - case report**Mirjana Bakic\*<sup>1</sup><sup>1</sup>Clinical Center of Montenegro, dermatovenerology, Podgorica, Montenegro

**Introduction & Objectives:** Mycosis fungoides MF is an epidermotropic cutaneous lymphoma of small or medium-sized neoplastic T lymphocytes. It belongs to the group of indolent lymphomas with slow, perennial progression. Clinical manifestations are passed through the stage of the macula, plaques to the development of tumors, erythroderma, lymph nodes, bone marrow, and in later stages, the involvement of visceral organs. Mycosis fungoides is a disease predominately in adult males, although children are occasionally affected. Treatment of mycosis fungoides (MF) is indicated to reduce symptoms, improve clinical appearance, prevent secondary complications, and prevent the progression of the disease, all of which may have an impact on survival. Treatment of MF includes topical and systemic therapies, which can be administered alone or in combination.

**Materials & Methods:** A 33 old year man with the initial changes in the skin of the left thigh in the form of erythematous plaque was treated with local and systemic antimycotics, after the ph findings of the biopsy change-dermis was permeated with inflammatory cells along small cavities coated with a more orphaned epidermis. Such changes may be found in changes caused by fungi. After two months, there were manifestations of disease on the scalp, face and trunk. The patient was hospitalized at the Clinic of Dermatovenerology changes that had persisted for six months in the form of erythematous oval plaques, with an indurated edge of 4-6 cm in diameter, localized on the skin of the zygomatic region to the right, the skin of the periumbilical and the back of the trunk, while on the scalp there were three deep ulcerations, with a diameter of 7 cm reaching the periosteum, with a necrotic edge. The biopsy of change- HP Protocol Number 14004/2022. Histopathological findings were in favor of the primary angular T-cell lymphoma- Mycosis fungoides follicle-tropic variant. After diagnostic examination and diagnosis of T cell lymphoma MF folliculotropic type, the patient was referred to the Center for Hematology, where combination chemotherapy of cyclophosphamide, doxorubicin, vincristine, etoposide and prednisone (CHOEP) was administered, with predicted VI cycles. Radiotherapy and bone marrow transplantation were performed afterward. In the patient, brentuximab vedotin was tried, after the initial improvement, there was an exacerbation.

**Results:** Mycosis fungoides is divided into three stages-premycotic, mycotic and tumor stage. In our case, the patient presented with tumor stage. Atypical lymphocytes, highly mitotic cerebriform nuclei, with the formation of microabscesses were present in the dermis. For advanced-stage MF/SS, systemic treatments by biological or targeted therapies including bexarotene and interferon either alone or in combination are tried first, with more immunosuppressive chemotherapies being reserved for refractory or rapidly progressive disease. Recent improvements in biological or targeted therapies include brentuximab vedotin and mogamulizumab.\*\* Since immunohistochemistry confirmed that the tumor was CD 30 negative, brentuximab vedotin therapy could not be given to our patient

**Conclusion:** When treatments are timely and carried out in the less advanced stages of the disease, the progression of mycosis fungoides can be stopped, entering the remission when the clinical manifestations of the disease disappear.



**Abstract N°: 5725****Atypical fibroxanthoma and pleomorphic dermal sarcoma - A 10-year retrospective study**

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**Introduction & Objectives:** Atypical fibroxanthoma (AFX) and pleomorphic dermal sarcoma (PDS) are neoplasms whose definition has been subject to debate in recent years. Currently, it is argued that they constitute part of the same spectrum of malignant tumors with fibrohistiocytic origin, with PDS being a more aggressive variant with less favorable prognosis.

**Materials & Methods:** Retrospective study of patients diagnosed with AFX or PDS at the Dermatology and Venereology Department of the North Lisbon University Hospital Centre between 2013 and 2023, with description and analysis of demographic, clinical, histological, therapeutic, and evolutionary variables.

**Results:** Twenty-two male patients over 65 years old were identified. In 9 of the patients (39%), personal history of malignant cutaneous neoplasms was identified. Clinically, hyperkeratotic tumors and plaques were identified, with proposed clinical diagnoses of squamous cell carcinoma, basal cell carcinoma, malignant melanoma, atypical fibroxanthoma, primary cutaneous lymphoma, and hypertrophic actinic keratosis. Lesions were located on the scalp (40%), face (31%), ear (18%), shoulder (5%), and hand (5%). Overall, spindle cell neoplasms with marked nuclear pleomorphism, diffuse positivity for CD10 were observed, with several markers used for differential diagnosis with other malignant neoplasms. Subcutaneous invasion, vascular invasion, neurotropism, presence of necrosis, mitosis, and/or ulceration were the criteria used to histologically differentiate AFX/PDS. All patients underwent surgical therapy, with initial incomplete excision in 5 patients (23%), of whom 3 underwent adjuvant radiotherapy (17%). Lymph node metastasis was observed in a single patient, and no cases of distant metastasis were detected. None of the cases resulted in death directly associated with the neoplasm.

**Conclusion:** AFX and PDS are rare malignant neoplasms that often arise in photoexposed areas of elderly male patients. These malignant tumors lack characteristic clinical, histological, or immunohistochemical features, making their diagnosis and management a challenge in clinical practice.




**Abstract N°: 5726**
**Lyme disease associated with cutaneous T lymphocytic infiltration: A real diagnostic challenge**

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**Introduction & Objectives:**

The association between B lymphocytic infiltration and borreliosis has been well described in the literature. However, the association of the latter with cutaneous T lymphocytic infiltration has been rarely reported and poorly elucidated.

The role of *B. burgdorferi* in primary cutaneous T-cell lymphomas and T-cell pseudolymphomas has been the subject of certain studies raising suspicion of its inducing role.

We report a rare case of association of Lyme disease with cutaneous T lymphocytic infiltration posing a diagnostic challenge.

**Materials & Methods:**

A 30-year-old patient, who presented with a pruritic erythematous-violaceous plaque with a centrifugal extension on the left knee associated with inflammatory monoarthralgia that has been evolving for 4 years. Dermatological examination revealed an extensive infiltrated erythematoviolaceous plaque measuring 25 cmx 10cm on the knee and the left thigh surmounted by thick adherent scales. The infectious tests as well as the bacteriological and mycological skin samples were negative. Lyme disease serology was positive for IGG and negative for IGM. Histology and immunohistochemistry showed a dense infiltrate of atypical lymphoid cells in the dermis with epidermotropism and positive CD3, CD4 and CD8. The histological, immunohistochemical features as well as the rest of examinations were in favor of a monolesional mycosis fungoides classified IA. MRI of the knee revealed villonodular synovitis. The patient was treated with doxycycline and topical steroids. Given the extension of the lesion and the appearance of new infiltrated erythematous lesions, a treatment with methotrexate was initiated with good progress.

**Results:**

Mycosis fungoides (MF), the most common cutaneous T-cell lymphoma, usually presents in the early stage as inflammatory erythematous plaques. Over the past decades, many atypical forms of MF have been described. Some authors have therefore identified the disease as a "great imitator". Recently, a form of MF mimicking erythema migrans has been reported. This could be the case for our patient, especially since a positive serology for Lyme disease does not always confirm the diagnosis.

Furthermore, the role of *Borrelia burgdorferi* is interesting, which according to the literature can be associated with certain forms of primary cutaneous lymphomas. A case-control study suggests that the persistence of multiple infectious agents including *Borrelia burgdorferi* may cause long-term antigenic stimulation contributing to malignant transformation of T cells.

According to some authors, *Borrelia burgdorferi* is part of the group of agents capable of causing cutaneous pseudolymphomas and therefore inducing pseudo-mycosis fungoides.

Kampf and al demonstrated that cutaneous borreliosis can sometimes simulate cutaneous T lymphoma. Additionally, an unusual clinical presentation of erythematous plaque borreliosis may further increase the risk of misinterpretation as T-cell lymphoma.

**Conclusion:**

In the case presented, we wonder if it is a mycosis fungoides caused by B.burgdoferi? Or a pseudo-mycosis fungoides following borreliosis? Or if it is a case of T-cell lymphoma pseudoerythema chronica migrans type?

At present, we have retained the diagnosis of mycosis fungoides mimicking lyme disease or triggered by B.Burgdoferi given the extension of the lesions despite an appropriate treatment and the good response to methotrexate.

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**Abstract N°: 5749****Massive cutaneous metastasis from breast cancer, an unusual clinical presentation.**

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**Introduction & Objectives:**

Skin metastasis of breast cancer represents a rare but clinically significant manifestation of advanced disease, with implications for prognosis and treatment. Skin metastases from breast cancer typically present as cutaneous nodules, plaques, or inflammatory lesions, often occurring in areas of lymphatic drainage or surgical scars. These cutaneous manifestations may precede, occur concurrently with, or follow the diagnosis of primary breast cancer.

Skin metastases of breast cancer can occur years after the primary diagnosis and treatment of the primary disease and are often indicative of an advanced neoplastic disease with a poor prognosis.

**Materials & Methods:**

A 72-year-old female came to our attention due to the presence of an ulcerated neoformation of hard-wooden consistency affecting the entire right laterocervical and retroauricular region, extending up to the mastoid region and the mandibular angle with infiltration of the ipsilateral ear. In medical history, the patient reported a history of lobular carcinoma of the left breast, diagnosed in 1996 and treated by quadrantectomy, followed by chemotherapy, radiotherapy and adjuvant hormone therapy for 5 years, with complete remission, maintained during the subsequent regular oncological follow-up. In the clinical suspicion of squamous cell carcinoma of cutaneous origin, the patient underwent a skin biopsy.

**Results:**

Surprisingly, the histological examination highlighted histological findings of poorly differentiated infiltrating carcinoma, compatible with the localization of invasive carcinoma of the breast, and a diagnosis of cutaneous metastasis of breast carcinoma was therefore made. The patient underwent a bilateral mammogram which excluded a new breast primary. Following a multidisciplinary dermo-oncological evaluation, in consideration of the advanced state of the neoplasm, she was started on chemotherapy with a CDK 4/6 inhibitor (ribociclib) associated with an aromatase inhibitor.

**Conclusion:**

In conclusion, skin metastasis of breast cancer represents a complex clinical entity that requires comprehensive evaluation and individualized management strategies. Early recognition of cutaneous manifestations, prompt diagnostic workup, and timely initiation of appropriate treatment modalities are crucial for optimizing patient outcomes.




**Abstract N°: 5766**
**Angiosarcoma of the face with spontaneous regression following biopsy: A case report**

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**Case Report:**

A 66-year-old man attended the dermatology department with a three-month history of an enlarging violaceous and erythematous plaque on his nose. He had no significant past medical history and was on no regular medications.

He had a 20x20mm well-defined violaceous and erythematous plaque on the nasal bridge with two superficial erosions. Dermoscopy showed white perifollicular circles on an erythematous background. The differential diagnosis included lupus pernio, cutaneous lupus, cutaneous lymphoma and angiosarcoma.

A biopsy showed an atypical vascular proliferation dissecting dermal collagen. Immunohistochemistry stained with D2-40 and not with HHV8. The features were consistent with angiosarcoma. Following the biopsy, the patient noted the plaque reduce in size and prominence.

A Computed-tomography(CT) scan of his brain, thorax, abdomen, and pelvis showed no evidence of metastatic disease. Magnetic Resonance Imaging(MRI) of his face showed soft tissue thickening at the right nasal tip with no deep extension into the nasal cartilage or bone.

He underwent a wide local excision with a 2cm excision margin under plastic surgery and was planned for adjuvant radiotherapy. Surprisingly, there were no tumour cells seen on the histology specimen from the wide local excision which demonstrated normal skin only. Adjuvant radiotherapy was not recommended based on the normal histologic results of the excision. He is being followed up regularly by dermatology and plastic surgery, without evidence of recurrence.

**Learning Points:**

1. Cutaneous angiosarcoma(cAS) is an aggressive malignancy arising from vascular or lymphatic endothelial cells and is associated with a poor prognosis. It most commonly occurs spontaneously on the scalp and face of elderly men but can also occur post radiotherapy or in the setting of congenital or chronic lymphoedema.
2. For primary lesions, radical surgery and adjuvant radiotherapy are usually advised.
3. Spontaneous regression of any cancer is a rare phenomenon. However, it has been reported more frequently in certain tumours including neuroblastomas, testicular malignancies, renal cell carcinomas, melanomas, and lymphomas. Spontaneous regression of cAS is an exceptional event.
4. Theories around spontaneous regression include immune stimulation, disruption of the tumour microenvironment, inhibition of angiogenesis, enhanced apoptosis, and epigenetic mechanisms. Some cases of spontaneous remission have been attributed to biopsies.

**Conclusion:**

Cutaneous Angiosarcoma is a rare and aggressive malignancy and spontaneous regression is an exceptional event.

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**Abstract N°: 5789**

## **Artificial Intelligence for Skin Cancer Detection: An Umbrella Review of Meta-Analyses**

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### **Introduction & Objectives:**

Skin cancer represents 32.5% of all diagnosed malignancies, with a global prevalence of 7.96 million cases annually. Early detection is vital for improving outcomes, yet it poses challenges due to the morphological similarities between malignant and benign lesions. Being experience-dependent, even specialists often struggle to achieve sensitivity and specificity levels above 80%, placing considerable strain on healthcare resources. Therefore, Artificial Intelligence (AI) is being explored to assist dermatologists. This study undertook an umbrella review of meta-analyses to evaluate AI's diagnostic accuracy in skin cancer detection, guiding its practical application and future direction.

### **Materials & Methods:**

This umbrella review adhered to the PRISMA guidelines. We concentrated on systematic reviews with meta-analyses to assess the accuracy of AI-based models for screening skin cancers, encompassing both melanomas and non-melanomas. We conducted a comprehensive literature search across PubMed, Web of Science, and Embase databases, including studies published up to April 11, 2024. Two authors independently assessed the quality of the included meta-analyses using the Assessing the Methodological Quality of Systematic Reviews 2 (AMSTAR-2) checklist, supplemented by Cochrane's Grading of Recommendations Assessment, Development, and Evaluation (GRADE) approach to evaluate the certainty of evidence.

### **Results:**

The initial search identified 462 studies, with 7 meta-analyses ultimately selected for inclusion after full-text screening. These studies, from 2009 to 2023, encompassed 492 observational primary studies. Among the meta-analyses, four focused on melanoma, one on non-melanoma, and two addressed both skin cancer types. The accuracy of AI models in detecting skin cancer, based on the study with a higher number of primary included studies on similar modalities, was as follows: The sensitivity for Basal Cell Carcinoma (BCC) was reported as 0.83 (95% CI: 0.77, 0.88), with a specificity of 0.98 (95% CI: 0.96, 0.98). In contrast, the sensitivity of AI models for Squamous Cell Carcinoma (SCC) was lower at 0.603 (95% CI: 0.396, 0.81), with a specificity of 0.933 (95% CI: 0.865, 1.0).

In detecting melanoma among all skin cancers, the sensitivity was 0.842 (95% CI: 0.816, 0.868), complemented by a robust specificity of 0.9891 (95% CI: 0.871, 0.91). When distinguishing melanoma from melanocytic lesions using a combination of diagnostic imaging techniques, the sensitivity and specificity stood at 0.85 (95% CI: 0.82, 0.87) and 0.86 (95% CI: 0.82, 0.88), respectively. Nonetheless, due to substantial heterogeneity among the studies and limited data availability, further statistical analyses could not be executed.

### **Conclusion:**

Our findings indicate promising results in AI model performance, particularly in achieving strong specificity for

melanoma and non-melanoma detection, reducing false-positive results, unnecessary biopsies, and healthcare costs. However, limited focus on real-world application and inadequate reporting hindered our evaluation of clinical utility. Future research should prioritize high-quality primary studies assessing applicability in clinical practice. Therefore, professional oversight remains essential to prevent false diagnoses until AI development reaches maturity.

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**Abstract N°: 5801****Risky surgery avoided: from suspected carcinoma to verrucous psoriasis treated with brodalumab and acitretin, a case report**Pelle Kahr Nilsson<sup>\*1</sup>, Lars Iversen<sup>2</sup>, Henrik Lorentzen<sup>1</sup><sup>1</sup>Odense University Hospital, Dermatology, Odense C, Denmark, <sup>2</sup>Aarhus Universitetshospital, Dermatology, Aarhus, Denmark**Introduction & Objectives:**

Verrucous psoriasis (VP) is a rare variant of psoriasis, often misdiagnosed due to its clinical and histological resemblance to both verrucae vulgaris and verrucous carcinoma (VC). This case report aims to present a challenging instance of VP initially suspected to be VC on the heel, highlighting the necessity of considering medical alternatives in such diagnostic dilemmas.

**Materials & Methods:**

A 73-year-old male with a history of hypercholesterolemia and hypertension presented with a progressively enlarging hyperkeratotic plaque on the left heel, causing significant discomfort and mobility issues. Despite initial management with topical therapy and debridement, the lesion persisted. Biopsies initially revealed papillary squamous cell proliferation without malignancy. However, subsequent biopsies indicated features suggestive of VC, prompting consultation for surgical intervention.

**Results:**

Multidisciplinary discussion cautioned against surgery due to the risk of poor wound healing and potential amputation, given the lesion's location on the weight-bearing foot. Consequently, medical therapy options were explored. The patient was treated with a combination of brodalumab and acitretin, resulting in remarkable improvement. Within two months, complete clearance of the lesion was achieved. However, discontinuation of acitretin led to relapse, underscoring its crucial role in maintenance therapy.

**Conclusion:**

This case underscores the diagnostic challenge in distinguishing between VP and VC, emphasizing the importance of considering non-surgical options in such scenarios. By opting for medical treatment, surgical risks were mitigated, and diagnostic clarity was achieved. This highlights the necessity of a multidisciplinary approach in dermatologic management, particularly when faced with complex diagnostic dilemmas.





**Abstract N°: 5806**

**Prospective Analysis of Reflectance Confocal Microscopy in 1285 Dermatological Lesions: Experience in a University Hospital Setting**

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**Introduction & Objectives:**

Reflectance confocal microscopy (RCM) is a non-invasive diagnostic method that allows real-time imaging of superficial skin layers with quasi-histological resolution. There are several studies that have demonstrated its utility, mainly in controlled clinical settings and oncological dermatology centers; however, there is limited data regarding its usefulness in real clinical practice in uncontrolled clinical settings. The aim of this study is to describe the results and utility of RCM use in a university hospital in an uncontrolled clinical setting.

**Materials & Methods:**

This was a prospective study of consecutive cases conducted between February 2021 and January 2024. Data were extracted from clinical records, RCM reports, and pathology reports. The location of the lesions was described based on Delphi anatomical dermatological consensus. The clinical diagnosis of suspicion and RCM diagnosis with the worst prognosis implicated were considered. In melanocytic lesions diagnosed by histopathology, an additional category MPATH-Dx Version 2.0 was incorporated. Statistical analysis was performed using the RStudio program.

**Results:**

A total of 1285 lesions in 877 patients were studied, 64.08% (562) female and 35.92% (315) male, with a mean age and standard deviation of  $51.1 \pm 18.7$  years (range 0-98 years). The most frequent locations of the studied lesions were cheek (17%), nose (15.4%), and upper back (7.9%). Together, 51.1% corresponded to lesions located on the head. The main clinical referral diagnoses were melanoma (55.59%; 696 lesions), basal cell carcinoma (37.54%; 470 lesions), and squamous cell carcinoma (2.24%; 28 lesions), and the main diagnoses by RCM were nevus (29.34%; 377 lesions), basal cell carcinoma (25.06%; 322 lesions), and melanoma (12.53%; 161 lesions). Overall, a clinical-RCM concordance of 40.42% and 58.6% potentially saved biopsies were obtained. Of the total lesions that were finally biopsied and had histopathological data collected, the RCM-histopathological correlation was 69.7% (283/406 lesions), being even higher for exclusively facial lesions (80%), and when analyzed by subgroups, the concordance for basal cell carcinoma was 92.6% and for melanoma was 36.6% (Table 1). When analyzing the RCM-Histopathological concordance of melanocytic lesions by MPATH-Dx version 2.0, this increased to 54.1%. Of the total lesions without biopsy indication by RCM diagnosis, 45 were biopsied for different reasons and 8 were followed by a new RCM, estimating based on this data an overall negative predictive value for neoplastic lesions of 94.3% (3/53 lesions).

**Conclusion:**

This study evaluates the utility of RCM for daily dermatological practice in a center without exclusive oncological dedication, demonstrating the potential of this tool to save a significant percentage of unnecessary biopsies, with adequate RCM-histopathological correlation, being higher for basal cell carcinoma compared to melanocytic lesions.

**Table 1. Concordance of MCR and histopathological diagnosis for neoplastic and spitzoid lesions.**

	BCC	Melanoma	MPATH-Dx V2.0	Nevus	SCC	Spitzoid lesion
Concordant	200	45	59	16	4	4
Discordant	16	78	50	1	10	0
% Concordance (estimated PPV)	92.6 %	36.6 %	54.1 %	94.1 %	28.6 %	100 %
Estimated sensitivity	98.5 % (200/203)	100 % (44/44)	100 % (64/64) <small>**MPATH &gt; 0 = 2</small>			100 % (4/4)
Estimated specificity	90 % (144/160)	67.1 % (161/240)	71.6 % (161/225)			56 % (5/9)

**BCC:** Basal cell carcinoma; **MPATH-Dx V2.0:** Melanocytic Pathology Assessment Tool and Hierarchy for Diagnosis V2.0; **SCC:** Squamous cell carcinoma; **PPV:** Positive predictive value.

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**Abstract N°: 5811****Neglected Cutaneous Tumors: Ignoring the Obvious**

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**Introduction & Objectives:**

Cutaneous tumors are common and increasing in incidence. Many articles describe cases of advanced cutaneous tumors, referred to as “historical” tumors or neglected tumors. The term “historical tumor” refers to a tumor worthy of preservation in history and medical literature, due to its size exceeding 5 cm, its location, and its evolution.

**Materials & Methods:**

In this case series, we present cases of tumors at an extreme state of neglect, and we discuss patient characteristics, clinical presentations, the factors leading to this neglect, and the significant challenges posed in their treatments.

**Results:**

In response to the question, “Have historic tumors disappeared?” the answer is obviously no: unfortunately, they still form part of the medical landscape. As a result of this tumor neglect, disease progression continues unchecked, resulting in excessive tumor growth, invasion of nearby structures, often metastatic spread, and significant disfigurement. Their management is often complex, and their prognosis rather bleak. Several factors explaining the discovery of such historic tumors can be discussed, notably psychiatric disorders (anxiety, depression, psychotic state), denial, social isolation, low socioeconomic status, absence of symptoms, and the tumor’s slow evolution. Finally, the refusal of care due to fear of treatment side effects seems to be the most determining factor.

The tumors encountered included squamous cell carcinoma, basal cell carcinoma, melanoma, and dermatofibrosarcoma protuberans. Most of the patients lived in rural areas.

These cases required multidisciplinary efforts involved in tumor resection, adjuvant treatments, and the complex reconstructive efforts after tumor extirpation.

**Conclusion:**

“Historic” neglected malignant tumors are a rare but real-life fact. While early management is associated with a good prognosis and less aggressive treatment, these neglected tumors often lead to a detrimental outcome. Therefore, a broader psychological and social evaluation should be conducted.





## Abstract N°: 5813

### Putting AI chatbots to the test: a comparative analysis of large language model performance in the context of basal cell carcinoma

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#### Introduction & Objectives:

Large language models (LLMs) have been explored in various medical settings, including an array of dermatological conditions. For example, the utility of LLM-powered chatbots in advising health care practitioners has been assessed in the context of actinic keratosis where the quality of information was considered inadequate in more than half of all responses.

In this study, we aimed to examine the clinical guidance provided by three contemporary LLMs on clinical questions and scenarios in the context of treatment of basal cell carcinoma (BCC).

#### Materials & Methods:

Four authors formulated 20 questions on clinical management of BCC patients. Questions were entered in all three chatbots (ChatGPT, Co-Pilot, Gemini) with different underlying LLMs (GPT-4, Prometheus, Gemini Ultra 1.0). Their blinded responses were presented to a panel of 9 dermato-oncologists from two hospitals in Denmark for consensus-based assessment of their i) factual accuracy ii) concision and ii) comprehensiveness. In a second step, the panel members were asked to choose their preferred response for each question on an individual basis.

Lastly, the generated responses were quantitatively assessed by measuring response length defined as number of words per response and by calculating lexical (i.e., vocabulary) and semantic (i.e. meaning) similarity based on the BLEU (Bilingual Evaluation Understudy) score and by leveraging an open-source language model, ClinicalBERT, respectively. Similarity scores range between 0 (no similarity) to 1 (identical).

#### Results:

Based on the panel consensus, GPT-4 had the highest accuracy rate of 85% (i.e. 17/20 responses), followed by Gemini (55%) and Prometheus (30%, see *figure 1*). All models scored lower for concision and comprehensiveness but were ranked in the same order, with GPT-4 in the lead (concise 65%, comprehensive 70%), followed by Gemini (15%; 40%) and Prometheus (10%; 20%). The panel also achieved consensus on a preferred model response on 15 questions, expressing a strong preference for GPT-4 (60%), followed by Gemini (10%) and Prometheus (5%).

Response length varied between LLMs, with Prometheus generating shorter responses (mean 203.5 words, SD 50.4) than GPT-4 (mean 304.9, SD 93.0,  $p < 0.00$ ) and Gemini (mean 318.8, SD 68.5,  $p < 0.00$ ).

Comparison of paired responses between the three models showed substantial variation. GPT-4 showed the highest semantic overlap with Gemini of 0.69 (SD 0.09); similarity between Prometheus and Gemini, and between Prometheus and GPT-4 were equally high 0.57 (SD 0.14 and SD 0.13). BLEU scores for lexical similarity were overall

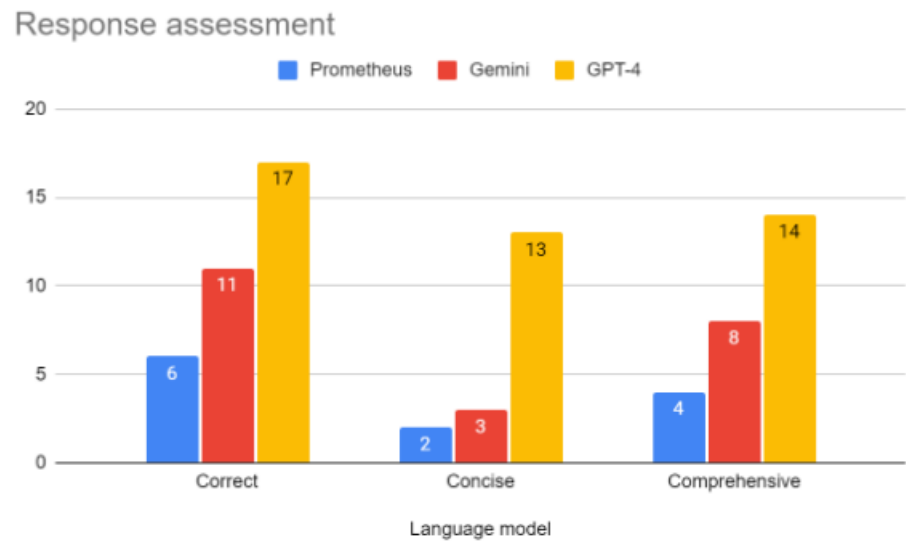


low but showed a corresponding pattern with GPT-4 and Gemini showing higher similarity than comparisons with Prometheus (see figure 2).

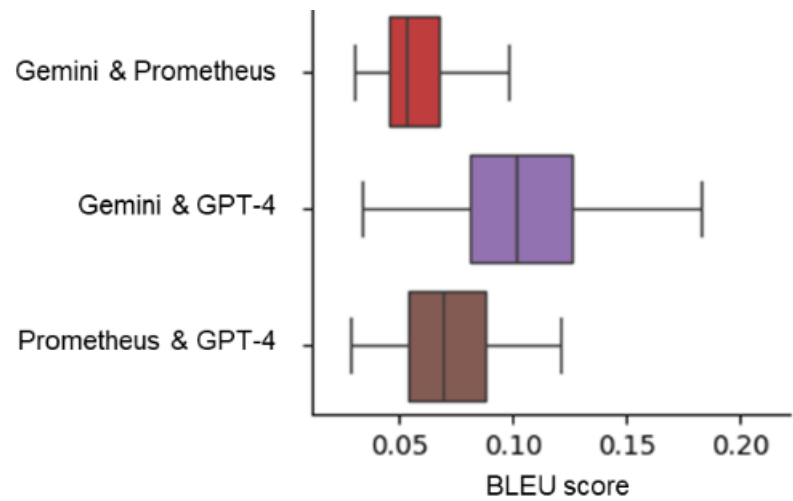
**Conclusion:**

Despite substantial semantic overlap, GPT-4 outperformed both Gemini and Prometheus in providing correct, concise, and comprehensive responses to clinical questions on the treatment of BCC. While more research is needed before chatbots can be responsibly implemented in clinical practice, LLMs are rapidly developing into potential clinical decision support systems.

**Figure 1:** Consensus-based assessment of LLM responses to 20 questions on the treatment of BCC.



**Figure 2:** BLEU scores describing the lexical similarity of paired LLM responses to questions on the treatment of BCC. (0= no similarity, 1= identical)





**Abstract N°: 5816**

**Aggravation of Plaque Lesions After Bnt162b2 Vaccination in a Patient with Psoriasis: Cd30 (+) Mycosis Fungoides with Large Cell Transformation**

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**Introduction**

The diagnosis of mycosis fungoides is frequently challenging. Here, we report a long-term psoriasis patient who had an exacerbation of skin eruptions after vaccination with BNT162b2, who was diagnosed with CD30 + transformed mycosis fungoides.

The main objective of presenting this case is to highlight the diagnostic controversy between inflammatory skin diseases and mycosis fungoides and to discuss the potential relationship of the BNT162b2 vaccine with these disorders.

**Case**

A 58-year-old male patient presented with scattered erythematous, squamous plaques on the scalp, back, buttocks, anterior trunk, and bilateral extremities. Approximately three years after the fourth dose of the BNT162b2 vaccine, the patient developed brown-red plaque lesions on the anterior surface of the right leg. These lesions were evaluated as a post-vaccination exacerbation of psoriasis vulgaris and treated with topical agents and acitretin for one year. Following an inadequate response, the patient received methotrexate 15 mg/week for seven months. However, the patient discontinued the follow-up and received topical alternative medicine methods for six months. During this period, the lesions demonstrated a worsening course. The physical examination revealed psoriasiform plaques with erosions, ulceration, impetiginization, and early tumoral lesions on the plaques, which differed from his previous examinations.

Multiple biopsies were obtained from different lesions. The histopathologic examination reported "extensive band-like lymphoid infiltration in the epidermis, occasionally accompanied by large atypical lymphocytes, with epidermotropism in several areas". The immunohistochemical study demonstrated that the infiltration was CD4+, CD2+, CD20-, CD19-, CD30+, and the CD4/CD8 ratio was significantly increased.

The patient's skin findings rapidly increased during the one-month follow-up period, evolving into erythroderma. Peripheral blood flow cytometry findings were consistent with B2-stage disease involvement. The patient was diagnosed with stage IVA2 (T3N3B2) mycosis fungoides with large cell transformation and was subsequently followed up in the intensive care unit. After 1,5 months with the histopathologic diagnosis of MF, the patient died due to a resistant CMV infection.

**Conclusion**

Cutaneous T-cell lymphoma requires a multidisciplinary approach, and early diagnosis is essential to ensure an effective management strategy. mRNA vaccines like BNT162b2 contribute to the triggering of lymphomas as well as inflammatory diseases by antigenic stimulation.

With this case report, we aim to raise awareness of the need for biopsy and further evaluation for cutaneous

lymphoma in patients with psoriasis in the absence of clinical response to appropriate systemic treatment, or even worsening of lesions despite treatment, or changes in lesion morphology in psoriasiform and psoriatic plaques accompanied by erosion, ulceration, and impetiginization.

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**Abstract N°: 5831**
**Application of a diagnostic algorithm for hypopigmented mycosis fungoides: A retrospective cohort study**

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**Introduction & Objectives:**

Hypopigmented mycosis fungoides (HMF) is a subtype of mycosis fungoides (MF) that most often presents with hypopigmented patches over sun-protected areas in patients with skin of color.<sup>1</sup> Although the prognosis of HMF is better compared to other MF variants, early diagnosis is imperative to establish treatment. Diagnosis is typically based on clinical criteria and pathology showing epidermotropism with atypical lymphocytes.<sup>2</sup> A diagnostic algorithm for early MF, with scoring based on clinical, histopathologic, molecular, and immunohistochemical criteria, was introduced by The International Society for Cutaneous Lymphoma (ISCL) and requires a score of 4 to establish the diagnosis of early MF; however, it has not been evaluated in HMF patients and thus is the goal of this retrospective study.

**Materials & Methods:**

Data from patients 18 years or older with an ICD-10 code of 84.X were reviewed from Tulane clinics (New Orleans, USA) with IRB approval. 33 patients diagnosed with stage IA or IB hypopigmented MF were included.

**Results:**

The majority were female (n=26/33, 78.8%) with a median age of 49 years. Patients identified as Black (n=24/33, 72.7%) or Latino (n=6/33, 18.2%), with race unknown in 3 patients (9.1%). Of the 33 study patients, 27 had biopsy results available for review (81.8%). Using the ISCL's scoring algorithm, patients received a score of 3 (n=11/27, 40.8%), 4 (n=13/33, 48.1%), or 5 (n=3/27, 11.1%). Most patients satisfied clinical criteria (2 points each, n=25/27, 92.6%) and all received partial (n=14/27; 51.9%) or full scoring (n=13/27; 48.1%) for histopathologic criteria. Fewer patients received points for T-cell receptor (TCR) rearrangement/molecular (n=6/33, 22.2%) or immunopathologic criteria (n=2/27, 7.4%).

**Conclusion:**

Using ISCL's diagnostic algorithm, all patients received a score ranging from 3-5 (mean=3.70); however, 11/27 included patients would not have been diagnosed with early MF. Almost all patients received diagnostic points for clinical criteria. Patients received points far less in TCR rearrangement/molecular scoring with only 16/33 patients having results available for review. Furthermore, most pathology reports did not quantify immunohistochemical cell surface marker expression to meet immunopathologic criteria (n=20/27), which is a major limitation of this study. Future studies should focus on establishing a standardized diagnostic algorithm specific for HMF patients.

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**Abstract N°: 5835**

**Primary and Secondary Grzybowski's Generalized Eruptive Keratoacanthoma: A New Perspective on Case Management, Clinical Features, and Prognosis**

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**Introduction & Objectives:** Grzybowski's generalized eruptive keratoacanthoma (GEKA) is a very rare variant of keratoacanthomas with only 63 cases documented. It is characterized by hundreds to thousands of keratoacanthomas, usually accompanied by pruritus and multiple comorbidities and a decreased quality of life. The aim of our study was to conduct a review of the literature of all cases published and determine an updated guide of the disease.

**Materials & Methods:** We conducted a literature review of all cases published between 1950 and the 21st of March 2024, following the Preferred Items for Systematic Reviews and Meta-Analysis reporting guidelines. Overall, 143 articles were screened, and 57 articles were included.

**Results:** A total of 63 cases were found, with a 3:2 female to male predominancy. We observed that 40 patients had no significant medical history while 23 had significant comorbidities such as cancer (10/23, 43%), autoimmune disorders (9/23, 39%), renal impairment (6/23, 26%), uncontrolled hypertension (8/23, 35%), and other (4/23, 17%). Based on medical history, we divided them into primary and secondary GEKA both with different characteristics.

For primary GEKA, the overall first symptom was eruptive tumors (16/40, 40%), and average time to diagnosis of 4 years. Complications are more severe with a higher resistance to treatment, ectropion (18/40, 45%), mucosal involvement (17/40, 42%), scarring (13/40, 32%), and the mask sign (8/40, 20%). Only 14/38 (37%) had a full or partial response and 24/38 (63%) had no response to treatment.

For secondary GEKA the overall first symptom is pruritus (8/23, 35%), and an average time to diagnosis of 7 months. Complications are less severe and frequent, ectropion (5/23, 22%) and mucosal involvement (6/23, 26%), scarring (2/23, 9%), and the mask sign (4/23, 17%). Response is significantly improved ( $p=0.0007$ ) with 17/20 (85%) cases remitting fully or partially and only (3/20, 15%) cases with no response.

The main complaint for both variants is pruritus with 24/40 or 60% for primary and 9/23 or 39% for secondary GEKA. Although primary GEKA tends to have a more severe form (6/40 or 15% vs 1/23 or 4%). Primary GEKA with the main complaint of pruritus 18/24 or 75% had eruptive tumors as the first symptom while the secondary GEKA had 5/9 or 56% pruritus as the first symptom. Clinical description tends to be similar although plaque formation is not described in secondary GEKA.

**Conclusion:** Considering the differences in clinical background, first signs and symptoms, complications and prognosis, we propose the classification of Grzybowski's syndrome in primary and secondary acknowledging the differences between the clinical and prognostic outcome.





**Abstract N°: 5836**

**A case of rare borderline tumor – pigmented epithelioid melanocytoma**

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**Introduction & Objectives:**

We present a case of pigmented epithelioid melanocytoma (PEM). This term describes a rare low-grade melanocytic tumor with frequent regional lymph node involvement.

**Materials & Methods:**

We report a case of PEM in a young patient and discuss its clinical, histological and dermoscopic features.

**Results:**

14-year-old patient presented to our outpatient clinic with a lesion on his shoulder, which appeared several years ago and currently started changing in colour. He had no previous comorbidities and familial medical history revealed cutaneous neoplasms. Clinical examination revealed a 6 x 9 mm, black-brown papule on the right shoulder. Dermoscopy findings include shiny white streaks in the center of the lesion, white dots, and gray veil. The lesion was surgically excised, histology report was consistent with pigmented epithelioid melanocytoma – a lesion formed of epithelioid and elongated melanophages, melanocytes with slight pigmented cytoplasm and nuclei varying in size. There was a melanocytic component in epidermal-dermal junction with abundant melanophages. Immunohistochemical staining with MelanA and S100 were positive, BAP1 reaction was present, while BRAF reaction was non-conclusive (although it was difficult to evaluate due to heavy melanin staining). Regional lymph node and internal organ ultrasound showed no findings.

**Conclusion:**

PEM is a rare, pigmented, borderline, melanocytic tumor. Regarding treatment, the primary lesion should be completely excised with safety margins to reduce recurrence, as it was done in this case. However, due to the low-grade nature of PEM, wide local excision according to Breslow depth, as in melanoma treatment, is not standard and was not performed in our case. Regional lymph node involvement is described in literature, but its malignant potential or further metastases are not common, so sentinel lymph node biopsy is not indicated.





**Abstract N°: 5887****Rosai-Dorfman Disease with Cutaneous Presentation: A Case Report**

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**Introduction & Objectives:**

Rosai-Dorfman disease (RDD) is a benign non-Langerhans cell histiocytosis primarily characterized by lymph node involvement.

Extra-nodal manifestations, particularly skin involvement (16%), often present with nonspecific clinical features.

Here, we describe a case of RDD with cutaneous manifestation in a young adult.

**Materials & Methods:**

A 25-year-old man with no significant medical history presented a skin pattern of progressive installation over 08 months of papulo-nodular lesions that had progressively evolved into numerous 3 to 6 cm long, painless erythematous-violaceous tumors with a nipple surface localized on the back and face. The rest of the clinical examination was uncommon.

There was a biological inflammatory syndrome. Immuno-electrophoresis eliminates monoclonal dysglobulinemia. The blood formula count was normal. Serologies of HIV, HBV, HCV were negative, as well as intra-dermo-reaction to tuberculin

Bacteriological, mycological and parasitological samples were negative.

The chest X-ray was normal. Ultrasound of the lymph node areas revealed the presence of left axillary lymphadenopathy, the largest of which measured 23 mm. The abdominopelvic ultrasound was uncommon.

Histological examination of a skin biopsy revealed an intense dermal inflammatory infiltrate rich in polymorphonuclear cells, lymphocytes, plasma cells, and histiocytes with abundant eosinophilic cytoplasm and signs of haematophagocytosis. Immunohistochemistry showed histiocytes positive for S100 protein and CD68+, and negative for CD1A-, confirming the diagnosis of Rosai-Dorfman disease.

An observation alone approach treatment was adopted for our patient.

**Results:**

Rosai-Dorfman disease primarily affects young adult males with an average age of 20.6 years, consistent with our patient.

Clinically, 85% of patients present with massive lymphadenopathy at diagnosis, mostly cervical, with axillary involvement in 38% of cases.

Extra-nodal involvement, seen in 43% of cases, mainly affects the skin, showing a nonspecific polymorphic appearance of lesions and ubiquitous localization.

The anatomopathological study is identical regardless of the location of the lesions; in immunohistochemistry, the

positivity of markers S100, CD163, CD68, macrophagic markers, and the negativity of CD1a confirms the diagnosis.

Our patient presents a misleading clinical appearance made mainly of skin lesions without palpable lymph node involvement at the time of diagnosis, thus discordant with literature findings and the absence of other systemic involvement.

Histological examination with the positivity of S100 protein and negativity of CD1a helped confirm the diagnosis and exclude Langerhans cell histiocytosis.

Classic care consists of monitoring the disease and refraining from medication due to the very frequent spontaneous regression of symptoms except in disseminated forms or in the cases of compressive lymphadenopathies in our observation spontaneous regression of lesions occurred after 4 months.

### **Conclusion:**

The dermatological manifestations of Rosai-Dorfman disease are polymorphic sometimes revealing the disease; only the histological study with immunohistochemistry would confirm the diagnosis and adopt an adequate conduct.

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**Abstract N°: 5895****Interleukin-17A derived from mast cells promotes Cutaneous Squamous Cell Carcinoma Growth and Migration**

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**Introduction & Objectives:** Cutaneous squamous cell carcinoma (cSCC) arises from differentiated epithelial keratinocytes and is the second most common skin cancer. Interleukin -17A(IL-17A) is a key proinflammatory cytokine that either enhance or inhibit the growth of tumors, depending on the system. It has been reported that IL-17A is mainly produced by immune cell populations other than T cells in cSCC. However, their source and precise mechanism in cSCC remains unclear.

**Materials & Methods:** The patients with cSCC were enrolled, the main source cells of IL-17A in SCC tissues were explored by double immunofluorescence staining, also the correlation between IL-17A and SCC grade was evaluated. The effect of IL-17A on the proliferation and migration of cSCC lines SCL-1 and HSC-1 in vitro were investigated.

**Results:** We found a significantly higher IL-17 expression in SCC tissue and correlated with poor tumor grade. The IL-17A in SCC is mainly derived from mast cells, not T cells. HSC-1 and SCL-1 treated with IL-17 in vitro obtained increased proliferation and migration ability.

**Conclusion:** IL-17A derived from mast cells contributes to tumor cell growth and migration in cutaneous squamous cell carcinoma, which should be further investigated in tumor immunity.



**Abstract N°: 5931****A spontaneous diagnosis of tumoral melanosis**Niyaz Mostafa<sup>\*1</sup>, Erin Mullan<sup>2</sup>, Tevi Wain<sup>3</sup><sup>1</sup>St George Dermatology & Skin Cancer Centre, Kogarah, Australia, <sup>2</sup>Delta Dermatology, Kingsford, Australia,<sup>3</sup>Royal Prince Alfred Hospital, Camperdown, Australia**Introduction & Objectives:**

A 78-year-old Caucasian male from Coffs-Harbours presented with an evolving pigmented lesion on his back. There were no associated symptoms including weight loss, fevers or night sweats. His past medical history was significant for non-melanoma skin cancers and advanced macular degeneration, requiring regular ophthalmic steroid injections. He is currently being considered for systemic immunosuppression for his advanced macular degeneration.

**Materials & Methods:**

On examination there was a 2cm irregular, blue-black lesion with white and pink colours. On dermoscopy it had structureless areas, pseudopods and a blue-black veil. On his left paraspinal-back there was an atypical junctional appearing naevus and 5 papules over his left back and chest that were blue-black in colour. There was another pigmented lesion over his left shoulder, suspicious for melanoma. There was no appreciable lymphadenopathy.

**Results:**

On initial review, an excisional biopsy of the right upper back, left paraspinal-back and left shoulder lesions was performed. Biopsies demonstrated tumoral melanosis, melanoma in-situ (MIS) and pigmented bowen's disease respectively. He was immediately referred to a tertiary dermatology centre for further investigation and related oncological management. Given the high risk of tumoral melanosis to be associated with metastatic melanoma, a PET scan was performed. Fortunately, the scan was negative for metastatic lesions. Further punch biopsies were performed of the 5 blue-black papules, investigating for any confirmation of cutaneous metastases. These were all negative for melanoma and he has been promptly referred for surgical excision of his primary and associated lesions with potential sentinel node biopsy. His lesion was surgically removed and then commenced methotrexate. Unfortunately he developed another melanoma in situ 12 weeks after commencing treatment.

**Conclusion:**

Our case is unique as there is presently no evidence surrounding the safety of future immunosuppression use after initial diagnosis of tumour melanosis. Caution and close monitoring is recommended before proceeding with any relevant systemic treatments.



**Abstract N°: 5947****Melanoma metastases to the scalp : A case series**Anagha Kumar<sup>\*1</sup>, Svetomir Markovic<sup>2</sup><sup>1</sup>Mayo Clinic, Dermatology, Rochester, United States, <sup>2</sup>Mayo Clinic, Medical Oncology, Rochester, United States**MELANOMA METASTASES TO THE SCALP- A CASE SERIES****Introduction & Objectives:**

The scalp is an infrequent site for metastasis of melanoma. Our aim was to describe the clinical features, treatments, and prognosis of patients with melanoma that developed scalp metastases at our institution.

**Materials & Methods:**

This is an Institutional review board exempt retrospective chart review of patients with melanoma who had developed biopsy proven metastases to the scalp between 2012-2022.

**Results:**

We had 13 patients in the study that included 8 (61.5%) women and 5 (38.5%) men. The median age at diagnosis of melanoma was 65 (33-86) years. Nine (69.2%) primary melanomas were on the head and neck, 1 (7.7%) tumor on the upper extremity, 1 (7.7%) on the lower extremity, 1 (7.7%) on the scrotum and 1 (7.7%) was a choroid melanoma. The median Breslow depth of the primary tumor was 1.2 (0.23-5.2) mm. Among the primary melanomas, 4 (30.7%) were of superficial spreading subtype, 3 (23%) were lentigo maligna, 1 (7.7%) had features of both superficial spreading and lentiginous subtype, 1 (7.7%) was a desmoplastic melanoma, 1 (7.7%) was a choroidal melanoma and 3 (23%) were classified as unidentified subtype. Among primary tumors with staging available, 2 (15.4%) were T1a, 1 (7.7%) was T1b, 2 (15.4%) were T2a, 3 (23%) were T3a, and 1 (7.7%) was T4a. Four tumors (30.7%) had a c-kit mutation, 2 (15.4%) had BRAF mutation, 2 (15.4%) had GNA 11 mutation, 2 (15.4%) had NRAS mutation, and 1 (7.7%) patient had deletions in BRCA-1 (non-germline), ARID2, ATM, CDK12, and CHEK. Median time to development of scalp metastases from diagnosis of primary melanoma was 16 months (6-99). Ten primary melanomas were treated with wide local excision, 1 with Mohs micrographic surgery, 2 received adjuvant immunotherapy with Nivolumab and 1 patient received adjuvant radiation therapy. The patient with choroidal melanoma was treated with brachytherapy. Two (22.2%) of 9 patients who underwent sentinel lymph node biopsy had a positive sentinel lymph node. Three (23%) patients had their scalp metastases treated with surgical excision. Twelve (92.3%) patients received immunotherapy; 5 (38.5%) patients underwent chemotherapy. At the time of last follow up, 3 (23%) patients had died due to progression of melanoma. Median time from diagnosis of melanoma to last follow up or death 36 (12-150) months and the median time from diagnosis of scalp mets to last follow up or death 24 (1-64) months.

**Conclusion:**

Melanomas with metastases to the scalp are associated with poor outcomes. Further studies are needed to evaluate patients who are at higher risk of developing metastases to the scalp and develop more efficacious treatments.


**Abstract N°: 5969**
**What is the quality-of-life impact of basal cell carcinoma in older patients? A multicentric cross-sectional study.**

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**Introduction & Objectives**

Basal cell carcinoma (BCC) is the most frequent tumour worldwide and incidences are rising rapidly.(1) BCC mainly causes harm by invading surrounding tissues. There is an important knowledge gap concerning the impact of BCC on the health-related quality of life (HrQoL) and limited data reported contradicting results.(2-4) Measuring HrQoL in BCC patients should be done using disease-specific questionnaires such as the Basal and Squamous cell carcinoma Quality of Life (BaSQoL) questionnaire.(5) This study assesses the BCC-related HrQoL and examines all patient, tumour and treatment characteristics to identify the most relevant factors. We focused on older BCC patients because of the often complex treatment decisions in this subgroup.

**Materials & Methods**

Patients  $\geq 18$  years with a history of BCC consulting 4 medical centers were asked to fill in the BaSQoL questionnaire, containing 5 subdomains. Multivariable analyses were done using a generalized additive model (GAM), incorporating non-linear functions.

**Results**

Four hundred BCC-patients (median age of 66) were included. Mean BaSQoL subscores were 0.78 (SD 0.63) for 'behaviour', 1.01 (SD 0.73) for 'diagnosis&treatment', 0.90 (SD 0.73) for 'worries', 0.40 (SD 0.63) for 'appearance' and 1.20 (SD 0.75) for 'other people', illustrating the low/moderate impact of BCCs on the HrQoL. A GAM with subsequent ANOVA testing was done for all variables. In 4 out of 5 BaSQoL subdomains 'age' showed a significant correlation with the BaSQoL score ('behaviour'  $p=0.007$ ; 'diagnosis & treatment'  $p=0.026$ ; 'worries'  $p=0.003$ ; 'appearance'  $p=0.008$ ). Lower BaSQoL scores were seen in older patients, meaning less BCC-impact on their HrQoL. There was a clear non-linear correlation between the BaSQoL scores and the age (figure 1), demonstrating the impact\* of BCC on the HrQoL shows a rapid decrease starting around the age of 70.

**Conclusion**

This study is the first to illustrate the relation between the BCC-related HrQoL and the age of patients with the use of a disease-specific HrQoL instrument. We found a lower BaSQoL score in older adults, with a specific group of interest starting around the age of 70-75. This is an argument for a more conservative strategy for BCCs in these patients.

**Figure 1.** BaSQoL total score in relation to the patients' age

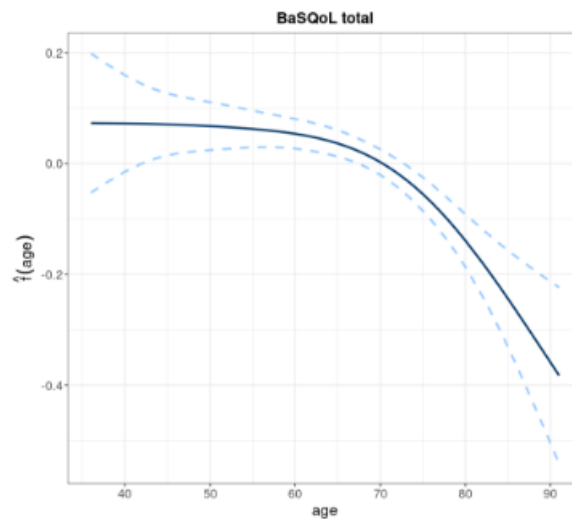


Figure 1. BaSQoL total score in relation to the patients' age

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**Abstract N°: 5970****The role of imatinib in neoadjuvant treatment of Dermatofibrosarcoma Protuberans**

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**Introduction & Objectives:**

Dermatofibrosarcoma Protuberans (DFSP) is a rare mesenchymal tumor characterized by a tendency for deep extension beyond palpable limits and a high risk of local recurrence. Surgical excision, even with tissue-sparing techniques, can result in significant deformity or disability. We report the case of a patient with locally advanced DFSP who received neoadjuvant therapy with imatinib prior to surgical treatment with good outcome.

**Materials & Methods:****Results:**

A 30-year-old patient with no previous pathological history consulted us for a painless, progressive tumour of the trunk that had been evolving for two years. Clinical examination revealed an indurated, infiltrated, non-ulcerated, brownish plaque measuring 17 cm, with two sessile, flesh-coloured nodules located in the right basithoracic region. The rest of the examination was normal. A skin biopsy revealed a mesenchymal proliferation of spindle cells arranged in irregular bundles in a storiform pattern. Intense and diffuse immunostaining of tumour cells with the anti-CD34 antibody confirmed the diagnosis of Dermatofibrosarcoma Protuberans. A soft tissue MRI was performed, showing infiltration down to the aponeurosis of the rectus abdominis muscle. A thoraco-abdomino-pelvic CT scan was performed and showed no secondary localizations. Given the large size of the tumour and its infiltrative nature, the patient was treated with oral Imatinib 400mg daily for 06 months. Progression was marked by a reduction in tumour size of around 70%, with nodule subsidence and plaque disinfiltration.

**Conclusion:**

DFSP is an indolent soft-tissue tumor. It occurs most frequently on the trunk and extremities, and less frequently on the head and neck. It presents as indurated, flesh-colored or erythematous, ill-defined plaques, within which nodules may appear. The tumor often extends well beyond the clinically apparent margins, infiltrating through local extension into the dermis, subcutaneous tissue, fascia and even muscle. It has a high rate of local recurrence, but rarely metastasizes. Excision by Mohs micrographic surgery (MMS) is the standard treatment for DFSP. However, given its infiltrative nature, resection can be difficult and associated with significant deformity or disability. In difficult cases, neoadjuvant treatment with oral imatinib, a molecular analog of adenosine triphosphate, can reduce the tumor mass and decrease extension, enabling smaller surgical excision margins and a better overall outcome. Imatinib has been successfully used to treat unresectable and metastatic lesions, as well as locally advanced or recurrent DFSP. Larger prospective studies are needed to confirm and develop our findings.



**Abstract N°: 6022****Kaposi Sarcoma in an HIV-Positive Patient Treated Palliatively with Liquid Nitrogen Cryotherapy**Hasmik Gazazyan<sup>1</sup>, Nikolay Tsankov<sup>1</sup><sup>1</sup>Acibadem City Clinic Tokuda Hospital , Dermatology and Venereology , Sofia, Bulgaria**Introduction:**

HIV-associated Kaposi sarcoma is one of the AIDS-defining conditions. It is one of the most common cancers in HIV-infected individuals, especially among men who have sex with men (MSM). We present a clinical case of an HIV-positive patient presenting with Kaposi sarcoma.

**Results:**

A 49-year-old male patient presented with a 2-month history of asymptomatic nodular lesions, that first developed over the lower extremities and gradually spread over the entire body, including the genitalia and perianal region. The patient reported a significant loss of weight, lethargy, and malaise 4 months prior to the onset of the lesions.

Dermatological examination revealed multiple well-defined, violaceous nodules of variable size affecting the entire body. There were no pathological changes over the oral mucosa. The patient denied intravenous drug abuse or a history of blood transfusion. He admitted to having unprotected sex with men on multiple occasions in the past.

Laboratory investigation including complete blood count, renal and liver function tests were all within the normal range. Serum VDRL and TPHA were negative. HIV serology showed positive results. A biopsy from the lesion was taken and histopathological examination confirmed the diagnosis of Kaposi Sarcoma.

Highly active antiretroviral therapy (HAART) was initiated. Cryotherapy was applied for local therapeutic management of the lesions at 2-week intervals. After 3 sessions there was a significant regression of the lesions, with postinflammatory hyperpigmentation.

**Conclusion:**

Kaposi sarcoma is still one of the most common cancers in HIV-positive patients. The primary therapeutic options are controlling HIV replication with long-term antiretroviral therapy, however the lesions can be very distressing for the patients and lead to decreased quality of life, especially when they are located on exposed areas. Local therapies, such as cryotherapy, can be used in combination with antiretroviral medications to improve the symptoms of the patients. With this case we present the effective clinical response of Kaposi sarcoma lesions to cryotherapy.



**Abstract N°: 6028****Squamoid Eccrine Ductal Carcinoma: Clinical and Histopathological Findings in a Series of 3 Cases**Ina Tudurachi<sup>1</sup>, Alessia Guidotti<sup>1</sup>, Mauro Alaibac<sup>1</sup>, Stefano Piaserico<sup>1</sup><sup>1</sup>University of Padua, Department of Medicine, Padua, Italy**Squamoid Eccrine Ductal Carcinoma: Clinical and Histopathological Findings in a Series of 3 Cases**

**Introduction & Objectives:** Squamoid eccrine ductal carcinoma (SEDC) is a rare cutaneous adnexal tumor originating from the eccrine apparatus, characterized by a biphasic differentiation pattern on histopathology. Its superficial component resembles well-differentiated squamous cell carcinoma (cSCC), while the deeper component exhibits infiltrative features with prominent ductal differentiation. Despite its rarity, accurate diagnosis is critical due to SEDC's aggressive behavior, including local invasion, perineural and intravascular spread, and high potential for recurrence and metastasis. Unfortunately, nearly half of reported cases are initially misdiagnosed, often confused with squamous cell carcinoma (SCC).

Clinically, SEDC typically presents as solitary nodules or plaques, occasionally ulcerated, predominantly located in the head and neck region, though extremity involvement is also reported. It primarily affects elderly individuals, particularly males, and is more prevalent in immunocompromised patients.

**Materials & Methods:** We present three cases of SEDC observed at our Dermatology Clinic, all in elderly males (age 60, 84, and 90 years) with a history of actinic keratosis and prior excisions of basal cell and squamous cell carcinomas. Clinically, two cases manifested as ulcerated plaques, while one presented as a dyskeratotic nodule on the head. The preferred therapeutic approach involved radical surgical excision in two cases, while radiotherapy was performed in the third case due to patient age, medical history, and preference. In this last case, subsequent surgical intervention was necessary due to incomplete response to the treatment.

**Results:** It is noteworthy that none of the cases showed evidence of regional or distant metastases. However, vigilance is essential due to the potential for recurrence and dissemination, necessitating long-term follow-up. The lack of a standardized treatment protocol for SEDC underscores the need for further research into its biological behavior and optimal therapeutic strategies. While excision and Mohs surgery have shown efficacy, Mohs surgery appears superior in reducing recurrence rates compared to wide local excision.

**Conclusion:** In summary, SEDC poses diagnostic challenges due to its rarity and histopathological complexity. Early and accurate diagnosis, coupled with appropriate management strategies, is crucial for optimizing patient outcomes and minimizing the risk of recurrence and metastasis.





Abstract N°: 6046

**Basal Cell Carcinoma in Non-Photoexposed Areas: A Single-Center Retrospective Study**

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**Introduction & Objectives:** Basal cell carcinoma (BCC) is the most common malignancy, accounting for over 50% of all non-melanoma skin cancers. It typically presents in photoexposed areas, with ultraviolet radiation as the primary factor. Other independent risk factors include advanced age and male gender. Approximately 0.2% of BCCs are in the genital and perianal areas. In this location, potential risk factors include previous radiotherapy, chronic pruritus, papilloma virus infection and immunosuppression. There is no data on the frequency and characteristics of BCC in other unexposed locations such as axillae, palms or soles. This study aims to analyze BCC characteristics in non-photoexposed areas at our center.

**Materials & Methods:** This was a single-centre retrospective study that included all patients with a biopsy-confirmed BCC in non-photoexposed areas. The search was conducted through our pathological anatomy database. Search terms used included “vulva”, “vulvar lip(s)”, “pubis”, “perine(al)”, “genital”, “scrotum”, “penis”, “perianal”, “axilla”, “palm”, “sole”, “fingers”, “toes” and “buttocks”. Data collected for each case included age, sex, prior and subsequent neoplasms, previous dermatoses in the area, genetic syndromes or immunosuppression, location, histological size and subtype, initial treatment, reinterventions needed, recurrences, and the specialist who treated them.

**Results:** A total of 64 BCCs in 62 patients were included, with an average age of 75.1 years (range 40-95) at diagnosis. Seven of them (10.9%) had prior dermatoses in the area. None had a history of radiation or immunosuppression, and one had Gorlin syndrome (1.6%). The most common location was the axilla with 21 cases (32.8%), followed by the vulva with 12 cases (18.8%), buttocks with 11 cases (17.2%) pubic area with 7 cases (10.9%), perianal area with 5 cases (7.8%), scrotum with 4 cases (6.3%), fingers with 3 cases (4.7%), and sole with one case (1.6%). The most common histological subtype was nodular (64%), with an average histological size of 13.7 x 11 mm (range 2- 45). Most cases were treated with simple excision (93.8%), three with vulvectomy (4.7%), and in one case therapeutic abstention was chosen. Reintervention was only necessary in 6 cases (9.5%) and recurrence occurred in just one case (1.6%), which was located on the sole. Most of cases (75%) were managed by dermatologists, 9 by gynaecologists (14.1%), 6 by general surgeons (9.4%), and one by plastic surgery (1.6%).

**Conclusion:** Basal cell carcinomas located in non-photoexposed areas are rare and their characteristics are poorly studied. They show clinical, histological and treatment heterogeneity. The risk factors for BCCs in these areas differ from those in sun-exposed areas. Understanding these factors can help in prevention or early diagnosis. It has been shown that most BCCs arise from interfollicular epidermal cells. However, this does not explain BCC formation in palms and soles. For this group of tumours, an origin in eccrine progenitor cells has been suggested. Despite its rarity, dermatologists must keep in mind BCCs in non-photoexposed areas when examining patients.



**Abstract N°: 6048****The application of High Frequency Ultrasonography (HF-USG) in monitoring the photodynamic therapy treatment efficacy of actinic keratoses and field cancerization.**

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**Introduction & Objectives:**

Actinic keratoses (AK) are pink, scaly plaques that usually occur on the face, scalp, dorsum of the hands, and other sun-exposed areas in elderly patients with fair skin phototypes and are associated with a phenomenon called field cancerization and a higher risk of cutaneous squamous cell carcinoma. Therefore, treating actinic damage is extremely important to prevent transformation to an invasive lesion.

Photodynamic therapy (PDT) is a recommended treatment modality in AK and field cancerization. After photosensitizer application and incubation period, the lesions are targeted with a red (630nm) or blue (417nm) light source which in the presence of oxygen, determine the generation of cytotoxic molecules that lead to the destruction of neoplastic cells.

Ultrasonography is a widely used non-invasive diagnostic method in medicine. High-frequency ultrasonography (HF-USG) allows visualization of the superficial layers of skin, appendages, and subcutaneous tissue.

**Materials & Methods:**

We included 40 male and female patients aged 53 to 89 years old (mean age 73,42; 72.5% male) with previously untreated AKs on the face and scalp. Prior to the photodynamic therapy procedure and at 4, 8, 12 weeks after the procedure, clinical, dermatoscopic and HF-USG assessment was performed. Photographic documentation was done at each visit.

**Results:**

In HF-USG examination, following the photodynamic therapy sessions, the lesions and field cancerization revealed the reduction of subepidermal low echogenic band (SLEB) in the AK lesions along the cancerization field. The decrease in SLEB thickness and the change in skin echogenicity were related to clinical response.

**Conclusion:**

Skin ultrasonography can be a valuable adjuvant monitoring method in treatment of field cancerization and AK, especially in subclinical lesions which are difficult to assess dermatoscopically.



**Abstract N°: 6063****Combination of Chemotherapy with Topical Bexarotene in the Management of Advanced-Stage Mycosis Fungoides: A Case Report**Yusuf Can Edek\*<sup>1</sup>, Esra Adışen<sup>1</sup><sup>1</sup>Gazi University Faculty of Medicine, Department of Dermatology, Ankara, Türkiye**Introduction & Objectives:**

Mycosis Fungoides (MF) is the most common type of cutaneous T-cell lymphomas (CTCL) originating from CD4+ T cells and is classically characterized by patches, plaques, and tumoral lesions. While treatment methods such as topical corticosteroids, topical bexarotene, and phototherapy are preferred in the early-stage MF (1a, 1b, 2a) management, agents such as retinoids, interferon- $\alpha$ , Total Skin Electron Skin Beam Therapy (TSEBT), methotrexate and single-agent chemotherapy can be used in patients with advanced-stage MF.

**Materials & Methods:**

In this case report, a male patient with stage-IIIB MF, who was treated with a combination of chemotherapy and topical bexarotene in the management of resistant tumoral and plaque lesions, is presented.

**Results:**

A 57-year-old male patient with a known diagnosis of MF was evaluated by us. He described that he was followed for 23 years with the diagnosis of MF, and he used PUVA (70 sessions), methotrexate (6 cycles), NB-UVB (3 years), interferon (1 year), oral bexarotene (1 month), extracorporeal photopheresis (6 months), gemcitabine, cisplatin chemotherapy (3 cycles), TSEBT (8 sessions) and was unresponsive to those treatments. The patient who did not undergo regular follow-ups and did not receive treatment during the Covid-19 pandemic was evaluated by us. During the dermatological examination of the patient, widespread erythematous plaques and tumoral lesions with ulceration were detected throughout the body. While the histopathological evaluation of punch biopsies taken from the patient's plaque and tumoral lesions was found to be compatible with MF, and the patient's stage was evaluated as IIB as a result of blood tests, ultrasonographic examination, flow cytometry and PET examination. The patient, who was evaluated together with hematology, was treated with bendamustine chemotherapy, and tumoral and plaque lesions were detected to regress. Upon an increase in lesions during follow-up treatment was switched to romidepsin and topical bexarotene was started to be applied to the tumoral and plaque lesions of the patient, in a one-day use-two-day break treatment scheme. The patient's tumoral lesions decreased in the first week of treatment, and it was observed that the tumoral lesions thinned and regressed during follow-up. The patient has an allogeneic stem cell transplant plan.

**Conclusion:**

Bexarotene is a retinoid that selectively binds retinoid X receptors (RXR) alpha, beta, and gamma, which regulate the expression of genes that control cellular differentiation and proliferation. Bexarotene has been shown to inhibit the in vitro growth of some tumor cell lines of hematopoietic and squamous cell origin by inhibition of apoptosis and angiogenesis. The drug is available in a 1% gel formulation developed for topical application, and there is data on its use in patients with stage 1a-1b MF who are unresponsive or intolerant to other treatment options. All the cases in the literature are early-stage MF, and in our case with advanced stage MF, the use of bexarotene in combined treatment and a significant regression was detected in the tumoral lesions.

With this case, we would like to emphasize the importance of combination treatments in disease management in MF patients and that topical bexarotene is an effective agent that can also be used in advanced stage MF.

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**Abstract N°: 6072****Diagnosis deception: The intriguing case of myofibroblastoma masquerading as metastatic melanoma**Filip Bosnić<sup>1</sup>, Klara Gaćina<sup>1</sup>, Nikola Ferara<sup>1</sup>, Vanda Haralović<sup>1</sup>, Mirna Situm<sup>1</sup>, Ivana Prkačin<sup>1</sup><sup>1</sup>Sestre milosrdnice University Hospital Center, Department of Dermatology and Venereology, Zagreb, Croatia**Introduction & Objectives:**

Myofibroblastoma is a rare, benign tumor that originates from myofibroblasts, cells with both muscle and fibroblast-like properties, often found in breast tissue, but can rarely occur in other regions such as the inguinal area. It typically presents as a painless, well-defined mass and is usually diagnosed through imaging and confirmed with histological examination

**Materials & Methods:**

We report a case of a 52-year-old female presented with a subcutaneous resistance in the right groin. An ultrasound of the inguinal region was performed, revealing a pathologically changed lymph node with a diameter of 10 mm. The cytological puncture findings, performed in a private practice, highlighted numerous clusters of spindle cells with occasionally visible grains of dark pigment highly indicative for metastasis of spindle cell melanoma. Skin examination revealed solely a livid papule on the right shin, clinically and dermatoscopically consistent with a hemangioma. Additionally, a firm, painless, and immobile nodule was palpated in the right inguinal region

**Results:**

By decision of the Multidisciplinary Team for Melanoma and other skin tumors, the patient underwent a whole body PET/CT scan which exhibited pathological metabolism of FDG in the right inguinal region, highly indicative of malignant disease. According to the team's joint recommendation, dissection of the right inguinal region was performed, and histopathological analysis verified intranodal palisaded myofibroblastoma of the right inguinal region. Immunohistochemically, the lymph node cells were positive for SMA and negative for S100, Melan-A, HMB-45, desmin, and CD34. Also histopathological analysis of the excised livid papule of the right shin confirmed a hemangioma.

**Conclusion:**

The presented case underscores the significant challenges encountered in diagnosing and managing dermatooncological patients, particularly when rare sites are involved. Despite initial suspicion of metastatic spindle cell melanoma based on cytological findings, further investigation led to the identification of a rare intranodal palisaded myofibroblastoma in the right inguinal region. This emphasizes the crucial role of immunohistochemical analysis in confirming the nature of lesions. Given its rarity, awareness of myofibroblastoma among clinicians is crucial for accurate diagnosis and appropriate management, as misinterpretation can lead to unnecessary interventions. Continued research and reporting of cases can contribute to a better understanding of this tumor's behavior and optimal treatment strategies.



**Abstract N°: 6093****cutaneous malignant melanoma with rhabdoide features: a case report**

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**Introduction & Objectives:**

Rhabdoid melanoma is a rare and aggressive form of malignant melanoma distinguished by rhabdoid features. This tumour presents diagnostic challenges due to its unique histological appearance, requiring careful analysis for identification.

**Materials & Methods:**

We report the case of a melanoma with rhabdoid differentiation at the stage of multiple metastases.

**Results:**

A 35-year-old man, with no significant medical history, had been presenting for 7 months with a hard, hemorrhagic, and adherent subcutaneous tissue mass measuring 7 cm adjacent to the right shoulder. Initially suspected to be a dermatofibrosarcoma based on its clinical appearance, location, and evolution, tumor resection was performed. Skin biopsy revealed a rhabdoid-differentiated melanoma, confirmed by immunohistochemistry showing strong expression of the melanocytic markers HMB45 and melan A, with negativity for other markers. The patient then underwent a wide surgical excision with a 2 cm margin, but staging revealed a single femoral bone metastasis, confirmed by scintigraphy, and treated with radiotherapy, initially yielding a satisfactory response. No metastases to other sites were detected by the initial scan. However, three months later, the patient developed a meningeal syndrome, leading to an MRI revealing cerebral metastases. A PET scan also showed hypermetabolic abdominopelvic masses, suggesting the presence of metastatic lymph nodes. Given the unavailability of adjuvant targeted therapy in the country, the decision was made to pursue palliative chemo-radiotherapy.

**Conclusion:**

Malignant melanoma is known for its variety of histological patterns. Melanoma variants that can mimic the morphological and immunohistochemical features of non-melanocytic neoplasms include balloon cell melanoma, signet ring cell melanoma, myxoid melanoma, small cell melanoma and rhabdoid melanoma. Immunohistochemistry is of vital importance in characterising this tumour. In our patient, it showed strong expression of the melanocyte markers HMB45 and melan A, while other markers were negative. This observation suggests a rhabdoid differentiation of the tumour. Rhabdoid features are defined by morphological characteristics such as eccentric nuclei, large nucleoli and abundant cytoplasm containing hyaline filamentous inclusions, and are similar to skeletal muscle cells. Rhabdoid melanoma shows significant heterogeneity histologically, immunohistochemically and ultrastructurally. The presence of multiple metastases in rhabdoid-differentiated melanoma underscores the aggressiveness of this particular form of skin cancer and the necessity for a proactive therapeutic approach. Given that rhabdoid melanomas may exhibit specific genetic alterations and complex interactions with the immune system, early access to immunotherapy and targeted therapy is justified. Immunotherapy, by activating the immune system to target tumor cells, can help control the progression of multiple metastases and extend patient survival. Similarly, targeted therapy, by targeting specific signaling pathways activated in tumor cells, can provide a more precise and effective approach to treating multiple

metastases. In conclusion, early access to both immunotherapy and targeted therapy is crucial for managing the aggressive nature of rhabdoid-differentiated melanoma and improving patient outcomes.

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**Abstract N°: 6104**
**Cutaneous lesions with CD123+ infiltrate in patient with chronic myelomonocytic leukemia**

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**Introduction & Objectives:**

The cutaneous lesions described in the context of myeloid neoplasms encompass highly diverse clinical and histological presentations, and their biological significance is not clearly established. Here, we present the case of a patient with chronic myelomonocytic leukemia (CMML) who exhibited annular cutaneous lesions, and following a biopsy of cutaneous lesions, was diagnosed with plasmacytoid dendritic cell dermatosis (PDC).

**Materials & Methods:**

Description of a clinical case. Literature review.

**Results:**

An 87-year-old woman with a history of breast cancer treated 20 years ago and diagnosed with chronic myelomonocytic leukemia (CMML) one year ago, currently stable with chemotherapy, presented with pruritic lesions on her trunk. These lesions appeared annular with erythematous borders, accompanied by petechiae-like lesions and a cleared center. Biopsy revealed skin with a perivascular lymphohistiocytic inflammatory infiltrate in the superficial dermis with epidermotropism. Notably, numerous CD123-positive elements were observed within the infiltrate, consistent with a diagnosis of plasmacytoid dendritic cell dermatosis in the context of CMML. Topical corticosteroid treatment was initiated, resulting in complete resolution of the lesions. DNA extraction for molecular study was not feasible.

Chronic myelomonocytic leukemia (CMML) is a myeloid neoplasm characterized by persistent monocytosis and often predisposes to cutaneous lesions. These lesions can either be nonspecific or reactive, such as neutrophilic dermatoses, or specific if tumor cells are present. Definitive confirmation of the latter can be achieved if the cells in the cutaneous infiltrate harbor the same mutations as neoplastic cells, through molecular studies. Within specific dermatoses, various groups have been described based on the implicated cells: myelomonocytic cells, blasts, or plasmacytoid dendritic cells. Tumors or dermatoses of plasmacytoid dendritic cells typically present with pruritic erythematous papules and often resolve spontaneously or with corticosteroid treatment, although it has been suggested that they may herald progression of hematologic pathology. These cells are identified by being CD123+, although other stains may be necessary.

**Conclusion:**

In a patient with a history of cutaneous eruption with CD123+ infiltrate alongside compatible hematologic abnormalities, we should consider excluding underlying hematologic neoplasms, focusing on plasmacytoid dendritic cell dermatosis, which may be associated with myeloid neoplasms: myeloproliferative or myelodysplastic syndromes such as CMML.

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**Abstract N°: 6114****Indeterminate Cell Histiocytosis: An Unusual Case of a Rare Disease**

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**Introduction & Objectives:** Indeterminate Cell Histiocytosis (ICH) is a very rare condition.

**Materials & Methods:** A 70-year-old man with no significant medical history presented with a single itchy lesion on his scalp, which had been slowly growing over 2-3 years. Physical examination revealed a soft, pink, sessile papular lesion, measuring 10 mm. There were no clinical or dermoscopic features characteristic of any specific condition.

Excision and histological analysis revealed a dermis densely populated by a nodular proliferation of histiocytic cells, with cells that were positive for CD68, CD1a, S100, and CD31, but negative for Langerin (CD207). No cytological atypia or mitotic figures were observed. The proliferation index (Ki67) was 10-15%. Based on this phenotype, a diagnosis of ICH was made.

A complete blood analysis, a bone survey, a chest X-ray, and an abdominal ultrasound were conducted, yielding no abnormal findings.

After one year of follow-up, the patient has not experienced a recurrence of the removed lesion and has not developed any other similar lesions.

**Results:** Histiocytoses are a heterogeneous group of disorders characterized by the excessive proliferation of histiocytes. One type of histiocytosis is indeterminate cell histiocytosis (ICH), with only a few cases described in the literature. In studies, up to 25% of patients with ICH are associated with a hematological malignancy, which can affect the prognosis. This association is more common among patients with multiple skin lesions. Cases with a single lesion are rare and tend to have a good prognosis, with patients often being cured after surgical removal. Like other types of histiocytoses, there is significant clinical and behavioral variability, raising questions about whether these are neoplastic or reactive proliferations and whether they all belong to the same entity. There are also documented cases of ICH following insect bites and scabies. Our patient did not recall any insect bites on the scalp, but it is possible that they occurred without his notice.

**Conclusion:** We present an exceptional case of ICH, as it involved a single lesion, was cured through surgery, and showed no recurrence after one year of follow-up.




**Abstract N°: 6116**
**Kaposi sarcoma with spontaneous regression after blood transfusion**

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**Introduction & Objectives:**

Kaposi sarcoma (KS) is an angioproliferative neoplasm triggered by infection with Kaposi sarcoma-related herpes virus, also known as human herpesvirus 8. The lesions primarily manifest on mucocutaneous surfaces but can affect various organs.

**Materials & Methods:**

Herein we report an interesting case of KS with spontaneous regression.

**Results:**

A 73-year-old male with a medical history of hypertension, presented with raised violaceous plaques on the lower limbs evolving for over 3 years, rapidly extending over 5 months to involve extensive confluent lesions on both lower and upper limbs. Anatomopathological examination confirmed the diagnosis of KS. The HIV serology was negative. The patient presented with normochromic normocytic anemia, indicative of both inflammatory and nutritional deficiencies, with low vitamin B9 and low serum iron. Imaging studies, including CT scan, revealed irregular thickening in the proximal ascending colon wall with discrete infiltration of surrounding fat and right common iliac lymphadenopathy. Colonoscopy revealed an ulcerated suspicious non-granular lateral spreading tumor, with biopsy showing nonspecific and inconclusive moderate acute colitis lesions. Scintigraphy detected suspicious anomalies in the right 6th rib and left iliac crest. The patient's persistent anemia necessitated a red blood cell transfusion. Subsequently, spontaneous regression of the KS lesions was observed after two weeks following the transfusion

**Conclusion:**

KS is acknowledged to manifest in four distinct variants, each with unique clinical features: Classic form, African or endemic, organ transplant-related, and acquired immunodeficiency syndrome-related. Our patient's presentation is aligned with the classic subtype, usually seen in immunocompetent individuals. However, the rapid extension and widespread of lesions raise questions about its typically indolent nature. The intriguing observation of spontaneous regression of KS lesions in our patient merits further discussion. While regressive forms of KS have been previously described in the iatrogenic type and in the in AIDS-related subtype, similar instances in the classic KS are not well-documented in the literature. There was one notable case that featured a 68-year-old woman with classic KS involving the lungs and mediastinal lymph nodes. Remarkably, this patient experienced partial spontaneous remission without receiving any treatment. The administration of a blood transfusion to our patient prior to the observed regression raises intriguing possibilities regarding its potential immunomodulatory effects. It suggests that the transfusion may have acted as a stimulus, boosting the immune response. This phenomenon prompts consideration of the theory implicating the role of a fully competent immune system in disease regression.







## Abstract N°: 6142

### Non-melanoma skin cancer in renal transplant recipients: forgotten group of risk patients?

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#### Introduction & Objectives:

Transplantation today is one of the most science-intensive modern medical technologies. It was proven effectiveness of the combination of azathioprine with prednisolone. Renal transplant recipients (RTRs) who achieve long-term survival are at risk of complications from immunosuppressive therapy, including cancer. Squamous cell carcinoma (SCC) and basal cell carcinoma (BCC) account for more than 90% of skin malignancies after transplantation. Merkel cell carcinoma, Kaposi's sarcoma are also commonly seen.

#### Materials & Methods:

An analysis of the literature, international guidelines, local nephrology societies, skin cancer registries was conducted. The incidence of skin cancer in different countries was analyzed, also geographic, economic factors, awareness about skin cancer of the risk groups - kidney transplant patients.

#### Results:

Non-melanoma skin cancer (NMSC) is the most common malignancy after renal transplantation, affecting 20-30 % of recipients in the UK, over 70 % in Australia after 10 years. White (skin types 1-4) RTRs living in Australia have the highest rates of NMSC in the world. In the general population, the incidence of SCC is higher than BCC, while the SCC/BCC ratio can be as high as 5 in transplant recipients. Solid organ transplant patients are at increased risk of non-melanoma skin cancer, mainly SCC, BCC, various risk factors. The incidence rate of NMSC after transplantation varies by geographic latitude; in Italy they are approximately 5% after 5 years and 10% after 10, in Northern Europe - 10 % after 10 years, 40% after 20, Australia - 45% after 11 years, 70 % - after 20. The average time to the development of NMSC is estimated to range from 4 to 9 years after organ transplantation. The incidence of NMSC increases steadily with time after transplantation and ranges in the USA and Western Europe from 5% to 10-27% to 40-60% at 2, 10, and 20 years, respectively. Higher rates are observed in Australia, the 20-year incidence reaches 70-82%. The incidence of SCC and BCC in RTRs appears to be higher (up to 250 times) than in the general population, and the cumulative incidence of SCC and BCC 20 years after transplantation reaches 82 % in Queensland, Australia, 41% in the Netherlands. A ratio of 1.3:1 to 1:1 has recently been reported in Portugal, as in Spain and Italy (BCC predominates over SCC - 1.4:1 to 2.2:1). In Ukraine, transplantation began to develop actively in 2019, when the relevant law was adopted. In 2022, 384 transplants were performed, in 2023 - 589. Therefore, research and observation of recipients of transplanted organs continues.

#### Conclusion:

Tumors in patients on long-term immunosuppression develop at a relatively young age compared to the general population. Many develop multiple lesions that can be aggressive, and although mortality associated with NMSC remains relatively low, significant morbidity can be as a result of the frequent surgical treatment required to treat multiple lesions. Early diagnosis of NMSC is recognized to reduce morbidity and mortality and to provide a better cosmetic outcome with removal of small lesions using simple, cost-effective treatments. There is still no evidence of a protective effect of broad-spectrum sunscreens for the prevention of NMSC in patients who have received

immunocompetent therapy. Management of these patients requires integrated multidisciplinary treatment. Therapeutic preventive strategies are needed for this high-risk population.

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**Abstract N°: 6160****Spitzoid tumors: A diagnostic challenge (13 cases)**

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**Introduction & Objectives:**

Spitzoid tumours (ST) are melanocytic proliferations with clinical and histopathological presentations that may resemble those of melanoma. The aim of this study was to evaluate the clinical characteristics of ST.

**Materials & Methods:**

A 16-year duration retrospective study was conducted in our departement evaluating all ST that were excised between 2008 and 2023.

**Results:**

Thirteen patients were assessed, including 8 having Spitz nevi (SN) with an average age of 21.4 years and 5 presenting an atypical Spitz tumours (AST) with an average age of 13 years. The sex ratio (M/F) was 1.1. The mean duration of evolution of the ST was 18.5 months. The lesion was unique in all cases and appeared as a firm papule or nodule, reddish-brown (8 cases), purplish (2 cases) or pink (3 cases). The surface was keratotic in 7 cases. The mean size was 7 mm (3-15 mm). ST were clinically confused with a wart (3 cases), a dermatofibroma (4 cases), an angioma (2 cases) or an achromic nevus (1 case). Lesions were located on the trunk in 4 cases (30.7%), the upper limbs, lower limbs or head in 3 cases each (23.1%). Surgical excision, recommended in all cases, was not followed by recurrence after a follow-up ranging from 4 months to 11 years.

Spitz melanocytic lesions can be categorised as SN, AST and spitzoid melanoma (SM). These lesions generally occur in childhood. Contrary to the literature, we observed a slight male predominance. SM have a slight male predominance and tend to occur at an older age. The clinical presentation is typical in our patients with generally unpigmented papules or nodules located predominantly on the trunk. Histologically, SN can be junctional or dermal. They are well circumscribed lesions composed of epithelioid and/or spindle-shaped neuromelanocytes with prominent nucleoli. AST have some features of typical SN and some features of SM. Unlike SM, SN are entirely benign, whereas AST have a 39% rate of sentinel lymph node positivity. None of our patients benefited from this diagnostic method. Some authors recommend regular follow-up in view of the possible spontaneous regression of typical SN, particularly in children. However, surgical excision remains the reference treatment for all ST.

**Conclusion:**

ST represent a heterogenous group of melanocytic lesion. More studies are needed to elucidate the specificity of each entity of this group.



**Abstract N°: 6179****A female patient of inflammatory breast cancer presents in dermatology clinic with the purple red patches on the trunk as the initial manifestation.**Yangying Liu<sup>1</sup><sup>1</sup>Sichuan provincial People's Hospital, dermatology, Chengdu , China**Introduction & Objectives:**

To report a case of inflammatory breast cancer with erythematous purpura as the initial symptom on the left chest, back, and abdomen, aiming to provide new diagnostic and therapeutic insights for clinicians facing patients with clinical symptoms that cannot be explained by common dermatological diseases.

**Materials & Methods:**

We retrospectively analyzed the clinical data of a patient with inflammatory breast cancer presenting with erythematous purpura on the left chest, back, and abdomen as the initial symptom, and discussed the reasons for misdiagnosis based on literature review.

**Results:**

The patient, a 53-year-old female, presented with "eyelid swelling and erythematous purpura on the left chest, back, and abdomen with left upper limb swelling for 3 months." She was initially diagnosed with "dermatomyositis" in the outpatient department and admitted to the hospital. Physical examination revealed swelling and faint purplish-red spots on both upper eyelids and diffuse erythematous purpura on the left chest, back, and abdomen. Auxiliary examinations showed a BI-RADS 4C hypoechoic nodule near the left axilla (close to the glandular margin) and enlarged lymph nodes in the left axilla on breast ultrasound. Breast MRI revealed multiple enhanced nodules in the left breast, considered as BI-RADS 4A, and enlarged lymph nodes in the left axilla. Skin biopsy pathology of the back showed dysplastic epithelial cells within blood vessels, suggesting intravascular cancer thrombus with a possible origin in the breast. Biopsy results of the left axillary nodule and lymph nodes indicated secondary cancer. Immunohistochemistry of the left axillary lymph node biopsy suggested HER-2 (2+), and FISH test indicated HER-2 amplification positive. Combined with clinical symptoms and laboratory findings, the diagnosis was confirmed as "left inflammatory breast cancer, stage IIIB." The patient underwent TCbH (paclitaxel nanoparticle albumin-bound + trastuzumab + carboplatin) chemotherapy in the oncology department and completed one cycle of chemotherapy.

**Conclusion:**

In routine clinical practice, erythematous purpura can present as a primary manifestation of various dermatological diseases such as dermatomyositis and lymphoma, or as a skin manifestation of rheumatological and immunological diseases. However, when common dermatological diseases or rheumatological and immunological diseases cannot clearly explain a patient's clinical presentation, consideration should be given to secondary skin changes caused by tumor metastasis. Radiographic imaging and histopathological biopsy aid in clinically detecting tumors.



**Abstract N°: 6212****Refined prognostic stratification of cutaneous squamous cell carcinoma using top 8 risk factors: a retrospective cohort study.**

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**Introduction & Objectives:** Risk stratification of cutaneous squamous cell carcinoma (CSCC) is relevant for guiding patients' management and current staging systems need improvements. A recent comprehensive meta-analysis by Zakhem GA et al., collected all the risk factors (RF) identified to date in CSCC and demonstrated that of those which have been evaluated in more than one study, there were eight RF with the greatest prognostic impact (tumor size, invasion beyond the subcutaneous fat, immunosuppression, lymphovascular invasion, perineural invasion, desmoplasia, tumor budding and poor degree of differentiation). All these RF have not been incorporated in a classification system to date. We aimed to explore the impact of a classification system derived from all those relevant RF found in that meta-analysis with the most popular staging systems (BWH and AJCC8) in a retrospective cohort study of 794 patients.

**Materials & Methods:** We explore the outcome depending on the accumulation of RF and derived a 4-stage classification system (0RF, 1-2RF, 3-4RF and >4RF). We explored the cumulative incidence function (CIF) for local recurrence, nodal metastasis (NM), distant metastases and disease-specific death (DSD) using Fine-Gray proportional hazard regression, for the 8RF classification system, the BWH and the AJCC8. Death from other causes was considered a competing risk. Also, we explored sensitivity, specificity, positive predictive value, negative predictive value, accuracy, and C-index.

**Results:** The 5-year cumulative incidence (5y-CIF) were quite similar between BWH and the 8RF classification system. Concerning DSD, the 5yCIF for BWH was 1.7%(0.6-3.7) for T1-BWH, 4.7%(2.4-8.2) for T2a-BWH, 16.0%(10.8-22.2) for T2b-BWH and 43.0%(22.1-62.4) for T3-BWH. For DSD, the 5yCIF for the 8RF classification system were 1.0%(0.2-3.4) for 0RF, 4.3%(2.5-6.9) for 1-2RF, 15.9%(10.3-22.6) for 3-4RF and 43.2%(24.7-60.5) for >4RF. The C-index and accuracy calculations remained better for BWH and the 8RF than for AJCC8. 80% of patients with 7 RF at the same time died from CSCC in this cohort.

**Conclusion:** Adding many risk factors to the models does not seem to improve much the distinctiveness of the classification systems compared to the BWH. However, considering many risk factors combined in a same patient may pinpoint towards certain very high-risk patients who may need more careful surveillance and aggressive management. Indeed, 80% of those cases with 7 risk factors at the same time died from CSCC in this cohort. Incorporating molecular biomarkers to clinical practice may be the next step to improve the classification of patients.



**Abstract N°: 6215****An 86-year-old patient with a fast growing superficial basal cell carcinoma**Gergana Vazheva<sup>1</sup>, Liliya Aleksandrova-Zisova<sup>1</sup><sup>1</sup>Medical University of Plovdiv, Dermatology and Venereology, Plovdiv, Bulgaria**An 86-year-old patient with a fast growing superficial basal cell carcinoma**

**Introduction & Objectives:** Basal cell carcinomas (BCCs) are the most common type of non-melanoma keratinocyte cancers. The average lifetime risk for individuals with fair skin to develop BCC is around 30%. Many countries all over the world have reported increasing incidence of BCC as a result of altered sun-exposure behaviours and a general ageing population. There are large regional differences in reported BCC incidence rates depending on the geographic location of the study population, investigated period, and diagnosing methods. Europe has the third highest incidence of BCC, preceded by Australia and the United States (US). This clinical case describes an 86-year-old patient who developed a superficial basal cell carcinoma on her back in the course of only one year.

**Materials & Methods:** Our patient is an 86-year-old female patient who came to our clinic with the complaint of a slightly pruritic lesion on her upper back that she cannot see properly but reports that has been growing for a year. She has been applying emollients and local antihistamines that were not effective.

On examination, there is an erythematous, scaly plaque with well-defined borders, 8-9 cm in diameter. Centrally, there are a couple of ulcerations covered with hemorrhagic crusts. A 4 mm punch biopsy was performed within the next days.

**Results:** Histology results came back with the diagnosis superficial BCC. The treatment options were discussed and the patient agreed to a surgical removal of the malignant tumour followed by a skin graft.

**Conclusion:** The most common histologic forms of basal cell carcinoma are superficial, nodular, ulcerative, morpheaform, and infiltrative. Superficial BCCs usually look like an erythematous squamous plaque with well-defined borders, and frequently have central ulcerations. Although they usually have a slow progression, there are some cases, such as this one, when the carcinoma grows fast. This makes their treatment challenging. Treatment options for BCC include surgical and non-surgical procedures, dependent on anatomical location, size, and histological subtype. According to the recommendations of the European Association of Dermato-Oncology for safety margins, low-risk BCCs should be excised with standard surgery and 2 mm to 5 mm excision margins, and high-risk lesions between 5 mm and 15 mm. Tumour size is extremely important when predicting the risk of subclinical extension. However, there are additional factors, such as histopathological subtype, primary or recurrent lesion, presence or absence of perineural invasion. Histopathological assessment of the excised tissue should be routinely performed after the surgery.



**Abstract N°: 6231****AI-Assisted Skin Cancer Detection Tools in LMICs: Illuminating Prospects for Developing Nations**Mouna Azaroual<sup>1</sup>, Mohd Faizan Siddiqui<sup>2</sup><sup>1</sup>CHU Mohammed VI, Marrakesh, Morocco, <sup>2</sup>International Medical Faculty, Osh State Univeristy, Osh, Kyrgyzstan**Title:** AI-Assisted Skin Cancer Detection Tools in LMICs: Illuminating Prospects for Developing Nations**Author:** Mouna Azaroual, MD<sup>1,2</sup>; Mohd Faizan Siddiqui, MD<sup>3</sup><sup>1</sup>Tambov State Medical University, Tambov City, Russia<sup>2</sup>CHU Mohammed VI, Marrakesh, Morocco<sup>3</sup>International Medical Faculty, Osh State Univeristy, Osh City, Kyrgyzstan**Abstract:****Introduction & Objectives:**

Skin cancer incidence is escalating globally, underscoring the urgent need for enhanced diagnostic capabilities. The emergence of Artificial Intelligence (AI) presents a promising avenue for augmenting diagnostic accuracy, particularly in regions where expert resources are scarce. However, the realization of AI's potential hinges upon meticulous evaluation of its efficacy and safety, tailored to the unique socio-economic and healthcare landscapes of LMICs. Timely diagnosis of skin cancer is paramount for effective intervention, yet achieving early detection remains a significant challenge, particularly in Low and Middle Income Countries (LMICs). Despite its critical importance, LMICs often struggle to achieve timely detection due to various systemic barriers, including limited access to healthcare infrastructure and a shortage of specialized medical personnel. Our study review aims to comprehensively survey existing research pertaining to AI-driven methodologies for skin cancer detection and classification within clinical settings, with a specific focus on their applicability in LMIC contexts.

**Materials & Methods:**

A systematic search strategy was deployed research databases to identify pertinent studies published up to April 2024 using keywords such as "Skin Cancer," "Oncology," "Low and Middle Income Countries (LMICs)," and "Artificial Intelligence". Subsequently, a rigorous selection process was undertaken by four independent reviewers to curate relevant studies, followed by meticulous data extraction and analysis.

**Results:**

Among the vast array of studies identified, a subset of 45 study demonstrated a primary focus on the integration of AI for skin cancer detection and diagnosis within LMIC clinical settings. The combined results cover a wide range of aspects, including how the methods were used, the techniques for handling data, and what we've learned from putting these methods into practice in real clinical settings in Low and Middle income countries and rural areas of the countries where we have very limited resource. Additionally, findings from healthcare workers in these places gives us priceless understanding about whether using AI for diagnoses is practical and acceptable.

**Conclusion:**

The advent of AI holds immense promise for revolutionizing skin cancer diagnostics, particularly in LMICs where

resource constraints pose formidable challenges. Nonetheless, the successful integration of AI mandates a judicious approach encompassing robust validation, collaborative engagement with healthcare stakeholders, and tailored implementation strategies. Addressing the intricacies of accessibility, training, and data availability is imperative to unlock the transformative potential of AI-driven diagnostics within LMIC healthcare ecosystems.

**Keywords:** Skin Cancer, Oncology, LMICs, Early Diagnosis, AI Tools

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**Abstract N°: 6234****Identification of two transcriptomic subgroups in actinic keratosis: differentiation between normal skin and cutaneous squamous cell carcinoma-like profiles using RNA-seq**

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**Introduction & Objectives:** Actinic keratosis (AK) is the most important independent risk factor for the development of cutaneous squamous cell carcinoma (CSCC). The description of AK is essentially clinicopathological, and its molecular characterization is not completely defined. We set out to evaluate a spectrum of aggressiveness from normal skin towards CSCC, with particular attention to AK, and we aimed to evaluate whether there are distinguishable groups of actinic keratosis at the transcriptomic level.

**Materials & Methods:** An RNA-Seq study was performed, including normal skin (N=7), clinically similar grade II AKs (N=8), low-risk SCC (N=10), and high-risk SCC (N=9). Total RNA was extracted from the QIAGEN Kit samples (ref: 74134). The quality and quantity of the RNA were evaluated using the Bioanalyzer (Agilent) (RIN>8.5, 10 ng/μL). Sequencing was done on the Next-seq500 on the Flowcell Mid 150 to generate 75 bp long, paired-end reads. 75 million readings were performed per sample. Sequencing data processing using STAR and DESeq2. Biological pathways and gene set analyzes were performed by GSEA using the ClusterProfiler R package, focusing on cancer Hallmark pathways from the msigdb package to obtain biological information. The rMATS tool was used to carry out an analysis of alternative splicing.

**Results:** Our study has delineated two distinct subtypes of AK, distinguished by 651 differentially expressed genes (DEGs). Transcriptomic analysis revealed that one subtype exhibits a profile closely aligned with that of Normal Skin (NS), hereby referred to as NS-like AK, while the other subtype mirrors the expression profile characteristic of CSCC, thus termed SCC-like AK. This distinction implies divergent paths in the progression toward tumorigenesis. Further, enrichment analysis highlighted a pronounced presence of pathways associated with proliferation and inflammation within the SCC-like subtype in comparison to the NS-like subtype. Notably, we observed significant differences between the two AK subtypes not only in their transcriptomic landscapes but also in their profiles of alternative splicing isoforms. The comparative analysis extended to the alternative splicing isoform patterns of AK against those of normal skin and CSCC, revealing nuanced distinctions. To shed light on these variances in alternative splicing, we investigated the expression levels of transcripts coding for proteins integral to the splicing machinery.

**Conclusion:** RNA-seq analysis has successfully identified two molecularly divergent subgroups of AK, characterized by distinct transcriptomic signatures and alternative splicing isoform profiles. One subgroup is transcriptionally akin to normal skin, while the other bears greater resemblance to SCC, suggesting different stages in the evolution toward malignancy. These insights hold potential for improving clinical management and advancing the development of tailored therapeutic approaches.



**Abstract N°: 6244****The prognostic role of FDG PET/CT in patients with advanced cutaneous squamous cell carcinoma submitted to cemiplimab immunotherapy: a single-center retrospective study**Ilaria Proietti<sup>1</sup>, Luca Filippi<sup>2</sup>, Concetta Potenza<sup>1</sup>

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**Introduction & Objectives:**

Our aim was to investigate whether baseline FDG PET-derived parameters and 3-month metabolic response have a prognostic role in advanced cutaneous squamous cell carcinoma (cSCC) submitted to cemiplimab immunotherapy

**Materials & Methods:**

Clinical records of 25 cSCC patients on cemiplimab therapy, submitted to FDG PET/CT at baseline and after 3 months, were retrospectively reviewed. The Kaplan-Meier (KM) method was applied to analyze differences in event-free survival (EFS) and Cox regression analysis was employed to identify prognostic factors.

**Results:**

At baseline PET/CT scan, all enrolled subjects had FDG-avid lesions. At 3-month PET/CT evaluation, 16 patients were classified as responders (complete or partial response) and 9 as non-responders ("unconfirmed progressive disease") according to immune PET Response Criteria in Solid Tumors (iPERCIST). By KM analysis, baseline metabolic tumor volume (MTV) and total lesion glycolysis (TLG) significantly correlated with EFS ( $p < 0.05$ ). Furthermore, KM analysis showed that lack of metabolic response at 3 months was associated with meaningfully shorter EFS ( $7.2 \pm 1$  months in non-responders vs.  $20.3 \pm 2.3$  months in responders).(tab.1) In Cox multivariate analysis, metabolic response at 3 months remained the only predictor of EFS ( $p < 0.05$ ).(fig.1)

**Conclusion:**

Baseline tumor load (i.e. MTV and TLG) and metabolic response at 3 months may have a prognostic impact in cSCC patients treated with cemiplimab.



**Abstract N°: 6290****Merkel cell cancer: the need to standardize care**

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**Introduction & Objectives:**

Merkel Cell Carcinoma (MCC) is a rare and aggressive neuroendocrine tumour with a poorer 5-year survival than malignant melanoma. We audited our regional practice in the diagnosis and management of MCC from 2016-2020, using standards derived from American and European guidelines as currently there are no published UK standards (1,2).

**Materials & Methods:**

The proposed audit standards were: 1. Staging of all MCCs using AJCC7 or UICC8 classification. 2. Identification of high-risk patients (head and neck as primary site; tumour >2cm; immunosuppression, HIV positive status, CLL or solid organ transplant, involved margins and lympho-vascular invasion). 3. SLNB recommended and discussed with the patient. 4. Adequate imaging according to the body site. 5. Therapeutic intervention for tumour stage (surgery, wide local excision (WLE), adjuvant radiotherapy (RT) and avelumab for metastatic disease).

**Results:**

We identified 59 patients; 35 males and 24 females with MCC. The median age at presentation was 80-89 years. The head and neck (52%) were the commonest anatomical areas involved.

53/59 patients were adequately staged. In 6/59 patients staging was limited due to biopsy with no follow through due to patient and system factors.

Most patients were deemed high-risk with 22/59 tumours showing lymphovascular invasion, 6/59 patients a history of immunosuppression. 30/59 patients had previous or concurrent malignancies (mostly non-melanoma skin cancer).

Only 15/59 patients were recommended at MDT for SLNB of which only 11/15 patients had the procedure. All patients with head and neck tumours had CT chest, abdomen and pelvis (CTCAP) plus MRI head and neck whereas others only had CTCAP as staging scans. Only 1 patient had PET scan.

The detail of the staging and intervention is as below:

Stage	Simple Excision	WLE	RT	WLE and RT	Simple Excision and RT	WLE + RT + Chemotherapy	No Treatment
<b>pT1</b> <b>N=24</b>	2	7	5	6	3	0	1
<b>pT2</b> <b>N=16</b>	2	3	1	7	1	1	1
<b>pT3</b> <b>N=4</b>	0	1	0	2	0	0	1
<b>pT4</b> <b>N=2</b>	0	0	0	1	1	0	0

Table 1. MCC staging and intervention

No cases were referred as possible MCC, though 69% were described as ‘a rapidly growing lesion’. In only 11/59 was MCC considered after review in secondary care. 3/11 of these patients had recurrent disease.

#### Conclusion:

This audit suggests that MCC is a poorly recognised cancer with tumours presenting mostly in older and frail people for whom invasive staging and surgery appears less acceptable. This audit highlights the need for better recognition of the cancer and a standardised approach to patient care.

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**Abstract N°: 6298****Clinical & Histopathological Profile of benign and malignant skin tumors.**

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**Introduction & Objectives:**

The skin is one of the most common site for malignancy. Reliable statistical data on the frequency of skin tumors are scarce. Factors into consideration: (1) histogenic type (2) race (3) sex (4) age (5) localization (6) environment (7) precancerous conditions. The aim of this study is to understand the epidemiology, clinical & histopathological profile of benign and malignant skin tumors in our setting.

**Materials & Methods:**

This is a retrospective analysis of 363 papules, patches, nodules, plaques, cysts and ulcers on skin, nail or mucosae with suspected tumor as differentials and confirmed by laboratory and histological evaluation at our hospital. Clinical, epidemiological histopathological profile of these patients was studied with respect to features like age, sex, site of predilection, origin of tumor and malignant potential.

**Results:** \*\* Total number of cases were 363. Male to female ratio was 1:1.04. Third and fourth decade were most commonly affected followed by fifth decade. Predisposing factors in our study were chronic sun exposure (28 cases), genetic predisposition: 14 cases (neurofibromatosis 1 & 2, tuberous sclerosis, familial cylindromatosis, Goltz Gorlin Syndrome, familial trichoepithelioma, dyskeratosis congenita), tobacco use (56 cases), smoking (64 cases), premalignant conditions (lichen sclerosus, leukoplakia, chronic ulcers, lichen amyloidosis), HIV (4 cases), pre-existing nevi (1 case), underlying systemic malignancy (6 cases), burn scar (3 cases), chronic sari dermatitis (2 cases), chronic lymphedema (1 case). Based on histopathology, keratinocytic tumors were most common consisting of 36% followed by appendageal tumors (18.5%), neural (10.7%), vascular (10.7%), fibrous and fibro-histiocytic (10.5%), tumors of subcutaneous tissue (4.1%), cutaneous metastasis (3.3%), lymphatic (3%) and miscellaneous (2.5%). In correlation tumors with age group, fibrous tumors (24%) were most common in children (n=46), followed by lympho-vascular and appendageal tumors (15% each) with lesser occurrence of malignant tumors (solitary case of oral SCC in a patient of dyskeratosis congenita and 2 cases of dermatofibrosarcoma protuberans). In adult males keratinocytic tumors (42%) were most common followed by tumors of vascular and lymphatic origin (19%). Seborrheic keratosis was the most common benign tumor and SSC was the most common malignant tumor, followed by cutaneous metastasis as 2nd most common in males. In adult females most common were appendageal tumors (31.5%) followed by neural tumors (23%) and keratinocytic tumors (18%). Based on location of tumors, face (36.4%) was the commonest site, followed by trunk (16.5%), lower extremity (11.6%), upper extremity (10.7%), scalp (10.5%), oral cavity (7.98%) and genital (6.9%). On face, the most common site was cheeks (41%). Most common facial tumors were of keratinocytic in origin (33.3%) followed by appendageal tumors (16.7%).

**Conclusion:**

In the era of increasing prevalence of skin tumors, clinical suspicion, adequate knowledge about atypical presentations and diagnosis by histopathology are important factors for the early diagnosis and successful treatment of skin tumors.





**Abstract N°: 6346****Pigmented epithelioid melanocytoma of the nail unit in a 59-year old woman**

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**Introduction & Objectives:**

Pigmented epithelioid melanocytoma (PEM) is a rare low-grade melanocytic tumor, characterized by dermal proliferation of heavily pigmented epithelioid, dendritic and spindled melanocytes. Despite the high rate of regional lymph nodes metastasis, it seems to follow an indolent course. Typically it is observed as a heavily pigmented nodule on the trunk or extremities of young adults. Dermoscopy exhibits homogeneous blue pigmentation and a variable combination of black, brown and white colour. PEM of the nail unit is an uncommon occurrence with only one case reported so far.

**Materials & Methods:**

We present a 59-year-old female patient with a recently developed pigmented lesion of the left toenail. She denied previous trauma and her medical and family history were negative for melanoma. Clinical examination revealed hyperkeratosis and diffuse greyish discolouration of the affected nail and two 4-5mm wide brown-black bands of melanonychia. Hutchinson sign was negative. With suspicion of melanoma nail ablation was performed.

**Results:**

Histopathology described dysplastic keratinocytes in the lower half of the nail matrix epithelium and an extensive superficial dermal melanosis with no visible melanocytic proliferation (SOX 10 negative). On control visit two small residual pigmentations of the nail matrix were noticeable and were again biopsied. Histopathology revealed an intradermal melanocytic proliferation with numerous melanophages and rare epithelioid melanocytes (SOX 10 positive), consistent with PEM. Due to narrow margins complete surgical excision of the nail bed was performed. On histopathology reactive changes of epidermal melanocytes were noted with focal lentiginous and slightly pagetoid proliferation of larger melanocytes with atypical nucleoli (PRAME positive). Sonography of the regional lymph nodes was normal. No evidence of disease relapse or distant disease has been observed for two years after the surgery.

**Conclusion:**

PEM affecting the nail unit is very rare and can present as a heavily pigmented menacing lesion, mimicking melanoma.





## Abstract N°: 6351

### Enhancing human-machine cooperation in melanoma screening via Artificial Intelligence's doubtful case detection

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#### Introduction & Objectives:

The early detection of skin cancer, including melanoma, substantially improves the five-year survival rate of patients. Deep Learning has shown its capability to assess pigmented skin lesions with a level of accuracy that matches that of dermatologists. These artificial neural networks analyze images at the pixel level as they pass through various layers of the network with distinct graphic filters. However, it is important to acknowledge the limitations of such neural networks. They may struggle with rare entities due to a lack of training images or image artifacts. The best results may be achieved through a collaborative approach, combining dermatologists' expertise with machine capabilities.

#### Materials & Methods:

In our study, 207 anonymous cases from outpatient dermatology clinics, with lesions photographed by dermoscopy, were assessed. 370 other dermoscopic skin lesions were collected for a total of 577 images. Our algorithm achieved excellent performance in melanoma classification using dermoscopy images and few high resolution zoomed clinical images, showing a robust performance. The achievement of this score was made possible through the application of an optimization strategy, which enabled us to create a "doubtful" category derived from the two original categories: melanoma and non-melanoma. Although maintaining all three categories yielded an acceptable score, the exclusion of probabilities within the doubtful category significantly improved performance. This method is likely to be precise because it highlights, via the "doubtful" category, which lesions require the insight of human experts and which ones are clear-cut cases. This enables specialists to concentrate solely on instances that demand their full attention.

#### Results:

**The algorithm has demonstrated excellent performance, with an AUC of 95%, sensitivity of 98%, and specificity of 88% on test data.**

These results also demonstrate the potential to aid primary care providers in making more informed referrals by distinguishing between pigmented lesions with a high likelihood of being melanoma and those that are probably benign, using dermoscopic images of the skin. Lesions considered 'doubtful' should be managed using the usual care pathway.

#### Conclusion:

The algorithm designed for melanoma skin cancer classification has demonstrated robust performance, particularly in differentiating between extreme classes. The ability of the HUVY algorithm to identify its own limit (doubtful area) is an opportunity to mitigate False Positives and False Negatives and to alert the healthcare professional when a lesion needs human expertise. It illustrates a good complementarity of human and machine. The machine allows for an optimal care pathway for obvious cases (whether it is malign or benign) but also

alerting the human when it is not obvious and that other parameters have to be taken into account.

To build upon these promising results, a heavier neural network architecture could be employed to increase the model's capacity for feature extraction and representation. Such architectures would potentially enable the algorithm to discern more intricate patterns within the data, which is especially beneficial for complex medical imaging tasks. However, this approach should be balanced against the increased computational demands and the potential for overfitting, necessitating a larger dataset for training and validation.

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**Abstract N°: 6353**
**Granulomatous Slack Skin: An Unusual Variant of Mycosis Fungoides – A Case Report**

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**Introduction & Objectives:**

Granulomatous slack skin (GSS) represents an extremely rare variant of cutaneous T-cell lymphoma (CTCL), documented in around 60 cases. Clinically, GSS is characterized by circumscribed erythematous lax skin masses with a predilection for the axillae and groin. From a histological perspective, it is distinguished by the presence of granulomatous T-cell infiltrates and a depletion of elastic fibers. This disease is frequently associated with preceding or subsequent lymphoproliferative malignancies, notably Mycosis Fungoides (MF) and Hodgkin's Disease (HD). Whether GSS represents a benign disorder, an unusual host reaction, a potential precursor to malignant lymphoma, or an indolent CTCL in itself is still a matter of debate.

**Materials & Methods:**

We describe a patient who presented with erythematous plaques, rapidly progressing to a rare variant of CTCL.

**Results:**

We present a case of a 57-year-old Caucasian female with a 4-year history of multiple erythematous lesions involving the lower limbs, axillae, lower trunk and the groin. During these years the patient had received various diagnoses including dermatitis and sarcoidosis from other clinical centers. Over a period of 5 months, the lesions progressively increased in size and some lesions showed laxity of the overlying skin. Clinical examination revealed well-circumscribed plaques, consisting of pendulous, wrinkled, lax skin, affecting the groin, the axillae, and the right lower abdomen.

Skin biopsy from the lower abdomen revealed diffuse granulomatous infiltrates composed of lymphocytes and macrophages involving the dermis. Orcein stain showed loss of elastic fibers. Immunohistochemistry revealed neoplastic T-lymphocytes positive for clusters of differentiation (CD)2, CD3, CD4, CD5 and negative CD30. CT of the abdomen and pelvis revealed two hyperdense masses on the pelvic wall and on the thoracoabdominal junction with a craniocaudal size of 17 cm. Inguinal lymphadenopathy was observed on CT. Based on the above clinicopathological findings, we made a diagnosis of GSS. Considering the patient's clinical fragility discussed in a multidisciplinary meeting, we decided to pursue therapy focused on relieving symptoms and controlling the disease using chlorambucil. As the patient's clinical condition deteriorated progressively, she was referred to the oncology department. Unfortunately, the patient passed away two years after being diagnosed.

**Conclusion:**

GSS is an extremely rare type of CTCL that presents with subtle but unique clinical and histological features. The diagnosis of GSS, as in our case, is based on the typical clinical and histological features. Given its uncommon nature, establishing the precise incidence rate of this disease poses a challenge. However, it was estimated that GSS accounts for about 1.2% of MF cases within the younger population. Even though 5-year disease-specific survival of this disease is close to 100%, its association with lymphoproliferative disorders warrants lifelong

monitoring. Treatment of GSS includes systemic chemotherapy and, if needed, potential consideration for brentuximab vedotin or alemtuzumab. Given the patient's characteristics and the challenging prognosis associated with GSS, we chose a palliative treatment approach.

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**Abstract N°: 6378****Unusual Presentation of Mycosis Fungoides: Multiple Subcutaneous Scalp Nodules**Osmanegre Atliya<sup>1</sup>, Ayşenur Sert<sup>2</sup>, Esra Adışen<sup>2</sup><sup>1</sup>Gazi University Medical School, Dermatology, Ankara, Türkiye, <sup>2</sup>Gazi University Medical School, Pathology, Ankara, Türkiye**Introduction & Objectives:**

Mycosis Fungoides which is a type of non Hodgkin T cell lymphoma of the skin, present clinically as three forms classically; patch, plaque or tumors. Unusual patterns are described in the literature. In this report we are presenting a extremely rare case of mycosis fungoides, followed as erythrodermic variant developed multiple subcutaneous tumor nodules on scalp.

**Materials & Methods:****Results:**

24 y/o man followed in our clinic as erythrodermic variant of mycosis fungoides for 6 years. He took UVA1 phototherapy, methotrexate, peg-interferon, acitretin treatments in the past however no benefit was achieved. His recent stage is 4A2(T4N3M0). Lastly he took UVA1 phototherapy 20 days and thereafter systemic bexarotene for one month. As the patient come for control to our mycosis fungoides clinic painful widespread edematous swellings on scalp which is same in appearance with other scalp skin noticed. After one month under same swellings subcutaneous mobile nodules in hard consistency revealed. Tru-cut biopsies achieved from both of swellings and nodules. Pathologic examination of swellings demonstrated folliculotropic type of mycosis fungoides, nodules are also consistent with mycosis fungoides infiltration. Upon this systemic chemotherapy was planned.

Mycosis fungoides can be present as atypical manifestations. This variants includes alopecia mucinosa, tumor d'emblee, granulomatous, bullous verrucous types, rarely subcutaneous nodules. Subcutaneous trunk and extremity nodules and solitary scalp nodules reported in the literature very rarely. Multiple scalp nodules of mycosis fungoides didn't reported so far. While managing masses with mycosis fungoides patients CT, MRI, PET/CT and Gallium scintigraphy can be used, but biopsy of lesions and pathological examination must be crucial. Early detection of new lesions is important that can be change disease stage and treatment strategy. Systemic chemotherapy and electron beam therapy options are useful in management.

**Conclusion:**

Mycosis fungoides can present rare conditions as our case. Patients must be examined detailly in control visits, if abnormal signs detected appropriate imaging techniques and pathologic examination must be performed to accurate diagnosis and treatment.





**Abstract N°: 6409****A case series of atypical cutaneous tumours**

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**Introduction & Objectives:**

This case series aims at broadening the understanding of potential variations in presentation of various cutaneous tumours.

**Case Series:****Case 1:**

A 46-year-old male presented with a single asymptomatic plaque measuring 10cm x 8cm studded with multiple hyperpigmented nodules with ulceration over back since 7 years and recent history of bleeding. Dermoscopy showed central depigmented structureless areas, pigment network, linear vessels. Histopathology revealed spindle shaped fibroblasts arranged in a storiform pattern. Immunohistochemistry showed CD34 positivity. A final diagnosis of dermatofibrosarcoma protuberans was made and the lesion was excised with involvement of plastic surgeon.

**Case 2:**

A 42-year-old male with segmental, painful skin coloured firm nodules over left side of chest and back since 8 years. There was history of pain on touch and pressure and no history of any systemic complaints or family history. Cold test to ice was positive. Histopathology revealed muscle fibres arranged in a whorled pattern in deep dermis extending to subcutaneous tissue. Masson's trichrome showed blue coloured collagen with red coloured muscle fibres confirming the diagnosis of segmental leiomyomas. He was managed with tablet nifedipine 10 mg thrice daily and excision of larger painful lesions.

**Case 3:**

A 59-year-old male presented with a large erythematous to skin coloured plaque studded with nodules and large areas of ulcerations and crusting over the scalp extending onto the face since past 7 months. The ulcers were deep extending till the skull bone. MRI brain and orbit showed an ill defined heterogenous mass involving the scalp and face with enlarged cervical lymph nodes. Histopathology revealed sheets of tumor cells with large nuclei with HMB 45 positivity. PET-CT scan showed multiple foci of metastasis in the pleura, vertebra and inguinal nodes. A final diagnosis of metastatic melanoma was established. The patient succumbed to the disease within two months of diagnosis.

**Case 4:**

A 50 year-old male presented with a solitary 3cm x 2cm sized nodule with central crusting over left leg since 1 month. Histopathology showed invagination of epidermal cells into the dermis with keratin pearls and atypical keratinocytes confirming a diagnosis of Keratoacanthoma. He was managed with wide local excision.

**Case 5:**

A 69 year-old female presented with asymptomatic dark colored patch measuring about 6cm x 3cm over left sole since 20 years with recent history of rapid enlargement and further darkening for the past three years. The patient has no personal and family history of melanoma. Patient had history of weight loss. There is no history of trauma, discharge or bleeding from the lesion. On cutaneous examination well-demarcated blackish patch measuring about 6cm x 3cm in diameter with erythematous nodules with shiny surface melanonychia was present over left toe nail. Histopathology revealed extensive proliferation of malignant melanocytes in a nested array extending till deep dermis suggesting the diagnosis of acral lentiginous melanoma. HMB 45 & S100 immunohistochemical staining confirmed the diagnosis. He underwent wide local excision under general anesthesia to the level of underlying fascia with 1 cm margins.

**Conclusion:**

Atypical presentations of tumors can pose a diagnostic challenge. In such cases biopsy, dermoscopy immunohistochemistry and special staining are crucial for accurate and timely diagnosis.

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**Abstract N°: 6421****Bcl-2 expression in primary cutaneous follicle center b-cell lymphoma**

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**Introduction & Objectives:**

The primary cutaneous follicle center B-cell lymphoma (PCFCL) represents 11% of cutaneous lymphomas. It has an excellent prognosis with a 5-year survival rate of >95% and extracutaneous involvement and dissemination in 5-10% of cases. This B-cell lymphoma generally expresses bcl-6 and CD10 but is most often negative for bcl-2. A strong expression of bcl-2 may suggest secondary cutaneous involvement by a follicular lymphoma. We report a case of PCFCL with positive bcl-2 expression.

**Materials & Methods:**

This concerns a 51-year-old female patient with a history of metastatic breast cancer in the right breast in 2017, still undergoing chemotherapy. Clinical examination revealed a single, painless, raised erythematous lesion on the left cheek evolving over 25 days, with no other lesions on the rest of the skin or palpable lymph nodes.

**Results:**

Dermoscopy showed irregular linear vessels, a homogeneous salmon-pink area, follicular plugs, rosettes, and chrysalises. Excision was performed, and histopathological examination with immunohistochemistry favored PCFCL with positive bcl-2 and Ki67 estimated at 30%. The staging was unremarkable.

**Conclusion:**

Follicular lymphoma (FL) systemic and PCFCL should be considered as two distinct entities, given their phenotypic differences. Moreover, PCFCLs have a better response rate to treatment and a better prognosis, thus, in the majority of cases, not requiring heavy chemotherapy treatments. Therefore, the expression of bcl-2 in cutaneous FL should prompt us to search for systemic FL with secondary cutaneous involvement through a comprehensive staging evaluation.



**Abstract N°: 6440****Misdiagnosis and clinical insights of acral amelanotic melanoma**

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**Introduction & Objectives:** Melanoma, a skin cancer originating from melanocytes, exhibits diverse clinical presentations primarily characterized by pigmented lesions. Acral amelanotic melanomas (AAMs), a rare subtype constituting 2-3% of melanomas, challenge diagnosis due to their lack of pigmentation and location on acral regions. Misdiagnosis as benign conditions can lead to delayed treatment and poor outcomes.

**Method:** To address the diagnostic challenges posed by acral amelanotic melanomas, we conducted a systematic literature review following PRISMA guidelines. A comprehensive search of the MEDLINE/PubMed, EMBASE, and SCOPUS databases was conducted up to August 2023. Our inclusion criteria encompassed case series and case reports of AAM patients initially misdiagnosed as other lesions. Extracted data include patient demographics, clinical features, diagnostic methods, treatment modalities, and outcomes.

**Results:** The review highlights a spectrum of cases where AAMs were initially mistaken for benign lesions like warts, scars, ulcers, and more. The cases encompass diverse clinical scenarios, emphasizing the challenge of distinguishing AAMs from benign conditions. Diagnostic methods range from clinical examination to histopathology and molecular markers. Treatment involves surgery, chemotherapy, immunotherapy, and targeted therapy. Delayed diagnosis and misidentification are common themes, underlining the need for heightened clinical suspicion.

**Conclusions:** AAMs, though rare, present significant diagnostic difficulties due to their deceptive appearance and anatomical location. This systematic review underscores the importance of early and accurate identification to improve patient outcomes. Clinicians and pathologists should be vigilant when encountering suspicious acral lesions, considering the potential for AAMs even in absence of typical pigmentation. Heightened awareness, multidisciplinary collaboration, and innovative diagnostic tools are crucial for effective management of these disguised melanomas.



**Abstract N°: 6454****Tirbanibulin 1% ointment for Actinic Keratosis and surrounding solar-damaged skin (field therapy): Results from a Real-Life Study.**

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**Introduction & Objectives:** Actinic keratosis (AKs) is a common precancerous skin lesion that typically develops in sun exposed areas and can progress into invasive squamous cell carcinomas. Moreover, sun-damaged skin can lead to cosmetic concerns, psychological distress, and an increased risk of non-melanoma skin cancers. Tirbanibulin 1% ointment is approved for the field treatment of Olsen grade I actinic keratosis of the face and scalp.

**Materials & Methods:** We performed a prospective non-randomized study to assess the effectiveness and tolerability of tirbanibulin 1% ointment for the treatment of AKs and surrounding solar-damaged skin (field therapy), in a real-life setting. 100 patients were included: 79 males (79%) and 21 females (21%). Tirbanibulin, was applied daily for five consecutive days. A satisfactory response was defined by complete (100% reduction in the number of lesions) or partial clearance (75–99%) of treated AKs.

**Results:** Total clearance of AKs was recorded in 52% of patients, while partial clearance was recorded in > 70% of lesions. An excellent tolerability profile and a high degree of satisfaction were observed, even more related to n terms of photorejuvenation. No treatment discontinuation due to adverse events was reported.

**Conclusion:** Our real-life experience confirms the effectiveness and safety of tirbanibulin ointment for the treatment of AKs and specially for surrounding solar-damaged skin (field therapy).



**Abstract N°: 6471****Clinical Response to Vismodegib in Nevoid Basal Cell Carcinoma Syndrome: A Case Report**

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**Introduction & Objectives:** Nevoid basal cell carcinoma syndrome (NBCCS), alternatively recognized as Gorlin-Goltz syndrome or Gorlin syndrome, is an infrequent autosomal dominant multisystemic disorder, exhibiting an approximate prevalence of 1 in 100,000 cases. Its etiology stems from a germline mutation affecting the human homolog *Drosophila patched* (PTCH1) gene or the suppressor of fused (SUFU) gene, integral constituents of the sonic hedgehog (SHH) signaling cascade. Dysregulated activation of the SHH pathway is associated with the pathogenesis of basal cell carcinoma (BCC) and other neoplasms within this syndrome.

**Materials & Methods:** We present the case of a 77-year-old man diagnosed with NBCCS, who has a history of over 100 basal cell carcinomas excised since his initial diagnosis of Gorlin-Goltz syndrome in 1970. He inherited the condition from his mother. Besides surgery, other treatment modalities employed include photodynamic therapy, resulting in regression of multiple BCCs, as well as partial resections of both earlobes, application of 5% imiquimod cream, and cryotherapy. Additionally, the patient has been diagnosed with other conditions such as arrhythmia, arterial hypertension, chronic obstructive pulmonary disease (COPD), glaucoma in both eyes, and goiter.

**Results:** Following a deterioration in the patient's clinical condition, vismodegib was initiated as a novel therapeutic option. Vismodegib, an oral inhibitor targeting smoothened (SMO) protein, thereby inhibiting the activation of the SHH pathway, has gained approval for managing advanced and metastatic BCC. Its application has extended to patients diagnosed with NBCCS since it is known to reduce the BCC tumor burden among NBCCS patients. Our patient was prescribed a daily dose of 150 mg of vismodegib, starting in January 2024. Subsequent follow-ups demonstrated a favorable therapeutic response, as evidenced by clinical photographs. Despite developing dysgeusia in February 2024, the patient continued vismodegib therapy due to satisfaction with the treatment outcomes.

**Conclusion:** In summary, this case report outlines the efficacy of vismodegib in treating advanced BCC in an NBCCS patient. However, the significant incidence of severe adverse effects, including muscle cramps, alopecia, ageusia, and weight loss, warrants careful consideration in clinical decision-making. Further research is necessary to elucidate the long-term therapeutic potential and safety profile of vismodegib in NBCCS management.



**Abstract N°: 6487****A 100-year-old patient with inoperable squamous cell carcinoma**Gergana Vazheva<sup>1</sup><sup>1</sup>Medical University of Plovdiv, Department of Dermatology and Venereology, Plovdiv, Bulgaria**A 100-year-old patient with inoperable squamous cell carcinoma**

**Introduction & Objectives:** Cutaneous squamous cell carcinoma (cSCC) is considered to be the second most common nonmelanoma skin cancer, preceded by basal cell carcinoma (BCC). Most frequently cSCC appears on photodamaged skin due to a prolonged exposure to ultraviolet (UV) radiation, chronic immunosuppression, chronic skin conditions, genetic conditions, etc. Some lesions, such as actinic keratosis, cutaneous horn, and cSCC in situ, are considered to be precursor lesions and are commonly found around the sites of the malignant tumour. This clinical case presents a 100-year-old woman with a cSCC on her face with an extremely fast development of six months.

**Materials & Methods:** Our patient is a 100-year-old woman who came to our practice with an ulcerative lesion on her face. Six months ago, it started growing from what the patient described as a papule on her nose. As time passed, it began to grow and ulcerate, destroying parts of her nose and affecting the right eye. During the last month, it started bleeding spontaneously, which made the patient look for medical help.

On examination, an ulcerative crateriform tumour, approximately 5-6 cm in diameter, is observed in the middle of her face, affecting large area of the nose, and extending to the right eye, involving the eye itself. The lesion is centered with haemorrhages and yellowish crusts are observed peripherally. On her right cheek, there is a cutaneous horn (cornu cutaneum) approximately 1 cm in diameter, and on her forehead, there is an actinic keratosis, 1-2 cm/dm. The rest of her skin on the face is visibly photodamaged with multiple hyperpigmented macules.

The diagnostic process included a biopsy of the skin lesions, followed by histopathology, an ultrasound scan, and CT scans.

**Results:** The results from the biopsy showed a poorly differentiated infiltrative cutaneous squamous cell carcinoma with perineural invasion. There were local lymph node metastases. The Oncology Committee discussed the patient and the case was deemed as a very high-risk and inoperable.

Other options for the patient include starting treatment with cemiplimab, a monoclonal antibody blocking the PD-1 pathway, indicated for the treatment of patients with metastatic cSCC or locally advanced cSCC who are not suitable for curative surgery or curative radiation.

**Conclusion:** The treatment of cutaneous squamous cell carcinoma depends on the state of the patient - co-morbidities, preferences, frailty. Determining if the carcinoma is low-risk, high-risk, locally advanced, if there are regional or distant metastases, is important for the final decision - whether the tumour is operable or not. Multidisciplinary board decisions are mandatory for all patients with advanced cSCC. Anti-PD-1 agents are the first-line systemic treatment for patients with metastatic or locally advanced cSCC who are not candidates for curative surgery or radiotherapy. In Europe, cemiplimab is the only approved medication for immunotherapy for advanced cSCC.







## Abstract N°: 6507

### Indications for adjuvant radiotherapy in high-risk cutaneous squamous cell carcinoma with clear margins: a Delphi consensus

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**Introduction & Objectives:** A lack of precise guidelines for the selection of patients who would benefit from adjuvant radiotherapy (aRT) in cutaneous squamous cell carcinoma currently exist.

The aim of our study is to provide indications for adjuvant radiotherapy in high risk cutaneous squamous cell carcinoma.

**Materials & Methods:** Delphi methodology was chosen to harness the extensive experience and opinions of a panel of experts in the field of cutaneous squamous cell carcinoma treatment.

**Results:** 23/30 participants completed the three rounds of the consensus (76.7%). Of these, 81% (n=20) declared to recommend aRT after excision of high risk cSCCs with clear histological margins. The experts deemed the presence of perineural invasion or bone invasion as sufficient criteria to select patients for adjuvant radiotherapy.

In the absence of these factors, aRT can be considered if two or more of the following criteria are present: invasion beyond subcutaneous fat, poor differentiation, tumor diameter  $\geq 2$  cm, or recurrent tumor.

**Conclusion:** Standardizing the criteria for selecting patients who might benefit from adjuvant radiotherapy will improve the management of cSCC patients and ultimately reduce the risk of local recurrence and metastasis.

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**Abstract N°: 6530****Performance status documentation for skin cancer patients: A vital tool to determine cancer care**Soo Min Yap<sup>\*1</sup>, Andrew Whitehead<sup>1</sup>, Maulina Sharma<sup>1</sup><sup>1</sup>Royal Derby Hospital, United Kingdom

**Introduction & Objectives:** Performance status (PS) is a score to estimate patient's ability to perform various daily activities without the assistance from others. It is crucial for predicting prognosis and determining optimal treatments for skin cancer patients, especially when considering surgical and oncological interventions.\*\* The National Institute for Health and Care Excellence (NICE) guidelines in the United Kingdom recommend that all patients referred to secondary care for a suspected skin cancer should have performance status recorded. The absence of documentation of performance status during the specialist skin cancer multi-disciplinary (MDT) meeting can potentially delay treatments or inappropriate pathway management for these complex patients. An audit was carried out to assess baseline performance status documentation of all patients on the skin cancer pathway at a regional cancer centre at a UK University hospital dermatology department.

**Materials & Methods:** A retrospective audit was conducted on the baseline documentation of performance status for 100 most recent patients seen in secondary care following the skin cancer pathway. Patients were identified from the hospital cancer centre database, and their performance status documentation was reviewed from letters from primary care General Practice (GP) at the time of referral, Dermatology and Plastic Surgery clinic correspondence letters.

**Results:** Of the 100 patients, 60 had a diagnosis of squamous cell carcinoma (SCC), 28 with melanoma and 12 were non-reportable cancers. The age group ranged from 31 years to 89 years.

Only 46% had performance status recorded at some time point during their process through the skin cancer pathway. Among these 46 patients, performance status was documented in 56.7% of GP referrals, 20.2% during the initial dermatology appointment and 23.3% at the dermatology diagnosis appointment.

**Conclusion:** The study findings were presented at the specialist skin cancer MDT operational meeting attended by dermatology, plastic surgery and oncology department representatives to raise awareness and facilitate education. Action plans include education for primary care (GP) clinicians, placing laminated PS guidance sheets in all clinic rooms, adding PS to suspected skin cancer proformas used in clinics and incorporating PS onto the skin cancer MDT outcome sheets. A re-audit will be performed 3 months after implementing these changes following the Plan, Do, Study, Act cycle. PS acts as a vital tool for determining the most appropriate skin cancer management and patient outcomes on the cancer pathway.



**Abstract N°: 6560****Revealing the Phenomenon of Nevi Regression in a Patient with Multiple Primary Melanomas**

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**Introduction & Objectives:** The phenomenon of spontaneous regression in melanocytic neoplasms is intriguing and infrequent. It may manifest in both benign and malignant cutaneous melanocytic tumours. Regression is characterised by either partial or complete fading of a tumour, which can be confirmed through histopathological analysis. We present a patient with a medical history of melanoma and dysplastic nevi syndrome, who subsequently experienced sudden regression of nearly all nevi.

**Materials & Methods:** We present a 73-year-old man with dysplastic nevi syndrome who has been in regular follow-ups including total body photography (TBP) and digital dermoscopy in our Dermatology Clinic for many years. He was diagnosed with an intermediate-thickness melanoma in the right temporal area in 1993. During follow-up, a melanoma *in situ* (MIS) in the left abdominal area was excised in 2013, followed by a superficial spreading melanoma (SSM) (Clark II, Breslow 0.32 mm) on his back in 2014, and a superficial atypical melanocytic proliferation of uncertain significance (SAMPUS) on his left upper arm in August 2023. No lymph node or distant metastases were detected so far. The patient has also had multiple basal cell carcinomas removed throughout the years. Tamsulosin is the only medication that our patient was taking, due to benign prostate hyperplasia.

**Results:** At the beginning of 2023, signs of initial regression in multiple nevi were observed upon digital dermoscopy. However, in September 2023, a regular TBP follow-up revealed a striking disappearance of almost all nevi. At the same time, an atypical melanocytic lesion with signs of regression was observed on the patient's back, subsequently histopathologically confirmed as SSM with a Breslow thickness of 0.56 mm and Clark stage II. Additionally, histopathological and immunohistochemical analysis of three excised regressed nevi confirmed the diagnosis of dysplastic nevi. Due to these impressive dermoscopic findings of regressed nevi along with the newly detected melanoma, a PET-CT scan was performed and it showed no pathologic metabolic activity of fluorodeoxyglucose. Moreover, S100 and LDH levels were within the normal values. Therefore, there was no sign of an active malignant disease.

**Conclusion:** This is one of extremely rare cases in which a patient developed an abrupt regression of almost all nevi, even though he was neither diagnosed with metastatic melanoma nor did he receive therapy, which is usually associated with nevi regression, such as pembrolizumab. The observed regression, possibly triggered by the most recent primary melanoma, underscores the immunostimulatory potential of melanoma progression, similarly to the commonly discussed melanoma-associated vitiligo. Further research on the immunological dynamics driving nevus regression and melanoma pathogenesis is needed to elucidate this rare phenomenon.



**Abstract N°: 6578****A Rare Cerebriform Variant of Sebaceous Nevus**Tugce Banli<sup>1</sup>, Duru Onan<sup>1</sup>, Cemile Altunel<sup>1</sup>, Merih Tepeoğlu<sup>2</sup><sup>1</sup>Baskent University Hospital, Dermatology and Venerology, ankara, Türkiye, <sup>2</sup>Baskent University Hospital, Department of Pathology, Ankara, Türkiye

## A Rare Cerebriform Variant of Sebaceous Nevus

## Introduction

Nevus sebaceous is an uncommon cutaneous hamartoma primarily composed of sebaceous glands. A very rare clinical variant of this condition is cerebriform nevus sebaceous. We report a new case with lesions appearing in the preauricular and nasolabial folds.

## Case Presentation

A 48-year-old man presented with verrucous plaques that were first noticed 25 years ago. Despite numerous cryotherapy sessions and topical treatments under the mistaken diagnosis of warts, there was no improvement. Physical examination revealed yellow verrucous plaques on the bilateral nasolabial folds and the left postauricular region. These plaques exhibited sulci and gyri, giving them a characteristic 'cerebriform' appearance. Dermoscopic examination showed yellowish or brown globules clustered on a yellow background. An incisional biopsy was taken, and histopathological analysis confirmed a diagnosis of sebaceous nevus. The patient expressed concern over cosmetic disfigurement. Subsequently, a complete excision of the lesion behind the ear was performed, yielding favorable cosmetic results.

## Discussion

Nevus sebaceous is a benign skin hamartoma, with the cerebriform type representing an exceedingly rare morphological variant. The cause of the cerebriform appearance remains unknown. Typically, it manifests as a solitary lesion in the head and neck region, often appearing at birth as a single hairless yellowish plaque with a smooth velvety surface. At puberty, it becomes more prominent and adopts a verrucous or mammillated appearance. It may be associated with other developmental defects within the scope of epidermal nevus syndrome. Although most sebaceous nevi remain unchanged throughout life and do not cause problems, 10–20% may develop secondary tumors. While most of these tumors are benign, malignant tumors—most commonly basal cell carcinoma, squamous cell carcinoma, sebaceous carcinoma, or adnexal carcinoma—can also occur. Symptoms are usually absent, with cosmetic concerns being the primary reason for seeking consultation. When a lesion with a cerebriform appearance is identified on the scalp, it's important to consider the possibility of a sebaceous nevus. Due to the characteristic potential for malignant transformation in sebaceous nevi, the lesions should be excised. If excision is not possible, close follow-up should be performed.





## Abstract N°: 6593

### Cutaneous form of Rosai-Dorfman disease treated with MEK inhibitors.

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### Introduction & Objectives:

Rosai-Dorfman disease (RDD) is a rare non-Langerhans cell histiocytosis, which usually involves different groups of lymph nodes. Skin lesions are rare and can be seen in 10% of extranodal RDD. The diagnosis of isolated cutaneous RDD is very uncommon, moreover, cutaneous RDD is regarded as a separate disease entity and belongs to the C group of histiocytoses with different epidemiology and clinical features.

### Materials & Methods:

We report a clinical case of a 68-year-old man with continuously growing lesions on his nose and left temporal area with no history of lymphadenopathy or systemic symptoms. The primary lesion in the form of erosion formed on the nose after sunburn with the second lesion appearing within a month. Over the 9 month period repeated coagulation and surgical excisions were performed with uncertain histological data and without beneficial clinical results. Also throughout the entire period, the patient admitted tearing off the crusts so the autodestructive component could be the additional cause for clinical atypia. The patient presented to the department with nonhealing ulcerative defects within the tumour growth. Due to the honey-colored crusts and oozing systemic tetracyclines were prescribed with a slight improvement, though over a month examination period new lesions appeared in the ear, postauricular area and scalp.

### Results:

Another re-evaluation of FFPE blocks with additional IHC study showed areas of granulation tissue, massive plasmacytic infiltration and the presence of histiocytic cells with emperipolesis. The histiocytes were S100 and CD68 positive.\* As RDD is known to be a self-limited disease with a high frequency of spontaneous remissions, different therapeutic strategies might be applied. In cases with progressive destructive disseminated lesions systemic treatment is indicated but there is no specific protocol and the experience is mostly limited to case series. According to the RDD consensus recommendations (Abla et al., Blood, 2018) consideration of targeted therapy for MAPK mutations is advised in severe or refractory cases. In our case MEK inhibitor Trametinib was prescribed based on pERK expression which indicates activation of the MAPK/ERK pathway. The initial dose was 1 mg orally once a day. A clinical result with almost full regression of the lesions and restoration of normal nose anatomy is visible after 2 months of therapy and treatment is continued with 1 mg Trametinib orally every other day.

### Conclusion:

The general rareness of cutaneous RDD with atypical manifestation makes the diagnosis extremely challenging for dermatologists. The choice of therapy might also be puzzling, since there are no clear guidelines and every case



should be evaluated from a “risk-benefit” standpoint.

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**Abstract N°: 6600**
**case report : a rare case of cutaneous desmoid-type fibromatosis**

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**Introduction & Objectives:**

Desmoid-type fibromatosis is a locally aggressive, nonmetastasizing, well-differentiated, unencapsulated monoclonal myofibroblastic proliferation with a tendency for local invasion and recurrence. The tumor is intermediate between a fibroma and fibrosarcoma. Without a well documented etiology. This case report presents the clinical features, diagnosis, and management, of a patient with desmoid fibromatosis. The report emphasizes the challenges associated with the management of this rare tumor and highlights the importance of a multidisciplinary approach for optimal patient outcomes.

**Materials & Methods:**

We present the case of a 30-year-old male patient who presented with a painless, firm mass in his left shoulder region. The mass had been gradually increasing in size over the past six months. Physical examination revealed a palpable, non-mobile mass measuring approximately 5 cm in diameter. Further investigations, including biopsy demonstrate a proliferation of uniform spindle cells resembling myofibroblasts, in the back- ground of abundant collagenous stroma and vascular network , and immunohistochemistry, objective the presence of the C 121A> G mutation in exon 3 of the CTNNB1 gene, suggestive of desmoid fibromatosis. Based on the clinical presentation , biopsy , immunohistochemistry and imaging findings, a diagnosis of desmoid fibromatosis was made. A multidisciplinary team comprising surgeons, oncologists, was involved in the management plan. Due to the size and location of the tumor, a conservative approach was initially adopted, with regular clinical and radiological monitoring. The patient was enrolled in a surveillance program, including regular imaging studies to monitor tumor growth and potential signs of recurrence

**Results:**

Desmoid-type fibromatosis is a rare, locally infiltrative, mesenchymal neoplasm that is associated with high rates of local recurrence but lacks the potential to metastasise. The disease affects younger individuals, with a peak age of 30 years. These rare tumours have a widely variable clinical presentation and unpredictable natural history, it poses unique challenges in terms of diagnosis and management. Treatment options range from surgery with or without radiation therapy which was the principle treatment. More recently, several series have reported spontaneous regression or prolonged indolent disease without treatment, with many institutions proposing a "watch and wait" policy . This strategy enables identification of those patients who will remain asymptomatic with stable disease or undergo spontaneous regression , radiation therapy, and medical interventions such as nonsteroidal anti-inflammatory drugs (NSAIDs) or targeted therapies. The choice of treatment depends on various factors, including tumor location, size, symptoms, and patient preferences. being a rare and complex condition, Desmoid-type fibromatosis has been the subject of various case reports and studies in the medical literature.\*\*

**Conclusion:**

This case report highlights the clinical presentation, diagnosis, management, of a patient with desmoid fibromatosis. It underscores the importance of a multidisciplinary approach and regular surveillance in optimizing patient outcomes. Further research and collaboration among experts are necessary to establish standardized

treatment guidelines and improve long-term outcomes for patients with desmoid fibromatosis.

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**Abstract N°: 6613****An Aggressive B-Cell Lymphoma Revealed: High-Grade Large B-Cell Lymphoma in a 16-Year-Old Girl.**Bettioui Halima Saadia Soued<sup>1</sup><sup>1</sup>Regional Military University Hospital of Oran, dermatology, Oran, Algeria**Introduction & Objectives:**

Diffuse large B-cell lymphomas account for 30 to 40% of non-Hodgkin lymphomas and can occur at any age; initially confined to extranodal territories such as the skin[1].

**Materials & Methods:**

A 16-year-old girl with no significant medical history presented with a large erythematous tumor plaque on the left side of her neck, measuring 20/15 cm, with a firm consistency adherent to the deep muscle plane, causing functional impairment. She had been treated with various antibiotics without improvement for six months prior to her admission. Physical examination revealed bilateral cervical and ipsilateral axillary lymphadenopathy. Laboratory tests were unremarkable except for elevated LDH levels. Cervicothoracic abdominopelvic CT scan showed unilateral left hypertrophy of the soft tissues in the lateral cervical region involving various muscle groups with effacement of intermuscular fascia, as well as ipsilateral skin and subcutaneous tissue. There was hypertrophy of the left pectoralis major and minor muscles forming a mass containing areas of necrosis, along with necrotic left axillary lymph nodes. Viral serologies were negative. The patient's condition progressed with extension of induration to the ipsilateral hemithorax causing superior vena cava syndrome with collateral circulation, cape-like edema, and dysphagia due to inaccessible lymph nodes. A muscle biopsy was performed, and systemic corticosteroid therapy, prophylactic anticoagulation, and emergency chemotherapy (CHOP) were initiated, resulting in a dramatic reduction in the tumor plaque. Immunohistological examination revealed a malignant tumor proliferation with diffuse architecture composed of large polymorphic cells with reduced eosinophilic cytoplasm containing irregularly hyperchromatic nuclei; high mitotic index, positive for CD20 and high Ki67, negative for CD15/30/99/TDT/myogenin, consistent with high-grade large B-cell lymphoma, leading to the adaptation of RCHOP therapeutic protocol, resulting in complete remission after 3 months of follow-up.

**Results:**

Diffuse large B-cell lymphomas (DLBCL) account for 30 to 40% of non-Hodgkin lymphomas in adults[1] but can occur in children as in our case report. Their clinical presentation is highly variable, with 40% of cases initially presenting with extranodal involvement including muscle and skin as rapidly growing tumor masses[2], as seen in our patient. The invasion of skin and muscles, due to the inability to biopsy deeply located lymph nodes near the brachial plexus, can be explained either by contiguous spread from infiltrated lymph nodes or by metastatic dissemination[3], or even by a primary dermomuscular localization, which remains an exceptional possibility[4]. Among the consequences of this lymphoma is superior vena cava syndrome[4], unfortunately noted in our patient. The treatment of choice is the combination of Rituximab and CHOP chemotherapy [5], which our patient received; the prognosis appears to be better than that of T-cell lymphomas[6].

**Conclusion:**

**Abstract N°: 6622****Lennert lymphoma mimicking leprosy, a challenging diagnosis.**

Alejandra Fajardo-Peña , Ana María Jimenez-Segura<sup>1</sup>, Juan Felipe Ochoa Bermudez<sup>2</sup>, Elkin Omar Penaranda Contreras<sup>2</sup>

<sup>1</sup>Clinica Los Nogales , Bogotá, Colombia, <sup>2</sup>Clinica Los Nogales

**Introduction and objectives:**

We present a 59 year old male patient presented with pruriginous plaques in the left forearm for approximately 1 year, which had extended to the whole extremity. Clinically, multiple yellowish- erythematous plaques of granulomatous appearance were evidenced, as well as two tumoral lesions of similar characteristics.

**Materials and Methods:**

A clinical case of a 4th level clinical center in Bogota Colombia in the month of November - 2023 is presented.

**Results:**

Biopsy and culture for acid-fast bacilli (AFB) from biopsy specimens were performed. Histopathology showed a nodular granulomatous dermatitis occupying the entirety of the reticular dermis which was separated from the epidermis by a grenz zone. Accumulations of epithelioid histiocytes, with occasional lymphocytes and plasmocytes, were following the path of cutaneous adnexa and surrounding nerve filets. Immunohistochemical stains for Ziehl-neelsen and Fite Faraco were negative for AFB, although a repeat stain was requested due to poor control. S100 was also negative. These findings were suggestive of paucibacillary (tuberculoid) Hansen's disease.

A second biopsy was performed due to lack of clinico-pathological correlation, a medical review board was held with immunohistochemical markers which were positive for CD3, c-myc, granzyme, TIA, and a KI-67 index of 90%. CD2 and CD5 had lost expression, and there was absence of CD7, CD4, and CD8. CD10 and Bcl 6 were negative. B-lymphocytes were scarce and CD20 positive. CD56 was negative in neoplastic cells, but GATA3 was positive.

A diagnosis of Peripheral T-cell lymphoma not otherwise specified (PTCL-NOS) was made, and staging studies were performed. No extracutaneous or nodal compromise were evidenced in extension studies, HTLV 1 and 2 were negative. Optimal response to radiotherapy was achieved.

**Conclusion:**

Lennert lymphoma is a rare variant of T-cell lymphoma not otherwise specified (PTCL/NOS) with particular but subtle histopathology findings. The primary skin affection is uncommon, and leprosy should be included as a differential diagnosis (1,2).



**Abstract N°: 6651****Adult T-Cell Leukemia-Lymphoma: A 20 year survival with lymphomatous transformation**Thage Cardoso Vecchi<sup>\*1</sup>, José Marcos T. Cunha<sup>1</sup>, Beatriz Trope<sup>1</sup><sup>1</sup>UFRJ, Dermatology, Rio de Janeiro, Brazil**Introduction & Objectives:**

Adult T-cell lymphoma/leukemia (ATLL) is a rare and aggressive disease of mature neoplastic T cells, caused by chronic HTLV-1 RNA retrovirus infection. Contamination can occur through sexual, vertical or contact with infected blood and derivatives transmission. The latency period is usually long, around 20-40 years, with the majority of the carries remaining asymptomatic. Xerosis is the most common dermatological manifestation of HTLV-1 infection, and from a hematological perspective, ATLL stands out. ATLL is classified into 5 subtypes: smoldering, chronic, primary cutaneous tumor, lymphomatous, and acute. The first three mentioned subtypes are considered indolent, with an average survival of 4 years, while the last 2 are more aggressive with average survival of 1 year. Literature describes that chronic and smoldering types can evolve into aggressive types.

**Materials & Methods:**

We present a male, 41-year-old, widowed, diagnosed with smoldering ATLL subtype in 2004. At this time, he presented with severe xeroderma and itching. His recently deceased wife had ATLL, indicating possible sexual transmission. From 2004 to 2018, he recurrently exhibited papules and pustules, treated as folliculitis. Always maintaining xerosis and itching. During this period he experienced some opportunistic infections and other complications, such as dental fistula, acute otitis media, condyloma acuminatum, exfoliative erythroderma, and mollusk contagium. In 2023 a painful tumor appeared in his left inguinal region. A biopsy of the inguinal lymphonode was performed, diagnosing High-Grade Non-Hodgkin Lymphoma. He was referred to hematology section and classified as lymphomatous ATLL, starting chemotherapy with cyclophosphamide, vincristine, Adriamycin and prednisone. After 9 cycles, he good clinical response. With the chemotherapy he developed photoeczema and post-chemotherapy hyperchromia. Until his last appointment, the patient completed 20 years of diagnosis.

**Results:**

From a clinical point of viwe, ATLL may manifest a variety of cutaneous lesions, such as papules, plaques, pustules, tumors and xerosis. Severe itching, lymphadenopathy, organ dysfunction, opportunistic infections can also occur. Hypercalcemia and elevated lactate dehydrogenase (LDH) are common and considered indicators of severity. The treatment of ATLL depends on its subtype, varying from conservative, phototherapy, use of antiretrovirals, chemotherapy, to bone marrow transplantation.

**Conclusion:**

The goal of this report is to demonstrate a beyond the expected survival in a smoldering ATLL patient, which evolved into the lymphomatous subtype during the clinical monitoring, emphasizing the importance of regular surveillance since a subtype transformation can occur at any time during the disease progression.



**Abstract N°: 6699****Assessment of Carcinogens in Cosmetics and Skin Cancer Risk: A Perspective on Low and Middle Income Countries.**

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<sup>1</sup>International Medical Faculty, Osh State University

**Introduction & Objectives:**

Cancer remains a prominent global health concern, ranking as the second leading cause of mortality worldwide. Dermatological complications arising from cancer therapies exert considerable psychosocial repercussions on patient well-being. In 2022, the global incidence of cancer reached an estimated 20 million new cases, resulting in 9.7 million fatalities. Notably, skin cancers constitute a prevalent malignancy, with over 1.5 million new diagnoses reported globally, including approximately 330,000 cases of melanoma, culminating in 60,000 deaths. Recent investigations have revealed the pervasive presence of various carcinogenic compounds in numerous cosmetic formulations, such as parabens, silica, coal tar, formaldehyde, phthalates, heavy metals like lead and arsenic, alongside certain ethoxylated compounds.

**Materials & Methods:**

A systematic search was conducted across prominent research databases, including PUBMED, SCOPUS, and MEDLINE, to identify pertinent studies published up to January 2024, utilizing keywords encompassing "Cancer," "Cosmetics," "Carcinogens," "Oncology," and "LMICs." Subsequently, a stringent selection protocol, reviewed by 2 independent reviewers, was implemented to select relevant studies, followed by meticulous data extraction and analysis.

**Results:**

Our analysis revealed a predominant association between mortality in skin cancer and the presence of carcinogens in cosmetic formulations. The elevated prevalence of carcinogenic compounds in these products potentially amplifies the risk of skin malignancies. Additionally, laser therapy for procedures like hydra facial surgery may heighten the susceptibility to cancer. Furthermore, inadequate public awareness regarding the carcinogenic content of cosmetics contributes to the heightened incidence of skin cancer in low- and middle-income countries (LMICs). Moreover, research on this subject predominantly originates from developed nations, thereby limiting comprehensive data availability and hindering conclusive interpretations, particularly concerning LMICs.

**Conclusion:**

Natural or herbal alternatives demonstrate efficacy in mitigating the adverse effects of carcinogenic compounds found in cosmetics. It is imperative for cosmetic companies to disclose the presence of carcinogens in their products, and proactive measures, including regional language awareness campaigns, are warranted to enhance public consciousness surrounding this issue in LMICs.





**Abstract N°: 6730****Utility of the 40 gene expression profile (40-GEP) test in refining risk of metastasis in high-risk cutaneous squamous cell carcinoma (HR-cSCC) patients stratified through a clinicopathological prognostic nomogram.**

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**Introduction & Objectives:** Risk stratification for cutaneous squamous cell carcinoma (cSCC) is challenging due to tumor heterogeneity associated with poor outcomes. Several tools exist, including clinical staging systems and 40-GEP testing. The purpose of this study is to evaluate the performance of a cSCC nomogram published by Rentroia-Pacheco, et al<sup>1</sup> and test the additional prognostic value of the 40-GEP.

**Materials & Methods:** Castle Biosciences retrospective cSCC cohort (n=760) of high (64.9%[493/760]) or very-high risk (35.1%[267/760]) NCCN tumors were categorized into 2 groups (low-risk group, LRG=0-20%, n=737; high-risk group, HRG= $\geq$ 21%, n=23) by the nomogram, and compared to the results of 40-GEP testing. Kaplan-Meier (KM) curves were generated to determine 3-year metastasis-free survival (MFS).

**Results:** Overall MFS was 89.2% (95%CI:87.0-91.4%). Nomogram risk bins showed MFS rates of 90.2% (95%CI:88.1-92.4%) in the LRG and 56.5% (95%CI:39.5-80.9%) in the HRG. However, 88.5% (77/87) of all metastases\*\* were in tumors categorized as LRG. In the LRG, 40-GEP identified patients at increased risk of metastasis (Class 2A predicted risk: 39.1% (288/737), true metastases: 59.7% (46/77)); Class 2B predicted risk: 3.3% (24/737), true metastases: 10.4% (8/77)) with 3-year MFS rates of 84.4% (95% CI 80.3-88.7%) and 70.8% (95% CI 54.8-91.6%), for Class 2A and 2B respectively.

**Conclusion:** The nomogram classified 9 out of 10 tumors that metastasized as lower risk. However, the 40-GEP classified 70% of tumors missed by the nomogram as high-risk Class 2. These data demonstrate that 40-GEP improves risk stratification of NCCN high or very high-risk patients who were categorized as low-risk by this nomogram.





## Abstract N°: 6750

### The skin microbiome in early stage mycosis fungoides : a longitudinal analysis in response to narrow band ultraviolet B phototherapy

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#### Introduction & Objectives:

Mycosis Fungoides (MF) is the most common type of cutaneous T cell lymphoma (CTCL). Antigenic stimulation by bacterial microorganisms has been suggested to play a central role in MF pathogenesis. However, the associations between microbiome diversity and response to phototherapy have not been established yet. This study aimed to determine the bacterial skin microbiome of lesional and non-lesional skin of MF patients before and after narrow band ultraviolet B (NB-UVB) treatment and to compare it to the skin microbiome of healthy controls. Additionally, we aimed to correlate these findings with clinical response to NB-UVB treatment.

#### Materials & Methods:

All enrolled MF patients who had a supporting skin biopsy based on histopathology and immunohistochemistry were included in the study. Skin swabs were collected from lesional and adjacent non-lesional skin (flank), before starting NB-UVB and 12-16 weeks after treatment. Healthy controls were similarly swabbed. Participants did not shower 12 hours before swabbing. Patients receiving topical or systemic treatment for MF or antibiotics one month before skin swabbing or phototherapy 6 months prior to enrollment were excluded.

Genomic DNA was extracted from skin swabs. Subsequently, the V1-V3 region of bacterial 16S ribosomal DNA gene and the *tuf2* gene for the sequencing of the genus *Staphylococcus* were amplified and sequenced on an Illumina platform. Representative sequences were processed with QIIME 2 and analyses were performed using R software.

#### Results:

Sixteen MF patients and 18 healthy controls were enrolled in the study. Nine stage 1B MF patients completed the phototherapy protocol. Beta-diversity of healthy individuals and MF patients did not show significant clustering. Similarly, lesional and non-lesional samples before and after phototherapy did not show differences. While the mean observed species ( $\alpha$ -diversity) did not significantly differ between healthy, lesional, and non-lesional skin, the scattering patterns suggest that lesional skin is more uniform both before and after NB-UVB treatment. From a taxonomic point, the three most prevalent amplicon sequencing variants (ASVs) were *Corynebacterium*, *Cutibacterium*, and *Staphylococcus* (S.) both in healthy participants and MF patients. Within the genus *Staphylococcus* (*tuf2* gene), the species *S.epidermidis* was shown to be the most prevalent among patients following phototherapy. *S. aureus* was detected only in patients following phototherapy, and not in healthy or pre-treatment samples. It was most prevalent in non-lesional swabs in patients having poor response to phototherapy.

Using differential abundance analysis in patients before and after phototherapy, four ASVs were identified with positive correlation to phototherapy: *Eubacterium\_nodatum* ( $q < 0.01$ ), *Dorea.s* ( $q < 0.01$ ), *Lachnospiraceae* ( $q < 0.05$ ), and *Treponema\_medium* ( $q < 0.05$ ).

**Conclusion:**

This study simultaneously compared the skin microbiome of healthy participants and a homogenous group of treatment naive early stage MF patients in response to phototherapy. It highlighted several genera that were more abundant following phototherapy. Non-lesional skin showed genus-level shifts when comparing responders and poor responders. Our study provides insights on microbiome diversity in the skin of MF patients in response to phototherapy and requires further validation and investigation.

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Abstract N°: 6764

**Skin's Symphony: Mycosis Fungoides and The Leser-Trélat Sign as a paraneoplastic marker**Mihaela Paula Toader<sup>1</sup>, Daciana Elena Branisteanu<sup>2</sup>, Mihaela Cojocaru<sup>1</sup>, Diana Sinigur<sup>2</sup>, Andreea-Caterina Rusu<sup>1</sup><sup>1</sup>Railway Clinical Hospital Iasi, Dermatovenerology, <sup>2</sup>Railway Clinical Hospital Iasi

**Introduction & Objectives:** Mycosis fungoides, a subtype of non-Hodgkin's lymphoma, predominantly affects the skin, displaying a broad spectrum of clinical presentations that vary according to the disease's stage. Leser-Trélat sign (LT), characterized by the sudden emergence or rapid expansion of seborrheic keratoses (SKs), often serves as an indicator of an underlying malignancy. In rare instances, it presents as a paraneoplastic phenomenon accompanying cutaneous T-cell lymphoma, such as mycosis fungoides (MF).

**Materials & Methods:** We detail a case of mycosis fungoides in a Caucasian woman, exhibiting red patches, plaques, and infiltrated lesions throughout her body, along with numerous brown warty papules, mainly on her face, neck and upper body.

**Results:** An 84-year-old patient with multiple pathologies was referred to our dermatology department due to severe pruritus, finely scaling red patches, plaques, along with reddish-brown well-demarcated, infiltrated lesions consistent with the diagnosis of MF with onset in 2012 and histopathologically confirmed 2 years later. PUVA therapy yielded satisfactory results, but during the pandemic the patient stopped the treatment. Subsequently, she reported the onset of brown papules on her upper back, increasing in number over time. In 2023, the patient underwent her first assessment in our department, where a thorough physical examination and a comprehensive investigation panel included her in stage IIB of the disease. Additionally, several well-circumscribed brown lesions, possessing a waxy texture and a "stuck-on" appearance, were noted on the face, neck and upper body, with dermoscopic features consistent with SKs. MF lesions were treated with potent topical corticosteroids and phototherapy, while asymptomatic SKs required no intervention. Subsequent follow-up after two months demonstrated favorable results in MF but a rapid increase in SKs, nearly doubling in number, suggesting the presence of the Leser-Trélat sign. Several lesions on the eyelids obstructed her vision, requiring curettage. Considering the onset of LT after the diagnosis of MF, additional investigations were conducted, including a CT scan of the chest, abdomen and pelvis to exclude a visceral malignancy. Following collaboration with the oncology department, it was determined that chemotherapy was not warranted for MF, and we proceeded with skin-directed therapy.

**Conclusion:** The Leser-Trélat sign, though rare, serves as a significant paraneoplastic cutaneous marker of internal malignancy and may precede, occur concurrently or after the diagnosis of disease. While the precise etiology remains elusive, it is hypothesized to involve cytokine dysregulation and the release of growth factors from the neoplasm. Considering the relatively common occurrence of SKs in individuals over 60, patients exhibiting the Leser-Trélat sign should undergo a diagnostic screening program for malignant disease. By recognizing and addressing the Leser-Trélat sign, clinicians can improve patient outcomes through early detection and appropriate management of associated malignancies. The mainstay of treatment in patients with asymptomatic SKs lesions involves management of the underlying malignancy while symptomatic lesions may be addressed through various physical methods such as cryotherapy, curettage or electrodesiccation.



**Abstract N°: 6828****Degeneration of Verneuil disease into cutaneous squamous cell carcinoma**Bettioui Halima Saadia Soued<sup>1</sup><sup>1</sup>Regional Military University Hospital of Oran, Oran, Algeria**INTRODUCTION:**

Verneuil's disease also called suppurative hidradenitis is a chronic fistulizing and sclerosing suppuration developed at the expense of the apocrine glands. Malignant degeneration into squamous cell carcinoma during of this disease is a rare complication occurring after a long course. We report a new case of cutaneous squamous cell carcinoma (SCC) complicating Verneuil's disease. **OBSERVATION:** Mr. MD aged 50 consulted at our level for the management of 'a CEC at the level of the gluteal region evolving for a year,. The history revealed Verneuil's disease for 20 years as well as active pulmonary tuberculosis and chronic smoking. Skin examination of the patient revealed an ulcerated tumor lesion measuring 10 cm in diameter in the gluteal region with loss of substance. As well as atrophic and achromic scar lesions of Verneuil's disease. The thoraco-abdominopelvic scanner as well as the MRI of the pelvis found locoregional invasion with sacral and coccygeal osteolysis and infiltration of the superficial gluteal muscles. Thus we are faced with a CEC classified T 3NxM0. The decision of the RCP was to begin radiotherapy sessions aimed at analgesia, surgical treatment being impossible and chemotherapy also being impossible because of active pulmonary tuberculosis.

**DISCUSSION:** The degeneration of Verneuil disease into SCC is a classic but rare complication. Although Verneuil disease is more common in women than in men, malignant transformation is predominantly male. The average age at the time of diagnosis of neoplastic transformation is 51 years and although we cannot explain it, this complication only occurs in the perineal, perianal and buttock locations of Verneuil's disease. This risk of degeneration is all the more significant when there is associated chronic smoking. These particularities are consistent with our observation.

**CONCLUSION:** Our observation highlights the interest in close monitoring of patients with Verneuil's disease in order to quickly detect degeneration in SCC, a rare but formidable complication.





**Abstract N°: 6829**

## **Early Serum Markers for Immune Checkpoint inhibitor induced Hypophysitis in Melanoma Patients**

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### **Introduction & Objectives:**

Immunotherapy with checkpoint inhibitors (ICIs) has significantly reduced mortality in melanoma patients by activating the immune system to fight cancer. However, this activation can also lead to immune-related adverse events (irAEs), such as inflammation of the pituitary gland (hypophysitis). The etiology of immune-related hypophysitis involves complex immune reactions possibly linked to antibodies against specific antigens in the pituitary gland. Diagnosing this condition requires clinical assessments, lab tests, and imaging, primarily MRI, though many cases show no radiological changes, making diagnosis challenging.

The delayed diagnosis of immune-related (ir) hypophysitis has been shown to result in higher rates of morbidity and mortality. Better prognostic and predictive factors for this disease are needed.

### **Materials & Methods:**

A retrospective analysis of 40 melanoma patients who experienced hypophysitis during treatment with ICIs was performed. These patients were compared with 40 control patients who did not develop hypophysitis matched by age, gender, type of immunotherapy, and disease stage. Clinical data and blood values including LDH, CRP, TSH, T3, T4, and absolute immune cell counts were extracted from medical records. Then patient characteristics, laboratory results, progression-free survival, and overall survival between the two groups were compared.

### **Results:**

Hypophysitis occurred much earlier in patients treated with ipilimumab alone or with nivolumab) compared to those on anti-PD1 monotherapy.

Common symptoms across both treatment groups included weakness, hypotension, and dizziness. Headaches were specifically noted only in the ipilimumab group. Additionally, 50% of those with hypophysitis also experienced other immune-related adverse events.

There was no significant difference in clinical response or survival rates between the groups, with the median progression-free survival being notably longer in the hypophysitis group compared to the control group.

Patients with hypophysitis consistently showed a marked decrease in T4 hormone levels throughout their treatment until diagnosis, regardless of the type of immune checkpoint inhibitor (ICI) used.

### **Conclusion:**

Since ICIs are now widely used in cancer treatment, it is essential to watch for signs and lab alterations indicative of autoimmune hypophysitis to ensure early diagnosis and timely intervention. This research emphasizes the need for regular monitoring of T4 hormone levels, while TSH monitoring proved beneficial primarily in patients treated with ipilimumab-based ICI regimens. Hyponatremia was commonly observed in patients with immune-related hypophysitis, suggesting that it could serve as an indicator for further evaluations, including tests for ACTH and cortisol levels.



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**Abstract N°: 6857**

**Therapeutic challenge mycosis fungoides and viral infection!!!**

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<sup>1</sup>ORAN university hospital establishment, oran, Algeria

**Introduction & Objectives:** Mycosis fungoides (MF) is the most common type of primary cutaneous T-cell lymphoma. One of the major complications of MF is infection, particularly skin infections. We report a rare case of MF complicated by viral infection by human papillomavirus (HPV).

**Materials & Methods:** 78-year-old man followed for classic MF classified T2b NxMx B0, treated with methotrexate (MTX 25 mg/week), corticosteroids (CTC) (30 mg/d) and topical corticosteroids for 5 months leading to regression of the skin lesions but also to appearance of warty lesions on the chin and trunk reminiscent of common warts. The patient was initially treated with cryotherapy, but given the exacerbation of the number of warts and their extension, MTX was stopped with maintenance of general corticosteroid therapy leading to the regression of the lesions of the chin with the persistence of the lesions of the trunk and the reappearance of the pruritus. The patient stopped CTC on his own initiative and was lost to follow-up, returning 4 months later with progression of his MF: T2b N1Mx B1 and the persistence of warty lesions prompting the reintroduction of general CTC at a dose of 30 mg/d and cryotherapy, the patient died a month later.

**Results:** Infectious events are major causes of death in patients with advanced stages of MF and Sezary syndrome (SS). Immunosuppression in these patients is multifactorial. Cutaneous lymphoma predisposes patients to infections by skin bacteria and chemotherapy-induced neutropenia, and immunosuppression puts them at risk for opportunistic infections.

In a study by Axelrod et al, bacterial skin infection was the most common, followed by herpes simplex virus and herpes zoster virus skin infection, fungal infections were rare. These data are confirmed by the cohort of Beylot et al.

In a cohort by Vidulich et al of 180 patients with cutaneous lymphoma followed since 1992, only three SS patients with disseminated warts were encountered, our patient with MF presented a similar presentation.

Systemic medications such as MTX represent additional risk factors. Topical corticosteroids have local immunosuppressive properties, and other cutaneous therapies, such as UVB or PUVA, also increase the risk of infection by depleting epidermal Langerhans cells.

The clinical presentations of skin infections complicating MF lesions are atypical, associated with a diagnostic delay and require longer treatments than usual. In our patient MTX was stopped despite its effectiveness on MF following a rare infection and spread by HPV (could have acted as a cocarcinogen in the development of other cancers).

**Conclusion:** Dermatologists and patients with MF must be familiar with infectious complications in order to adequately diagnose and manage them.





**Abstract N°: 6859**

## **Rare Presentation of Cutaneous Metastases from Colorectal Cancer Mimicking HerpesZoster: A Case Report**

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### **Introduction & Objectives:**

Cutaneous metastases from internal cancers are rare, occurring in 0.7% to 9.0% of all cancers. They typically indicate intralymphatic or intravascular tumor spread with a poor prognosis. The most common primary tumors that metastasize to the skin are the most frequent human cancers, such as breast cancer in women and lung cancer in men. Cutaneous metastases are more commonly observed as papules or nodules and may present ulcerations at a later stage. The zosteriform distribution pattern of these lesions is an exclusive and even rarer presentation form. We describe here the case of a 54-year-old woman followed for colorectal adenocarcinoma, presenting with zosteriform cutaneous metastases.

### **Clinical case:**

We report the case of a 54-year-old woman followed for 4 years for colorectal adenocarcinoma who was treated with neoadjuvant radiochemotherapy followed by surgical resection with lymph node dissection, currently undergoing chemotherapy. She presented to the emergency department with painful erythematous vesiculopapules with crusts involving the left thigh. On examination, numerous firm erythematous papules were present on the left lower limb with a metameric distribution (L2-L3).

This eruption was treated as a herpes zoster infection without improvement. A biopsy of the skin lesions with immunohistochemistry was performed and revealed the appearance of a cutaneous localization of a moderately differentiated adenocarcinoma of gastro-bilio-pancreatic origin. Extension assessment did not reveal any other secondary localization. The patient was referred to the oncology department to initiate appropriate treatment.

### **Discussion:**

Despite the well-described cutaneous involvement in solid tumors, zosteriform metastases are a rare entity, with only a few cases published in the literature. Many of them were initially diagnosed as herpes zoster, which is a common finding in immunocompromised cancer patients. The mechanism of zosteriform distribution often remains unknown. However, proposed theories include hematogenous or lymphatic dissemination, direct metastasis, and direct implantation of tumor cells. Another possible explanation is the Koebner phenomenon. Clinically, metastases are located near the underlying internal carcinoma. In this reported case, the possible pathological mechanism was lymphatic dissemination. The treatment and management strategy for cancer with cutaneous metastases involve determining the tumor origin. The prognosis of patients with cutaneous metastases depends mainly on the pathology and biological behavior of the primary neoplasm and its response to treatment; however, cutaneous metastases are markers of poor prognosis. One of the important factors influencing survival is the time elapsed between diagnosis and the appearance of cutaneous recurrences. It is imperative that zosteriform cutaneous metastasis of colorectal cancer be correctly diagnosed and appropriate treatment initiated promptly.

### **Conclusion:**

The case presented highlights the importance of including cutaneous metastases in the differential diagnosis of patients with lesions resembling herpes zoster. A biopsy should be performed to avoid further delay in diagnosis, especially when the lesion is rapidly evolving and not responding to treatment. Early detection and recognition of metastatic disease in the skin could significantly influence treatment strategies and prognosis.

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## Abstract N°: 6906

### **Transcriptome analysis combined with Mendelian randomization revealed that the trihydroxy-modified substrate molecule Rgs 10 has dual effect in melanoma**

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#### **Introduction & Objectives:**

Melanoma is a kind of malignant skin cancer. It is highly metastatic with a high recurrence rate. Therefore, the early diagnosis and treatment of melanoma is needed. Although advances in diagnosis and treatments has improved in recent years, causes of malignant transformation of melanoma nevus into melanoma and the molecular mechanisms of malignant transformation are still unclear. Therefore, further research is needed to determine the factors that affect tumorigenesis and prognosis of melanoma.

#### **Materials & Methods:**

In this study, we enriched differential genes between melanoma tissues and control tissues based on the UCSC-Xena database to determine the main biological pathways in melanoma patients, and used Mendelian randomization to determine the pathogenesis. After determining that different lipoprotein and lipid metabolism levels are the cause of melanoma, the intersection of the differential gene and the trihydroxybutyrylation substrate gene was determined, and the impact of the intersection gene on the patient's prognosis was determined. Furthermore, we screened biomarkers based on different machine learning models such as Lasso, RF, and XGBoost, and constructed diagnostic and survival nomogram models. For the obtained biomarkers, Mendelian randomization analysis was performed again to determine whether each biomarker is a cause of melanoma. In addition, for the final selected key gene RGS10, we elaborated on its potential biological effects and targeted therapeutic drugs through single-gene GSEA enrichment, immune microenvironment correlation and drug sensitivity analysis.

#### **Results:**

Using  $\text{adj.P.Value} < 0.05$  and  $|\log_2\text{FC}| > 1$  as the threshold, a total of 9138 differential genes were obtained between melanoma tissues and control tissues. The enrichment analysis results showed that lipid-related biological processes, especially lipid Metabolic-like processes are well represented. Mendelian randomization analysis of multiple lipid classes demonstrated a direct causal relationship between multiple lipoprotein levels and melanoma. Among the differential genes, a total of 51 genes can serve as substrate molecules for trihydroxybutyrylation, of which 17 intersection genes are significantly related to patient prognosis. A total of 5 characteristic genes including PLA2G4D, RGS10, FKBP5, RREB1, and SHMT2 were screened by different machine learning. Mendelian randomization analysis showed that RGS10 is a pathogenic molecule that directly causes melanoma. The nomogram model shows that RGS10 is a risk factor for the disease in the population, and it is a protective factor for prognosis in the sick population, indicating that RGS10 has different regulatory mechanisms for the onset and prognosis. GSEA enrichment of the RGS10 single gene shows that it has the potential function of regulating DNA replication, cell cycle and chromosomes, which is of great significance for the induction of cancer. In addition, RGS10 is also significantly related to a variety of immune cells, which has a significant impact on the regulation of the tumor immune microenvironment.

#### **Conclusion:**

Differential gene enrichment and Mendelian randomization showed us that the lipid level of melanoma patients has a direct causal relationship with the onset of melanoma. RGS10 acts as a risk factor for tumorigenesis as well as a protective factor for prognosis in melanoma.

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**Abstract N°: 6933**

**Cutaneous Anaplastic Large Cell Lymphoma in a Child**

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**Introduction & Objectives:**

Anaplastic large cell lymphomas represent 10%–15% of non-Hodgkin lymphomas in children. Anaplastic large cell lymphoma ALK-negative (ALCL ALK-) is a rare CD30-positive T-cell lymphoma that poses a significant diagnostic challenge. It typically affects adults between the ages of 40 and 65, with occurrences reported in patients at both extremes of age, and it exhibits a male predominance. The primary involvement is usually nodal. Both morphologically and immunohistochemically, anaplastic large cell lymphoma (ALCL) can mimic various other hematologic and non-hematologic malignancies.

**Materials & Methods:**

We present the case of a child diagnosed with primary cutaneous anaplastic large cell lymphoma, a subtype of T-cell lymphoma.

**Results:**

A 5 year old child with no significant medical history presented with an erythematous-ulcerative lesion on the right wrist for the past 3 months. The lesion rapidly increased in size, without other associated lesions or systemic symptoms. Upon clinical examination, the patient was conscious, stable hemodynamically and respiratorily. Cutaneous examination revealed an ulcerative and bleeding tumor on the anterior surface of the right wrist. Additionally, a sub-centimeter axillary lymphadenopathy was observed, while the rest of the clinical examination was normal.

A biopsy with immunohistochemical study confirmed the diagnosis primary cutaneous anaplastic large cell lymphoma ALK negative, a type of non Hodgkin T cell lymphoma.

As part of the staging assessment, a cervico-thoraco-abdomino-pelvic CT scan was performed, revealing suspicious sub-centimeter axillary lymph nodes. The bone marrow was not infiltrated by anaplastic cells.

PET-CT scan revealed hypermetabolic axillary lymph nodes, along with bilateral hypermetabolism of the pharyngeal and lingual tonsils.

Laboratory and infectious disease workup yielded negative results.

The patient was treated with alternating protocol between AM (dexamethasone, methotrexate, ifosfamide, cytarabine) and BM (dexamethasone, methotrexate, cyclophosphamide, doxorubicin). The patient showed good progress with complete regression of the cutaneous lesion after three treatment sessions.

**Conclusion:**

ALCL is a biologically and clinically heterogeneous subtype of T-cell lymphoma. Clinically, ALCL can manifest as localized (primary) skin disease or widespread systemic disease. Both types, however, share a similar histology,



characterized by cohesive sheets of large lymphoid cells expressing the Ki-1 molecule (CD30). Primary cutaneous ALCL (C-ALCL) is part of a spectrum of CD30+ lymphoproliferative skin diseases.

Patients with systemic ALK+ ALCL have a better prognosis compared to those with ALK-negative ALCL, although both subtypes warrant treatment with polychemotherapy. Autologous and allogeneic stem cell transplantation plays a role in recurrent disease, although the utility of initial transplantation remains undefined.

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**Abstract N°: 6940****Preliminary Results about the Role of Nicotinamide in the Pathogenesis of Actinic Keratosis: Implications for NAD<sup>+</sup>/SIRT1 Pathway**

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**Introduction & Objectives:** Actinic keratosis (AK) is a precursor to invasive squamous cell carcinoma (SCC), primarily induced by ultraviolet radiation (UVR) exposure. Thus, AK diagnosis and treatment are critical due to potential SCC progression. Several therapeutic options, including target lesion or field cancerization treatment, are combined with preventive strategies, focused on sunscreen protection and oral nicotinamide (NAM) intake. Specifically, NAM administration appears to promote a reduction in AK progression, mitigate inflammation, and facilitate the repair of DNA damaged by UV radiation. Interestingly, NAM is a precursor of nicotinamide adenine dinucleotide (NAD<sup>+</sup>), a well-known substrate of sirtuins, a family of protein with anti-aging, anti-inflammatory, anti-oxidant and anti-cancer properties. The aim of the present clinical study is to analyze the potential involvement of sirtuins and NAD<sup>+</sup> in the NAM-induced effects against AKs arising and progression.

**Materials & Methods:** Thirty patients affected by AKs and other previous non-melanoma skin cancer were enrolled and treated with NAM (1 g/day), for a period of 24 months. The procedure was approved by the Ethical Committee of the Hospital and were performed according to the declaration of Helsinki. Haematological, biochemical, and skin condition assessments were conducted every 6 months. Blood samples were collected and serum and peripheral blood mononuclear cells (PBMCs) were extracted. PARP1, SIRT1 and NAD<sup>+</sup> levels, were measured by using commercial available ELISA assays. SIRT1 activity in PBMCs was assessed fluorometrically.

**Results:** No significant variations in biochemical parameters except for a decreased basophils ( $p < 0.01$ ), monocytes, total cholesterol, and blood glucose levels ( $p < 0.05$ ), were reported for the study group, suggesting reduced inflammation and increased physiological activity following NAM administration. Interestingly, NAM treatment significantly enhanced NAD<sup>+</sup> sera levels ( $p < 0.001$ ), leading to a significant increase in nuclear SIRT1 activity ( $p < 0.0001$ ), evaluated in PBMCs. However, NAM did not affect PARP1 and SIRT1 sera levels.

**Conclusion:** NAM administration significantly improved AK progression by increasing NAD<sup>+</sup> sera levels and nuclear SIRT1 activity, suggesting a novel potential mechanism for NAM in counteracting AK. These findings support NAM's role as a chemopreventive agent in AK management and highlight its implications for skin cancer prevention and treatment. Our results are preliminary and further research is warranted to elucidate NAM's therapeutic potential and optimize its clinical use in a large population study.

**Inizio modulo**



**Abstract N°: 6943****Comprehensive Diagnostic for Fibrosarcomatous Dermatofibrosarcoma Protuberans: A Rare Case**Winne Irene Putri Yulian<sup>1</sup>, Roro Krisanti<sup>1</sup>, Adhimukti Sampurna<sup>1</sup>, Sondang Sirait<sup>1</sup>, Riesye Arisant<sup>1</sup><sup>1</sup>Faculty of Medicine Universitas Indonesia – Dr. Cipto Mangunkusumo National Hospital, Dermatology and Venereology, Jakarta, Indonesia**Introduction & Objectives:**

Dermatofibrosarcoma protuberans (DFSP) is a malignant neoplasm that is typically locally aggressive with a tendency to local recurrence, but rarely metastasizes. It is characterized by a uniform spindle cell arrangement, classically with a storiform pattern and CD34 immunoreactivity. A rare variant of DFSP, fibrosarcomatous dermatofibrosarcoma protuberans (FS-DFSP) is very challenging to diagnose, considering that it has a high risk of recurrence and metastasis compared to other DFSP variants.

**Materials & Methods:**

A 27-year-old female patient presented to our hospital with a lump on the right upper lateral thigh. The complaints started 10 years ago, the skin of the right thigh area became hardened. About 8 years later, it turned reddish, started to stand out accompanied by pain and itching. Over the past year, the lump has gotten bigger and bleeds easily. The patient went to a local hospital for treatment. Based on the biopsy results, the patient was diagnosed as scleroderma. The patient received therapy for 6 months, but no improvement was seen. Next, the patient is referred to our hospital.

**Results:**

Physical examination revealed a hard, dense, erythematous to hyperpigmented mass, measuring 10x15 cm with a bumpy surface and multiple ulcers with black crusts. The histopathological analysis of the dermis to subcutaneous tissue revealed a mesenchymal tumor mass, spindle-shaped cells arranged in storiform pattern, pleomorphic, hyperchromatic, and eosinophilic cytoplasm. Mitotic figures were found up to 15 per 10 high-power fields (HPF). Several inflammatory cells were seen in the superficial dermis. Congestive blood vessels were located in between the tumor tissues and the superficial portion showed granulation tissues. Immunohistochemistry stains of the tumor cells demonstrated positive for CD34, CD56, CD99, BCL2, and negative for SMA Desmin, S100, EMA AE1/3, TLE-1, Melan-A, HMB45, and SOX10. The histopathological and immunohistochemistry results in this patient suggested spindle cell tumor, which is most consistent with FS-DFSP.

**Conclusion:**

We have found one case of FS-DFSP. Diagnosis of this disease is complicated, and requires histopathological and immunohistochemical examination. Correct identification of this tumor type can guide the choice of surgical procedure and improve the prognosis. A cross-disciplinary approach by pathologists and adequate laboratory facilities is required to achieve maximum results.




**Abstract N°: 6946**
**From patients' needs to a digital, personalised melanoma survivorship care plan**

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**Introduction & Objectives:**

Despite being the leading cause of death among cutaneous tumors, recent advancements in treatment options for melanoma, including immunotherapy and targeted therapies, have significantly improved survival, especially for advanced stages. These treatments are now being extended to earlier stages as (neo-)adjuvant therapies, revolutionising melanoma treatment and further increasing survivor numbers. However, these survivors may face unique challenges including long-term effects of the disease and its treatment, which may impact their physical, psychological and social well-being. Survivorship care plans (SCPs) aim to support patients in dealing with this impact. Currently however, SCPs for other types of cancer are poorly implemented and not sufficiently effective, likely due to a lack of customisation to individual needs. Therefore, this project aims to develop a personalised, digital melanoma SCP in cocreation with relevant stakeholders.

**Materials & Methods:**

This project employed a multi-phase, mixed-methods participatory design, involving all key stakeholders in the design of an SCP. It started with in-depth qualitative interview- and focus group studies among 50 patients (stage I – IV) and 24 healthcare providers (HCPs) to gather insights about their experiences with and perspectives on adequate melanoma care. These insights were translated into potential SCP components, which informed a three-round Delphi-consensus process involving 32 patients and 15 HCPs to determine essential SCP components. A co-creation study was then conducted with 4 patients, 3 HCPs and 6 IT-professionals to gather insights into the underlying motives, and to incorporate IT-perspectives.

**Results:**

Qualitative studies revealed a need for broader information and support, addressing patients with all stages of the disease, from diagnosis onwards, and extending to the patients' close relatives. These were translated into 44 potential SCP components and through the Delphi-consensus consensus was reached on 24 key components of the SCP which focused on personal information including disease stage, Breslow thickness, and treatments; general information about diagnosis, related treatment steps, and possible outcomes; a guide for addressing symptoms and issues, a personalised follow-up schedule including background information; information on skin self-examination; and (melanoma-specific) lifestyle advices. In the cocreation study, discrepancies were addressed, and IT-professional perspectives included, to shape the final SCP content. The components were then integrated into the melanoma care pathway, and incorporated into a hospital-wide patient journey app, which is connected

to the patients' electronic health records.

**Conclusion:**

We developed a digital SCP Melanoma app tailored to the specific disease- and stage-related needs of patients with melanoma. By also taking into account HCPs' and IT-professionals' perspectives, the SCP has gained broad support, enhancing the likelihood of effective implementation in practice. This digital SCP will be evaluated in a randomised controlled trial focusing on outcomes that matter to patients. This is expected to demonstrate effectiveness and facilitate broader implementation.

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**Abstract N°: 6956****Coexisting mycosis fungoides and Hodgkin's disease as a discordant lymphoma: a case report**

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**Introduction & Objectives:** Mycosis fungoides (MF), a common form of primary cutaneous T-cell lymphoma (CTCL), is a type of non-Hodgkin's lymphoma (HL). Although the coexistence of multiple distinct lymphoid neoplasms in the same individual is rare, cases of CTCL associated with HL have been described previously. This association was first described in 1963, and only 40 cases have been reported in literature since then.

**Materials & Methods:** We report the case of a patient who had Hodgkin's disease of the nodular sclerosing type and subsequently developed mycosis fungoides. The Hodgkin's disease was treated with chemotherapy, and the patient was in complete remission. Six years later mycosis fungoides occurred and rapidly became progressive.

**Results:** A 37-year-old man with a medical history of Hodgkin's disease was treated with 8 cycles of ABVD chemotherapy in 2016. After the following 6 years of complete remission, the patient consulted for erythroderma. On physical examination, he presented axillary lymphadenopathy. Biopsy specimens of skin revealed mycosis fungoides extended into the dermis. Immunohistochemistry revealed clear positivity for anti-CD3, anti-CD4 and anti-CD8 antibodies. The patient received Methotrexate 25mg/week for a year. Finishing the treatment, the skin lesions and the axillary lymphadenopathy were completely controlled and a clinical complete remission was induced. In January 2024 the patient was readmitted due to fever, night sweating, and weight loss. He presented several ulcerative lesions atop the poikilodermatous erythroderma associated with multiple lymphadenopathy. Biopsy specimens of skin revealed mycosis fungoides extended into the dermis, as previously diagnosed. Biopsy specimens from axillary lymph nodes revealed a lymphoma which was diagnosed as Hodgkin's disease with atypical cellularity. Immunohistochemistry revealed clear positivity for anti-CD30 antibodies in the large tumor cells and for anti-CD20 antibodies expressed by residual B lymphocytes and by some large tumor cells. In addition, T-cell markers were positive. The bone marrow finding was normal without any evidence of involvement of mycosis fungoides or Hodgkin's disease. We initially considered the axillary lymph node as the nodal involvement of mycosis fungoides and its transformation. We then diagnosed a discordant lymphoma stage IVA2 (T4N3M0B0) of MF with a recurrent HL and diffuse large B-cell lymphoma. The patient was referred in oncology and is now being treated with chemotherapy.

**Conclusion:** Within the past few years, an increasing number of reports of Hodgkin's disease following the diagnosis of, and frequently coexisting with, mycosis fungoides have appeared. Previously, Hodgkin's disease found in the lymph nodes of the patient diagnosed as mycosis fungoides was considered as a transformed form of the mycosis fungoides. Coexisting lymphomas in the same patient are classified by the working formulation of nonHodgkin's lymphoma as discordant, composite and secondary lymphomas. Due to rarity of this association and paucity of case series with longterm followup, clinical outcome in such patients cannot be conclusively predicted therefore it is important to remember the possibility of a coexisting other lymphoma, especially in patients with longlasting cutaneous mycosis fungoides.





**Abstract N°: 7011****Diagnostic and therapeutic challenges of primary cutaneous aggressive epidermotropic CD8+ T-cell lymphoma**

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**Introduction & Objectives:** Primary cutaneous aggressive epidermotropic CD8+ T-cell lymphoma is a rare subtype of cutaneous T-cell lymphoma (CTCL) (>1% of CTCL cases), characterized by aggressive clinical behaviour and proliferation of epidermotropic CD8+ T cells. Atypical presentation creates further diagnostic and therapeutic challenges.

**Materials & Methods:** A 65-year-old Caucasian man presented with an exophytic ulcerated tumour on the left thigh, along with pruritic skin papules and nodules, initially on the lower limbs, thereafter, spreading to the trunk, upper limbs, and intertriginous folds, over 5 months. Immunohistochemistry was diagnostic of primary cutaneous CD8+ aggressive epidermotropic cytotoxic T-cell lymphoma, (WHO 5th ed). Histologic examination showed diffuse dermal infiltration by lymphoid proliferation associated with epidermal necrosis, angiocentricity and angioinvasion with fibrinoid necrosis of small vessels, and a CD7-/CD2+ phenotype associated with high invasive potential. Therefore, further biopsies were obtained. Left femoral lymph node biopsy was positive, whereas bone marrow biopsy was negative. Dermoscopy facilitated clinical suspicion and early diagnosis of this rare neoplasm.

**Results:** Multiagent chemotherapy, particularly doxorubicin-based regimens such as cyclophosphamide, hydroxy doxorubicin, Oncovin, and prednisone (CHOP) and the hyper-cyclophosphamide, vincristine, Adriamycin (doxorubicin), and dexamethasone regimen (hyper-CVAD), are the most used option and it's what was used in our case. However, unsuccessfully and the tumours remained a therapeutic challenge. Importantly, the cardiotoxicity of anticancer agents can lead to significant cardiovascular complications, such as heart failure, as in our case. The severity of such toxicity depends on many factors such as the molecular site of action, the immediate and cumulative dose, the method of administration, the presence of any underlying heart conditions. Meantime superinfection with staphylococcus and pseudomonas further complicated therapeutic efficacy and options. Staphylococcus aureus colonization and infection is also reported to fuel CTCL progression while contributing to sepsis, further complicating treatment.

**Conclusion:** While multiple therapeutic options have been proposed, unresponsiveness or relapse after multiagent regimes of this invasive CTCL, superinfections, and the cardiotoxicity of anticancer agents, remain challenging therapeutically. Emerging efforts may lead to early diagnosis and optimal treatment.



**Abstract N°: 7012****Dual Expression of CD4 and CD8 in Poikilodermatous mycosis fungoides: a clinical rarity**Devi Priya S<sup>\*1</sup>, Dr Shruti Barnwal<sup>1</sup><sup>1</sup>Government Doon Medical College, Dermatology, Dehradun, India**Introduction & Objectives:**

Mycosis fungoides (MF) is a primary cutaneous non Hodgkin's lymphoma originating from T cells. In contrast to CD4+/CD8- MF, CD4/CD8 dual positive MF presents a rare immune phenotype. Poikilodermatous mycosis fungoides is a distinct clinicopathological entity compared to classic patch plaque MF. In this report, we present a case of a middle aged indian female, who exhibited signs indicative of poikilodermatous MF, with CD4/CD8 dual positivity, effectively managed with phototherapy and oral isotretinoin. The occurrence of CD4 and CD8 positive MF is extremely rare.

**Materials & Methods:**

A 37 year old indian female visited Dermatology outpatient department with complaints of discoloration over body persisting since eleven years. Lesions initially appeared over bilateral thighs at the age of twenty six, gradually spreading to cover 80% of her body surface area. Despite seeking treatment from various local physicians and undergoing multiple therapies, she experienced no improvement. On examination, extensive reticulated poikilodermatous patches with mottled hyper and hypopigmented areas, accompanied by scaling, atrophy and telangiectasia, were noted on bilateral lower limbs, upper limbs, trunk, neck and buttocks. Face exhibited erythema with scaling. However the lesions spared bilateral axillary, popliteal and cubital fossa, as well as the palms, soles, hair, nails and mucosa. There was no other relevant positive history. Systemic examination was within normal limits

**Results:**

All routine investigations along with serum lactate dehydrogenase (S.LDH), anti nuclear antibody (ANA), ultrasound abdomen and pelvis, skin biopsy was performed. All blood reports and ultrasonography report came out to be normal. Histopathological examination revealed focal parakeratosis, elongated rete ridges at places in the epidermis. In dermis there was perivascular lymphohistiocytic infiltrate along with melanin pigment incontinence. Epidermotrophism of lymphocytes were present with absence of Pautrier's microabscesses. Immunohistochemistry revealed strong positivity for CD4 and mild positivity for CD8. Patient was started on combination of oral isotretinoin and phototherapy (Narrow band UVB therapy), leading to significant improvement in 6 months.

**Conclusion:**

This case highlights the importance of recognizing poikilodermatous MF as a distinct entity. Early diagnosis and intervention are necessary to control the disease progression. Additionally, CD4 and CD8 positive variant is very rare and in our case showed a good response to treatment, indicating the better prognosis associated with CD8 positivity.



**Abstract N°: 7021****Insights into poikilodermatous mycosis fungoides: A rare presentation.**

Anass Abbour<sup>1</sup>, Hanane Rachadi<sup>1</sup>, Fatima Zahra Elfatoiki<sup>1</sup>, Fouzia Hali<sup>1</sup>, Soumiya Chiheb<sup>1</sup>

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**Introduction & Objectives:**

Poikilodermatous mycosis fungoides (PMF) is a rare distinct clinical variant of mycosis fungoides (Cutaneous T-cell lymphoma) constituting 1%–2% of the total cases. It presents as erythematous patches and plaques with or without scaling.

Herein, we report a case of a 26-year-old female with poikilodermatous MF with characteristic clinical, histopathological, dermoscopic, and immunohistochemical findings.

**Materials & Methods:****Results:**

A 26-year-old female presented to our department for 10 months history of generalized burning sensation over the body with multiple mildly pruritic dark-colored lesions over the trunk and lower extremities. Dermatological examination revealed diffuse poikiloderma over the trunk involving abdominal folds and upper limbs along with multiple discrete violaceous papules over the thighs and axillary folds involving nearly 50% of body surface area.

Dermoscopic examination revealed reticular brown pigment pattern on a pink white background. Unevenly distributed grey dots were present throughout the pigment pattern. Linear and glomerular vessels were also visualized.

The general and systemic examinations were unremarkable without any significant lymphadenopathy.

A skin biopsy was performed and the findings were consistent with poikilodermatous mycosis fungoides (PMF).

All hematological investigations were normal. Computed tomography scans of the thorax, abdomen, and pelvis showed no abnormalities.

The patient was managed as a case of stage T2N0M0B0 MF with ultraviolet (UV) B therapy associated with topical steroids and methotrexate (25mg/week) to which she had shown a slight response.

**Conclusion:**

Poikilodermatous mycosis fungoides is a rare clinical variant of mycosis fungoides (MF), formerly referred to as poikiloderma vasculare atrophicum or parapsoriasis variegata. The clinical presentation of this clinical MF variant is characterized by large patches or plaques of hypopigmentation and hyperpigmentation with atrophy and telangiectasis. The patches or plaques may be asymptomatic or mildly pruritic and typically involve the major flexural areas and trunk.

Similar to classic MF, poikilodermatous MF presents as an early stage (IA-IIA) at diagnosis with a male predominance. However, poikilodermatous MF patients usually are younger than are classic MF patients and it has an excellent prognosis.

Histopathologic features of poikilodermatous MF show an atypical T-cell infiltrate in the papillary dermis with evidence of epidermotropism, epidermal atrophy, dilated blood vessels in the dermis, melanophages, and melanin incontinence. Pautrier micro abscesses are rarely present. The atypical lymphocytes are commonly CD4+, which is similar to classic MF.

The differential diagnosis of poikilodermatous MF comprises any diseases with clinical manifestations of poikiloderma, including large plaque parapsoriasis, connective-tissue diseases (e.g., lupus erythematosus and dermatomyositis), corticosteroid induced poikiloderma, radiation dermatitis, and graft-versus-host disease.

As in classic MF, treatment for poikilodermatous MF is generally skin-directed. Narrowband ultraviolet B phototherapy is the first-line therapy for poikilodermatous MF. Other skin-directed treatments include topical glucocorticoids, topical retinoids, topical cytotoxic agents, and radiation therapy.

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**Abstract N°: 7031****Eccrine Porocarcinoma Of The Leg : A rare Case Report And Review Of Literature**

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<sup>1</sup>chu Ibn Rochd Casablanca , dermatologie, <sup>2</sup>chu Ibn Rochd Casablanca , chiru

**Introduction & Objectives:**

Eccrine porocarcinoma (EPC), an incredibly rare adnexal carcinoma, comprising merely 0.005% of epithelial cutaneous neoplasms. Recognized for its aggressive behavior, high recurrence rate, and propensity for lymph node metastases. EPC typically manifests on the lower extremities. It can arise either as a primary tumor from the acrosyringium or, more frequently, undergo malignant transformation from eccrine poroma (EP).

Herein, we present a case of left lower extremity eccrine porocarcinoma.

**Case description:**

A 73-year-old female presented with one-year history of slowly growing exophytic mass on the left lower extremity, initially diagnosed as a benign poroma (chondroid syringoma). Clinical examination revealed a 2.0 x 2.0 cm pink exophytic lesion over the left lateral malleolus region. No lymphadenopathy were noted and MRI indicated no communication with the tendons or ankle joint. Following interdisciplinary tumor board discussion, the patient underwent excision with 2 cm margins and reconstruction. Histopathological analysis revealed a well-differentiated, partly cystic EPC with clear surgical margins. The patient was regularly reviewed in our department until full wound healing was achieved and the physical exam remains unchanged with no palpable regional lymph nodes.

**Conclusion:**

EPCs are rare malignant lesions most commonly affecting the lower extremities, followed by head neck and upper extremities. There is equal gender representation and a higher incidence in elderly patients (42-90 years old). The traditional hypothesis implicates the transformation of benign poromas into malignant porocarcinomas in the pathogenesis of EPCs. Diagnostic work up often employs MRI scanning for evaluation.

Treatment necessitates a multidisciplinary approach involving dermatologists, pathologists and surgeons. While surgical resection achieves cure in 70%-80% of the cases, there is a 20% risk of local recurrence and metastases to regional lymph nodes. Metastatic disease carries a grim prognosis, with a relative mortality of 50%-80% and a 10-year overall survival rate of only 9%.

EPCs are frequently missed as a differential diagnosis due to their rarity and nonspecific appearance, which can delays in treatment that could significantly affect patient outcomes. Consequently, EPCs underscore the importance for clinicians to consider this diagnosis when evaluation cutaneous lesions.





**Abstract N°: 7036**

**Intermammary ulcer as the presenting finding of a rare mimicker of breast carcinoma**

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**Introduction & Objectives:**

Although cutaneous infiltration by an adenocarcinoma should always motivate investigation for an underlying solid organ malignancy, the tumor can seldom be primary cutaneous. We aim at reporting how an intermammary ulcer may be the presenting finding of a rare primary cutaneous adenocarcinoma not otherwise specified (NOS).

**Materials & Methods:**

We report a case of an 86-year-old female that presented with a painful intermammary ulcer.

**Results:**

Clinical Case: A 86-year-old female, with no significant past medical history, presented to the Dermatology consultation with a painful intermammary lesion which had progressively enlarged during the previous year. She denied fever and other systemic symptoms.

On physical examination, an intermammary ulcer with elevated borders and an indurated base, measuring 5 by 4 centimeters, could be seen. It had a petrous consistency and was particularly adherent to the deep fascia. Breast palpation was normal and there was no palpable axillary or cervical adenomegalies.

Histopathological analysis of the lesion revealed infiltration of the dermis by a neoplasm composed by trabeculae of neoplastic cells with an abundant cytoplasm and pleomorphic nuclei, showing ductal differentiation. These cells showed positivity for CK7 and GATA3, as well as for progesterone receptors (90%), estrogen receptors (100%) and HER2 (score 1). The Ki-67 index was 20%. CK20, TTF1, PAX8 and SATB2 were all negative. These findings were consistent with cutaneous infiltration by an adenocarcinoma.

A PET-CT scan revealed an intense hypermetabolic cutaneous and subcutaneous thickening at the site of the intermammary ulcer, with no other abnormalities. The diagnosis of adnexal adenocarcinoma NOS was then made and, after tumor board discussion, treatment with anastrozole was initiated, which resulted in the complete resolution of the lesion in five months.

**Discussion and conclusion:**

The diagnosis of adenocarcinoma on a skin biopsy often represents the presence of an underlying tumor and, in this case, the immunophenotype and intermammary location suggested a breast origin. Considering the absence of pathological findings on the PET scan, besides those in relation to the intermammary ulcer, the diagnosis of a primary cutaneous adenocarcinoma could be made.

Adnexal adenocarcinoma NOS is a rare malignant cutaneous adnexal tumor which presents with ductal differentiation but that has no other specific features to allow further classification. Previously known as eccrine carcinoma, its diagnosis can only be confirmed after thorough exclusion of extracutaneous neoplasms as it can be a histological mimicker of skin metastases of lung, colon and breast cancer. As other malignant adnexal tumors, it most commonly has a locally aggressive behavior and a high rate of recurrence, although distant metastatization is

possible. There is no standardized therapeutic approach, but surgical excision is often proposed for localized lesions, while classical chemotherapy and radiation therapy are used in lymph node and distant metastasis. The use of anti-estrogen therapy has been reported in literature, in cases where estrogen receptors are diffusely positive – the same therapeutic rationale as in breast cancer.

Due to the patient's age, the size of the lesion, and the positivity for estrogen receptors, primary hormonotherapy with anastrozole was preferred to a surgical approach, which resulted in a complete resolution of the lesion.

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**Abstract N°: 7047****Pseudomyogenic hemangioendothelioma: a diagnostic challenge**

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**Introduction & Objectives:**

Pseudo-myogenic hemangioendothelioma is a very rare, recently described vascular tumor of intermediate malignancy. It usually has a multifocal presentation and may involve several tissue planes, including dermis, hypodermis, muscle and bone. The tumor occurs most frequently in young adults, predominantly males, mainly in the limbs.

**Materials & Methods:**

We report the case of a female patient presenting a pseudo-myogenic hemangioendothelioma of the shoulder, a puzzling tumor.

**Results:**

A 36-year-old woman, with no previous pathological history, presented with two painful, pruritic lesions on the right shoulder, that had been evolving for eight months with an interval of two month in between. These lesions did not increase in size and were associated with mechanical arthralgias on both shoulders. The patient's general condition remained unchanged. Clinical examination objectified two mobile, painful, firm subcutaneous nodules with an erythematous surface, associated with a visible superficial venous network. There was no warmth or lymphadenopathy.

A soft tissue ultrasonography was performed which showed a slightly heterogeneous, echogenic dermal-hypodermal formation with no vascular spot on Doppler.

A skin biopsy revealed a massive tumor proliferation in the dermis and hypodermis, vaguely nodular, non-encapsulated, consisting of spindle-shaped cells arranged in bundles, with narrow vascular fissures containing red blood cells. The tumor cells had discretely atypical nuclei with rare mitoses, accompanied by a lymphoplasmacytic infiltrate.

Immunohistochemistry confirmed the diagnosis of pseudomyogenic hemangioendothelioma, with positive anti-CD31, anti-ERG, anti-Pan-cytokeratin (AE1/AE3), anti-smooth muscle actin, anti-CD68 and anti-Ki67 (10%) antibodies. The following immunostains were negative: CD34, S-100 protein and HHV-8.

The management was surgical with a complete excision of the lesions. There was no evidence of local, regional, or distant recurrence after 3 months.

**Conclusion:**

Pseudomyogenic hemangioendothelioma is a rare vascular tumor characterized by an unusual histological architecture, often confused with other mesenchymal tumor lesions. Despite its rarity, its recognition is crucial due to its potential for recurrence and its locally aggressive capability.



**Abstract N°: 7059****Cutaneous Metastases Mimicking Breast Lesions in an Ovarian Cancer: : A Case Report**Saliha Jebbouje<sup>1</sup>, Hali Fouzia<sup>1</sup>, Bouchra Baghdad<sup>1</sup>, Chiheb Soumiya<sup>1</sup><sup>1</sup>chu Ibn Rochd Casablanca , dermatology**Introduction & Objectives:**

Ovarian cancer represent one of the most lethal gynecologic malignancies, often diagnosed at an advanced stage. The occurrence of cutaneous metastases is rare, its incidence range from 1.9% to 5.1% and the most common sites are the abdominal and chest walls.

Herein we report a unique case of ovarian carcinoma with multiple cutaneous metastases.

**Case description:**

A 34-year-old female with a one-year history of an ovarian adenocarcinoma with pulmonary and hepatic metastases, undergoing paclitaxel/carboplatin, was referred to our dermatology department from oncology due to skin lesions on her right breast for the past month. Physical examination revealed a subcutaneous infiltrated mass topped with firm erythematous-violaceous nodules and papules, occasionally ulcerated, extending from the axillary fossa to the supero-internal quadrant of the right breast. Isolated nodules were also found on left breast and abdomen along with axillar and inguinal lymphadenopathy and ascites. Histopathological examination of a skin biopsy confirmed metastatic mucinous adenocarcinoma, suggestive of ovarian origin. Following interdisciplinary discussion at a tumor board, the patient underwent chemotherapy with gemcitabine/oxaliplatin and remains under follow-up

**Conclusion:**

Cutaneous metastases of ovarian cancer are uncommon, occurring in 2 to 5% of case. Typically, they manifest as multiple lesions localized on the abdominal and thoracic walls, presenting variable as small nodules, herpetiform erythematous lesions, and scare plaques. Late onset and poor prognosis characterize these metastases, with median survival ranging from 4 to 12 months according to studies.

Mechanisms of extension may involve direct invasion, neoplastic implantation during surgery, or contiguous extension via lymphatic vessels.

Our case represents a rare instance of ovarian carcinoma with atypical cutaneous manifestations resembling carcinomatous lymphangitis observed in breast cancers. Lymphatic obstruction may have been influenced by axillary lymph node metastases or direct lymphatic tropism of cancer cells. This case underscores the fact that atypical breast cutaneous lesions, appearing secondary without a prioi diagnosis, should prompt investigation for a primary ovarian origin.





**Abstract N°: 7093**

**Malignant T-Cells Induce Apoptosis Resistance and Malignant Transformation in CTCL by Transferring lncRNA-HOTAIRM1/miR-196b-5p via Extracellular Vesicles to Regulate MGAT4A-Mediated N-Glycosylation**

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**Introduction & Objectives:**

The mechanisms underlying the malignant transformation of Cutaneous T-Cell Lymphoma (CTCL) remain unclear, and apoptosis resistance frequently occurs during treatment. Non-coding RNAs can be encapsulated in extracellular vesicles (EVs) and transported between cells, which were associated with the malignant progression of tumors. However, the number of identified functional lncRNAs/miRNAs related to the malignant progression of CTCL is very limited, and few studies have yet explored the use of lncRNAs/miRNAs for CTCL treatment.

**Materials & Methods:**

Whole-transcriptome sequencing was employed to investigate differentially expressed lncRNA/miRNA/mRNA in CTCL. The effects of each target on cell proliferation and apoptosis were assessed in vitro and in vivo. EVs from CTCL cell lines were isolated, with the expression levels of lncRNA and miRNA detected. The influence of malignant T-cell-derived EVs on apoptosis resistance in benign T-cells was also investigated. Finally, in vitro and in vivo experiments were conducted to explore the therapeutic potential of engineered EVs derived from lncRNA-overexpressing T-cells in CTCL.

**Results:**

lncRNA HOTAIRM1 is significantly reduced in CTCL cells and tissues, compared to those from benign inflammatory skin diseases (BID). CTCL cell lines HH and Hut-78 overexpressing HOTAIRM1 were constructed, and elevated expression of HOTAIRM1 in cells inhibits proliferation and induces apoptosis, resulting in a reduced in vivo tumorigenic capacity. Whole-transcriptome sequencing and target validation showed that overexpressed HOTAIRM1 binds to miR-196b-5p, and then MGAT4A is directly targeted by miR-196b-5p. HOTAIRM1-overexpressing cell lines exhibited increased MGAT4A expression, while MGAT4A expression was reduced in CTCL.

As a glycosyltransferase, MGAT4A can increase the affinity for Galectin-1 by enhancing the  $\beta$ 1,4GlcNAc branching of N-glycans on membrane proteins, thereby facilitating galectin-induced apoptosis. CTCL cell lines exhibit partial resistance to Galectin-1-induced cell death due to their relatively low MGAT4A expression. In contrast, HOTAIRM1-overexpressing cells display increased MGAT4A expression and significant cell death following Galectin-1 treatment. Meanwhile, BID-derived CD4<sup>+</sup> T cells also show sensitivity to Galectin-1-induced apoptosis due to their higher MGAT4A expression levels.

Increased levels of miR-196b-5p in malignant T-cell-derived EVs can specifically target benign CD4<sup>+</sup> T-cells, leading to changes in MGAT4A expression and N-glycosylation modifications, thereby inducing resistance to Galectin-1-mediated apoptosis and tumor progression. Engineered EVs from HOTAIRM1-overexpressing cells could increase HOTAIRM1 expression and reduce miR-196b-5p levels, demonstrating apoptosis-inducing effects on CTCL in both in vitro and in vivo experiments, significantly inhibiting tumor growth.

**Conclusion:**

This study identified changes in the HOTAIRM1/miR-196b-5p/MGAT4A axis in CTCL, elucidating the mechanism by which N-glycosylation modifications mediate CTCL tumor cell resistance to Galectin-1-induced apoptosis. Engineered HOTAIRM1-overexpressing EVs demonstrated promising targeting ability and therapeutic effects in inhibiting CTCL apoptosis resistance, offering potential as a next-generation nanomedicine for CTCL treatment with significant clinical translational value.

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**Abstract N°: 7105****Dysplastic changes secondary to cytomegalovirus induced Lipschutz ulcer: Unraveling complexity**Devi Priya S<sup>1</sup><sup>1</sup>Government Doon Medical College, Dermatology, Dehradun, India**Introduction & Objectives:**

Lipschutz ulcer is a rare non venereal condition affecting predominantly young individuals and can be triggered by various infectious agents. CMV( Cytomegalovirus) induced lipschutz ulcer is very rarely reported and association with dysplastic changes have not been reported yet.

**Materials & Methods:**

A 19 year old female presented with complaints of painful lesion in her genital area. It was associated with fever 3 days before onset of lesions. There was no history of applying irritants, taking medications, sustaining any trauma before onset of lesion. There was no history of sexual contact or immunodeficiency. On examination, there were multiple small erosions and ulcers, largest measuring 5x4mm with an erythematous base and a red border. Lesions were localized to the left side of labia majora and were tender to touch. Lymph nodes were not palpable

**Results:**

Gram staining and routine blood investigations yielded normal results. VDRL, HIV and HbsAg tests were negative . However serology for CMV was high positive (IgM – 186 AU/ml ,IgG-23AU/ml). DNA PCR for CMV returned a positive result . Histopathology revealed irregular acanthosis in the epidermis , neutrophil exocytosis and focal moderate dysplasia characterized by high nucleo- cytoplasmic ratio, nuclear pleomorphism, vesicular nuclei, prominent nucleoli and occasional mitotic figures In the dermis , there was dense patchy inflammatory infiltrate. Oral antivirals and a short course of oral corticosteroids were initiated . The patient found symptomatic relief and the lesions healed in 10 days

**Conclusion:**

Identifying the cause of genital ulcer is very crucial as any misdiagnosis could lead to unnecessary medical interventions.It is essential to consider CMV as a potential source of non venereal genital ulcer and to conduct assessments to rule out any associated dysplasia to prevent further complications




**Abstract N°: 7117**
**Primary cutaneous diffuse large B-cell lymphoma, non-germinal center B-cell type, not otherwise specified: A rare and disputed entity**

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**Introduction & Objectives:**

Diffuse large B-cell lymphomas (DLBCL) are aggressive malignant neoplasms that most commonly present in lymph nodes, but can present either primarily or secondarily on the skin. When presenting primarily on the skin, they must be distinguished from other primary cutaneous B-cell lymphomas (pcBCLs), namely primary cutaneous follicular center lymphomas with a diffuse growth pattern and primary cutaneous DLBCL-leg type (pcDLBCL-LT). In the rare circumstance when an entity cannot be characterized as either of these according to the 2018 WHO-EORTC classification, a diagnosis of primary cutaneous diffuse large B-cell lymphoma – not otherwise specified (pcDLBCL-NOS) is made. Herein, we present a rare case of primary cutaneous diffuse large B-cell lymphoma (pcDLBCL), non-germinal center B-cell (non-GCB) type, not otherwise specified (NOS).

**Materials & Methods:**

A 73-year-old male presented to the dermatology clinic for an asymptomatic persistent rash on his right flank that started in 2009. A biopsy was done and was consistent with erythema annulare centrifugum. The patient was subsequently lost to follow-up. On representation in 2018, a biopsy was consistent with Majocchi granuloma, for which he was treated with oral terbinafine and then oral fluconazole without resolution. He was subsequently lost to follow-up until 2022. On representation, the exam revealed indurated erythematous polycyclic, annular, serpiginous plaques and nodules, some with central clearing on the right flank.

**Results:**

A biopsy at that time was consistent with DLBCL, which was sent for external review and confirmed. Furthermore, a repeat biopsy was done, which was again consistent with DLBCL - NOS non-GCB type with cells positive for CD20, BCL6, and MUM-1, and negative for c-Myc, BCL2, CD3, CD5, cyclin D1, CD30, CD10. Systemic workup, including lab work and imaging, was negative for any systemic disease. The patient was referred to hematology-oncology. The patient declined systemic chemoimmunotherapy, instead opting for radiation therapy. The patient demonstrated significant improvement after one fraction of radiation; however, after a lapse in follow-up, he represented with worsening of the lesions. The patient continues to decline systemic chemoimmunotherapy and is currently undergoing further radiation therapy.

**Conclusion:**

DLBCL are aggressive mature non-Hodgkin lymphomas that may present primarily on the skin (pcDLBCL-LT or NOS) or secondarily. Large erythematous indurated plaques or nodules should raise concern for pcDLBCL, especially those associated with nodular development and ulceration. Rebiopsy should be obtained if clinical suspicion is high and/or a previously biopsied rash is not resolving with appropriate therapy. Our case highlights the more indolent nature of pcDLBCL-NOS compared to pcDLBCL-LT. Although a disputed entity, pcDLBCL-NOS, or its associated phenotype, may hold important prognostic and treatment implications. Management involves systemic workup and coordination of care with hematology/oncology and radiation oncology.







**Abstract N°: 7126**

**Atypical acne: diagnostic trap!!!**

Fatima Zohra Hadid<sup>1</sup>, Oumaima Chelbi<sup>1</sup>, Ahlam Bekhtaoui<sup>1</sup>, Haoui Hanane<sup>1</sup>, Yasmina Abi Ayad<sup>1</sup>, Serradj Amina<sup>1</sup>

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**Introduction & Objectives:** The coexistence of mycosis fungoides (MF) and B-cell malignancies or Hodgkin lymphoma in the same patient is unusual. It is a particular form because of its clinical and histological aspects.

We report a case of a patient with transformed MF and chronic lymphocytic leukemia (CLL).

**Materials & Methods:** a 53-year-old man presented with papulopustular lesions; atrophic scars on the face, and hyperpigmented follicular papules and nodules on the trunk with pilotropism. The patient was treated for a long time for acne. The skin biopsy taken after 22 years of evolution came back in favor of MFP. The study of lymphocyte clonality in the blood also shows a monoclonal profile of the TCR  $\gamma\delta$  type.

Ultrasound of the lymph node areas revealed multiple cervical lymphadenopathy in bilateral sector III and right sector V. The thoraco-abdomino-pelvic CT scan was unremarkable.

The patient was placed on methotrexate 25 mg/week subcutaneously with a poor response to treatment.

**Results:** MFP frequently affects adult men aged 46 to 59 years which is the case of our patient however the diagnosis time was very very long in him compared to the literature where it is 18 to 48 months. It manifests itself by papules follicular; acneiform closets; comedones and spinulosic plaques on the head, neck and trunk, which is consistent with our observation. Tumor lesions are rare but possible to absent in our patient.

The biopsies are characterized by a lymphocytic infiltrate with perifollicular accentuation, that of our patient finds intense lymphoid infiltrate at the level of the superficial dermis. In addition to a slight cellular atypia, we can find a transformation of large cells which is the case of our patient; mucin deposits in the follicular epithelium (follicular mucinosis) are found in approximately 75% of cases but not in our patient. On immunohistochemistry (IHC), there is typically an increase in the CD4/CD8 ratio, generally in favor of CD4, the IHC profile of our patient matches that of the literature.

PFMs have long been considered to have a worse prognosis than classic MF. However, recent anatomoclinical studies have defined a subgroup of early, very indolent PFM with an excellent prognosis to differentiate from more aggressive forms. Our patient belongs to the group with a poorer prognosis.

Therapeutic options include topical agents, phototherapy (low response related to lesion depth), interferon alpha or methotrexate (MTX). Inadequate response is an indication for aggressive systemic treatment: mono(chemo)- therapies: gemcitabine, liposomal doxorubicin, or alemtuzumab. In case of disease progression, stem cell transplantation should be discussed as a possible option. Our patient is on MTX 25 mg/week with an unsatisfactory response to treatment.

**Conclusion:** The originality of our case is the long diagnostic delay which is not linked to the patient but to a delay in carrying out a skin biopsy due to the atypical clinical appearance and the lack of knowledge of this rare entity by clinicians.



**Abstract N°: 7177****Trichilemmal Carcinoma: A Rare Case Report**

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**Introduction & Objectives:**

Trichilemmal carcinoma (TC) is a rare adnexal malignancy arising from the outer root sheath of hair follicles. The objective of this abstract is to present a comprehensive overview of TC through a case study.

**Materials & Methods:**

An 84-year-old woman, followed up in a dermatology outpatient clinic due to previous cutaneous malignancies, with significant lifetime sun exposure. She presented with a new asymptomatic and exophytic lesion on the lower lip, 3 millimeters in size and covered by a central hematic crust. The diagnostic hypothesis squamous cell carcinoma (SCC), basal cell carcinomas (BCC) or keratoacanthoma (KA) was considered. An excisional biopsy revealed malignant adnexal epithelial neoplasia characterized by projections forming in the epidermis and invading the dermis, anastomosing with each other, giving the lesion a nodular appearance. Small infiltrative buds were noted, with neoplastic cells showing varying cytoplasm density, strongly stained by [Periodic Acid Schiff](#) (PAS), with peripheral palisading. Nuclear polymorphism and hyperchromasia with areas of cell condensation, isolated necrotic cells, and atypical mitotic figures were also observed. Surface examination revealed fibrino-hematic crust exulceration. Collagen fibers exhibited a marked degree of basophilic degeneration. Surgical resection margins were free from neoplastic involvement. Thus, a diagnosis of TC was made. The patient has not experienced recurrence to date and remains under outpatient follow-up.

**Results:**

Similar to our case, literature reports lesions commonly occurring on the face, scalp and body of elderly individuals, clinically presenting as asymptomatic exophytic or polypoid masses, resembling BCC, SCC, KA, or proliferating pilar cysts. The pathogenesis of TC is not fully understood, but risk factors include radiation exposure, previous trauma, genetic disorders, and immunosuppression. Histologically, the diagnosis relies on histological evaluation, possibly with immunohistochemical staining (IHC). Microscopically, TC shows solid, lobular, or trabecular growth, often around a pilosebaceous unit. It can be confined to the intraepithelial space or spread to the dermis. Tumor cells are clear, polygonal, and PAS-positive, resembling normal outer root sheath cells. Features include peripheral palisading, cytologic atypia, and a high mitotic index. Trichilemmal keratinization aids in diagnosis. Despite cytological malignancy, TC tends to behave nonaggressively clinically; most cases follow an indolent course if treated with complete excision. However, there are reports of recurrence and metastasis, therefore, it's important to maintain the follow up. Mohs micrographic surgery has been preferred in some cases, with successful results.

**Conclusion:**

TC presents a diagnostic challenge. It is important for dermatologists to be aware of TC's existence to ensure timely recognition and appropriate management.



**Abstract N°: 7184****Anogenital Kaposi's sarcoma: a monocentric, retrospective investigation.**

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**Introduction & Objectives:**

Kaposi's sarcoma (KS) is a lymphangioproliferative neoplasm associated with Human Herpesvirus 8 (HHV8) infection. This condition, which mainly involves the skin, manifests at mucosal and pseudo-mucosal levels in less than 5% of cases, but epidemiology is limited in a few studies in the literature. Our aim is to report the prevalence of anogenital localization of KS in a series of 900 patients with histologically proven KS, which have been followed in our outpatient clinic dedicated to the diagnosis and treatment of KS.

**Materials & Methods:**

The present study is a monocentric, retrospective, observational investigation. The records of 900 patients with KS have been reviewed in order to identify patients affected by anogenital KS. All our patients are usually assessed clinically and dermoscopically.

**Results:**

Among the 900 patients with KS, 41 (4.5%) patients had anogenital localization. The average age of these patients was 70.8 years. Forty patients were male and only one patient was female. Main comorbidities included benign prostatic hyperplasia (11/41), genital lichen sclerosus et atrophicus (3/41), and KSHV-associated multicentric Castleman's disease (2/41). Six patients underwent urological interventions (3 frenectomies, 1 TURP, 1 bladder resection, and 1 epididymectomy) with subsequent development of anogenital Kaposi's lesions, probably due to the Koebner phenomenon. In these patients, KS was mainly of classical type (36 cases), followed by epidemic (3) and iatrogenic (2) cases. Twenty-eight patients exhibited a rapidly progressive and/or disseminated KS. Four patients showed involvement of other mucosal sites (conjunctiva, epiglottis, and palate), and another four had visceral involvement (inguinal lymph nodes, duodenum, stomach, and intestine). Anogenital localization was the initial manifestation of KS in 7 patients, of whom 3 maintained such involvement as the sole site of disease. In the remaining cases, the mean time between the first diagnosis and genital involvement was 9.8 years. The most commonly affected sites were the glans (20/41), penile shaft (17/41), and foreskin (16/41). Macules and plaques predominated at the foreskin, while nodules were more common on the shaft. Penile lymphedema was often present and 22% of the patients reported functional disturbances such as urinary and erectile problems. Most of the patients were treated with intralesional vincristine infiltration and/or curettage for individual nodular lesions. Systemic chemotherapy, especially intravenous Taxol, has been successfully used in patients with diffuse anogenital lesions, and/or in patients with penile localization associated with functional disturbances.

**Conclusion:**

Disease management requires a multidisciplinary approach involving dermatologists, oncologists, and urologists to ensure correct diagnostic pathways and personalized treatments.

**Abstract N°: 7218****male breast carcinoma simulating melanoma: diagnostic traps**

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**Introduction & Objectives:** Male breast cancer is a rare disease that can have a several clinical forms, so its positive diagnosis is often delayed and could be confused with multiple diagnoses.

**Observation:** Patient aged 47, chronic smoker with 30 PA, consulted for a black lesion of the right areola-mammelon plaque following a nipple bite 4 years previously. Dermatological examination revealed a blackish plaque with crumbled border, nipped surface, crusted in places and ulcerated in others, infiltrated, non-bleeding on contact, mobile in relation to the deep plane and fixed in relation to the superficial plane with a partially retracted nipple. Dermoscopy revealed a homogeneous pigmented pattern, crumbling border, central ulceration and central and peripheral vascular pattern. The rest of the physical examination was normal, in particular the absence of adenopathy. The first diagnoses to be considered were melanoma, given the black appearance of the lesion, squamous cell carcinoma, breast carcinoma, Bowen's disease, Paget's disease, dermatofibrosarcoma and pigmented basal cell carcinoma. A skin biopsy was performed, concluding in a poorly differentiated infiltrating breast carcinoma with immunohistochemistry showing RH+, HER2- and Ki 67 at 30%. The patient was treated with Patey surgery and neoadjuvant chemotherapy-hormonotherapy.

**Discussion:** Male breast cancer is a rare disease and represents less than 1% of all cancers in men. Major risk factors include advancing age, hormonal imbalances, radiation exposure and a positive family history for breast cancer, which suggest a genetic susceptibility that can be linked to mutations in high or low penetrance genes, the most common one is a mutation in the BRCA2 gene, our patient has no risk factors. The clinical signs of breast cancer in men are poor, dominated by skin damage, this is due to the small glandular volume in men compared to women and therefore a precocious skin damage. About 90% of all male breast tumors have proved to be invasive ductal carcinomas, expressing high levels of hormone receptors with a good response to hormone-therapy improving prognosis which is the case of our patient. Although male breast cancer is far less common than women breast cancer, it is associated with less favorable prognosis because diagnosis is usually made at an advanced stage.

**Conclusion :** Concerted efforts must be made to educate both public and health professionals in order to make earlier diagnosis and improve prognosis.







**Abstract N°: 7248**

**Eosinophilic erythroderma : A case report of an uncommon paraneoplastic manifestation of lung cancer.**

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**Introduction & Objectives:**

Paraneoplastic syndromes are common in bronchial cancer. The most frequent manifestations are endocrine and neurological. Cutaneous paraneoplastic manifestations are rare. They may precede, coincide with or follow the diagnosis of cancer.

We report a rare case of paraneoplastic eosinophilic erythroderma to bronchial cancer.

**Materials & Methods:**

We present a case report of a 57 year-old patient, heavy smoker with no personal or family history of atopy; diagnosed with metastatic lung adenocarcinoma 3 weeks earlier (brain and bone metastases).

Clinical examination revealed a cachexic patient with a weight loss of 15 kg within 2 months. A pruritic desquamative generalized erythema had been present for 2 weeks. Biological tests showed a hypereosinophilia of 6 422 cells/mm<sup>3</sup>. Cardiac ultrasound showed no cardiac involvement. Skin biopsy showed superficial congestive dermatitis.

The diagnosis of hypereosinophilic erythroderma was made after ruling out other causes of hypereosinophilia. The patient was treated locally with soothing cream and dermocorticoids and referred to oncology to begin chemotherapy.

**Results:**

Lung cancer is the leading cause of cancer-related death worldwide. Although most symptoms are the direct result of the disease, some are caused by substances produced by the tumour or by the host, corresponding to the paraneoplastic syndrome, which is found in 16% of patients followed for lung cancer.

The most common paraneoplastic syndromes in bronchial cancer are digital hippocratism and endocrine manifestations, in particular the syndrome of inappropriate secretion of ADH and hypercalcaemia.

Paraneoplastic skin symptoms are less common. Some of these manifestations are associated with metabolic products of lung cancer, such as the hyperpigmentation seen in ectopic Cushing's syndrome. Acanthosis nigricans may also be found in atypical locations or in association with the Leser-Trelat sign. Other cutaneous paraneoplastic manifestations include Bazex acrokeratosis, dermatomyositis and erythema gyratum repens.

Erythroderma remains rare and does not present any specific clinical characteristics that would prompt suspicion of a paraneoplastic origin; the diagnosis is made definitively once other causes have been ruled out.

Hypereosinophilia is a rare paraneoplastic manifestation of lung cancer, often associated with a metastatic stage and a poor prognosis. In many cases, peripheral hypereosinophilia can lead to life-threatening endomyocardial fibrosis.

Other causes need to be ruled out, such as drugs, parasitosis or allergies. Hyper-eosinophilia therefore requires an

appropriate and thorough work-up.

In many cases, treatment of the underlying tumour leads to the disappearance of the paraneoplastic syndrome.

**Conclusion:**

Paraneoplastic syndromes are common complications of lung cancer. Although they are most often associated with advanced disease, they can also occur at early stages or even reveal the disease. The most effective treatment consists of treating the underlying malignant tumour and managing the emergencies associated with paraneoplastic manifestations.

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**Abstract N°: 7253****Diphencyprone as a treatment for cutaneous metastatic melanoma: Australian case series**

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**Introduction & Objectives:**

Cutaneous metastases of melanoma (CMM) represent a heterogeneous group of clinical presentations, for which multiple therapeutic options have been reported. In this context, diphencyprone (DPCP) has been shown to be useful in some case series as local immunotherapy. In Spain, it is frequently used for the treatment of alopecia areata and common warts, but its use in oncology is limited. However, in Anglo-Saxon countries its use is more widespread, so our aim is to demonstrate that experience.

**Materials & Methods:**

Descriptive observational study. Patients were obtained from the melanoma database of the Dermatology Department at Westmead Hospital in Sydney and Alfred Hospital in Melbourne. Those cases with CMM treated with DPCP have been included.

**Results:**

Six patients were collected, 66.7% women with a median age of 80 years. Three presented with stage IIIC and two with IIIB. The median time from diagnosis is 7 years and from the development of CMM, 4.5 years. 83.3% on limbs, one on the scalp. 66.7% underwent previous or concomitant systemic therapy with DPCP (immunotherapy and/or targeted therapy). The choice of drug was for clinical reasons and not for the characteristics of the metastases. 100% were sensitized to DPCP, showing a total histopathological response in 83.3% and only one patient showed a partial response. The main side effect in 100% was eczematization of the DPCP application area.

**Conclusion:**

A meta-analysis of 6 studies shows a response (complete and partial) in 64% of patients with CMM and consider it comparable to other approved therapeutic options. Furthermore, topical immunotherapy with DPCP is inexpensive and relatively non-invasive, so it should be considered as another option in patients with CMM who are not candidates for other more aggressive therapies.





## Abstract N°: 7316

### modified delphi consensus on interventions for radiation dermatitis in breast cancer: a canadian expert perspective

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#### Introduction & Objectives:

Acute radiation dermatitis is a prevalent adverse effect of radiotherapy in patients with breast cancer, and there is a lack of high-quality data regarding its prevention and management. This study employs a modified Delphi consensus process to compile the perspectives of Canadian dermatology and breast cancer radiation oncology experts, aiming to establish consensus-based recommendations for the prevention and management of acute radiation dermatitis in breast cancer patients.

#### Materials & Methods:

A four-round modified Delphi consensus process was organized with the participation of 19 Canadian experts. The process involved a systematic review of existing literature on the prevention and treatment of acute radiation dermatitis in breast cancer, from January 1946 to July 2023. After review of the literature, participants provided their opinions on the strength and quality of the evidence for the identified interventions. A second round assessed the degree to which the intervention would be recommended in either low- or high-risk settings. Two more rounds consolidated consensus.

#### Results:

After the first round, consensus for evidence of recommendation or suggestion in support of use of a product was reached for 4 prevention interventions. With regards to the management of acute radiation dermatitis, there was consensus about the strength of evidence for 1 product. After the fourth round, consensus for recommendation was reached for 3 prevention interventions in both low- and high-risk patients: washing, moisturizing, and prevention education. For high-risk settings, 3 additional prevention interventions reached consensus: barrier films, betamethasone and mometasone. With regards to the management of acute radiation dermatitis, there was consensus for recommendation of: foam dressings, betamethasone and mometasone.

#### Conclusion:

This pan-Canadian modified Delphi consensus initiative provides expert-reviewed and evidence-based recommendations for interventions to prevent and manage acute radiation dermatitis in breast cancer patients. The endorsed interventions offer valuable guidance for clinicians, highlighting areas where consensus among experts has been achieved.

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**Abstract N°: 7377****Cutaneous mastocytosis revealing digestive system involvement: Case report**

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**Introduction & Objectives:**

Mastocytoses are a group of rare, heterogeneous disorders affecting one or more organs, including the skin. The classic Darier's urticaria pigmentosa is the most often skin manifestation. Gastrointestinal involvement is relatively rare.

We report a case of cutaneous mastocytosis revealing digestive involvement in 25-year-old man.

**Materials & Methods:**

A 25-year-old man with a history of asthma, allergic rhinitis and gastritis three years previously. He presented pruritic pigmented maculopapular lesions on the trunk and upper and lower limbs. This rash had progressively developed over the previous 5 years. The friction of a macule triggered an urticarial reaction giving a positif Darier's sign. The patient reports the notion of epigastralgia.

**Results:**

The skin biopsy revealed moderate dermal inflammatory infiltrate with lymphohistiocytic perivascular inflammatory infiltrate and some eosinophils. The C-KIT (CD117) was positive on immunohistochemistry. Hematological investigations were negative.

In view of the notion of gastritis, three years after the onset of skin lesions the patient underwent upper and lower gastrointestinal endoscopies, which noted diffuse severe gastric inflammation. Biopsies noted an inflammatory infiltrate mast cell strongly positive for CD117, weakly positive for anti-CD68 and negative for anti-CD1a.

The diagnosis of cutaneous mastocytosis associated with indolent systemic mastocytosis was made given significant mast cell infiltration in the skin and gastrointestinal tract

Foods and drugs induced elevation of histamine was indicated in this patient with strict monitoring.

**Conclusion:**

Gastrointestinal localization of mastocytosis is rare. This condition not systematically investigated, but indicated in the case of digestive signs; in order of frequency: bloating, abdominal pain, and diarrhea or vomiting. However, it may not be symptomatic, as in our patient.

Patients with digestive mastocytosis are at risk of developing risk of developing gastrointestinal ulcers due to the high release of histamine release, leading to an increase in gastric acidity gastric acidity. Treatment based on hygiene measures: avoidance of foods and histaminolytic drugs.

In addition to hygiene measures, strict monitoring is essential, especially in view of the risk of developing haematological life-threatening hematological damage.





**Abstract N°: 7379****Role of eIF6 in Modulating Response to BRAF Inhibitors and Acquired Resistance in Cutaneous Melanoma**

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**Introduction & Objectives:** Translation rewiring plays a pivotal role in oncogenesis and experiences dysregulation in various cancer types, including melanoma. Melanoma, particularly cutaneous melanoma (CM), the most lethal form of skin cancer, frequently exhibits mutations in the BRAF gene. While targeted drugs aimed at BRAF initially show effectiveness, they quickly lead to acquired resistance through mechanisms related to the translation process. The translation initiation factor eIF6 is responsible for regulating the maturation of the 60S ribosomal subunit and the formation of the 80S ribosome. Recent reports have highlighted its involvement in CM progression, suggesting a potential role in selectively translating mRNAs that could promote tumorigenesis. Nevertheless, its specific contribution to CM progression and its impact on the response to targeted therapy remain unclear.

**Materials & Methods:** To establish cell lines with stable overexpression of eIF6, a lentiviral approach was employed. Five distinct human and mouse melanoma cell lines, each representing a different subtype of CM, were utilized. The determination of the IC<sub>50</sub> for vemurafenib in each instance was carried out through a resazurin assay. To investigate the impact of eIF6 on protein synthesis, puromycin staining and analyses of ribosome and polysome profiles using sucrose density gradients were conducted. The assessment of key signaling pathways affected in each case was performed through Western immunoblotting.

**Results:** In all cases, the overexpression of eIF6 resulted in increased levels of 60S ribosomal subunits. However, the response to vemurafenib varied across different subtypes. Interestingly, two of the cell lines displayed heightened resistance to vemurafenib in the presence of eIF6, while the remaining three showed enhanced susceptibility to BRAF inhibition. This observed response correlated with the distinct expression patterns of the central mTOR kinase and the phosphorylation state of ERK. Furthermore, contrasting effects on the translation machinery were noted, indicating a multifaceted regulatory role of eIF6.

**Conclusion:** Overcoming acquired resistance to targeted therapies is a crucial challenge in managing CM patients. Our discoveries highlight the participation of eIF6 in the response of melanoma cells to BRAF inhibitors, providing valuable insights that could pave the way for innovative therapeutic approaches aimed at overcoming resistance to vemurafenib.



**Abstract N°: 7385****Clinical Evaluation of Alpha-1-Acid Glycoprotein as a Novel Biomarker for Early Detection of Malignant Melanoma**

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**Introduction & Objectives:**

Melanoma, characterized as the most lethal form of skin cancer with a high propensity for metastasis and a rising incidence rate, underscores the critical importance of early detection for improved long-term outcomes. Consequently, there exists a pressing need for diagnostic biomarkers conducive to early tumor identification. This study endeavors to investigate the diagnostic utility of Alpha-1-Acid Glycoprotein (AGP), an abundantly glycosylated serum acute-phase protein, which may be shed by tumor cells, as a prospective biomarker for malignant melanoma.

**Materials & Methods:**

Serum AGP from patients afflicted with high-risk primary melanomas and healthy controls underwent meticulous isolation and purification to eliminate confounding factors. Subsequently, oligosaccharide side chains were liberated and chemically modified. The resultant derivatives were analyzed using a hydrophilic interaction liquid chromatography–tandem mass spectrometric approach. Linear discriminant analysis (LDA) was employed to scrutinize the acquired data. Additionally, serum S100B concentrations were determined for comparative purposes, enabling the assessment of sensitivity, specificity, as well as negative and positive predictive values.

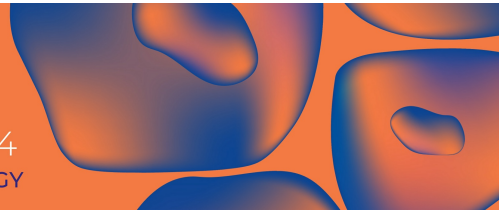
**Results:**

Within the melanoma cohort, a conspicuous upregulation of fucosylated glycans was observed, particularly those exhibiting greater branching, with this upregulation appearing to correlate positively with the number of attached fucose units. From a multitude of parameters, those displaying the highest discriminatory potential were meticulously selected. Discriminatory power rankings of the isomers were established to distinguish between the groups. LDA elucidated clear demarcation between control and melanoma samples. Upon cross-validation, these findings were compared with S100B protein concentrations in the studied population, revealing significantly enhanced sensitivity compared to S100B.

**Conclusion:**

This investigation underscores the diagnostic relevance of alterations in the glycan profile of human serum AGP in melanoma detection. In conclusion, a novel potential biomarker has been identified, exhibiting markedly superior performance to the established serum marker S100B, particularly in terms of sensitivity and negative predictive capability within the studied population.




**Abstract N°: 7407**
**Simple nipple hyperkeratosis revealing Paget's disease**

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**Introduction :**

Mammary Paget's disease represents a rare condition affecting the nipple-areola complex of the breast, frequently concomitant with an underlying carcinoma.

Characteristically, it manifests as a red, ulcerative lesion of the nipple or an erythematous, crusted lesion, sometimes accompanied by mass-like formations, infiltration, and nipple inversion.

In this article, we present a case involving a hyperkeratotic nipple lesion that was diagnosed as Paget's disease upon examination.

**Case report :**

A 40-year-old woman, without any significant medical history, presented with a hyperkeratotic lesion on the nipple that has been evolving for ten years.

Clinical examination revealed a unilateral hyperkeratotic plaque measuring approximately 1 cm in diameter, which was non-painful, non-pruritic, and adherent to the deeper layers, localized on the nipple. The remainder of the breast examination was unremarkable with no other detected alterations.

Dermoscopy demonstrated clusters of keratins without underlying vascularity. A skin punch biopsy was performed, followed by histological and immunohistochemical analysis, revealing Paget's disease with positive staining for cytokeratin 7.

Further radiological evaluation, including mammography and breast MRI, was requested without any abnormalities in the results. The patient was referred to surgeons for further management.

**Discussion :**

Paget's disease is a condition affecting postmenopausal women and is associated with an underlying malignant tumor, characterized by intraepidermal proliferation of epithelial cells unrelated to epidermal keratinocytes. These are large, rounded cells with voluminous vesicular nuclei, dispersed or grouped in small clusters at all levels of the epidermis. Paget's disease primarily affects the nipple and, less commonly, other extramammary apocrine areas (anogenital, axillary)

Clinically, alterations in nipple and areolar sensitivity, such as itching and burning, are noted. Objectively, eczematous changes of the nipple-areolar complex are common. Advanced stages of Paget's disease of the breast are characterized by ulceration and destruction of the nipple-areolar complex. Deep skin biopsy with histopathological and immunohistochemistry examination is necessary for diagnosis and for its differentiation from other types of tumors.

Management is conducted by a multidisciplinary team that determines the optimal management strategy. Treatment options are typically surgical and include breast-conserving surgery or mastectomy. Sentinel lymph

node biopsy is performed in all patients undergoing surgery. Adjuvant chemotherapy, radiotherapy, or endocrine therapy may be used to treat concurrent invasive disease or ductal carcinoma in situ.

Prognosis is related to the stage of development and appears similar to that of other types of breast cancer: The 10-year overall survival rate of patients with Paget's disease is 90% in the absence of palpable mass and less than 40% in cases of palpable mass.

**Conclusion:**

Although rare, Paget's disease of the breast should be considered in the presence of any modifications to the nipple-areolar complex without obvious cause, necessitating a thorough examination, including mammography .

Never underestimate chronic nipple lesions .

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**Abstract N°: 7435****Using the power of artificial intelligence to improve the diagnosis and management of non-melanoma skin cancer**Fahimeh Abdollahimajd<sup>1</sup>, Mona Gorji\*<sup>1</sup><sup>1</sup>shahid beheshti university of medical sciences**Introduction & Objectives:****Abstract:**

AI-based systems, or artificial intelligence, hold great promise in improving the accuracy, efficiency, and accessibility of diagnosing and managing non-melanoma skin cancer (NMSC). These systems have the potential to bring about early intervention, reduce unnecessary procedures, and facilitate collaboration among healthcare providers. AI algorithms have shown moderate to high performance in diagnosing NMSC, but there are still challenges to overcome.

One of the challenges is ensuring the robustness of AI models, as well as their explainability and generalizability. It is important to address these issues through collaborative efforts that focus on data diversity, image quality standards, and ethical considerations. Gaining patient trust is also crucial, as it plays a significant role in the successful implementation of AI in NMSC.

While the potential of AI in NMSC is indeed promising, it is essential to conduct more real-world clinical studies to fully evaluate its practical application and implementation. This highlights the need for continued research and development in this domain. By addressing these challenges and conducting comprehensive studies, we can unlock the full potential of AI in improving the diagnosis and management of non-melanoma skin cancer.

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**Abstract N°: 7439****Papular mycosis fungoides: a variant not to be ignored**

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**Introduction & Objectives:**

Mycosis fungoides (MF) is the most common cutaneous T-cell lymphoma. A positive diagnosis at the initial stages of the disease is not easily obtained. Several clinicals, histopathologicals and immunohistochemicals variants of mycosis fungoides have been described. We report a new case of papular MF.

**Materials & Methods:**

A 62-year-old woman referred to our department, with a 2-year history of persistent pruritic and\*\* disseminated papules. Clinical examination revealed reddish-brown papules, distributed on her trunk, upper and lower limbs. Since appeared, these lesions persisted without spontaneous resolution.

Biopsy of the papule revealed a lymphohistiocytic infiltration of the superficial dermis, several epidermotropic lymphocytes. Many of these lymphocytes were atypical and the most of them presented in the epidermis. perivascular infiltration of small lymphocytes was observed.

Immunohistochemistry confirmed the expression of interapidermal T cells (CD3+, CD4+, CD8–, CD20–) and only a few infiltrating cells in the dermis were CD8+ T cells and CD20+ B cell. Complete blood count and peripheral blood smear revealed no abnormalities.

The diagnosis of papular MF was made. The patient received 10 mg of methotrexate per week and applied a high-potency corticosteroid daily with partial response. Ultraviolet B has been started with good response. a complete remission was achieved after a few months of treatment.

**Results:**

The clinical variant of papular MF was initially described by Kodama and al. in 2005. In this form of MF, papular lesions are the only manifestation, unlike in the classic MF where papules present alongside patches and plaques. Whereas the clinical manifestations are not specific, the diagnosis of these papular lesions is based on histopathology and immunohistochemistry. For this variant, it's crucial to differentiate between lymphomatoid papulosis type B and pityriasis lichenoides chronica. The histopathological features of MF and type B lymphomatoid papulosis are similar ;the diagnosis of type B lymphomatoid papulosis is based on spontaneous resolution of lesions, while in pityriasis lichenoides chronica, the histopathology leads the diagnosis.

Papular MF has a good prognosis and often responds well to phototherapy, which is confirmed in our case since complete remission was obtained only after initiation of phototherapy treatment.

**Conclusion:**

We reported a new case of papular MF successfully treated by phototherapy. overall, in the presence of isolated papules without spontaneous resolution, the diagnosis of papular MF should be considered.



**Abstract N°: 7441****Leser-Trélat syndrome: Look out!**

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<sup>1</sup>university hospital souss massa , dermatology venerology

**Introduction & Objectives:** Leser-Trélat syndrome associates the rapid appearance of numerous seborrheic keratoses with underlying neoplasia. Its recognition can be a real diagnostic tool for a better therapeutic management.

**Materials & Methods:** We report the case of a 66-year-old patient followed for laryngeal plasmacytoma in whom Leser-trélat syndrome was discovered incidentally.

**Results:** A 66-year-old patient, with a history of laryngeal plasmacytoma treated by chemotherapy and radiotherapy for 14 years, presented for a dermatological consultation for a corn on the soles of his feet. Systematic dermatological examination revealed waxy and slightly itchy hyperpigmented macules and papules, diffuse on the trunk, back and face, evolving according to the patient for several years well before the discovery of his plasmacytoma. On dermoscopy, we found milia like cysts, comedo like openings, a pseudonetwork appearance at the periphery with a moth-eaten border. Given the clinical presentation and the patient's history, the diagnosis of Leser-Trélat syndrome was retained. The patient received treatment for his corn and monitoring for his seborrheic keratoses. Leser-Trélat syndrome is a rare paraneoplastic syndrome, its existence is rather controversial. It is accompanied by pruritus in almost half of the cases described, it mainly affects the trunk and the limbs. The rash precedes the diagnosis of neoplasia in the majority of cases described (68.3%), 5 months before and 10 months after. It mainly reveals digestive and pulmonary adenocarcinomas; some cases of lymphoma, mycosis fungoides or Sézary syndrome have also been reported. The evolution of skin lesions is linked to the treatment of the underlying solid tumor; regression or stabilization is frequently observed, as is the case of our patient. An exacerbation should raise suspicion of progression of the neoplasia.

**Conclusion:** Eruptive seborrheic keratoses in a patient with no known history should systematically seek out underlying neoplasia.







**Abstract N°: 7475**

**Axillary adenocarcinoma revealing a colonic primary**

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**Introduction & Objectives:**

The occurrence of skin metastases from digestive adenocarcinomas is an extremely rare clinical situation, but one that should be recognized, as it may precede digestive symptomatology and, on its own, be indicative of neoplasia. They have a very poor prognosis and indicate a general extension of the disease.

**Clinical case:**

We report an exceptional observation of a 54-year-old female patient with a nodular lesion of the left axillary fold that had been evolving for a year. The onset was marked by the sudden appearance, on healthy skin, of a nodular lesion progressively increasing in volume, with no notion of prior trauma.

A skin biopsy was performed, and histological and immunohistochemical examination revealed a moderately differentiated, infiltrating adenocarcinoma of the skin with a mucinous contingent. The workup for a possible primary revealed a rectal adenocarcinoma.

After multidisciplinary consultation, the skin lesion was completely removed, followed by palliative chemotherapy in view of the spread of the digestive adenocarcinoma.

**Discussion:**

Cutaneous metastases from digestive adenocarcinomas are very rare. An estimated 6% of digestive tumors metastasize to the skin.

Metastatic dissemination is largely via lymphatic vessels, and less frequently via the bloodstream (to the liver, peritoneal cavity, lungs, adrenal glands and skin).

Cutaneous metastases usually manifest as nodules, most of which are painless. Nodules are usually round, firm and mobile. They are usually skin-colored, but can be red to purplish, bluish or blackish. Sometimes they mimic shingles, erysipelas or cellulitis.

Skin metastases tend to occur in an area of the body close to the site of the primary tumour. Thus, the abdomen and chest are the most common sites of metastases: the face, scalp and axillary region are rarer sites.

Cutaneous metastases can be removed when the lesion is unique or when a small number of lesions are circumscribed, but recurrences are frequent after surgery. Local surface radiotherapy can be used for radiosensitive cancers.

Palliative oncological treatment may be offered to control certain radiosensitive or chemosensitive cancers.

**Conclusion:**

The cutaneous manifestations of metastases are sometimes misleading, mimicking other skin pathologies.

Knowledge of these rare conditions is the only guarantee of rapid diagnosis and improved management.

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**Abstract N°: 7495****A Complex Case of Primary Cutaneous Marginal Zone B-cell Lymphoma**

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**Introduction & Objectives:** Primary cutaneous B-cell lymphomas (PCBCLs) account for approximately 2% of non-Hodgkin lymphomas and around 20-30% of all primary cutaneous lymphomas. According to the 2024 WHO/EORTC classification, three main entities are distinguished: primary cutaneous marginal zone lymphoma (PCMZL), primary cutaneous follicle centre lymphoma and primary cutaneous diffuse large B-cell lymphoma, leg type.

In PCMZL, the mainly solitary nodules or plaques measuring 1 to 10 cm in diameter are reddish brown to purple and appear predominantly on the trunk, with head and neck involvement being less common. Usually, it does not ulcerate. Histologic features included nodular or diffuse infiltrate of small B-cells that are positive for Bcl2, CD19, CD20 and negative for CD5, CD10 and Bcl6. No extracutaneous pathologies are evident at the moment of the diagnosis. We report a complex case that illustrates the difficulty of classifying PCBCLs from both a clinical and histological perspective, with the aim that it would assist doctors in increasing their understanding of this disease, hence guiding clinical therapy.

**Materials & Methods:** A female 68-year-old patient presented with two violaceous ulcerating nodules covered with hematic crusts and of gigantic dimensions (17/10 cm) at the level of the right breast and at the level of the right hemithorax, as well as multiple subcutaneous nodules of around 2 cm at the level of the breasts. On the head and the neck, there were multiple brown-reddish firm nodules, while multiple clusters of violaceous indurated plaques of various dimensions were noticeable on the trunk which persisted for around ten years.

A thoracic CT scan revealed pulmonary nodules. The histopathological architecture consisted mainly of nodular proliferation of cells with centroblastic and centrocytic pattern lymphocytes with scant cytoplasm, angulated infolded nuclear contour, and lymphocytes with rotund to oval nuclei and vesicular chromatic, rare plasmacytes and eosinocytes. There was diffuse positivity for CD45, CD20, MUM1, Bcl2, Bcl6; negative for CD10, CD30, AKL1, AE1/AE3, Ki67=40% The plasmacytes showed clonal character (kappa/lambda 1/5).

Ten years before, the patient presented with papulonodular lesions on the face, and the pathological exam showed CD20+, CD10-, BCL2+ in diffuse zones, in follicular centres BCL6+, MUM1+, Kappa+, Ki67 =40%. That time she refused any treatment.

**Results:** The patient's condition was diagnosed as cutaneous marginal zone B-cell lymphoma with extracutaneous involvement, following R-CHOP combination therapy with excellent therapeutic results at a 12-month follow-up.

**Conclusion:** The case showed a positive outcome even when there is a 10 year time lapse between the pathology's debut and treatment initiation. However, the classification of PCBCLs remains a challenge for both clinicians and pathologists, additional studies being necessary.



**Abstract N°: 7497****A case of mycosis fungoides with orbital involvement in patient with tertiary syphilis disease**

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**Introduction & Objectives:**

Mycosis fungoides (MF) are the most common cutaneous T lymphoma. Secondary localizations are rare and appear in the late stages of the disease. We report the first case of MF with secondary orbital localization associated with tertiary syphilis.

**Materials & Methods:**

A 61-year-old woman was referred to our department for the management of a classical MF at stage IB. A syphilitic serology (TPHA, VDRL)-systematically performed-was positive. The neurological and ophthalmological examinations were normal whereas the cardiovascular examination revealed aortic insufficiency for which the patient received treatment with Benzathine benzylpenicillin. For her MF, the patient received 15 mg of methotrexate per week and applied a high-potency corticosteroid daily resulting in complete remission. A few months later, the patient presented a relapse, more severe than the initial flare, characterized by a rapid extension of the lesions and an involvement of the orbit and an infiltration of the bone marrow. The patient received multi-agent chemotherapy treatment and died shortly thereafter.

**Results:**

To our knowledge, the association of mycosis fungoides and tertiary syphilis has not been reported in the literature. Extra-cutaneous localizations of MF are rare and seen in the late stages of the disease after several years of evolution. Ocular manifestations are unusual and have been reported in rare isolated cases in the literature, most often as a palpebral involvement. Orbital localization is exceptional, the first case was reported by Giannotti in 1963, very rare cases were described later. The extension to the eyelid and the orbit is most often at the end stage of MF while in our patient, there was no concomitant palpebral or intra-ocular involvement.

**Conclusion:**

Our observation is characterized by the association of MF and tertiary syphilis, the rapidly unfavorable evolution despite a good initial response and secondary damage to the orbit in the absence of palpebral involvement. We do not know if the association with tertiary syphilis participated in the aggravation of the disease observed in our patient.



**Abstract N°: 7505****Lichenoid mycosis fungoides mimicking lichen planus: a case report**

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**Introduction & Objectives:**

Mycosis fungoides presents a challenge diagnostic, as it remarkably imitates and mimics clinically and histologically other dermatoses.

**Materials & Methods:**

We hereby present a case exhibiting pronounced lichenoid features clinically, dermoscopically, and histologically. Following multiple biopsies and clinicopathological correlation, the diagnosis of lichenoid mycosis fungoides was established.

**Results:**

A 59-year-old woman, previously diagnosed with Sjögren's syndrome and managed with symptomatic treatment, presented to our departement with diffuse, pruritic, erythematous-violaceous, erosive, and pigmented lesions that had been evolving over 16 years, with no other associated symptoms. Upon clinical examination, the patient appeared to be in good general condition. Skin examination revealed erythematous-violaceous, scaly-crusty, erosive, pruritic plaques, along with diffuse, poorly demarcated hyperpigmented patches resembling a poikilodermic-like appearance on the back, abdomen, buttocks, and a receding hairline at the scalp. Dermoscopic examination showed Wickham's striae, heterogeneous pinpoint vascularization, hemorrhagic crusts, and erosions. The patient had undergone two histopathological evaluations in 2018 and 2021, both initially diagnosed as lichen planus. However, due to the lack of improvement and progression of the cutaneous lesions, a biopsy was repeated in 2024, confirming a diagnosis of lichenoid mycosis fungoides with CD8(+) immunophenotype. Histological and immunohistochemical examination revealed a chronic psoriasiform lichenoid dermatosis with keratinocyte vacuolization, necrosis, and epidermotropism of CD8(+) atypical lymphocytes, exhibiting T-phenotypic holes: CD2(-), CD5(-). No Sézary cells were observed during flow cytometry evaluation. Additionally, ultrasonography of the lymph nodes detected a small left supraclavicular lymphadenopathy with bilateral cervical, axillary, and inguinal lymphadenopathies. Lymph node biopsy is planned for staging purposes and to determine potential treatment options.

**Conclusion:**

Lichenoid mycosis fungoides is a rare histopathological subtype characterized by a lichenoid band-like infiltrate of inflammatory cells, reminiscent of lichen planus. Only a small number of cases of lichenoid MF have been documented in the literature. This poses a considerable diagnostic dilemma for dermatologists and pathologists alike. Accurate and timely diagnosis relies heavily on comprehensive evaluation of clinical presentations, histopathological features, and occasionally immunohistochemical assessments.



**Abstract N°: 7522****Macrocheilitis indicative of mycosis fungoides**Meryem el Bakkali<sup>1</sup><sup>1</sup>Mohammed VI Hospital, Tangier university hospital , Department of Dermatology and Venereology,, tangier**Introduction & Objectives:**

Mycosis fungoides (MF) is the most common type of cutaneous T-cell lymphoma.

Specific mucosal involvement is possible in mycosis fungoides, but is rarely reported. In the vast majority of cases, only one mucosa is affected, usually the buccal mucosa. This is usually a marker of poor prognosis.

We report the case of a patient with upper lip involvement and ulcerations of the oral mucosa preceding the cutaneous involvement of mycosis fungoides.

**Materials & Methods:**

Case report Observation

**Results:**

73-year-old patient with no previous history of mycosis fungoides presented for 9 months with labial swelling of the upper lip and lesions of the buccal mucosa associated with dysphagia on solid presentation, followed by the onset of dysphonia.

After 4 months, multiple painless, non-itchy, reddish skin lesions appeared, mainly on the trunk. The evolution was rapid over a few weeks, marked by an increase in the size of the pre-existing lesions and the appearance of new lesions on the back, buttocks, and upper and lower limbs. This prompted the treating ENT physician to refer the patient for a specialist dermatological opinion.

Clinical examination revealed a conscious patient with stable HD and respiratory function, presenting with multiple erythematous maculopapular lesions, some confluent in plaques and diffusely localized, infiltrated and topped with fine yellowish scales and others with a brownish crust.

The examination also revealed macrocheilitis of the upper lip, associated with damage to the oral mucosa: a plicated tongue, erosions and leukoplakia.

In addition, there was no phanerotic involvement.

Skin biopsy with immunohistochemical study confirmed the diagnosis of mycosis fungoides with moderate pilotropism and no visible mucinosis.

Oral mucosa biopsy showed dense, diffuse dermohypodermal infiltration with epidermotropism marked by a large-cell lymphomatous process.

Pet scan: intense hypermetabolism of the upper labial region associated with multiple cutaneous hypermetabolism and bilateral pulmonary hypermetabolism.

The patient was referred to the medical oncology department and put on chemotherapy, with marked improvement in the cutaneous and pulmonary lesions.

**Conclusion:**

As a “great imitator”, MF is known for the range of forms it can take.

Involvement of the oral mucosa by MF is, however, very rare, with around 60 cases reported in the literature.

Recognition of MF of the buccal mucosa is important, not only for the diagnostic and therapeutic challenge it poses, but also for its poor prognosis, as reported in the literature.

Our case adds to the literature a particular localization in the oral mucosa that preceded the cutaneous involvement of an MF.

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**Abstract N°: 7525****Polymyositis, myocarditis, and thrombotic complications related to adjuvant immune checkpoint inhibitor treatment in melanoma**

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**Introduction & Objectives:**

Immune checkpoint inhibitors are employed with success in malignancies like melanoma, both in metastatic and in adjuvant setting. Their increased usage is accompanied by a rise in immune-related adverse events. Such immune-related adverse events can affect nearly every organ. Thrombotic complication, immune-related cardiac pathologies, myopathy, and myositis are rare, with an incidence of around 1-4%.

**Materials & Methods:**

The case involves a 72-year-old male patient, from whom two superficially spreading melanomas (pT1b) were removed from the scapular area and a desmoplastic melanoma (pT4b) from the right preauricular area. Sentinel lymph node biopsy from the neck and left axilla resulted in occult lymph node metastases. The BRAF V600E genetic testing carried out in two of the lesions confirmed BRAF wild-type melanomas. Detailed clinical staging did not confirm the presence of distant metastases. Adjuvant PD-1 inhibitor therapy was initiated of the stage IIIC melanoma. After the second cycle, axial and appendicular skeletal muscle weakness followed by moderate dyspnea upon exertion arose. A pronounced progression in symptoms was observed, necessitating suspension of immunotherapy and hospitalization. Laboratory exams revealed significantly elevated LDH (3x ULN), CK (32x ULN), and troponin T values (28-76x ULN). ECG and echocardiography investigations were inconclusive, however taking into consideration the clinical symptoms, elevated cardiac biomarkers, and an anomaly noted on cardiac MRI, a diagnosis of myocarditis was reached, which was supported by cardiologists. Imaging, cardiovascular, neurological and rheumatological examination confirmed grade 3 polymyositis, multiple deep venous thromboses of the right lower limb as well as unilateral disseminated pulmonary emboli. High-dose parenteral systemic corticosteroid treatment and subcutaneous enoxaparin was started.

**Results:**

Symptoms completely resolved with treatment. Steroid dosage was gradually tapered, and oral anticoagulation initiated. Subsequent oncological follow-up was provided at a dermato- oncology center. Additionally, a superficial spreading melanoma (pT1a) was excised.

**Conclusion:**

Immune checkpoint inhibitor-related myocarditis is a rare event associated with high mortality, diagnosed primarily through clinical symptoms, elevated cardiac biomarkers, and imaging. Elevated Troponin T levels are not exclusive to myocarditis but also linked to thromboembolisms and myositis. Managing melanoma patients with immune-related adverse events are challenging for dermato-oncologists, where interdisciplinary cooperation is vital for optimal care.





**Abstract N°: 7552****Therapeutic Implications of BRAF Mutation Heterogeneity in Metastatic Melanoma: Insights from Clinical Analysis**

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**Introduction & Objectives:**

Introduction: In patients treated for metastatic melanoma, one effective therapeutic option is BRAF-MEK inhibitor combination therapy. Targeted BRAF inhibitors are administered to patients whose tumors exhibit BRAF gene mutations, thus genetic analysis of the primary tumor and removed metastases is recommended. Literature suggests the phenomenon of tumor heterogeneity, implying potential differences in BRAF status between primary tumors and metastases.

Our study aims to support the hypothesis that within the same patient, primary tumors and metastases, as well as different metastases, may possess differing BRAF statuses. We seek to demonstrate that therapeutic switching to address newly discovered BRAF-positive metastases, following previous BRAF-negative findings, can have beneficial effects on disease management.

**Materials & Methods:**

We retrospectively reviewed patient data from the oncological dermatology center of Semmelweis Dermatology Clinic. We examined documentation of patients undergoing targeted and other therapies. Our investigation focused on therapy switches, their sequence, BRAF status of primary tumors and metastases, and patients' medical histories.

**Results:**

Among the patients studied, in 6 cases, either the primary tumor or the first assessed metastasis was initially negative, but subsequent metastases were found to be positive for the mutation. Following initiation of targeted therapy based on the new mutation analysis, most patients exhibited at least transient regression and reported subjective improvement in condition following therapy switch.

**Conclusion:**

Due to tumor heterogeneity, therapeutic decisions in metastatic disease should consider the BRAF status of metastases, as recommended by guidelines. Even in cases where systemic treatment was decided based on the BRAF-negative status of the primary tumor or metastasis, it is advisable to consider targeted removal of new metastases for genetic analysis if feasible. Current international recommendations do not emphasize the potential therapeutic benefits of biopsy for mutation analysis of metastases, but our cases demonstrate its potential efficacy.



**Abstract N°: 7557****Melanoma-Associated Long-Distance Leucoderma: A Case to Remember**Joana Vieitez Frade<sup>1</sup>, Paulo Filipe<sup>1, 2, 3</sup>

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**Introduction & Objectives:** The association between melanoma and long-distance leucoderma, characterized by depigmented patches distant from the primary tumor site, poses a unique challenge in clinical practice. While the link between melanoma and leucoderma has been recognized, the underlying mechanisms and clinical implications of this association remain poorly understood.

**Materials & Methods:** Data from medical records and literature review. The keywords included were “melanoma”, “leukoderma” “vitiligo-like depigmentation”.

**Results:** A 71-year-old woman presented with a history of a pT3b nodular melanoma excised from her right leg ten years prior. She had declined further examinations or treatment following the initial surgery. However, she was admitted to the emergency department with symptoms of hemiparesis and confusion. Upon examination, depigmented patches were observed on her face and neck, distinct from the site of her previous melanoma excision. Imaging studies revealed metastatic lesions in her brain, confirming the diagnosis of metastatic melanoma. Despite aggressive treatment, the patient’s condition continued to deteriorate, and she succumbed to her illness shortly after admission.

**Conclusion:** Metastatic melanoma is renowned for its propensity to disseminate to distant sites, including the skin and internal organs. Long-distance leucoderma, although rare, has been reported as a cutaneous manifestation of metastatic melanoma. The pathogenesis of melanoma-associated long-distance leucoderma remains poorly understood, with hypotheses suggesting immune-mediated mechanisms and neural pathways. Recognition of long-distance leucoderma in patients with melanoma is paramount, as it may serve as a clinical indicator of disease progression and treatment resistance. Further research is warranted to elucidate the underlying mechanisms driving this intriguing association and to explore potential therapeutic targets for advanced melanoma. Multidisciplinary collaboration among dermatologists, oncologists, and researchers is essential to enhance our understanding of melanoma-associated long-distance leucoderma and its implications for patient management.



**Abstract N°: 7580****Erythematous Halo Nevi - an important melanoma simulator**Thais Bello<sup>\*1</sup>, Maria Messina<sup>1</sup>, Patricia Consorti<sup>1</sup>, Fernanda Turazzi<sup>1</sup><sup>1</sup>Hospital Ipiranga, Sao Paulo, Brazil**Introduction & Objectives:**

Cutaneous melanoma is a potentially metastatic and fatal condition where early diagnosis plays a crucial role in prognosis. Halo nevus, typically a benign lesion in young individuals, especially children, can be concerning in older patients as it might indicate melanoma or be a significant differential diagnosis. In this report, the authors present three cases of histopathologically confirmed halo nevi. Interestingly, these cases lacked a clinically visible white halo, despite exhibiting clinical and dermoscopic features overlapping with melanoma.

**Materials & Methods:**

Three cases are presented, discussing their clinical, dermoscopic, and histopathological findings.

- \1. A 38-year-old male presented with an asymmetrical lesion on the arm, characterized by a black-blueish blotch and a blue-white veil.
- \2. A 52-year-old male had a lesion on the back noted during the initial visit but missed the excision appointment. After nine months, the lesion showed marked clinical enlargement and a milky-red area on dermoscopy.
- \3. A 58-year-old female presented with an elevated pigmented lesion on the back, featuring a structureless black-blue area.

**Results:**

All three patients received a histopathological diagnosis of halo nevi, despite the absence of clinical or dermoscopic halos. Interestingly, they exhibited dermoscopic features typical of melanoma.

**Conclusion:**

Halo nevus may not always exhibit a clinically or dermoscopically visible white vitiligoid halo. Instead, it may manifest with an erythematous background, making it challenging to differentiate from melanoma features. This underscores the importance of considering halo nevus as a relevant differential diagnosis in such cases.



**Abstract N°: 7591****A Rapidly Enlarging Left Leg, Syncope And A Red Eye**Zhi Lim<sup>\*1</sup>, Sarah Mehrtens<sup>1</sup>, Fiza Ahmed<sup>1</sup><sup>1</sup>Whipps Cross University Hospital, United Kingdom**Clinical findings**

A 71-year-old man presented with unilateral rapidly progressive swelling of the left lower limb, with associated pain, erythema, ulceration and reduced mobility. Initial assessment was consistent with a tender indurated nodular lymphoedema of the left lower leg with maceration and ulceration. The skin changes rapidly progressed over the course of a few weeks extending with erythematous firm nodules proximally to the knee. A few weeks later, he developed syncope, fast atrial fibrillation and right eye swelling. Further investigations including blood tests and an incisional biopsy of the leg was done. Subsequent blood tests demonstrated low CD3, CD4 and CD19 absolute lymphocyte counts, low CD4:CD8 ratio, raised CD8%, and positive EBV IgG. Full blood count was unremarkable. A punch biopsy from a nodule and a subsequent larger incisional biopsy showed similar findings; a pan-dermal, neoplastic, lymphoid infiltrate, with focal areas of angioinvasion. T-cells of varying sizes were seen, expressing CD3 and CD56, as well as cytotoxic markers. B-cell markers were negative, save for aberrant moderate CD20 staining. The findings were consistent with extranodal NK/T-cell lymphoma. Further radiological imaging including PET- CT, cardiac MRI and CT Head showed lymphoma infiltration of the heart, right orbital and lymph nodes. A diagnosis of extranodal NK/T-cell lymphoma was made, with lymphomatoid infiltration into the myocardium and right eye orbit. He was commenced on SMILE chemotherapy and interval PET- CT scan showed interval good partial response of cutaneous disease below the left knee with no new sites of FDG avid disease elsewhere.

**Discussion**

Extranodal NK/T-cell lymphoma (ENKTL) accounts for less than 2% of T-cell lymphomas, and is rare in Europe and North America. It is strongly associated with EBV and frequently originates in the nasal cavity.

Our patient has Ann Arbor stage IV disease, with probable lymphomatous infiltration into the myocardium and orbit of the right eye. Cardiac and orbital infiltration confer a poor prognosis, and have only rarely been reported in the literature; primary orbital lymphoma is rare in NK/T-cell lymphoma, and when present is often related to extension of the lymphoma from the nasal sinuses, which was not present in this case.

There are very few case reports on extra- nasal NK/T- cell lymphoma manifesting with a primary cutaneous manifestation in the leg. There was a case reported by Orlowski et al which had a similar primary presentation on the leg which was found to be extra- nasal NK/T- cell lymphoma. The patient was treated promptly with an improvement of disease.

Mortality rate is very high amongst this patient group. Better outcomes are reported in a case where patients received early treatments due to early referral to Dermatology, biopsy and diagnosis.



**Abstract N°: 7602****Impact of CP-GEP to improve selection of patients with melanoma who may forgo sentinel lymph node biopsy based on real world data**

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**Introduction & Objectives:**

According to the American Joint Committee on Cancers staging manual, all patients with pT1b melanoma or higher are eligible for sentinel lymph node biopsy (SLNB). Approximately 85% of these patients will not have sentinel node metastases but will be exposed to potential surgical complications including seroma and wound infection. The Clinicopathological Gene-Expression Profiling (CP-GEP) test combines age, Breslow thickness, and the expression of eight target genes to identify patients at low risk for SN metastases, who may forgo SLNB. The test has previously been validated in large independent retrospective and prospective studies. Here, we describe the impact of the CP-GEP on treatment decisions in clinical practice.

**Materials & Methods:**

This study was conducted in two specialized melanoma centers, experienced with CP-GEP. Between September 2023 and March 2024, all patients aged 18 years or older with cutaneous melanoma (pT1b-pT4), eligible for SLNB were consulted on CP-GEP, based on Breslow Thickness, location of the primary melanoma. Patients were excluded if the SLNB would not have any clinical consequences or if the clinical risk for SN metastasis was deemed negligible. If eligible, patients were consulted about the SLNB and informed about the possibility of forgoing SLNB following a "low risk" CP-GEP result. Upon completion of the analysis, results (either high-risk or low-risk) were returned to surgeon. The patient was consulted on the test result and a treatment decision was made following shared decision making. The primary outcome was the ratio of patients that did not undergo SLNB.

**Results:**

CP-GEP was performed in 45 patients. CP-GEP low-risk was found in 23 patients with pT1b and 6 patients with pT2a. In two patients the tissue yielded insufficient RNA and consequently no valid test results were available. Although the number of patients with >pT2a melanoma was relatively small (n=6), all patients had a high-risk CP-GEP result. In 23 patients with a low-risk CP-GEP outcome, surgery was forgone following shared decision making. Six patients underwent SLNB despite a low risk due to patient wish or surgery planned prior to return of test results.

**Conclusion:**

CP-GEP currently supports decision making in two melanoma centers in our country and its use has decreased SLNB rate in this cohort. A number of patients with pT1b melanoma was not included for CP-GEP. Their clinical risk for SN metastasis was either deemed low or there would not be any clinical consequences following SLNB. Based on these results, implementation of this test in the appropriate population may significantly improve the selection of patients who can forgo SLNB, reducing the amount of unnecessary surgery and adding to more personalized treatments for patients with melanoma.




**Abstract N°: 7613**
**Prognostic factors for transformation in mycosis fungoides: series of 53 cases**

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**Introduction & Objectives:**

Mycosis fungoides (MF) is the most common primary cutaneous T-cell lymphoma (65%). Its progression is typically indolent and transformation of MF is rare, but with an aggressive course increasing mortality.

The aim of our study was to describe the characteristics and outcomes of patients with MF, and to identify predictive factors for transformation in order to improve the management of the disease.

**Materials & Methods:**

A retrospective evaluation study of all confirmed cases of mycosis fungoides hospitalized at our dermatology department between 2013 and 2024. Clinical and paraclinical data were analyzed.

**Results:**

Fifty-three cases were included, the mean age was 57.1 years [12 – 80 years] and sex ratio was 1,12. At diagnosis, the classic form was found in 29 patients (54.7%), clinical variants were folliculotropic MF (9 cases), poikilodermatous (2 cases), lichenoid, hyperpigmented and ichthyosiform MF in one case each. Erythroderma was present in 11 cases.

According to the TNMB classification, an early stage was noted in 32 cases (60.4%): 9 IA, 16 IB, 7 IIA and an advanced stage in 21 cases (39.6%): 6 IIB, 9 IIIA, 4 IIIB and 2 IVA.

Patients were treated with dermocorticoids in 37 cases (69,8%), UVA or UVB phototherapy (26 cases), methotrexate (19 cases), interferon (4 cases), bexarotene (1 case), and polychemotherapy was administered for 12 patients.

During long-term follow-up, favorable evolution was observed in 30 patients (56,6%), progression to erythroderma in 3 cases, and transformed MF in 16 patients, 12 of whom were initially an advanced stage. Three deaths linked to the disease progression were reported: 2 patients with initial IIIB stage and 1 patient with initial IB stage.

The mean time between MF diagnosis and transformation was 41,6 months, advanced age (> 60 years) was found in 43.75% (7 cases/16), advanced TNMB stage in 25%, increased serum lactate dehydrogenase (LDH) in 50%, CD30 expression in 18.75%, folliculotropic MF in 18.75%, rapid extension of skin lesions in 31.25%, extracutaneous transformation in 25%, fibroplasia in histopathology in 25% and eosinophilia in 12,5%.

**Conclusion:**

Most of our patients were diagnosed at an early stage, had classic MF and a favorable outcome. 30,2% progressed to transformed MF with poor prognosis. Predictive factors statistically associated with disease progression and transformation were advanced stage (IIB, IIIA, IIIB, IVA), age > 60 years, elevated serum LDH and rapid extension of skin lesions. Identifying these factors may help to manage MF patients more efficiently.







## Abstract N°: 7638

### Progressive polycranial neuropathy as the presenting symptom of metastatic cutaneous squamous cell carcinoma

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#### Introduction & Objectives:

#### Case report

A 64-year-old man was attending the dermatology department for morphea, managed with abatacept, which he had been stable on for over five years. During his follow up, he was incidentally noted to have a lesion on his left temple, suspicious for squamous cell carcinoma (SCC), which was excised. Histological examination revealed a well differentiated SCC with no perineural invasion, a clear deep margin and a narrow peripheral margin of <1mm. He declined further excision and was referred for adjuvant radiotherapy. As the margin was clear, albeit close, the patient and his wife opted for clinical observation.

Within four weeks of the surgery, he began complaining of a severe, knife-like pain around the left temple, close to the surgical site. This was associated with jaw claudication. There was nothing of note clinically but given the narrow margins, there was a concern about residual SCC causing the pain. CT brain was unremarkable. Within three months of the initial excision, he presented to the emergency department with worsening left facial pain and headache, a progressive left facial weakness and left sided ptosis. On exam he was noted to have palsies of cranial nerves II, III, V, VI, VII. MRI brain showed a very subtle left retroorbital lesion. PET CT showed extensive perineural invasion. Over the course of a few weeks, his symptoms rapidly progressed with worsening neurology and an enlarging left retroorbital and left temporal subcutaneous mass. A biopsy confirmed metastatic SCC. Unfortunately, the patient deteriorated and died within a year of his initial diagnosis.

#### Discussion:

Cutaneous SCC of the head and neck is a common keratinocyte carcinoma, with perineural invasion (PNI) found in approximately 2.5% to 5% of cases. PNI is a histological marker of aggressive disease and is associated with locoregional recurrence, metastasis, and reduced tumour-specific survival(1). Patients may present with skin pain or vague neurologic symptoms. Head and neck cSCCs can lead to cranial neuropathies, most commonly cranial nerves V and VII(2). As signs and symptoms of PNI can be subtle and may occur in the absence of a clinically obvious lesion, diagnosis can be challenging. PNI is best confirmed by MRI with perineural protocol. Patients should be treated aggressively with surgery and/or radiotherapy for optimal outcomes. Immunotherapy can be used for advanced or metastatic cSCC(3).

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Head & Neck. 2023;45(8):2149-54.

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**Abstract N°: 7641****Clinical and histopathological study of cutaneous squamous cell carcinoma**

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**Clinical and histopathological study of cutaneous squamous cell carcinoma**

**Introduction:** Squamous cell carcinoma (SCC) is a malignant neoplasm originating from epidermal keratinocytes and/or mucosal membrane epithelium, in which cellular components exhibit variable squamous differentiation. It is the second most common among cutaneous cancer varieties, with potentially aggressive characteristics. Its etiopathogenesis is multifactorial, with solar exposure being its primary risk factor. Its topography predominates in sun-exposed areas and often initiates over some precancerous dermatosis. Morphologically, it is classified as superficial or Bowen's disease, ulcerative, nodular, nodular keratotic, vegetative, keratoacanthoma, and histologically classified as well-differentiated, moderately differentiated, and poorly differentiated.

**Objectives:** To describe the clinical, histopathological, and demographic characteristics of patients diagnosed with cutaneous SCC from 1993 to 2022 at a Dermatological Center.

**Materials & Methods:** An observational, descriptive, retrospective, and cross-sectional study was conducted. Retrospective review of records with clinical and histopathological diagnosis of SCC collecting clinical, demographic, and histopathological variables.

**Results:** Over 29 years, 1669 patients with skin cancer were collected, 21% (n=345) with cutaneous SCC, of which 52% (n=178) were male and 48% (n=167) were female, with a ratio of 1.06:1. The mean age was 70 to 79 years and the most common occupation was housewife at 41% (n=142) and 21% (n=42) were farmworkers. 49% (n=168) had Fitzpatrick skin type III. In 70% (n=240) of cases, the topography was on the head, with cheeks being the predominant region at 19% (n=67). The predominant clinical morphology and variety were nodular keratotic at 27% (n=92) and 29% (n=99) respectively. 75% (n=259) had a diameter of 0.5 to 2 cm with an average evolution time of 17 months. The most frequent differentiation grade was well-differentiated at 84% (n=288).

**Conclusions:** SCC is the second most common skin cancer worldwide and in this study. It predominantly affects the adult population aged 70 to 79 years. It occurs more frequently in occupations involving outdoor activities. Patients with Fitzpatrick type III skin (49%) are primarily affected, unlike what is reported in the literature. The topography predominantly affected corresponds to high-risk areas. The clinical variety that was most frequently observed was nodular keratotic, with a well-differentiated histological differentiation, half of the cases evolving over 6 to 12 months with a diameter of 0.5 to 2 cm in most cases.



**Abstract N°: 7642****Zosteriform Cutaneous Metastases from breast cancer : a case report**

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**Introduction & Objectives:**

Metastatic skin cancers vary in type. Most of these metastases present as nonspecific, painless, dermal or subcutaneous nodules, leaving the overlying epidermis intact. Only a few cases of metastatic skin cancer presenting with a zosteriform distribution have been reported in the medical literature. Zosteriform appearance of the metastasis has two aspects : one is its morphology with lesions resembling herpetic vesicles and the other is its zosteriform distribution.

Cutaneous metastases usually present as firm, painless, erythematous nodules or masses, while zosteriform cutaneous metastases are less common.

Typically, cutaneous metastases from internal cancers indicate a bad prognosis. Thus, the presence of widespread cutaneous metastases requires systemic therapy.

**Materials & Methods:**

Herein, We describe a case of a patient diagnosed with zosteriform cutaneous metastases from breast carcinoma.

**Results:**

A 53-years-old female was admitted with painful and pruritic erythema and nodules on the left thoracic wall and armpit that have been evolving for one month. She had a history of left patey's surgery 4 years ago for breast cancer.

The clinical examination revealed a purplish erythematous plaque with zosteriform metameric distribution at the level of the left thoracic wall with lymphedema of the upper limb.

A pathological biopsy of the skin showed that the epidermis is focally acanthotic, surmounted by a discreet orthokeratotic hyperkeratosis with multiple small dilated vessels harboring carcinomatous vascular emboli in the dermis.

The final diagnosis was zosteriform cutaneous metastases from breast carcinoma.

Currently, the patient is currently undergoing chemotherapy : Paclitaxel-Carboplatine and radiotherapy.

**Conclusion:**

In short, the clinical manifestations of cutaneous metastases are not specific. If patients with malignant tumors have obvious skin lesions, histopathological examination should be performed to confirm the diagnosis. For patients without a history of cancer, we should also be vigilant and prompt a biopsy to exclude internal malignancies and avoid misdiagnosis.



**Abstract N°: 7671****Cutaneous large B-cell lymphoma, EBV (+): on the scalp**Claudia Mateo<sup>1</sup><sup>1</sup>Hospital Clínico Universitario, Dermatology , Caracas, Venezuela**Cutaneous large B-cell lymphoma, EBV (+): on the scalp**

Cutaneous large B cell lymphoma, EBV (+), an aggressive neoplasm of large B cells, associated with the Epstein-Barr virus, this is an extremely rare disease that predominantly affects Asian patients, although cases have been described in South America in Mexico. It generally affects older patients from the 5th decade of life associated with states of immunosuppression; however, cases have been described in young patients with similar characteristics. This is a 27-year-old male patient, natural and from Caracas, who presents with alopecia and pain and inflammation in the scalp for 1 year. He has no personal, family history or psychobiological habits relevant to the current illness. On physical examination, multiple erythematous nodules with a shiny surface and fluctuating sinuous paths were observed on the scalp, with areas of fibrosis, furfuraceous scaling, and moderate pain on palpation. A skin biopsy sample was taken, which reported: epidermis without major changes, nodular and diffuse infiltration of the dermis due to neoplasia. At higher magnification we see infiltration made up of large cells with vesicular and irregular nuclei, inflammatory infiltrate made up of lymphocytes and eosinophils. Neoplasm suggestive of diffuse large cell lymphoma. Immunohistochemistry: marker for diffuse Cd20 positive B lymphocytes and characteristic membrane pattern. Large B cells Bcl-2 positive, Bcl-6 Positive, Ki-67 60% tumor cells, EBV + 90% tumor cells. The case is concluded as cutaneous large B cell lymphoma, EBV (+): in the scalp. Extension studies are requested without evidence of systemic disease. He is referred to the hematology service where he receives 5 cycles of R-Chop with satisfactory progress.



**Abstract N°: 8111****A phase 3, randomized controlled trial of topical patidegib gel 2% in patients with Gorlin syndrome**

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**Introduction & Objectives:**

Gorlin syndrome (GS) is a rare autosomal dominant genetic disorder caused mostly by mutations in the PTCH1 gene and characterized by many phenotypic abnormalities, prominent among which is the continued emergence of multiple basal cell carcinomas (BCCs). Topical Patidegib is an investigational topical Hedgehog Pathway inhibitor designed to prevent the development of GS-related BCCs.

**Materials & Methods:**

We conducted a Phase 3, double-blinded, randomized, vehicle-controlled trial, enrolling adult participants with clinically-diagnosed GS who had not used oral Hedgehog Pathway inhibitors in the previous 3 months, topical therapies to the face in the previous 2 months, or any systemic chemotherapy in the previous year. Participants also were required to have at least 2 small BCCs (<5mm in diameter) on the face at baseline and to have had at least 10 BCCs anywhere in the past 2 years.

Patients applied either vehicle or patidegib gel twice daily over the entire face for 12 months. The primary endpoint was the number of new BCCs per subject that developed on the face over the 12 month duration assessed during in-person monthly visits and through standardized facial photographs. Secondary endpoints included the number of new BCCs per subject by months 6, 9, and 12 and the proportion of subjects developing at least 1 or at least new facial BCCs by month 12. We enrolled 174 subjects at 44 sites in the USA, Canada, and the EU randomized in the Study to active or vehicle-only gel in a 1:1 ratio.

**Results:** Patidegib 2% gel showed a trend towards reducing the number of new facial BCCs. However, the primary endpoint failed to reach statistical significance, The secondary and exploratory endpoints showed that patidegib gel reduces new BCCs and lowers BCC lesion symptoms.

In post-hoc analysis restricted to subjects with PTCH1 mutations and a baseline high burden of facial BCCs, patidegib gel reduced facial BCCs by 50%.

**Conclusion:** A new Phase 3 trial designed to investigate patidegib 2% gel in PTCH1+/- GS patients with a high burden of facial BCCs at baseline has been opened at Sites in the EU, UK, and USA.

