

**Abstract N°: 71****Nurse-led smoking cessation initiative in a Dermatology systemic clinic – Making Every Contact Count**

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**Introduction & Objectives:**

In 2020, 22.3% of the world's population smoked tobacco, accounting for, 36.7% men and 7.8% women<sup>1</sup>. A study by the Centers for Disease Control and Prevention (CDC) has shown that four out of nine cigarette smokers who attended a healthcare professional did not receive smoking cessation advice<sup>2</sup>. Similarly, cardiovascular disease (CVD) risk factors in patients with chronic inflammatory skin diseases (CIDs) are rarely addressed and treated in Dermatology clinical practice, despite evidence supporting an increased CVDs risk among patients with CIDs<sup>3</sup>. A nursing proforma was established in our Dermatology department to perform blood pressure and body weight measurement prior to consultation. This however did not include smoking status.

Our aim was to develop a nurse led approach to asking about and offering smoking cessation interventions to patients with CIDs who attend the systemic clinic by applying the Making Every Contact Count (MECC) framework, purposed by the Public Health England<sup>4</sup>.

**Materials & Methods:**

Smokers were identified during routine blood pressure and body weight measurements performed by nursing staff prior to a consultation with the dermatologists. They were then offered referral to the National Tobacco Cessation Support Programme opportunistically. Smokers who agreed to the referral completed a questionnaire consisting of baseline demographics including a smoking history. Confidence, motivation and the importance of quitting were assessed with a score out of 10.~~

**Results:**

62 (17.4%) smokers were identified among 356 patients who attended the dermatology systemic clinic over a 12-week period. Of the 62 smokers, more than one-third (n=22; 11 males and 11 females) accepted referral to the National Tobacco Cessation Support Programme. The ages of the smokers ranged from 27 to 72 years, with a median age of 46 years. Most smokers (n=16) consumed more than 15 cigarettes per day and had smoked for 10 years or more. The majority (95.5%, n=21) reported previous attempt(s) to quit smoking. All smokers expressed a moderate to strong motivation to quit smoking and most (86.4%, n=19) rated quitting smoking as extremely important. However only one-third felt very confident in stopping.

**Conclusion:**

Systemic complications of CIDs such as CVDs, especially for patients receiving systemic therapy, need to be addressed and Dermatologists play a crucial role in highlighting identified risk factors to both patients and their family practitioners. The MECC framework allows nursing staff to build rapport with patients when attending regular appointments to the systemic clinic. This creates a less intimidating environment and regular opportunities to highlight smoking cessation, making every contact count.

**Abstract N°: 90****Clinical predictors of IL-17 and IL-23 inhibitors dose spacing in adult psoriatic patients: a real-world pilot study**Luca Mastorino\*<sup>1</sup>, Simone Ribero<sup>1</sup>, Pietro Quaglino<sup>1</sup>, Paolo Dapavo<sup>1</sup><sup>1</sup>University of Turin, Medical Science, Torino, Italy**Introduction & Objectives:**

De-escalation strategies of biologics in psoriasis treatment are widespread in clinical practice. Dose spacing (D-S) consists of de-escalating the time range between biological drug injections. This strategy could both reduce treatment costs and increase patients' compliance with therapy after an initial stable response.

**Materials & Methods:**

A retrospective cohort study from January 2017 to December 2022 was conducted at the dermatologic clinic of the University of Turin.

All consecutive adult psoriatic patients undergoing D-S of IL-23 and IL-17 inhibitors were enrolled.

Major objectives were: to identify phenotypic characteristics related to the selection of patients candidable for therapeutic D-S; describe trends in mean PASI, PASI100, PASI90, and PASI $\leq$ 1 from baseline to 12 months after D-S, and drug survival analysis of dose-spaced regimen.

Pre-post analysis between mean PASI at dose spacing and baseline, and time points following dose-spacing 3, 6, 9, and 12 months was also conducted.

**Results:**

Of 1144 patients treated with IL-23 and IL-17 inhibitors 61 patients underwent D-S. They presented with less mean baseline Body Mass Index (BMI) ( $p=0.011$ ) and PASI (Psoriasis Area Severity Index) ( $p=0.044$ ) and were more frequently bio-experienced ( $p=0.033$ ).

After 12 months from dose-spacing 42.9%, 85.7%, and 92.9% of observed patients achieved PASI 100, 90, and  $\leq$ 1.

There were no significant differences in mean PASI between D-S and subsequent time points. The D-S survival was 70% at 1 year.

**Conclusion:**

Therapeutic modulation, such as D-S, is an effective strategy in most psoriasis patients showing a clear or almost clear response of the skin, maintained over time.



**Abstract N°: 92****effect of rituximab on clinical and serological profile of pemphigus patients:a prospective observational study**Anisha Biswal\*<sup>1</sup><sup>1</sup>ims and sum hospital, dermatology venerology and leprosy, bhubaneswar, India**Introduction & Objectives:**

Pemphigus vulgaris and foliaceus are autoimmune disorders characterized by autoantibodies targeting desmoglein (DSG) 3 and 1. It adversely affects quality of life and also poses a therapeutic challenge. Rituximab (RTX) is the first line treatment option in pemphigus. This prospective observational study was conducted to observe the impact of Rituximab on the clinical and serological profiles of Pemphigus patients.

**Objectives:**

To Assess the efficacy and safety of 1gram Rituximab (RTX) two doses 2weeks apart in Pemphigus patients.

**Materials & Methods:**

All patients with Pemphigus (25) were enrolled after informed consent. Pemphigus disease area index (PDAI) scores, clinical responses, anti desmoglein titre, Visual Analogue Scale (VAS) assessments for itching and pain, Physician Global Assessment (PGA), Dermatology Life Quality Index (DLQI), and monitoring of adverse events (AEs) were done at baseline, 3, 6, and 12 months post-RTX infusion. Diagnosis was based upon clinical, histopathological and immunofluorescence findings

**Results:**

Twenty-five Pemphigus patients were treated with RTX, with a mean age of  $38.58 \pm 11.77$  years and a mean follow-up of  $16.22 \pm 3.45$  months. Significant reductions in PDAI scores, anti-Dsg 1 and Dsg 3 levels, itch and pain severity, and prednisolone dosages were observed within 1 to 3 months. Median time to achieve complete remission (CR) was 3-4 months, with a median CR duration and relapse time of 9 and 12 months. Newly diagnosed patients (NDPs) exhibited higher CR rates, longer remission durations, and lower relapse risks compared to previously treated patients (PTPs). Four patients reported adverse effects like facial palsy, dental abscess, scabies, and myiasis.

**Conclusion:**

Rituximab administration in Pemphigus patients showed favorable efficacy and safety profiles for both Newly diagnosed and Previously treated patients. Complete remission was typically achieved within 3-4 months with significant improvement of itch, pain, quality of life and sustained remission in follow up of more than 1 year. These findings emphasize on rituximab as a treatment covering all aspects from clinical to psychological in pemphigus.

**Abstract N°: 327****Coexistence of paradoxical psoriasis and erythema multiforme-like drug eruption in a patient with hidradenitis suppurativa on adalimumab therapy**Eylem Bayar\*<sup>1</sup>, Erkan Alpsoy<sup>1</sup><sup>1</sup>Akdeniz Üniversitesi Hastanesi, Türkiye**Introduction & Objectives:**

Paradoxical reactions refer to the development or worsening of immune-mediated inflammatory diseases when being treated with a targeted biologic drug, which is typically used for idiopathic counterparts of these diseases. We report here a unique case who developed both paradoxical psoriasis and erythema multiforme-like drug eruption while on adalimumab treatment for hidradenitis suppurativa (HS).

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**Case Report**

A 24-year-old woman with a family history of psoriasis was receiving adalimumab for severe HS. The patient developed a pustular psoriasis clinic at the end of her first year of treatment, presenting with widespread pustules on an erythematous base in the palmoplantar area. A month later, the patient experienced erythema multiforme characterized by widespread, target-like lesions on the thigh, gluteus, and trunk. Histopathological examination of the plantar area was consistent with pustular psoriasis and the patient was diagnosed with adalimumab-induced paradoxical psoriasis. The biopsy of the target-like lesion on the thigh revealed a diagnosis of a drug eruption. The erythema multiforme-like drug eruption gradually disappeared within a week of stopping adalimumab treatment. However, the paradoxical psoriasis remained unchanged after 6 weeks. In addition to local treatment, secukinumab treatment was started.

**Conclusion:**

The association between anti-TNF-alpha agents, specifically adalimumab, and paradoxical psoriasis and erythema multiforme-like drug eruption has been reported previously. Nevertheless, the co-occurrence of these two reactions has not been documented in one patient before. Inhibition of TNF- $\alpha$  by adalimumab results in uncontrolled activation of plasmacytoid dendritic cells and sustained production of IFN- $\alpha$ . Type I IFN-mediated inflammation might have played a part in the occurrence of both diseases in the same patient .

**Abstract N°: 388****Charting Uncharted Waters: A Dermatological Expedition with Generalized Annular Granuloma, Unveiling the Success of Upadacitinib Intervention**

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**Introduction & Objectives:**

Generalized annular granuloma (GAG) is a rare dermatological condition of unknown etiology, clinically characterized by the formation of annular plaques with a granulomatous histopathological pattern. Despite its infrequency, the clinical significance of GAG lies in its diverse and often perplexing presentations, posing challenges to accurate diagnosis and effective management. The primary objective of this case report is to elucidate a unique instance of GAG, emphasizing the clinical features, diagnostic journey, and the novel therapeutic intervention employed.

**Materials & Methods:**

A 61-year-old female patient presented with a diffuse and asymptomatic cutaneous eruption, featuring numerous small violaceous papules forming annular plaques that coalesced into sizeable lesions. A comprehensive investigation, including a histopathological exam and an exhaustive differential diagnosis, confirmed the diagnosis of GAG. The initial therapeutic approach comprised systemic Prednisone therapy, potent and super-potent topical corticoids, and UVB phototherapy, elements incorporated to address the widespread nature of the lesions, demonstrating initial positive outcomes with satisfactory improvement of the size, pigmentation and general aspect of the lesions. However, the patient experienced a rebound towards the end of the Prednisone tapering period, highlighting the challenges in managing GAG, the need for a more sustainable long-term solution and thus prompting exploration of alternative treatments. In response to the rebound, we explored therapeutic options and decided to attempt the administration of Upadacitinib, a Janus kinase (JAK) inhibitor.

**Results:**

Remarkably, within one month of initiating Rinvoq, the patient exhibited significant improvement. The clinical exam revealed notable amelioration in the skin lesions, evidenced by a reduction in both size and number. Furthermore, the lesions exhibited a discernible transition from heightened erythematous presentation to a more pronounced violaceous hue, suggestive of post-inflammatory hyperpigmentation. This outcome underscores the remarkable efficacy of Upadacitinib as a promising therapeutic intervention for GAG, especially in cases where conventional treatments may prove limited, surpassing the boundaries of conventional treatments. Up to date, following two months of treatment, the response remains sturdy with on-going amelioration of the lesions and a favorable safety profile void of any undesired side effects.

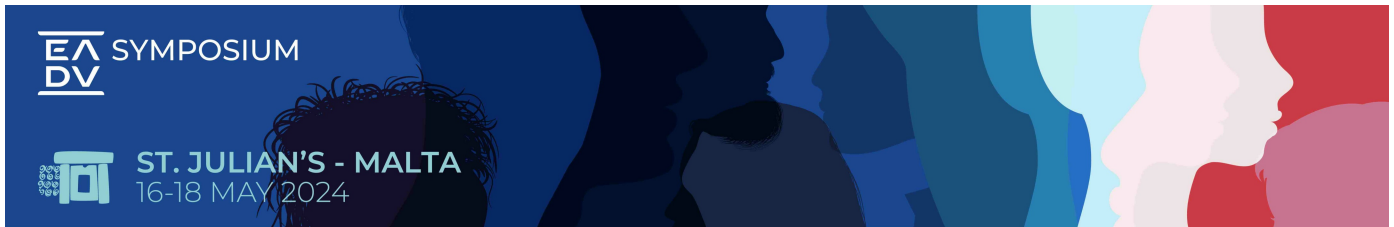
**Conclusion:**

Through a comprehensive analysis of the case, we aim to underscore the clinical complexity and enhance the understanding of GAG, providing insights into its variable manifestations and proposing insights that may contribute to improved diagnostic precision and therapeutic strategies. The report emphasizes the transformative potential of Upadacitinib therapy in addressing the challenges associated with GAG and advocates for its consideration as a primary intervention in cases where conventional treatments may fall short. The successful intervention in this unique case highlights the underexplored territory of Upadacitinib in managing GAG, encouraging further exploration of its long-term

effectiveness and safety profile. Upadacitinib emerges as a promising and novel therapeutic option for GAG, warranting consideration when conventional treatments prove insufficient.

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**Abstract N°: 614**

### **Use of Biologic Therapy for Impetigo Herpetiformis: An Evidence-Based Review**

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**Introduction & Objectives:** Impetigo herpetiformis (IH) is a form of pustular psoriasis arising during pregnancy, commonly linked to maternal and fetal complications. There remains limited treatment options for IH following first-line corticosteroid therapy. This systematic review examines evidence surrounding biologic therapies for this indication.

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

Following PRISMA guidelines, Embase and MEDLINE databases were searched on February 7, 2024 using variations of keywords "impetigo herpetiformis" and "biologic". Quality of evidence was assessed using Oxford Centre for Evidence-Based Medicine 2011 Levels of Evidence. Titles and abstracts followed by full-text articles were screened by two independent reviewers; 21 unique articles describing the use of biologic agents for impetigo herpetiformis with reported outcomes were included for data extraction and analysis.

#### **Results:**

Twenty-one articles reporting on 23 patients and 26 biologic treatments were analyzed. The mean age of mothers was 28.7 years (range: 18-45 years). An interleukin (IL)-36RN mutation was carried by 26.1% (6/23) of patients. Refractory disease to non-biologic systemic therapy was seen in 73.9% (17/23) of patients.

The biologics utilized were: secukinumab (30.8%, 8/26), infliximab (26.9%, 7/26), adalimumab (15.4%, 4/26), certolizumab (7.7%, 2/26), ustekinumab (7.7%, 2/26), brodalumab (3.8%, 1/26), ixekizumab (3.8%, 1/26), and intravenous immunoglobulin (3.8%, 1/26). Complete resolution was seen with secukinumab (100%, 8/8), brodalumab (100%, 1/1), ixekizumab (100%, 1/1), infliximab (71.4%, 5/7), adalimumab (50%, 2/4), and certolizumab (50%, 1/2). No improvement was seen in cases of infliximab (14.3%, 1/7) and adalimumab (25%, 1/4) use. Mean treatment duration was 76.5 days (22/26). Nine (39.1%, 9/23) patients used systemic concomitant medications, with systemic corticosteroids being most frequent (34.8%, 8/23). Seven patients experienced IH recurrence following initial resolution of disease (26.9%, 7/26). Fetal complications occurred in 26.1% (6/23) of patients, including low birthweight (13%, 3/23). There was one (4.3%, 1/23) case of intrauterine fetal death during treatment with secukinumab, deemed to be related to progressive IH disease course. One (4.3%, 1/23) maternal adverse event was observed involving oral herpes infection.

#### **Conclusion:**

Our findings suggest IL-17 inhibitors such as secukinumab, followed by infliximab are commonly utilized with favourable resolution rates. Current guidelines have previously recommended infliximab for refractory IH with no guidance on other biologics. Despite being categorized as US FDA category B drugs, biologic therapy was well-tolerated with minimal safety signals. As current evidence is limited to case reports and series, larger-scale studies are warranted to inform clinical application.





**Abstract N°: 840****Basal cell carcinoma in a 39-year-old man with Ankylosing Spondylitis on Infliximab therapy: A casereport**

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**Introduction & Objectives:**

Ankylosing spondylitis is a potentially disabling autoimmune and inflammatory arthritis affecting the spine, associated with chronic back pain, usually occurring before the age of 45. In patients with inadequate response to two different nonsteroidal anti-inflammatory drugs and present symptoms, the use of tumor necrosis alpha (TNF- $\alpha$ ) inhibitors is recommended.

Infliximab represents a chimeric monoclonal antibody and a TNF- $\alpha$  inhibitor, used for the treatment of various inflammatory conditions, such as ankylosing spondylitis. Although there has been evidence of an associated increased risk of nonmelanoma skin cancer, there is controversy between the use of TNF- $\alpha$  inhibitors and malignancies such as lymphoma, melanoma or non-melanoma skin cancer.

Basal cell carcinoma represents a common type of non-melanoma skin cancer, with low metastatic but locally aggressive potential. The diagnosis can be made upon clinical and dermatoscopic evaluation, with necessary skin biopsy for confirmation. First-line treatment is represented by surgical excision in most cases.

**Materials & Methods:**

Here, we present the case of a 39-year-old man who developed basal cell carcinoma while in treatment with Infliximab for ankylosing spondylitis.

The patient was diagnosed at 15 years old with ankylosing spondylitis and was treated with Infliximab by IV infusion, 5 mg/kg body weight every 8 weeks. The patient has received the treatment starting November 2013 and it was highly effective in controlling the disease. No other risk factors were noted

**Results:**

The man presented to our dermatology clinic in 2023, regarding an ulcerated lesion located on the face, in evolution for more than 1 year. Physical examination revealed a well-defined, pink ulcerated papule, with translucent quality and telangiectatic vessels, with a diameter of 2.5 cm. The lesion was located on the right pre-auricular region of the face and the peritumoral skin presented signs of inflammation. The dermoscopic examination revealed arborising vessels, ulceration and blue-gray ovoid nests. We decided to perform an excisional skin biopsy at the same time as definitive treatment, and we received the pathology confirmation of nodular basal cell carcinoma.

**Conclusion:**

With cancer incidence varying among studies, indications and cancer type, sometimes even between different individual TNF- $\alpha$  inhibitors, the risk for malignancy remains unclear. The presented case shows a direct correlation between the long-term treatment with Infliximab for ankylosing spondylitis and basal cell carcinoma in a young adult with no other risk factors.

Thus, in all patients, regardless of the TNF inhibitor use, routine skin cancer surveillance is advised, together with education of the patients regarding prevention methods (e.g. broad-spectrum sunscreens).





**Abstract N°: 874****Efficacy of apremilast in erosive lichen of the oral mucosa**Dario Didona\*<sup>1</sup>, Michael Hertl<sup>1</sup><sup>1</sup>Philipps-Universität Marburg, Dermatologie und Allergologie, Marburg, Germany

Oral lichen planus (OLP) is a chronic inflammatory disease that can occur in patients with cutaneous lichen planus. Its pathogenesis is not yet fully known, but it has been reported that several factors can lead to worsening of OLP, including trauma, dental procedures, and cigarette smoking.

OLP can be classified clinically into a nonerosive and an erosive subtype. The former is characterized by white reticular streaks and homogeneous white plaques, while patients with erosive OLP show painful erosions and ulcerations with erythematous borders. In this case, treatment is extremely difficult because of refractoriness to topical and systemic therapies.

Apremilast, a phosphodiesterase-4-inhibitor approved for the treatment of psoriatic arthritis and psoriasis vulgaris, can affect different anti-inflammatory mediators through its modulatory activity. Possible side effects of apremilast are nausea, vomiting, and headache. In rare cases, this drug can also cause depression or exacerbate a preexisting depression.

Here we report three cases of erosive OLP, refractory to topical and systemic therapies, who were effectively treated with apremilast. In all these cases, apremilast resulted in lasting reduction of oral erosions and significant reduction of pain.

In conclusion, apremilast could be a possible off-label-therapy for the treatment of difficult cases of erosive OLP refractory to local and systemic therapies, such as cortisone or retinoids.



**Abstract N°: 880****The treatment with secukinumab in a patient with psoriasis and hidradenitis suppurativa: A case report**Andreea Vasile<sup>1</sup>, Alexandra-Maria Alexe<sup>1</sup>, Bianca-Rodica Ivascu<sup>1</sup>, Carmen Curea<sup>1</sup><sup>1</sup>Colentina Clinical Hospital, IInd Department , Bucharest, Romania**Introduction & Objectives:**

The prevalence of psoriasis in the European adult population is about 2-2.5%, while that of hidradenitis suppurativa (HS) ranges from 0.7 to 1.2%. Both diseases have a genetic determinism and are characterized by chronic and recurrent inflammation of the skin. The coexistence of both diseases in the same patient is documented, with psoriasis usually appearing first and having a more severe course, according to some authors.

Clinically, psoriasis presents as erythematous-squamous plaques, with underlying epidermal hyperproliferation and 25-30% of patients may develop psoriatic arthritis, with inflammation in the peripheral joints. HS evolves with inflammatory nodules, abscesses, sinus tracts and fistulas, as well as retractile, mutilating scars, localized in the axillary, inguinal and genitoanal areas. Both diseases can present comorbidities such as metabolic syndrome, inflammatory bowel diseases and psychiatric disorders, profoundly affecting life quality.

The immunopathogenesis of psoriasis and HS presents common elements, such as the proinflammatory cytokines TNF-alpha, IL-23 and IL-17. Therefore, blocking these common inflammatory mediators represents therapeutic targets in both diseases. Adalimumab (anti-TNF-alpha) and secukinumab (anti-IL17A) are approved therapies for both diseases, which interrupt the inflammatory cascade and have remarkable results, especially in patients with both conditions.

**Materials & Methods:**

We present the case of a 41-year-old patient who came to our clinic in 2018 with large erythematous-squamous plaques, disseminated all over the body (PASI 20.2), as well as inflammatory nodules, abscesses and severe scar bands in the axillary and inguinal areas (Hurley III). The psoriasis had been evolving for 16 years, during which the patient had only received topical treatment and the HS had been evolving for 2 years, with the patient undergoing multiple courses of systemic and topical antibiotics. In December 2018, blood tests taken were normal, except for moderate inflammatory syndrome and positive quantiferon. Also, a skin biopsy was performed from a psoriatic plaque and treatment with methotrexate 15 mg/week was initiated.

**Results:**

After 6 months of treatment, the patient showed favorable progress, but interrupted the therapy voluntarily and did not receive any treatment for 4 years. In 2022, he returned to the clinic with both diseases aggravated (PASI score for psoriasis 24.4 and HS at Hurley III stage) and significant psychological impairment (DLQI 30). Treatment with methotrexate 15 mg/week and UVA phototherapy 2 sessions/week was restarted. After 8 months of treatment, due to the inefficiency of the administered treatment, biological therapy with secukinumab 300 mg was initiated in weeks 0, 1, 2, 3, 4, then 300 mg monthly. After only 3 months of treatment, the evolution of both diseases was impressive, with complete remission of psoriatic lesions (PASI 0) and significant improvement in inflammatory lesions of HS.

**Conclusion:**

Plaque psoriasis and HS are chronic inflammatory diseases with a major psychosocial impact, especially when associated. Common immunopathogenic pathways, in which TNF-alpha, IL-17 and IL-23 play a fundamental role, have led to the approval of innovative and effective therapies in both diseases. Secukinumab has demonstrated a rapid and spectacular

effect on both diseases, with persistence over time and durability of response yet to be observed.

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Abstract N°: 981

**Comparison of the efficacy of topical narrow-band UVB (311) ultraviolet radiation and topical psoralen with UVA phototherapy in localized vitiligo**

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**Comparison of the efficacy of topical narrow-band UVB (311) ultraviolet radiation and topical psoralen with UVA phototherapy in localized vitiligo**

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**Introduction & Objectives:** : Vitiligo is a determined melanocytopenia characterized by depigmentation, in which skin patches lose brightness due to a lack of melanin. Phototherapy is one of the available therapeutic methods. The distal limb presents the greatest challenge in therapy.\*\* To compare the effectiveness of targeted narrowband UVB (311) ultraviolet radiation and topical psoralen with targeted UVA phototherapy for localized vitiligo.

**Materials & Methods:** The study comprised 20 participants who had symmetrical vitiligo foci on their hands. On one side was targeted narrowband UVB (311) ultraviolet radiation, while on the other was topical psoralen combined with targeted UVA phototherapy. All lesions were treated with the same regimen during 36 sessions. Repigmentation was assessed using the Vitiligo Area Scoring Index (VASI). Twenty patients with localized vitiligo on their hands were included in the study.

**Results:** : There were six (30%) females and fourteen (70%) males aged 16 to 66. 50 symmetrical vitiligo lesions (20 left and 20 right) on the hands. Following 36 sessions, a considerably decreased VASI score and enhanced repigmentation rate were observed. An excellent repigmentation response was reported in 26.7% and 23.4% of patients in the UVB and PUVA groups, respectively, with no significant difference in repigmentation rate between the two groups.

**Conclusion:** By the conclusion of the third month, both targeted UVB phototherapy (311), and topical psoralen combined with targeted UVA phototherapy, had resulted in repigmentation of localized vitiligo on the hands. Our study found that both therapies are safe and offer repigmentation with a limited response; nevertheless, a bigger examination of patients is required.



**Abstract N°: 1140****Modern possibilities of treatment of atopic dermatitis in children**Valeriy Mukhortykh<sup>1, 2</sup>, Ilya Zybkin<sup>1</sup>, Anna Tomilova<sup>1</sup>, Svetlana Zaitseva<sup>1</sup>

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**Introduction & Objectives:**

In recent years, there has been a clear trend towards an increase in the number of patients with severe atopic dermatitis (AtD). In most patients, the ineffectiveness of previous therapy is noted, which requires a personalized approach to the selection of pharmacological agents aimed at achieving long-term control over the symptoms of the disease. The pathogenesis of AtD is based on T2 type immune inflammation, which is confirmed by the secretion of cytokines IL-4, IL-13, TSLP and IL-33. The introduction of biological drugs aimed at individual and specific components of T2 inflammation is a priority in the treatment of AtD. Dupilumab is a new treatment for patients with moderate to severe AtD, which inhibits the IL-4 and IL-13 signaling pathways and reduces the T2 response.

**Materials & Methods:**

We observed 58 patients aged 10 to 17 years suffering from moderate to severe AtD. The main complaints were skin itching of varying intensity, restless sleep, various polymorphic rashes and dry skin. The children were initiated therapy with the genetically engineered biological drug Dupilumab. The duration of follow-up was 20 weeks. Assessment of the severity of the ATD was carried out using the calculation of the EASI index.

**Results:**

Initially, all children had high levels of total immunoglobulin E (IgE) 444.6 [156.9; 897.4] IU/ml. The PASI index was 35.9±4.6. Against the background of Dupilumab therapy, there was a significant decrease in the level of total IgE of 125.6 [78.9; 400.1] IU/ml ( $p < 0.05$ ). A decrease in the level of total IgE correlated with clinical improvement: relief of itching in all children, improved sleep and a decrease in the area of skin lesions (EASI index was 2.3±1.1). There were no adverse reactions to the administration of the drug.

**Conclusion:**

The study shows the prospects of including Dupilumab in the comprehensive treatment of children with moderate to severe AtD and allows us to consider this direction as a way to increase the effectiveness of conventional therapy.

**Abstract N°: 1194****Long-Term Drug Survival of Biologics and GWAS Findings in Moderate-to-Severe Psoriasis**

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**Introduction & Objectives:**

Biologics have changed the paradigm of the management of moderate-to-severe psoriasis, but concerns persist regarding long-term drug survival.

**Materials & Methods:**

This retrospective observational study investigates the determinants of drug survival in 180 patients with psoriasis treated with interleukin inhibitors (ustekinumab, secukinumab, and guselkumab). The inclusion criteria comprised biologics-naïve individuals with a minimum one-year treatment history.

**Results:**

Our findings indicate that higher initial PASI scores [adjusted hazard ratio (HR) 1.41, 95% confidence interval (CI) 1.02-1.95], scalp involvement (adjusted HR 1.51, 95% CI 1.09-2.09), and obesity (BMI > 30) (adjusted HR 1.47, 95% CI 1.16-1.86) have a negative impact on overall drug survival. In subgroup analysis, specifically guselkumab appears to be more affected by obesity (BMI > 30) compared to other biologics (adjusted HR 11.38, CI 2.54-50.92). Moreover, the introduction of new biologics correlates with a decrease in ustekinumab survival, despite lacking statistical significance. In the GWAS analysis, the variant rs10505764 [odds ratio (OR) 3.99,  $p=2.50 \times 10^{-5}$ , ETV6] exhibited a potential negative correlation with drug survival.

**Conclusion:**

Subsequent large-scale, longer-term studies are needed to validate and deepen our understanding of factors influencing drug survival.





**Abstract N°: 1244**

**Sonidegib in locally advanced basal cell carcinoma. A twelve patient cohort.**

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**Introduction & Objectives:**

Sonidegib is an inhibitor of the Hedgehog pathway and is approved for advanced basal cell carcinoma (BCC) patients who are not candidates for surgery or radiation therapy or those that have recurred after these therapies.\*\*

**Materials & Methods:**

A retrospective analysis of all patients in the Hospital Virgen de La Victoria who received sonidegib for advanced BCC was performed. All patients who received sonidegib between December 2022 and February 2024 were included in the study.\*\*

**Results:**

Twelve patients (seven men and five women) were administered sonidegib. None of them smoked, and the main comorbidities, such as hypertension or diabetes, were described. The mean age of the cohort was 68.7 years. BCC was localized in nine patients (75%) in the face, one of them retroauricular location, three inferior eye-lid, one on the medial canthus, and four on the nose. Two patients presented with BCC on the scalp, and only one patient had BCC on the leg. Eleven patients underwent previous BCC surgery, and five of them received radiation therapy. One of these patients started treatment for the progression to metastatic BCC. After treatment, two patients had a complete response, and one of them stopped the treatment after six months of complete response. Only two patients showed progression, one of whom died shortly after progression for another cause, and the treatment was suspended in the other, and rescue surgery was performed. The main side effects reported were dysgeusia with a metal mouth flavor and cramps on the limbs. In most cases, these side effects were well tolerated; in three cases, the dosage was decreased to 200 mg every other day.

**Conclusion:**

Our findings are consistent with those reported in the literature, indicating that sonidegib is an effective and safe treatment in real clinical practice for patients who have had a poor response or are not candidates for other treatments.

**Abstract N°: 1290**

## **Do We Need to Interrupt Systemic Therapy in Patients Experiencing a Guttate Flare-up Triggered by a Streptococcal Infection?**

Romana Čeović<sup>1, 2</sup>, Ana-Maria Kašnar<sup>1</sup>, Daška Štulhofer Buzina<sup>1, 2</sup>, Daniela Ledić Drvar<sup>1, 2</sup>

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### **Introduction & Objectives:**

Psoriasis is a chronic skin disease marked by an impaired immune response leading to the release of proinflammatory cytokines such as IFN- $\gamma$ , TNF- $\alpha$ , IL-17, IL-23. Patients with moderate and severe psoriasis often receive systemic therapy which includes immunosuppressive or biologic therapy making their immune system more susceptible to the development of infections. (1) Guttate psoriasis is a specific form of psoriasis, typically initiated by streptococcal infection, and it is more frequently observed in children and adolescents compared to adults. (2)

We present two cases of guttate psoriasis induced by a streptococcal infection in adult patients with long-term, chronic plaque psoriasis both undergoing systemic therapy – one on methotrexate and the other on ixekizumab.

### **Materials & Methods:**

A 64-year-old female with previously well-managed, long-standing plaque psoriasis on ixekizumab comes to our clinic for an earlier follow-up appointment due to a worsening of her condition. A couple of weeks before, she looked after her grandchildren who had streptococcal infection and she got infected herself. She presented with densely disseminated pinpoint lesions and small scattered erythematous-squamous papules and plaques on the trunk and extremities. The other patient, 83-year-old female who receives methotrexate in her therapy for severe chronic plaque psoriasis, also spent time with her grandchildren who had streptococcal pharyngitis and contracted the infection. A worsening of psoriatic lesions on the forearms and the appearance of “drop-like” papules on the shins was observed.

Patients were treated with antibiotics for the streptococcal pharyngitis and the systemic therapy for plaque psoriasis was maintained without interruptions. In addition, the patients underwent narrowband UVB phototherapy (NBUVB) treatments along with the application of topical corticosteroids for guttate psoriasis.

### **Results:**

Both of our patients have a long-lasting history of stable plaque psoriasis undergoing continuous systemic therapy. After caring for their grandchildren, who had streptococcal pharyngitis, there was a worsening of their previously well-managed chronic plaque psoriasis, leading to the development of guttate psoriasis. The flare-up of guttate psoriasis was treated with NBUVB concomitantly with their systemic therapy for plaque psoriasis. The administered therapy resulted in a positive clinical response, manifesting great improvement in the overall presentation.

### **Conclusion:**

We live in an era where the prevalence of infections is on the rise, while concurrently, the utilization of immunomodulatory therapies, such as biologic therapy is increasing. Cases of our patients show there is no necessity to discontinue the systemic therapy. NBUVB with the application of topical corticosteroids proves to be an effective treatment for guttate psoriasis and can be combined with systemic and biologic therapy.

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**Abstract N°: 1300****Psoriasis in Association with Erythema Multiforme in a Patient with Ulcerative Colitis**Diana-Andreea Marcu<sup>1</sup>, Anton Mihai Tilea<sup>1</sup>, Marcela Poenaru<sup>1</sup><sup>1</sup>“Dr. Carol Davila” Central Military Emergency University Hospital

**Introduction & Objectives:** Anti-TNF- $\alpha$  agents are currently utilised for the treatment of a vast array of autoimmune conditions including inflammatory bowel disease. It is however noted that such therapeutic strategies have been linked to the specific induction of cutaneous-based reactions such as erythema multiforme and psoriasis. In this poster, we provide an overview of two skin eruptions which can be encountered in clinical practice at a patient with ulcerative colitis.

**Materials & Methods:** We present the case of a 52 years old patient, diagnosed with ulcerative colitis on treatment with Infliximab since May 2023, who was referred to our department for a rash localised on the trunk and limbs, consisting of erythematous papules and plaques, some with a target-like appearance, others with scales, fissures and itching, evolving since June 2023. A positive Quantiferon test determined a treatment initiation with Isoniazid in March 2023. At the time of presentation, treatment administration of Infliximab and Isoniazid had been stopped and the patient was treated with Vedolizumab.

Presumptive clinical diagnosis: erythema multiforme, psoriasis, ulcerative colitis and latent TB.

**Results:** A diagnosis of psoriasis and erythema multiforme was made based upon the cutaneous lesions presentation, the patient history, the temporal relation to Infliximab infusions and the histopathologic evaluations. The patient's treatment consisted of Acitretin, topical corticotherapy, emollients and antihistamines.

There were several challenges in the diagnosis of this case. First, are erythema multiforme and psoriasis vulgaris in this case just skin reactions of inflammatory bowel disease? Studies say that the most frequently associated cutaneous disease is psoriasis which occurs in 7-11% of the IBD population. The association is believed to be both genetically and immunologically related. Also, cases of erythema multiforme in patients with ulcerative colitis as a cutaneous manifestation of the disease are described in the literature.

Secondly, are psoriasis and erythema multiforme a treatment-induced adverse reactions? Cases of patients who developed erythema multiforme major with characteristic oral and cutaneous lesions following treatment with the anti-TNF- $\alpha$  medication infliximab therapy for Crohn's Disease (CD) were reported. Also, there was a case of a young female patient with Crohn's disease who developed psoriasis following treatment with the anti-TNF- $\alpha$  drug.

Last but not least, a case of erythema multiforme-like dermatitis due to Isoniazid hypersensitivity in a patient with psoriasis was described in one article.

**Conclusion:** The biologic era has greatly improved the treatment of ulcerative colitis. Biologics can however induce a wide variety of skin eruptions, especially those targeting the TNF- $\alpha$ . It is important to recognize these conditions and adapt the treatment strategy accordingly. Although the data are limited, most recalcitrant TNF-induced skin disorders can be adequately managed by switching to an anti-integrin receptor blocker.

**Abstract N°: 1413****Pseudolymphoma of the scalp induced by nivolumab therapy**

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**Introduction & Objectives:**

Cutaneous pseudolymphoma (CP) is a benign lymphoid proliferation connected with inflammatory response to a certain antigen that can mimic lymphoma either clinically or histologically. CP usually manifests as a solitary pink to red nodule or plaque, however multiple lesions were also reported. It may be either induced by different factors, including drugs, tattoo dyes, piercing, acupuncture, insect bites, *Borrelia burgdorferi* infection or be idiopathic. Herein, we present a case of a patient with melanoma diagnosis who presented with amelanotic scalp infiltration, initially suspected of melanoma metastasis, finally diagnosed as immunotherapy-related pseudolymphoma.

**Materials & Methods:**

A 60-year-old female with a history of NRAS-mutant acral lentiginous melanoma (pT3aN1(sen)M0)\* of the right foot diagnosed four years before and local recurrence one year before, was consulted due to recently noticed infiltration of the scalp suspected of melanoma metastasis. The lesion appeared about 6 months after nivolumab treatment initiation. Prior to immunotherapy surgical excision and sentinel node dissection were performed. Clinically, a flat pinkish plaque within the scalp was noted with central hair loss. Dermoscopy showed polymorphic vascular pattern over pinkish-orange background as well as irregularly distributed white and yellow globules. Histopathological evaluation of biopsy sample revealed a dense subepidermal and periadnexal lymphocytic infiltrate with the predominance of CD3-positive T-cells as well as scattered granulomas with Langhans-type giant cells. Based on the histopathological examination and additional immunohistochemical staining the diagnosis of cutaneous pseudolymphoma was made. Since then, the patient had not attended to dermatological follow-up visits for 3 years until January 2024, when she reported that the lesion disappeared. The patient could not specify for how long the lesion was absent but mentioned that from April to June 2023 there was a cessation of treatment with nivolumab and most likely the lesion resolved in the treatment-free period.

**Results:**

-

**Conclusion:**

Immunotherapy-related pseudolymphoma is has been rarely reported in the literature. Lesions tend to resolve spontaneously upon discontinuation of the therapy. Differential diagnosis of pseudolymphoma should include lymphoproliferative disorders as well as malignant skin tumors, including cutaneous melanoma metastases.

**Abstract N°: 1514**

**Prevalence and prognosis of covid-19 in patients undergoing immunosuppressive therapy or biotherapy in dermatology**

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**Introduction & Objectives:**

The initiation or continuation of long-term immunosuppressive (IS) treatment and/or biologic therapy during the COVID-19 pandemic has presented a significant challenge. The purpose of our study is to investigate the prevalence of COVID-19 in these patients and define the prognosis of this infection.

**Materials & Methods:**

This is a descriptive and cross-sectional study including all patients who received IS or biologic therapy and were followed in our institution from March 2020, the beginning of the COVID-19 pandemic in our country, to June 2023.

**Results:**

We collected data from a total of 190 patients under IS or biologic therapy, among whom 20 patients (10.5%) tested positive for COVID-19 during treatment. The average age was 54.7 years  $\pm$  9.3 years with a male-to-female ratio of 1.6. The most common treatment in our sample was long-term corticosteroid therapy in 40% of cases, followed by methotrexate and the rituximab-corticosteroid systemic combination, each administered to 4 patients, tofacitinib, the MTX-adalimumab combination, the MTX-corticosteroid systemic combination, and chemotherapy were received by 1 patient each. No patient receiving IL-17 treatment tested positive for COVID-19. The average duration between the start of IS/biologic therapy and COVID-19 infection was 8 months  $\pm$  0.6. Viral infection was diagnosed based on a positive COVID-19 PCR in 80% of patients and a positive rapid test in 20% of cases. Twelve patients underwent a CT scan showing COVID-19-type viral pneumonia with varying degrees of severity. Smoking history was found in 35% of patients. Hypertension and/or diabetes were present in 30% and 25% of patients, respectively. Fifty-five percent of patients were overweight or obese.

Five patients had severe symptoms requiring hospitalization, including one in intensive care. Two patients were on methotrexate, one on systemic corticosteroid therapy alone, and the other two were on corticosteroid therapy combined with rituximab. The outcome was favorable in 95% of cases, with no exacerbation of the underlying disease. Two patients had discontinued prescribed IS treatments. Only one death was noted in our series, in a patient on systemic corticosteroid therapy and rituximab, due to respiratory distress.

**Conclusion:**

In our series, only 10.5% of patients under immunosuppressive or biologic therapy were confirmed to have COVID-19. This low incidence can be attributed to the diligent follow-up of our patients regarding advice, recommendations, and national and international guidelines for COVID-19 prevention. Additionally, some patients with mild symptoms may not have sought medical attention or undergone testing, potentially underestimating the actual number of cases. Our results align with existing literature; in a multi-institutional cohort of 5302 patients with inflammatory bowel disease, the use of systemic immunosuppression was not associated with an increased risk of COVID-19.

Regarding the prognosis, only 5 patients in our sample had a severe form of the infection, with a favorable outcome in 95% of cases and only 1 death. Importantly, all these patients had other risk factors for severe COVID-19 pneumonia (smoking, hypertension, diabetes, obesity). In the literature, there is no evidence indicating an increased risk of severe COVID-19 among patients on IS/biologic therapy.

General preventive measures remain crucial in reducing the risk of infection.

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**Abstract N°: 1527****Precision dermatology: a review of molecular biomarkers and personalized therapies of chronic dermatoses**Isabella J. Tan<sup>1</sup>, Alicia Podwojnik<sup>2</sup>, Aarushi Parikh<sup>1</sup>, Bernard A Cohen<sup>3</sup><sup>1</sup>Rutgers Robert Wood Johnson Medical School, New Brunswick, United States, <sup>2</sup>Rowan University School of Osteopathic Medicine, Stratford, United States, <sup>3</sup>The Johns Hopkins Hospital, Dept. of Dermatology, Baltimore, United States**Introduction & Objectives:**

The evolution of personalized medicine in dermatology signifies a transformative shift towards individualized treatments driven by the integration of biomarkers. These molecular indicators serve beyond diagnostics, offering insights into disease staging, prognosis, and therapeutic monitoring. Specific criteria guide biomarker selection, ensuring attributes like specificity, sensitivity, cost feasibility, stability, rapid detection, and reproducibility. This literature review, based on data from PubMed, SCOPUS, and Web of Science, explores biomarkers in chronic dermatoses, including hidradenitis suppurativa (HS), psoriasis, atopic dermatitis (AD), alopecia areata (AA), vitiligo, and chronic spontaneous urticaria (CSU).

**Materials & Methods:**

The literature review was conducted using PubMed, SCOPUS, and Web of Science databases, with the following search string: ("biomarkers" OR "serum marker") AND (the relevant disease), tailored to target specific conditions of interest. Inclusion criteria encompassed articles presenting primary data from randomized controlled trials, cohort studies, retrospective studies, case studies, or case series published within the preceding five years (2018-2023) and focused on biomarkers associated with various dermatological conditions, including HS, psoriasis, AD, AA, vitiligo, or CSU. Priority was given to primary sources, while secondary sources such as reviews were consulted to complement potential gaps in information. Any pertinent articles identified beyond the initial search terms were integrated as necessary to ensure comprehensive coverage of the subject matter.

**Results:**

Proinflammatory markers are seen across many of these conditions, including various cytokines, matrix metalloproteinase (MMP), various miRNAs,

and C-reactive protein (CRP). In HS, TNF- $\alpha$ , IL-1 $\beta$ , and MMPs serve as biomarkers, influencing targeted therapies like adalimumab and anakinra. Biomarkers such as TNF- $\alpha$ , IL-23, and HLA genes, shape treatments like IL-23 and IL-17 inhibitors in psoriasis. AD biomarkers include ECP, IL-4, IL-13, and guiding therapies like dupilumab and tralokinumab. Lipocalin-2, cytokines, and genetic polymorphisms inform JAK inhibitors' use for AA. Vitiligo biomarkers range from cytokines to genetic markers like tyrosinase proteins (TYR and TYRP1), guiding treatments like JAK inhibitors. CSU biomarkers encompass IgE, cytokines, and autologous serum tests, influencing therapies like omalizumab and cyclosporine.

**Conclusion:**

When comparing conditions, common proinflammatory markers reveal limited specificity. While some biomarkers aid diagnosis and standard treatments, others hold more scientific than clinical value. Precision medicine, driven by biomarkers, has shown success in skin malignancies. Future directions involve AI-powered algorithms, nanotechnology, and multi-omics integration for personalized dermatological care.



**Abstract N°: 1673**

**Updates on immunomodulatory therapy for the management of moderate to severe hidradenitis suppurativa: A bibliographic review.**

Maria de Lourdes Ochoa Campollo<sup>1</sup>, Valeria Contreras Ocegüera<sup>2</sup>, Mairany Hernández Sánchez<sup>3</sup>

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**Introduction & Objectives:**

Hidradenitis suppurativa (HS) is a chronic inflammatory skin disease that affects intertriginous areas with a high density of apocrine glands, forming nodules, abscesses, and fistulas (image 1). Its multifactorial etiology involves genetic, environmental, and immunological factors, and its pathophysiology is associated with the occlusion of pilosebaceous follicle units, triggering inflammation and immune dysregulation (image 2). HS significantly impacts quality of life, especially in moderate to severe cases. This study aims to provide an updated review of biological therapeutic approaches and small molecule therapies in clinical development, while simultaneously offering molecular insights to enhance the management of these patients.

**Materials & Methods:**

A comprehensive search for articles was conducted on ClinicalKey, PubMed, and Google Scholar up to November 19, 2023, using key terms such as: "hidradenitis suppurativa", "pathophysiology", "treatment", "biological agents", and "small molecule inhibitors". Articles in English published within the last decade were selected, meeting rigorous quality criteria for inclusion in this study.

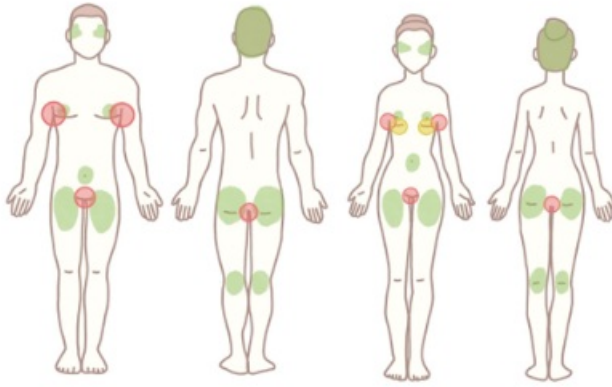
**Results:**

Following the approval of Adalimumab, there has been an increasing interest in immunomodulatory therapies based on the pathogenesis of HS, in various phases of clinical trials (tabla 1). The choice between antibiotics and immunomodulators in the treatment of hidradenitis suppurativa is guided by the severity of the disease, potential side effects, and the individual patient's response. The combination of strategies, such as using antibiotics for acute flares followed by immunomodulators, is being explored. Additionally, it would be interesting to assess the effectiveness of immunomodulators in conjunction with surgical procedures. Given that drug research for hidradenitis suppurativa primarily focuses on existing medications for other conditions, it would be interesting the future development of therapies specific to this condition.

**Conclusion:**

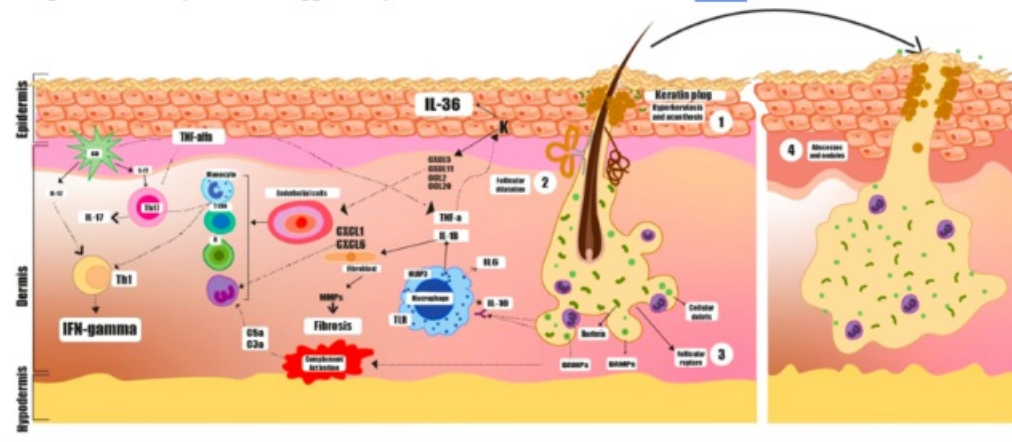
Although we are increasingly gathering more information about immunomodulatory therapies, there is the need to continue researching their effectiveness and safety, exploring combinations with other treatments, and considering results across different ethnicities.

**Image 1.** Distribution of characteristic lesions



- Most commonly affected areas
- Inframammary region (more common in women)
- Less commonly affected areas

**Image 2.** Immune processes triggered by the destruction of the follicular gland



**Table 1.** Summary of immunomodulatory therapies based on the pathogenesis of HS

Molecule targeted	Drug	Clinical trial phase	Route of administration
<b>(TNF)-α</b>	Adalimumab	Approved	Subcutaneous
	Infliximab	Phase II	Intravenous
	Certolizumab pegol	Administered only in specific cases	Subcutaneous
	Etanercept	Phase II	Subcutaneous
	Golimumab	Administered only in specific cases	Subcutaneous
<b>IL-17</b>	Secukinumab	Phase III	Subcutaneous
	Brodalumab	Phase III	Subcutaneous
	Ixekizumab	Administered only in specific cases	Subcutaneous
	Bimekizumab	Phase III	Subcutaneous
<b>IL-12/23</b>	Ustekinumab	Phase II	Subcutaneous or Intravenous





**Abstract N°: 1822**

### **Embarking on Varied Paths: Biologic Treatments in Alopecia Areata Patients with Diverse Clinical Trajectories**

Daciana Elena Branisteanu<sup>1, 2</sup>, Elena Porumb-Andrese<sup>1, 2</sup>, Roxana-Paraschiva Ciobanu<sup>1</sup>, Cristina Colac-Botoc<sup>1</sup>, Catalina Anca Munteanu<sup>1</sup>, Catalina Cojocaru<sup>1</sup>, Catalina Onu-Branisteanu<sup>3</sup>, Antonia Clivet<sup>\*1</sup>

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

Alopecia areata (AA) presents a perplexing challenge in dermatology, characterized by non-scarring hair loss resulting from immune-mediated attacks on hair follicles. Manifesting as localized patches or progressing to complete hair loss (alopecia totalis/universalis), AA's unpredictable course often intersects with other dermatological conditions, notably atopic dermatitis (AD) and autoimmune thyroiditis, further complicating management strategies. Diagnosis of AA typically relies on clinical examination, with characteristic hair loss patterns and the absence of scarring aiding in differentiation from other alopecias. Histopathological findings may reveal peribulbar lymphocytic infiltrates, supporting the diagnosis. Amidst this complexity, exploring the efficacy of biologic therapies in AA patients with diverse clinical trajectories becomes imperative. With this case series, we aim to contribute to the realm of new and innovative AA treatments.

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

We conducted a retrospective case series analysis of three female patients aged 16 to 22 years, diagnosed with AA and concurrent AD. Patient 1, aged 18, was initially treated with dupilumab for 6 months, followed by a switch to baricitinib. Patient 2, aged 16, received upadacitinib since November 2023, while Patient 3, aged 22, was treated with baricitinib since December 2023. Clinical data including disease duration, severity, treatment regimen, and response were collected.

#### **Results:**

All three patients exhibited concurrent AA and AD, with varying disease durations and severity. Patient 1, despite initial worsening of AA with dupilumab, showed improvement upon transitioning to baricitinib, with timid but promising repopulation of some hair territories. Patient 2, aged 16, presented with severe AA and was treated with upadacitinib since November 2023. However, her response was less favorable, displaying a stagnation of the disease, with uncertain progression toward alopecia universalis. It remains unclear whether this represents a natural disease progression or a lack of response to upadacitinib, given the relatively early stage of treatment evaluation. Additionally, Patient 2 received adjunctive treatments including potent topical corticosteroids and platelet-rich plasma (PRP) injections. Patient 3, aged 22, treated with baricitinib since December 2023, exhibited substantial improvement and signs of disease remission.

#### **Conclusion:**

This case series underscores the intricate relationship between alopecia areata (AA) and atopic dermatitis (AD), highlighting their frequent co-occurrence and the challenges posed by managing these conditions simultaneously. Beyond their physical manifestations, the emotional toll of navigating AA and AD independently, let alone in conjunction, cannot be overstated. Moreover, the limited efficacy of topical treatments often necessitates the escalation to systemic therapies, amplifying the importance of exploring novel therapeutic avenues. The promising outcomes observed with biologic therapies, particularly with baricitinib, signify a paradigm shift in the management of these complex dermatologic conditions. As we navigate this trichological territory, these findings underscore the potential of personalized medicine in alleviating the burden of AA and AD, emphasizing the crucial role of biologic interventions in improving both clinical outcomes and quality of life for affected individuals.

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**Abstract N°: 1831**

## **Charting Uncharted Waters: A Dermatological Expedition with Generalized Annular Granuloma, Unveiling the Success of Upadacitinib Intervention**

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### **Introduction & Objectives:**

Generalized annular granuloma (GAG) is a rare dermatological condition of unknown etiology, clinically characterized by the formation of annular plaques with a granulomatous histopathological pattern. Despite its infrequency, the clinical significance of GAG lies in its diverse and often perplexing presentations, posing challenges to accurate diagnosis and effective management. The primary objective of this case report is to elucidate a unique instance of GAG, emphasizing the clinical features, diagnostic journey, and the novel therapeutic intervention employed.

### **Materials & Methods:**

A 61-year-old female patient presented with a diffuse and asymptomatic cutaneous eruption, featuring numerous small violaceous papules forming annular plaques that coalesced into sizeable lesions. A comprehensive investigation, including a histopathological exam and an exhaustive differential diagnosis, confirmed the diagnosis of GAG. The initial therapeutic approach comprised systemic Prednisone therapy, potent and super-potent topical corticoids, and UVB phototherapy, elements incorporated to address the widespread nature of the lesions, demonstrating initial positive outcomes with satisfactory improvement of the size, pigmentation and general aspect of the lesions. However, the patient experienced a rebound towards the end of the Prednisone tapering period, highlighting the challenges in managing GAG, the need for a more sustainable long-term solution and thus prompting exploration of alternative treatments. In response to the rebound, we explored therapeutic options and decided to attempt the administration of Upadacitinib, a Janus kinase (JAK) inhibitor.

### **Results:**

Remarkably, within one month of initiating Upadacitinib, the patient exhibited significant improvement. The clinical exam revealed notable amelioration in the skin lesions, evidenced by a reduction in both size and number. Furthermore, the lesions exhibited a discernible transition from heightened erythematous presentation to a more pronounced violaceous hue, suggestive of post-inflammatory hyperpigmentation. This outcome underscores the remarkable efficacy of Upadacitinib as a promising therapeutic intervention for GAG, especially in cases where conventional treatments may prove limited, surpassing the boundaries of conventional treatments. Up to date, following two months of treatment, the response remains sturdy with on-going amelioration of the lesions and a favorable safety profile void of any undesired side effects.

### **Conclusion:**

Through a comprehensive analysis of the case, we aim to underscore the clinical complexity and enhance the understanding of GAG, providing insights into its variable manifestations and proposing insights that may contribute to improved diagnostic precision and therapeutic strategies. The report emphasizes the transformative potential of Upadacitinib therapy in addressing the challenges associated with GAG and advocates for its consideration as a primary intervention in cases where conventional treatments may fall short. The successful intervention in this unique case highlights the underexplored territory of Upadacitinib in managing GAG, encouraging further exploration of its long-term effectiveness and safety profile. Upadacitinib emerges as a promising and novel therapeutic option for GAG, warranting



consideration when conventional treatments prove insufficient.

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**Abstract N°: 1880**

**A Rare Case of Hair Depigmentation Following Adalimumab Therapy for Hidradenitis Suppurativa**

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<sup>1</sup>Imperial College Healthcare Trust, Dermatology, United Kingdom

**Introduction & Objectives:**

**Materials & Methods:**

**Results:**

Biologic therapies targeting tumour necrosis factor (TNF), such as adalimumab, are commonly employed to manage inflammatory conditions like psoriasis, psoriatic arthritis, hidradenitis suppurativa (HS), ankylosing spondylitis, and inflammatory bowel disease. While these treatments are associated with side effects ranging from injection site reactions and gastrointestinal symptoms to severe complications like serious infections and elevated cancer risk, hair-related side effects are typically less common. Alopecia is the most frequently noted hair-related adverse effect; however, both depigmentation and re-pigmentation incidents have been documented with adalimumab therapy, albeit rarely. We report the case of a 51-year-old man with severe HS who experienced hair depigmentation, three months after initiating adalimumab in May 2023, underscoring the drugs potential to induce depigmentation, a rare but notable side effect.

**Conclusion:**



Abstract N°: 1886

**Dupilumab-induced lichen planus – case report with cutaneous and mucosal involvement.**

Lipa Katarzyna<sup>1</sup>, Klaudia Dopytalska<sup>1</sup>, Eliza Galińska-Zatyka<sup>1</sup>, Irena Walecka-Herniczek<sup>1</sup>

<sup>1</sup>Department of Dermatology The National Institute of Medicine of the Ministry of the Interior and Administration, Warsaw, Poland

**Introduction & Objectives:**

Lichen planus (LP) is a chronic T-cell-mediated autoimmune disorder. LP affects approximately 1% of the population, most often adults aged 30-60. Typical cutaneous manifestations of lichen planus are papules and shiny polygonal plaques, flat-topped, and firm on palpation. The distribution of the skin lesions may be scattered, clustered, linear, annular, or actinic. The most frequently affected areas are the wrists, lower back, or ankles. The lesions also could be present in mucosal areas. The exact etiology is still unknown, but LP could be induced by several drugs such as non-steroidal anti-inflammatory drugs and antihypertensive drugs. Dupilumab is a monoclonal antibody, which binds to the alpha subunit of the interleukin-4 receptor (IL-4R $\alpha$ ), resulting in blocking interleukin-4 and interleukin-13. It downregulates the TH2 response, leading to a TH1/TH2 imbalance. Dupilumab is commonly used for the treatment of moderate to severe atopic dermatitis (AD). The most common side effects of dupilumab include injection site reactions, conjunctivitis, upper respiratory tract infections, joint pain, and herpes viral infections. Just a few cases of dupilumab-induced LP have been published. Here, we present a 29-year-old patient suffering from the occurrence of cutaneous and mucosal lichen planus during dupilumab treatment of AD.

**Materials & Methods: N/A**

**Results:**

A 29-year-old female patient with a history of severe atopic dermatitis (AD) since early childhood was admitted to our department for regular follow-up visits during dupilumab therapy for AD. Per medical history, previous treatment of AD includes topical and oral steroids, antihistamines, and cyclosporine, but her skin lesions remained refractory to therapy. It was decided to initiate 600 mg of dupilumab subcutaneously. After the first week, the dosage was reduced to 300 mg subcutaneously every other week, achieving almost complete resolution of atopic skin lesions and pruritis. After 10 months of dupilumab treatment, the patient noticed severe worsening of the pruritis and appeared new itchy papules on the forearms. Upon admission to the Department of Dermatology, purple papules were found on the forearms, lower back, inner surface of the thighs, and confluent white papules with Wickham's striae visible during dermoscopic examination on the labia majora. Histological examination of a skin biopsy obtained from the lower back and the left upper thigh confirmed the clinical diagnosis of LP. As a result of severe symptoms of LP, dupilumab treatment was discontinued, and as a result of extensive symptoms of LP, the patient was treated with topical potent steroids. The LP lesions improved after 6 weeks and no AD lesions were observed. In case of reoccurrence of moderate-to-severe AD, other treatment options such as JAK inhibitors may be initiated.

**Conclusion:** Correlations between the appearance of LP and the administration of biologics such as adalimumab, etanercept, and infliximab have been reported. In our patient's case lichenoid lesions involved both skin and mucous membranes. Diagnosis of the disease was confirmed by histopathological examination. We assume that there is a connection between dupilumab administration and the occurrence of lichenoid lesions. LP lesions were found after 10 months of treatment and lesions improved after dupilumab treatment was discontinued. This case confirms that dupilumab could cause drug-induced lichen planus.



**Abstract N°: 1901****Treatment-resistant areas and Quality of life in psoriasis treated with biologics**

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**Introduction & Objectives:** Biological therapy (BT) of psoriasis has demonstrated an unambiguously positive effect on both the skin lesions and the self-assessed quality of life (QoL). However, the question arises as to whether individual sites of recalcitrant psoriasis after long-term BT have a differential effect on QoL. We hypothesized that, if certain resistant regions affect QoL more than others, significantly different involvement of those regions in different groups of patients based on QoL scores would be observed.

**Materials & Methods:** Consecutive biologics-naïve patients who had been receiving BT at our Clinic for at least a year and had all relevant data available were included in the analysis (N=220). Data on the localization of psoriatic lesions and the Dermatology Life Quality Index (DLQI) after one year of therapy (52±4 weeks) were obtained from the patients' medical records. Patients were divided based on DLQI into 3 groups: DLQI 0-1 (N=171), 2-5 (N=30), or 6-30 (N=19). For risk assessment, the latter two groups were merged, denoting the patients with slightly or significantly impaired QoL.

**Results:** Values of DLQI at the annual follow-up positively correlated with both the Psoriasis Area and Severity Index ( $\rho=0.410$ ,  $p<0.001$ ) and body surface area ( $\rho=0.444$ ,  $p<0.001$ ). The most common localizations of residual psoriasis overall were toenails (31.8%), fingernails (29.1%), extensor surfaces of shins (27.3%), and elbows (26.4%). A significantly uneven distribution of recalcitrant lesions among the DLQI-guided strata was observed regarding the back, lumbosacral, and buttocks regions, elbows, hands, lower extremities, and soles. Univariate logistic regression identified the regions that carried the highest chance for impaired QoL (DLQI  $\geq 2$ ) – soles (OR 11.8, 95% CI 2.3-60.5), buttocks (OR 5.8, 95% CI 2.4-13.9), and knees (OR 4.4, 95% CI 2.1-9.2). The regression model employing these localizations was significant ( $p<0.001$ , Hosmer-Lemeshow  $p=0.632$ , Nagelkerke  $R^2=0.227$ , correctly classified 82.3%) in predicting impaired QoL.

**Conclusion:** Our findings indicate that residual psoriasis in certain body areas harms QoL more than in others. Patients experiencing residual disease on soles, knees, and buttocks had the greatest odds of having impaired QoL after one year of biological therapy. Of the mentioned, knees and buttocks were a peculiar finding, bearing in mind that these two regions are not designated as “special sites” of psoriasis, nor have they frequently been reported as bothersome to patients. Their role in the QoL disturbance cannot be attributed only to the overall frequency of resistant psoriasis in these areas, considering that these were not the most common places of residual disease in our population. We believe that our findings call for further elucidation of the regions and other covariates that hinder QoL the most, despite psoriasis treatment.