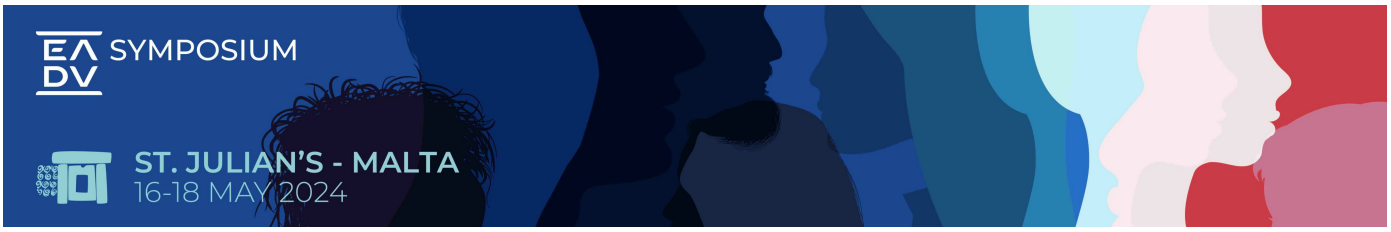

Abstract N°: 540

The Composition of Gut Microbiota and Related Immune Factors in Patients with Chronic Urticaria

Liborija Lugovic Mihic[1], Ena Parać[1], Diana Ćesić[1], Iva Fercek[1], Mirela Krištp[1]

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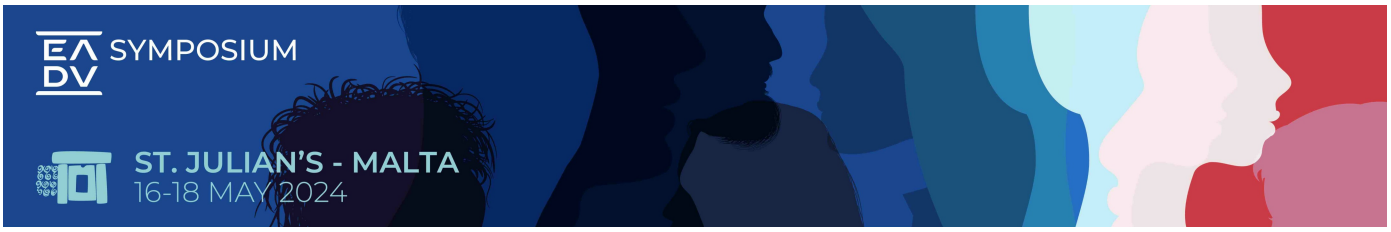
Introduction & Objectives: Recent research has identified an alteration in the composition of gut microbiota among patients diagnosed with chronic urticaria (CU). Given the homeostatic relationship between microbiota and the human immune system, and the regulatory role of microbiome composition on immune function, it is plausible that dysbiosis, or imbalance in the microbiota, may impact the progression of chronic spontaneous urticaria (CSU).

Materials & Methods: We present current knowledge and latest findings regarding the gut microbiome features of CU patients, including information concerning specific microorganisms. We analyzed recent articles published in English, sourced from available renowned literature.

Results: The majority of studies that examined the gut microbiome of patients with CSU have noted a reduction in microbial diversity within its composition. Their findings predominantly revealed a decline in beneficial bacteria like Bacteroides and Firmicutes, while the relative abundance of opportunistic bacteria such as Proteobacteria and Enterobacteria increased. Hence, it has been suggested that changes in the gut microbiome that result in imbalances of Th1/Th2/Th17 cytokines trigger inflammatory responses potentially implicated in the pathogenesis of CSU. Furthermore, recent findings from human metabolomics have demonstrated enteric dysbiosis in patients with CSU compared to healthy individuals. It appears that bacterial products disrupt the balance in the gut's pro-inflammatory and anti-inflammatory T cell subsets, favoring a more pro-inflammatory phenotype. This inflammatory response could activate mast cells and thereby worsen the severity of symptoms in CSU patients.**

Conclusion: By applying new and emerging understanding of gut microbiota and metabolomics, future treatment options for CSU may alter the microbial composition using interventions such as probiotics or analogous agents. Therefore, identifying the sources of inflammation could pave the way for innovative approaches that manage CSU symptoms more effectively and alleviate the burden of the disease on affected individuals.



Abstract N°: 806

Bullous urticaria, a rare entity

Zeineb Gafsi*[1], Refka Frioui[2], Hammami Houda[2], Chamli Amal[2], Fenniche Sami[2], Zaouak Anissa[2]

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Introduction & Objectives:

Bullous urticaria is a rare form of urticaria. It is an uncommon condition that is practically undescribed in textbooks. Herein, we report another case of bullous spontaneous acute urticaria.

Results:

A 47 year-old female patient presented with acute spontaneous urticaria associated with symmetrical foot and hand angioedema. On the fifth day, urticarial hives on the trunk disappeared while coalescent clear blisters appeared on her right forearm and hand, measuring 5 to 10 mm in diameter. Nikolsky's sign and Darier's sign were negative. There was no history of recent drug intake or newly introduced foods. The patient also experienced general malaise, ankle and wrist arthralgias. Blood tests revealed increased C-reactive protein and lactate dehydrogenase levels as well as anemia. A skin biopsy of the blisters was performed; revealing an intraepidermal bullae. Numerous neutrophils, eosinophils, and mastocytes were observed in the connective tissue floor of the bullae. The patient was treated with oral antihistamines. The blisters healed in few days without leaving any residual desquamation.

Conclusion:

Bullous urticaria is an uncommon benign condition. It may be accompanied by systemic signs and symptoms such as arthralgias, myalgias, fever and general malaise. Most of the reported cases were seen in insect bites or physical urticaria such as delayed pressure urticaria. Differential diagnosis include bullous eczema, dermatitis herpetiformis, bullous pemphigoid, and bullous erythema multiforme. Bullous urticaria heals rapidly with oral antihistamines and topical care of blisters. A short course of systemic steroid may be needed.

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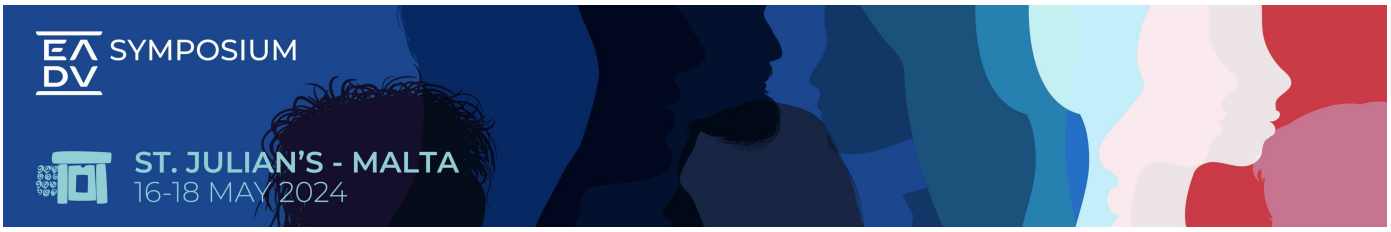

Abstract N°: 826

The possible influence of Single nucleotide polymorphisms of Gluthatione transpherase (GSTT1), Catalase (CAT) and Superoxide dismutase (SOD2) on clinical course and effectiveness of treatment of Chronic spontaneous urticaria

Hristina Kocic*[1, 2, 2], Tatjana Jevtovic-Stoimenov[2, 3], Vesna Karanikolic[2], Zaklina Smelcerovic[4]

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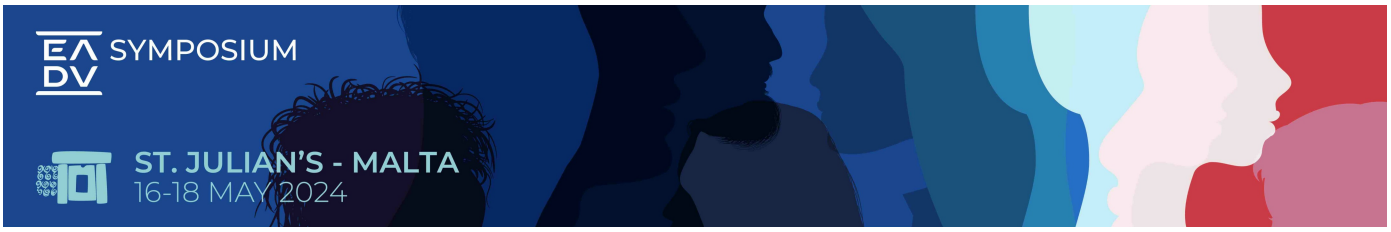
Introduction & Objectives: Chronic spontaneous urticaria (CSU), a mast cell-cutaneous disease, include recurrent daily raised or swollen wheals, swelling of the lips, eyelids or angioedema. As a common skin condition it can have various causes, including allergies to foods and medications, immune system disorders, both acute and long-term infections, and numerous more. Many chemical and physical toxicants can be detrimental to skin if they are exposed to them frequently. Endogenous metabolites produced by exogenous toxicants have the potential to produce a diverse range of reactive oxygen species. Its overproduction is linked to biological molecule damage, inflammatory cytokine release, and oxidative stress that overwhelms skin antioxidant defense systems. The relationship between urticaria and oxidative stress has been extensively studied. Previous research examined the roles of environmental contaminants and free radical species, produced from increased oxidative stress in the pathophysiology of CSU. Glutathione S transferase (GST), catalase (CAT), and superoxide dismutase (SOD) are enzymatic system with detoxifying and antioxidant activity. GSTT1 gene expression is crucial to detoxify ethylene oxides, dichloromethanes, and monohalomethanes, which are present in the environment. For a person to be susceptible to inflammatory and allergy disorders, this gene's inactivating homozygous deletion polymorphism is crucial. Mitochondrial superoxide dismutase is an antioxidant enzyme that is encoded by the SOD2 gene. The possible roles that SOD2 and CAT polymorphisms may play are in regulating allergy reactions mediated by free radicals. The aim of the present study has been to detect the SNP polymorphism of GSTT1 as a null genotipe (absence of product length 480bp), CAT polymorhism (262-CAT: TT or CT instead of CC), and SOD2 (Val/Val or Ala/Val instead of Ala/Ala) using the polymerase chain reaction–restriction fragment length polymorphism method (PCR–RFLP).

Materials & Methods: The study involved the enrollment of seven CSU patients with chronic form of urticaria (wheals lasting more than 6 weeks or appearance of angioedema). According to the current guidelines, as effective treatment options, updosing nonsedating antihistamines up to four times, as the first choice tratment were administrated. Since CSU have a risk of subsequent acute respiratory complications of angioedema, corticosteroids were administered in short cycles and tapering regimens. However, the patients did not exhibit the full clinical improvement that was expected.

Results: SNP results: The distributions of allele frequencies within the groups were examined as follows: GSTTT1- null genotype was found in three patients, four had homozygous polymorphism (Val/Val) and one had heterozygous (Ala/Val) for SOD2; in three patients, CAT(CT) polymorphism was identified. Four inividuals (57.14%) had two polymorphisms, one patient (14.28%) had all three, one patient (14.28%) had only one, and only one patient (14.28%) lacked the three SNPs that were listed. These findings imply that even 85.72% patients with one or more SNP would be at a higher risk of developing CSU, linked to elevated oxidative stress or insufficient detoxification.

Conclusion: Obtained data suggest that the SNP polymorphisms of GSTTT1, SOD2 and CAT, whether they are present in combination or separately, may affect the anticipated efficacy of CU treatment.



Abstract N°: 941

Results From Two Phase 3 Studies of Dupilumab in CSU

Marcus Maurer[1, 2], Thomas B. Casale[3], Sarbjit S. Saini[4], Moshe Ben-Shoshan[5], Ana M. Giménez-Arnau[6], Jonathan A. Bernstein[7], Akiko Yagami[8], Allen Radin[9], Eric Mortensen[9], Deborah Bauer[10], Tayler Gonzalez[11], Sonya L. Cyr[9], Philip Sugerman[11], Elizabeth Laws[11]

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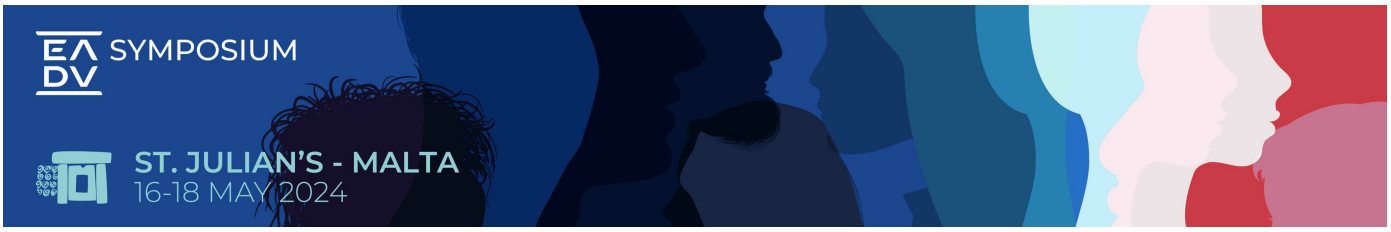
Introduction & Objectives: Many patients with chronic spontaneous urticaria (CSU) remain symptomatic despite H1-antihistamine and/or anti-immunoglobulin E (omalizumab) treatment. The efficacy and sand safety of dupilumab were examined in CSU patients who remained symptomatic despite H1-antihistamines and were omalizumab-naïve or omalizumab-intolerant/incomplete responders.

Materials & Methods: LIBERTY-CSU CUPID (NCT04180488) was a randomized, placebo-controlled, 24 week phase 3 trial of dupilumab in patients with CSU who were symptomatic despite H1-antihistamines (up to 4-fold approved dose) and omalizumab-naive (Study A; aged ≥6 years) or omalizumab-intolerant/incomplete responders (Study B; aged ≥12 years). Patients received dupilumab (300 mg) subcutaneously every 2 weeks (Study A/Study B: n=70/n=54) or matched placebo (Study A/Study B: n=68/n=54) added to protocol-specified H1-antihistamines. Planned interim analyses for Study B met prespecified futility criteria, however, only 2 patients had missing Week 24 values due to early termination. The full blinded dataset (N=108) was available to test against the remaining alpha (0.043) for significance. Efficacy endpoints included Urticaria Activity Score over 7 days (UAS7; range 0–42; EU primary/US key secondary) and Itch Severity Score over 7 days (ISS7; range 0–21; US primary/EU key secondary).

Results: In Study A, Week 24 least squares (LS) mean change from baseline (dupilumab/placebo) in UAS7 was −20.5/−12.0 (P=0.0003); ISS7, −10.2/−6.0 (P=0.0005). In Study B, Week 24 LS mean change from baseline in UAS7 (dupilumab/placebo) was −14.4/−8.5 (P=0.0390; statistically significant as EU primary endpoint; nominally significant as US key secondary endpoint). Numerical improvement in ISS7 at Week 24 (dupilumab/placebo: −7.7/−4.8) was not statistically significant (P=0.0449; significance at P<0.043). Incidence of treatment-emergent adverse events for dupilumab/placebo was 38 (54.3%)/40 (58.8%) in Study A and 33 (61.1%)/29 (53.7%) in Study B.

Conclusion: Study A met EU/US primary endpoints (UAS7/ISS7). Study B met EU primary endpoint (UAS7) but not US primary endpoint (ISS7; P=0.0449; prespecified threshold P<0.043 post interim analysis). Overall tolerability was consistent with the known dupilumab profile.



Abstract N°: 1016

Clinical Improvements With Rilzabrutinib in Patients With Chronic Spontaneous Urticaria: 12-Week Results From the RILECSU Phase 2 Dose-Ranging Study

Ana Giménez-Arnau*[1], Silvia Ferrucci[2], Marcus Maurer[3], Iris Sun[4], Leda Mannent[5], Jessica Gereige[6]

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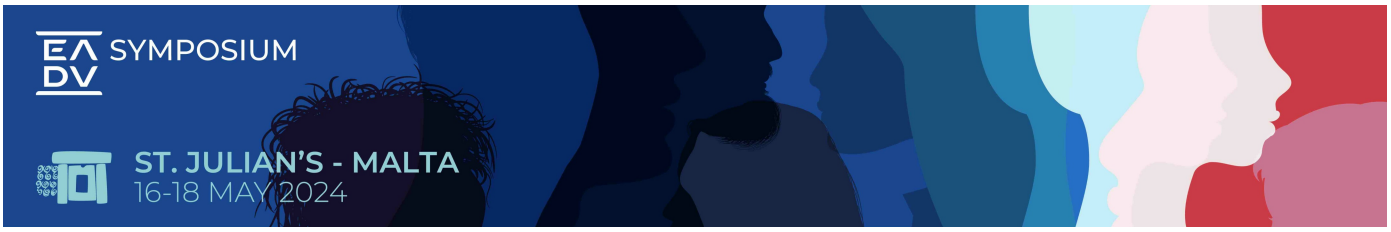
Introduction & Objectives: Chronic spontaneous urticaria (CSU) is a common immunologic skin disease characterised by pruritic hives and wheals lasting ≥6 weeks. CSU is driven mainly by the activation of cutaneous mast cells by various mechanisms, including autoantibodies. Bruton's tyrosine kinase (BTK), expressed in B cells and mast cells, among other immune cells, plays a critical role in multiple immune-mediated disease processes, making it a potential therapeutic target. Here we report the weekly Urticaria Activity Score (UAS7, measuring itch and hives) and weekly Itch Severity Score (ISS7) responses at Week 12 from the RILECSU phase 2 study evaluating efficacy and safety of rilzabrutinib (SAR444671), an oral reversible covalent BTK inhibitor, in adults with moderate-to-severe CSU.

Materials & Methods: RILECSU (NCT05107115) is a 52-week phase 2 study comprising a 12-week, randomised, double-blind, placebo-controlled, dose-ranging efficacy and safety period, followed by a 40-week open-label extension period. Participants include symptomatic adults aged ≥18 years with moderate-to-severe CSU whose disease is not adequately controlled with H1 antihistamine treatment alone. Participants were randomised 1:1:1:1 to rilzabrutinib 400 mg once every evening (QPM), 400 mg twice a day (BID), 400 mg three times a day (TID), or matching placebo. The intent-to-treat (ITT) population included participants who were omalizumab-naïve and omalizumab-incomplete responders (N=160); the primary analysis population included only omalizumab-naïve participants (N=143). The primary end point was change from baseline in weekly UAS7 at Week 12.

Results: The primary endpoint was met, with rilzabrutinib 400 mg TID demonstrating a significant reduction from baseline to Week 12 in UAS7 vs placebo [least squares mean (LSM) -16.89 vs -10.14; LSM difference (95% CI): -6.75 (-12.23, -1.26); *P*=0.0159] in the omalizumab-naive population. Similarly, in the ITT population, a significant reduction in UAS7 was observed with rilzabrutinib TID vs placebo (nominal *P*=0.0116). A significant reduction from baseline in ISS7 at Week 12 was observed with rilzabrutinib 400 mg TID vs placebo [LSM -9.21 vs -5.77; LSM difference (95% CI): -3.44 (-6.25, -0.62); *P*=0.0168] in the omalizumab-naive population. In the ITT population, a significant reduction from baseline in ISS7 at Week 12 was also observed with rilzabrutinib 400 mg TID vs placebo (nominal *P*=0.0181). Rilzabrutinib was well tolerated in all dosing regimens. Adverse events occurring at a higher frequency with rilzabrutinib than with placebo included headache, nausea, and diarrhoea.

Conclusion: The RILECSU dose-ranging study in symptomatic adults with moderate-to-severe CSU demonstrated a reduction in UAS7 and ISS7 with rilzabrutinib 400 mg TID compared with placebo at 12 weeks in the omalizumab-naïve and ITT (omalizumab-naïve plus incomplete responder) populations. Rilzabrutinib showed a favourable safety profile and was well tolerated.



Abstract N°: 1182

Cold urticaria in tropics: a clinico-epidemiological study

Hitaishi Mehta[1], Janaani Padmanabhan[1], Keshavamurthy Vinay[1], Anuradha Bishnoi[1], Davinder Parsad[1], Muthu Sendhil Kumaran[1]

[1]Post Graduate Institute of Medical Education and Research, Dermatology, Chandigarh, India

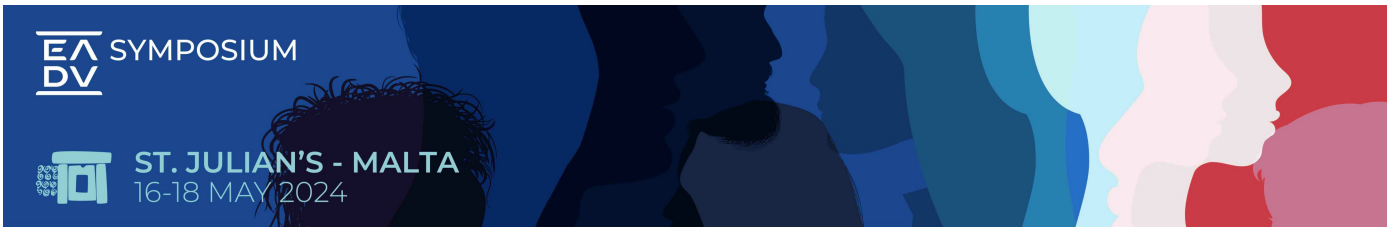
Cold urticaria in tropics: a clinico-epidemiological study

Introduction & Objectives: Cold urticaria (ColdU) is classified as a subtype of chronic inducible urticaria characterized by recurring pruritic wheals and/or angioedema upon exposure to cold stimuli. However, very limited data is available on ColdU specifically among tropical regions. The aim of this study was to describe the clinico-epidemiological characteristics and treatment response in patients diagnosed with cold urticaria.

Materials & Methods: The clinical records of patients diagnosed with ColdU past five years (January 2018 to December 2022) were retrospectively reviewed. Data including patient demographics, clinical manifestations, comorbidities, laboratory findings, and treatment response were collected and analysed.

Results: Among the 1780 urticaria patients included in our study, only 15 cases of cold-induced urticaria were identified. ColdU was classified as typical in all but three instances. Mean age of affected individuals was 36 ± 18 years (20–65 years), and 8 patients (53.3%) were males. Mean disease duration at presentation was 18 ± 27 months (3 months–4 years). Two patients experienced cold induced angioedema, and one patient had hypotensive episodes following cold exposure. Twelve patients demonstrated positive results to the ice cube provocation test. Of 15, only 6 (40%) achieved complete control of symptoms with standard dosing of second generation anti-histamines while 6 patients (40%) required titration to higher doses and 3 patients (20%) were initiated on cyclosporine therapy, resulting in remission.

Conclusion: In tropical climates, ColdU prevails at lower levels compared to the western regions. ColdU is likely underdiagnosed in such settings, possibly dismissed as chronic spontaneous urticaria. The management of ColdU involves a combination of protective measures against cold exposure and the use of anti-histamines to control disease activity. This retrospective study provides valuable insights into the clinico-epidemiological characteristics and treatment response of patients with ColdU. Limitations of our study include retrospective study design and possibility of selection bias.



Abstract N°: 1256

Treatment Response to Rilzabrutinib, By Baseline Patient Characteristics: A Subgroup Analysis of the RILECSU Phase 2 Dose-Ranging Study

Jonathan Bernstein*[1], Chi-Hung Lee[2], Marcus Maurer[3], Iris Sun[4], Vincent Mikol[5], Jessica Gereige[6], Leda Mannent[5]

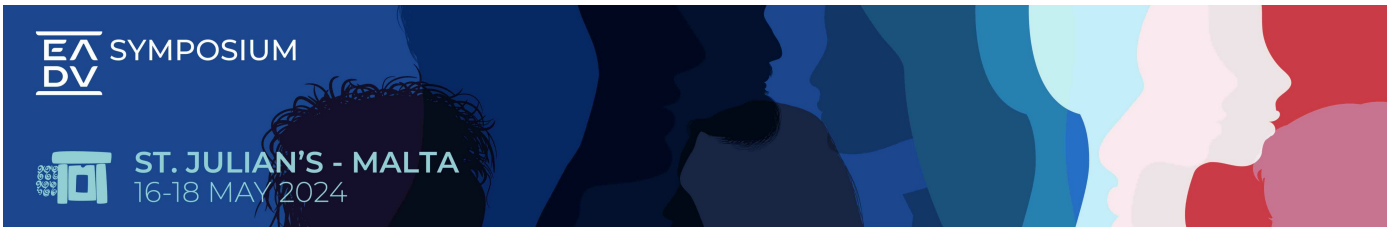
[1]University Internal Medicine, Cincinnati, United States, [2]Kaohsiung Chang Gung Memorial Hospital, Taiwan, [3]Institut für Allergieforschung IFA / Institute of Allergology, Berlin, Germany, [4]Sanofi (Beijing) Pharmaceuticals Co., Ltd. (Southeast Gate), China, [5]Sanofi, Paris, France, [6]Sanofi - 450 Water St, Cambridge, United States

Introduction & Objectives: Rilzabrutinib (SAR444671) is an oral, reversible, covalent Bruton's tyrosine kinase (BTK) inhibitor. BTK is expressed by mast cells and B cells, both of which are involved in the pathogenesis of chronic spontaneous urticaria (CSU), a common immunologic skin disease characterised by pruritic hives and wheals lasting>6 weeks. Here, we assessed whether the baseline characteristics from the RILECSU phase 2 study would affect the weekly Urticaria Activity Score (UAS7, measuring itch and hives) and weekly Itch Severity Score (ISS7) responses at Week 12 of rilzabrutinib in adults with moderate-to-severe CSU by a subgroup analysis.

Materials & Methods: RILECSU (NCT05107115) is a 52-week phase 2 study comprising a 12-week, randomised, double-blind, placebo-controlled, dose-ranging efficacy and safety period followed by a 40-week open-label extension period. Participants were symptomatic adults aged ≥18 years with moderate-to-severe CSU whose disease is not adequately controlled with H1 antihistamine. Participants were randomised 1:1:1:1 to rilzabrutinib 400 mg once every evening (QPM), 400 mg twice a day (BID), 400 mg three times a day (TID), or matching placebo. The primary analysis population included only omalizumab-naïve participants (N=143); the intent-to-treat (ITT) population included participants who were omalizumab-naïve and omalizumab-incomplete responders (N=160). A subgroup analysis was performed across different baseline characteristics to explore consistency of treatment response over 12 weeks.

Results: Baseline demographics and disease characteristics were generally well balanced across all treatment arms. The rilzabrutinib 400 mg TID group demonstrated a significant reduction in UAS7 from baseline to Week 12 vs placebo (least squares mean [LSM] difference [95% CI]: omalizumab-naïve, -6.75 [-12.23, -1.26]; *P*=0.0159; ITT, -6.76 [-12.01, -1.51]; *P*=0.0116). In the subgroup analyses, change from baseline to Week 12 in UAS7 was numerically improved with rilzabrutinib 400 mg TID compared with placebo across different subgroup baseline demographics and disease characteristics, including age, gender, history of angioedema, and baseline serum total IgE levels. A significant reduction from baseline in ISS7 at Week 12 was observed with rilzabrutinib 400 mg TID vs placebo (LSM difference [95% CI]: omalizumab-naïve, -3.44 [-6.25, -0.62]; *P*=0.0168; ITT, -3.26 [-5.97, -0.56]; *P*=0.0181) in the overall population, and numerical improvements with rilzabrutinib were demonstrated across the subgroups.

Conclusion: In this subgroup analysis of the RILECSU dose-ranging study in symptomatic adults with moderate-to-severe CSU, treatment effects on UAS7 and ISS7 at 12 weeks were consistently noted with rilzabrutinib 400 mg TID compared with placebo across baseline characteristics subgroups.



Abstract N°: 1258

A 12-Week Safety Assessment of Rilzabrutinib in Patients With Chronic Spontaneous Urticaria From the RILECSU Phase 2 Dose-Ranging Study

Moshe Ben-Shoshan*[1], Fernando Valenzuela[2], Marcus Maurer[3], Iris Sun[4], Jessica Gereige[5], Leda Mannent[6], Remco Diab[7]

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Introduction & Objectives: Rilzabrutinib (SAR444671) is an oral, reversible, covalent Bruton's tyrosine kinase inhibitor (BTKi). The reversibility of the covalent binding to Cys481 from BTK reduces the likelihood of off-target effects, thus potentially increasing tolerability of rilzabrutinib. BTK is expressed both in mast cells and B cells and plays a critical role in multiple immune-mediated disease processes, including those involved in chronic spontaneous urticaria (CSU). Here we report the safety analysis of the RILECSU phase 2 study in adults with moderate-to-severe CSU randomised to rilzabrutinib or placebo during the double-blind 12-week period.

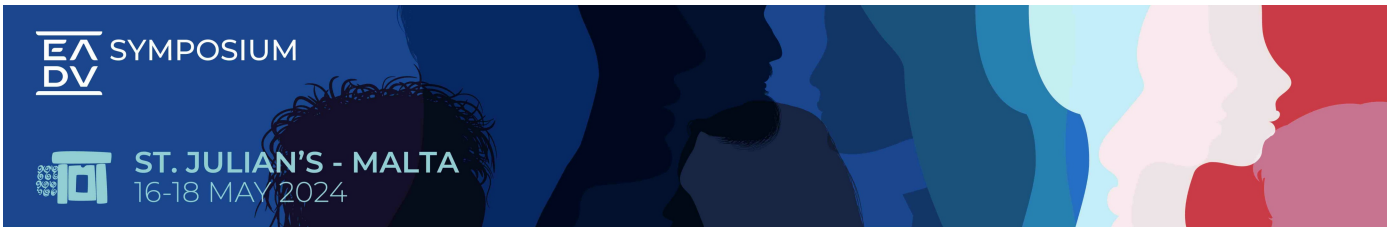
Materials & Methods: RILECSU (NCT05107115) is a 52-week phase 2 study comprising a 12-week, randomised, double-blind, placebo-controlled, dose-ranging efficacy and safety period followed by a 40-week open-label extension period. Participants are symptomatic adults aged ≥18 to 80 years with moderate to severe CSU (weekly Urticaria Activity Score (UAS7) ≥16; weekly Itch Severity Score (ISS7) ≥8) whose disease was not adequately controlled with H1 antihistamine treatment. Participants (N=160) were randomised 1:1:1:1 to rilzabrutinib 400 mg once every evening (QPM; n=38), 400 mg twice a day (BID; n=41), 400 mg three times a day (TID; n=41), or matching placebo (n=40). Safety assessments included adverse events (AEs), including serious AEs (SAEs) and AEs of special interest (AESIs), physical exams, vital signs, electrocardiograms (ECGs), and laboratory parameters.

Results: AEs occurring at a higher frequency with rilzabrutinib than placebo included diarrhoea, nausea, and headache; the majority reported as mild (Table). The incidence of SAEs was low (n=1 placebo; n=2 TID), and severe AEs occurred at the same incidence across all rilzabrutinib dosing groups and placebo. Vital signs and ECG results were similar across all groups. There were no severe/serious infections or opportunistic infections. Skin-related AEs were more frequent in placebo and rilzabrutinib QPM than in rilzabrutinib BID or TID. There were 4 cases (2 in QPM, 1 in BID and 1 in TID) with elevated alanine aminotransferase (ALT) levels (>3 times upper limit of normal, ULN) among patients treated with rilzabrutinib; 3 recovered while continuing rilzabrutinib treatment and no participant had values that met criteria for Hy's Law (ALT >3x ULN and total bilirubin >2x ULN) or hepatic failure. There was no incidence of BTKi associated cytopenia, bleeding, or atrial fibrillation among patients treated with rilzabrutinib.

Conclusion: Rilzabrutinib showed an acceptable safety profile and was well tolerated in the 12-week double-blind period of the RILECSU dose-ranging study in adults with moderate to severe CSU.

Table: Most common TEAEs through Week 12 (≥10% in any group)

TEAEs through Week 12, n (%)	Placebo (N=40)	Rilzabrutinib 400 mg QPM (N=38)	Rilzabrutinib 400 mg BID (N=41)	Rilzabrutinib 400 mg TID (N=41)
Diarrhea	6 (15.0)	3 (7.9)	12 (29.3)	12 (29.3)
Nausea	2 (5.0)	5 (13.2)	7 (17.1)	8 (19.5)
Headache	0	2 (5.3)	6 (14.6)	4 (9.8)
Abdominal pain	2 (5.0)	1 (2.6)	5 (12.2)	0



Abstract N°: 1280

Personalized approach for patients with anaphylaxis to biologics used for chronic spontaneous urticaria

Ganna Nesterenko[1], Viktor Litus[1], Aleksandr Litus[1], Lawrence Dubuske[2]

[1]Shupyk National Healthcare University of Ukraine, Kyiv, Ukraine,[2]Immunology Research Institute of New England, Gardner, United States

Introduction & Objectives:

While biologic therapy is widely used to treat chronic spontaneous urticaria, some patients may develop anaphylaxis associated with treatment. An alternate approach using non-biologic individualized combination therapy may be effective in these patients.

Materials & Methods:

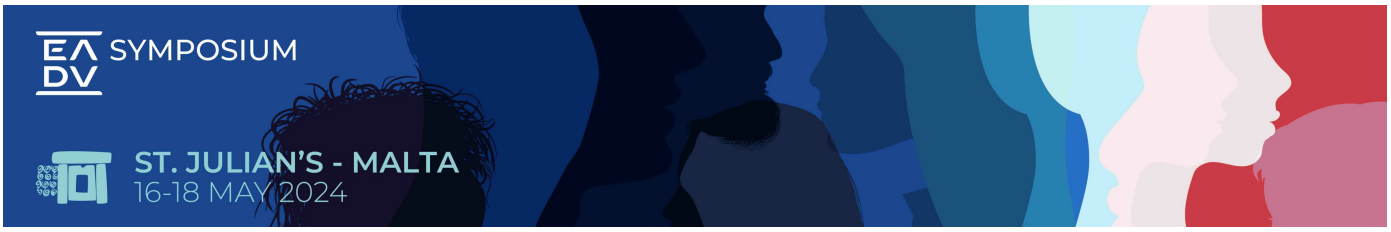
A 35-year-old female from Ireland was evaluated for pruritic urticarial rashes that occurred at any time, interfered with sleep, and were associated with a history of angioedema of the lips and eyes. Prior to admission to our clinic the patient had received omalizumab 150 mg based on a high IgE level (200 kU/L). On the night of omalizumab treatment the patient had anaphylaxis requiring therapy in the hospital with intravenous dexamethasone and chloropyramine. After 10 days, 8 mg methylprednisolone tablets was instituted but did not completely relieve symptoms. As the patient did not want to increase the dosage of methylprednisolone, a new approach using combinatorial therapy employing cyclosporine 150 mg twice a day was sought.

Results:

Combinatorial therapy with low dose methylprednisolone and cyclosporine led to symptom resolution. When the patient decided to reduce the dose of methylprednisolone by herself, the rash reappeared, but was less intense while resuming methylprednisolone at 8 mg led to resolution of the rash. Based on the low efficacy of cyclosporine and methylprednisolone 8 mg used as monotherapy, cyclosporine 300 mg per day together with methylprednisolone 8 mg was used as a steroid sparing treatment to reduce the risk of new rashes and angioedema. As a result of this approach, the therapeutic goal was achieved and the patient's request not to increase the dose of glucocorticoid was satisfied. During two weeks of cyclosporine and methylprednisolone in combination, the patient did not have new itchy rashes and did not have any further angioedema or anaphylaxis.

Conclusion:

Combination of cyclosporine and low dose methylprednisolone provided better results compared with either methylprednisolone or cyclosporine monotherapy. In the absence of a sufficient clinical response to cyclosporine alone in a standard therapeutic dose, a steroid sparing approach using glucocorticosteroids beginning at a minimal dose which is then increased every week to a dose that will help control the manifestations of chronic spontaneous urticaria may be very effective as individualized treatment.



Abstract N°: 1621

Decreased secretion of melatonin in CSU patients - the results from cross-sectional study

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Introduction & Objectives:

Chronic spontaneous urticaria (CSU) is a dermatological disorder accompanied by itching that greatly affects the quality of sleep and consequently quality of life. Therefore, it is assumed that CSU patients experience reduced melatonin secretion and lower values of serum or salivary melatonin.

Materials & Methods:

This pilot study included 20 patients with CSU (chronic urticaria of unknown etiology that lasts for more than 6 weeks) and 10 healthy controls. Salivary melatonin levels were determined by ELISA and all subjects completed a standardized Dermatology Life Quality Index questionnaire and Pittsburgh Sleep Quality Index on the same day they gave a saliva sample for analysis. An oral pathologist also examined CSU patients to exclude oral pathological conditions that can disturb melatonin secretion.

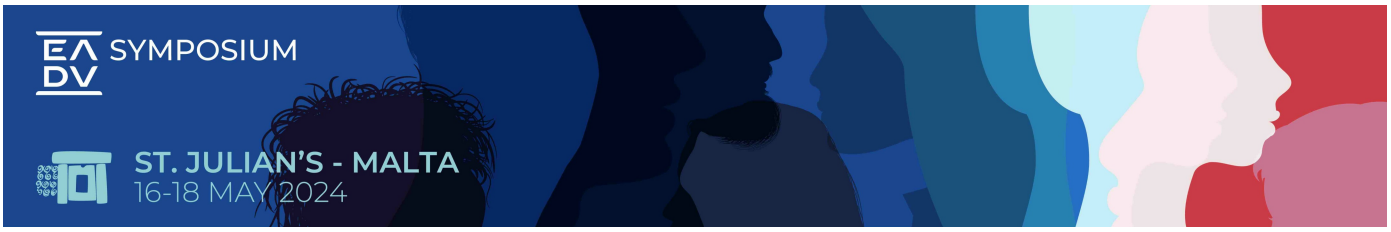
Results:

Our results showed that 86% of CSU patients had decreased values of salivary melatonin. Also, lower salivary melatonin values were significantly correlated with a reduced quality of life in CSU patients.

Conclusion:

Although this pilot study included a small number of patients, this study was the first which determined melatonin values in CSU patients and it may be useful as a basis for further studies with a larger group of patients. A possibility of melatonin as a new additional therapeutic option can also be analyzed in further studies.

Key words: Melatonin; Salivary melatonin; Chronic spontaneous urticaria; Sleep disorder; Therapeutic options



Abstract N°: 1745

Adrenergic urticaria: a rare underdiagnosed subtype of chronic urticaria

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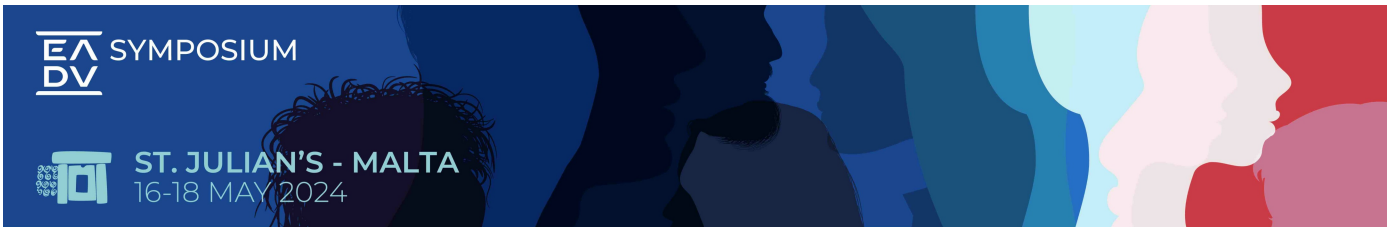
Introduction & Objectives: Urticaria is a common inflammatory skin disease. It is clinically defined as the occurrence of transient papular skin or subcutaneous lesions called angioedema. Chronic urticaria is defined as a clinical course over more than 6 weeks. Different clinical subtypes were described in the literature. Adrenergic urticarial (AU) is a rare underdiagnosed subtype, characterized by erythematous wheals surrounded by hypopigmented skin. It is a physical stress-induced form of urticaria and the mostly known triggering factors are an emotional upset, trauma and coffee. The associated symptoms can include heart palpitations, wheezing, tachypnea and malaise. The aim of our study was to evaluate the clinicopathological findings of AU among a series of patients.

Materials & Methods: It was a retrospective study including all cases of AU diagnosed in our Dermatology Department from 2016 to 2021. For each patient, we noted the epidemiological, the clinical, the therapeutic and the evolution findings.

Results: We collected 6 cases of AU. Five of the patients were women and one man. The morphology of the lesions was a small erythematous papules surrounded by a halo of vasoconstriction observed in all the patients. Lesions were localized on the trunk for one patient, on the limbs for two other patients. Three of the patients noticed some associated symptoms such as itch and palpitations. Triggering factors like stress and anxiety were reported by four patients. Five patients had other associated conditions such as autoimmune diseases, positive antinuclear antibodies, type 2 diabetes and a psychiatric disorder. None of the patients received an intradermal injection of epinephrine, which is not required for the diagnosis of AU as clinical presentation was characteristic. All the patients received a second generation anti-histamines with a slight ease of the symptoms. Five patients were treated by propranolol 10mg 3 times a day with complete resolution of rash and itch. The patient with diabetes could not receive propranolol treatment because of its unstable levels of glycemia. We noted that the control of this unstable levels of glycaemia resulted in clinical improvement of urticarial lesions.

Conclusion: AU is a rare type of physical urticaria characterized by transient outbreaks of red papules surrounded by halos of hypopigmented skin making the diagnosis certain. The reproduction of the lesions after an intradermal injection of epinephrine or norepinephrine can help guide the diagnosis. Oral propranolol is currently the best known treatment associated with trigger avoidance. Antihistamines can also lead to a slight improvement of the symptoms of adrenergic urticaria.



Abstract N°: 1777

Exploring the Safety Profile of Bilastine in Chronic Spontaneous Urticaria: A Real-World Analysis in the Indian Population

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Exploring the Safety Profile of Bilastine in Chronic Spontaneous Urticaria: A Real-World Analysis in the Indian Population

Introduction & Objectives:

Second-generation H1-antihistamines are preferred for treatment of chronic spontaneous urticaria (CSU). Bilastine, well-tolerated with no serious adverse events, primarily causes side effects like headache, somnolence, fatigue, and dyspnea. This study aimed to assess bilastine's safety in the Indian population, addressing the gap between Western literature emphasizing its non-sedative nature and observed sedative effects in Indian patients.

Materials & Methods:

A retrospective analysis of urticaria clinic records from January 3 to December 26, 2023, focused on patients aged 18 and above newly starting bilastine therapy for CSU, with a minimum 12-week treatment duration. Exclusion criteria encompassed pregnant or breastfeeding individuals, incomplete records, prior bilastine exposure, significant concurrent medications, non-compliance history, and inducible urticaria. Data collected comprised demographic details (age, gender), illness duration, and reported adverse effects. The dataset also included information on dosage during adverse effects and the duration of bilastine use leading to these effects.

Results:

During the study period, the urticaria clinic registered 1069 new patients, with 208 initiated on bilastine therapy. After applying inclusion criteria, 172 eligible patients were included, while 48 were excluded based on various criteria. The study focused on 124 patients diagnosed with CSU.

Among these, 23 (18.5%) reported adverse effects upon starting bilastine. The mean age of these patients was 37.2 ±6.8 years (range: 25-45), including 8 males and 15 females, with illness durations ranging from 8 weeks to 3 years. A total of 25 adverse effects were observed. Somnolence affected 11.20% (n=14), followed by headache at 2.41% (n=3). Dizziness, abdominal pain, and dyspepsia were reported by 1.6% each (n=2), while acneiform eruption and constipation were less frequent (0.8%, n=1 each). The mean duration of therapy before adverse effects onset was 8.6 weeks (range: 2–20 weeks).

Among the 23 patients, 7 experienced side effects at a lower bilastine dose (20 mg), while 16 encountered adverse effects at higher doses (≥40 mg). Incidence of somnolence was higher in the high-dose group (55.56% vs 42.86%), and abdominal pain, dyspepsia, and acneiform eruption were observed only in the high-dose group. Two patients up-dosed from 20 mg without an increase in adverse effects intensity. None of the observed adverse effects led to treatment discontinuation.

Conclusion:

Reports of sedation due to bilastine varied by region, with rates of 2% and 5.8% in Japanese and German studies. Earlier Indian investigations aligned closely with our study, reporting sedation in 10.2% and 12.9% of patients. The higher occurrence in India may be influenced by genetic variability, diverse lifestyles, environmental factors, and reporting biases. In conclusion, bilastine is generally safe and well-tolerated. Caution is advised when increasing the dose, and patients

should be counseled to promptly report any side effects.