



Abstract Highlights

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The following highlights spotlight key abstracts from the European Academy of Allergy and Clinical Immunology (EAACI) Congress 2025, held in Glasgow, UK, from the 13th–16th of June. Topics covered include rising food allergies in children, the psychological burden of chronic allergic diseases, predictors of asthma and eosinophilic gastritis, and quality-of-life improvements related to emerging therapies.



Pine Nut Allergy Increasing Among European Children

A RECENT analysis of data from the Allergy Vigilance Network, presented at the EAACI Congress 2025, has revealed that pine nut allergy, once considered rare, is becoming a more frequent cause of food-induced anaphylaxis.¹

The study reviewed 3,285 reported cases of food-related anaphylaxis across France, Belgium, and Luxembourg between 2002–2024. Of these, 61 cases, representing 1.9%, were linked to pine nuts, either in their native form or as hidden ingredients in foods such as sauces, salads, pastries, breaded fish, and both commercial and home-cooked meals.

The majority of cases (75.4%) occurred in children aged 1.6–18 years, with males and females affected equally. However, among adults, males were more frequently affected than females. A significant number of patients also had existing sensitisation to other nuts (39.3%) or a history of asthma or atopic dermatitis (29.5%). Notably, anaphylaxis was the first sign of pine nut allergy in 70% of patients, highlighting the potential severity of initial reactions.

Effort-related cofactors were identified in 21.3% of cases, the most common being physical exertion. The severity of the allergic reactions varied, with 80% being Grade 2, 18.2% being Grade 3, and one case being classified as Grade 4. Treatment details were available for 55 cases, with adrenaline used in 34.5%, and antihistamines or corticosteroids administered in over 90%.

These findings point to pine nuts as an emerging and potentially serious allergen, especially among children. Given their growing presence in globalised diets and the hidden nature of their inclusion in many foods, there is a strong case for adding pine nuts to the list of mandatory food allergens requiring labelling in Europe. Greater awareness and improved labelling could play a vital role in preventing severe allergic reactions in at-risk individuals.

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Study Reveals Unmet Need in Asthma Care

DEPRESSION prevalence is high amongst individuals with severe asthma, according to new research presented at the EAACI Congress 2025, which took place in Glasgow, UK, between the 13th–16th of June.²

The observational, cross-sectional study included 57 adult (≥ 13 years) and paediatric (< 13 years) patients with severe asthma, from an Allergy and Clinical Immunology department at a single centre in Portugal. To understand the frequency and impact of depression in this cohort, data were obtained from clinical records and standardised questionnaires. Of those included, 68.4% were female, the median age was 33.16 years (range: 7–71), the median BMI was 23.94 (interquartile range: 11.96), and the median fractional nitric oxide concentration in exhaled breath was 24.00 (interquartile range: 26.50).

The Beck Depression Inventory-II (BDI-II) and the Children's Depression Inventory (CDI) were used to assess depression in adults and children, respectively. A BDI-II score of > 28 was considered severe depression in adults, and a CDI score of > 24 was considered severe depression in children.

Using these cut-off values, the researchers identified depression in 45.6% of the cohort. A total of 23 adults and adolescents had depression (53.5%), of whom 16.3% ($n=7$) had severe symptoms, 25.6% ($n=11$) had moderate symptoms, and 11.6% ($n=5$) had mild symptoms. In children < 13 years of age, three were identified as having depression (21.4%). Of these individuals, none had severe symptoms, two (14.3%) had moderate symptoms, and one (7.1%) had mild symptoms. Additionally, those who were identified as having severe

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depression were found to have lower Asthma Control test scores, with a median of 17.00 compared to 10.50 for those with mild and moderate depression ($p=0.001$), as well as an increased number of short-term systemic corticosteroid cycles. The authors noted no significant differences between the two groups for age, BMI, or fractional nitric oxide concentration in exhaled breath levels.

From the findings, the researchers concluded that individuals with asthma experience significant emotional burden, and that the prevalence of depression is high. This indicates that there is a gap in asthma management that needs to be bridged by combining traditional treatments with mental health care.

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Quality of Life in Adults with Hereditary Angioedema: New Insights from European Study

ADULTS with hereditary angioedema due to C1 inhibitor deficiency (HAE-C1INH) experience significant impairment in quality of life, with disease severity, attack frequency, and psychological factors emerging as key determinants, according to new data presented at the EAACI Congress 2025.³

Hereditary angioedema is a rare, lifelong condition characterised by unpredictable and often painful swelling episodes, which can be life-threatening and have a profound impact on daily functioning and well-being. Understanding the burden of illness and the factors that most affect health-related quality of life (HRQoL) is essential for improving patient care and targeting interventions.

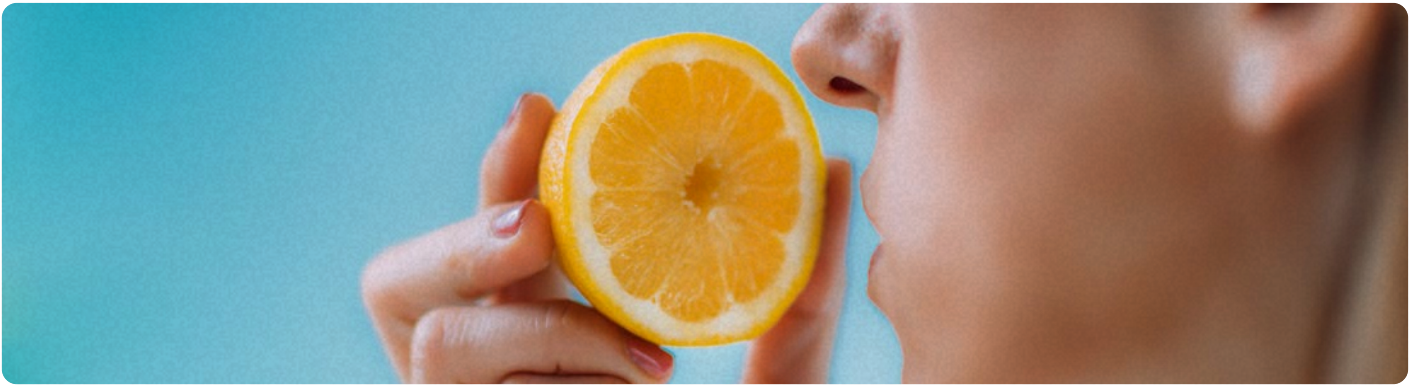
In a prospective observational study, 102 adults with confirmed HAE-C1INH were assessed using a range of validated instruments: the Hereditary Angioedema Quality of Life (HAE-QoL) questionnaire, the Angioedema Quality of Life (AE-QoL) questionnaire, the EuroQol five-dimensional five-level (EQ5D5L) index, the Hereditary Angioedema Activity Score (HAE-AS), and the Work Productivity and Impairment questionnaire. The median age of participants was 41.8 years, with 58.8% being female, and 32% receiving long-term prophylaxis. The median HAE-AS was 12.2, indicating moderate disease activity. Median scores reflected substantial impairment: HAE-QoL was 102.5, AE-QoL was 32.4, and the EQ5D5L index was 0.9. The domains most affected were 'Perceived control over illness', 'Fear/shame', and 'Pain'. HRQoL was significantly more impaired in females than males across all measures, with HAE-QoL scores of 93.0 versus 108.0, and AE-QoL scores of 37.5 versus 17.6, both statistically

significant. No major differences were found between age groups, except for heightened concern about offspring in those aged 31–45 years. Factors most strongly associated with poorer HRQoL included higher disease severity, frequent attacks, known triggers, need for emergency care, adverse effects of treatment, anxiety, depression, and the need for psychological support. Work and daily activities were also notably affected, with mean absenteeism at 2.7%, presenteeism at 13.4%, overall work productivity loss at 15.2%, and activity impairment at 22.3%. Patients who did not require sick leave reported significantly better HRQoL scores.

These findings highlight the complex and multifaceted burden of HAE-C1INH in adults, underlining the need for a holistic approach to care that addresses not only physical symptoms but also psychological well-being and social participation. In clinical practice, a regular assessment of HRQoL and work impact should be integrated into routine management, with particular attention paid to those with frequent attacks, high disease severity, and psychological distress.

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Olfactory Improvement Drives Quality of Life Gains in Chronic Rhinosinusitis with Nasal Polyps

A REAL-LIFE clinical study has shown that an improved sense of smell during dupilumab treatment is closely linked to better quality of life in patients with chronic rhinosinusitis with nasal polyps (CRSwNP), independent of nasal polyp regression.⁴

CRSwNP is commonly associated with nasal congestion and anosmia, both of which significantly impact patients' daily lives. Dupilumab, an IL-4/IL-13 receptor blocker, has emerged as an effective therapy, but the specific contributors to quality-of-life improvements remain under investigation. In this prospective study from Budapest, Hungary, researchers assessed the relationships between olfactory function, nasal obstruction, polyp score, and health-related quality of life. Twenty-four adult patients with CRSwNP were followed before and during dupilumab treatment. Olfactory function was quantified using the extended Sniffin' Sticks test, nasal obstruction was assessed with Visual Analogue Scale (VAS) and Nasal Obstruction Symptom Evaluation (NOSE) scores, and polyp size was graded via the modified Lund-Kennedy scoring system. Quality of life was evaluated using the validated Sino-Nasal Outcome Test (SNOT)-22, with data analysed using R statistical software.

Results revealed a rapid and sustained improvement in olfactory function, with the prevalence of anosmia dropping from 94% at baseline to 22% after 6 months of therapy. SNOT-22 scores significantly improved, with a mean change of 45.83 points (95% CI: 34.1–57.6; $p < 0.001$), and nasal polyp scores also showed a marked reduction (mean

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difference: 3.33; 95% CI: 2.3–4.3; $p < 0.001$). However, while improved olfaction strongly correlated with better quality of life, changes in nasal polyp scores or nasal obstruction did not. Moreover, no correlation was found between the degree of olfactory recovery and a reduction in polyp size.

These findings suggest that the restoration of olfactory function may be the primary driver of patient-reported improvement during dupilumab therapy, rather than structural changes. Further research is needed to clarify the underlying mechanisms of smell recovery in CRSwNP.



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Rising Prevalence of Walnut and Cashew Nut Allergies in Japan

A NATIONWIDE survey on immediate food allergies in Japan, presented at the EAACI Congress 2025, which has been conducted every 3 years since 2002, has revealed a marked increase in tree nut allergies, particularly to walnuts and cashew nuts, over the past decade.⁵

The survey involved data collection from around 1,000 physicians per cycle, focusing on patients who experienced allergic reactions within 60 minutes of ingesting specific foods. Cases were analysed based on causative foods, symptoms, treatments, and patient demographics.

From 2005–2023, the number of analysed cases steadily increased, from 2,227 in 2005 to over 6,000 in both 2020 and 2023. Until 2017, the top three allergens (hen's eggs, cow's milk, and wheat) remained consistent. However, from 2014 onwards, reports of tree nut allergies began to rise noticeably. Walnut allergies showed the most significant increase, ranking fourth in 2020 (7.6%) and rising to second place in 2023, accounting for 15.2% of cases. Cashew nut allergies also increased, along with other tree nuts such as macadamias, pistachios, almonds, pecans, and hazelnuts.

In children aged 0 years, hen's eggs, cow's milk, and wheat continued to dominate, with no major changes. In contrast, walnut allergies rose sharply in older age groups, particularly those aged 1–2, 3–6, and 7–17 years. There was also a marked increase in misfeeding-related reactions involving walnuts in the 3–17 age range.

In conclusion, tree nut allergies in Japan, especially to walnuts and cashews, have become significantly more common in the last 10 years, indicating the need for updated allergen labelling and greater public awareness.

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New Data Support Simpler Diet Approach in Childhood Eosinophilic Gastritis

EOSINOPHILIC gastritis (EoG) is a rare chronic inflammatory condition increasingly managed through empiric food elimination diets (FED), despite limited long-term data to guide reintroduction strategies. While FEDs have demonstrated benefit in eosinophilic oesophagitis, their use in EoG, particularly in paediatric populations, raises concerns about nutritional adequacy and quality of life. To address this gap, a retrospective study presented at the EAACI Congress 2025 reviewed the outcomes of food reintroduction in children diagnosed with EoG at a tertiary allergy-gastroenterology-dietetics centre between 2009–2024.⁶

Children aged 0–18 years with histologically confirmed EoG (defined by gastric eosinophil counts of >30/high-power field [HPF] in >5 separate HPFs) were included. Patients achieving histological remission (either a gastric eosinophil count of <20/HPF or a >75% reduction) underwent stepwise food reintroduction, followed by repeat endoscopy 8–12 weeks later to assess tolerance. Foods were considered tolerated if remission was maintained post-reintroduction. Data were analysed for factors predicting the need for ongoing multi-food avoidance.

Of the 30 patients included (53% female), the median age at diagnosis was 1.3 years (range: 0.3–16), with a median follow-up of 5 years. Initial treatment involved 3–6 FED in 60% and 1–2 FED in 33% of patients. Endoscopic re-evaluation was available for 25 patients, with 84% (21/25) achieving histological remission. The most frequently tolerated foods were fish (86%), shellfish (76%), and nuts (71%), while cow's milk (14%) and egg (48%) were the least tolerated. At the end of the study, eight children remained on single-FED, predominantly eliminating cow's milk. Only two had reintroduced all major allergens without relapse. Risk factors for requiring

ongoing 2–6 FED included concomitant IgE-mediated food allergy (odds ratio [OR]: 51.0; $p=0.0129$), initial peripheral eosinophilia (OR: 15.7; $p=0.0246$), and hypoalbuminaemia (OR: 10.7; $p=0.0230$).

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These findings support a more conservative dietary approach in paediatric EoG, beginning with one to two food eliminations rather than extensive FEDs. Identifying individual food triggers, particularly cow's milk, may reduce the long-term burden of dietary restrictions and improve quality of life. However, the retrospective nature of the study and small cohort size limit generalisability. Prospective, multicentre studies are needed to confirm optimal dietary management strategies and to further guide clinical decision-making.



Paediatric Asthma Risk Rises with Higher Eosinophil Counts

A NEW retrospective study, presented at the EAACI Congress 2025, has shed light on the potential of eosinophil blood count (EBC) as a predictive marker for asthma in preschool children presenting with acute wheezing.⁷

Wheezing in early childhood can be transient and benign, but for some children, it marks the beginning of chronic respiratory issues, including asthma. Accurate early prediction remains a clinical challenge, and EBC, a simple blood test, has been suggested as a possible tool, although current recommendations are based largely on expert opinion rather than robust evidence.

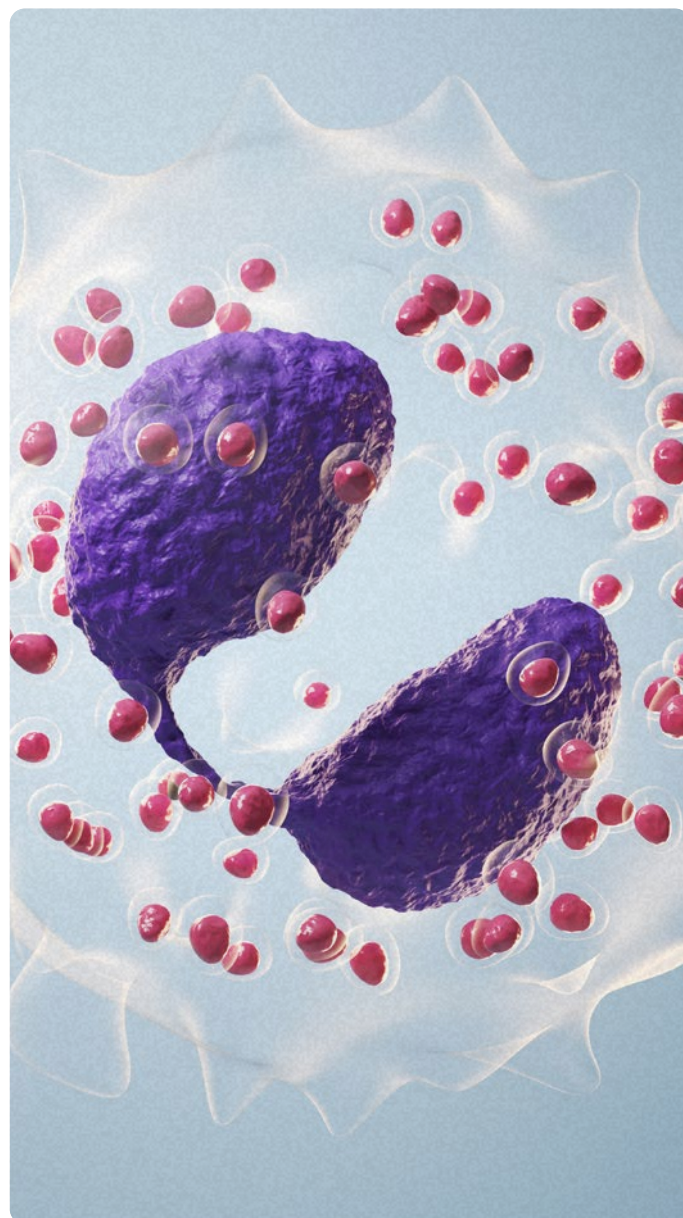
Researchers analysed data from 375 children aged 1–5 years old who were hospitalised with wheezing episodes between 2013–2023. Based on respiratory outcomes after the age of 5 years, children were classified into three categories: no recurrent wheezing, transient wheezing, and persistent wheezing or asthma. Results showed that those who went on to develop asthma had a significantly higher mean EBC (410 cells/ μ L) compared with children in the other two groups (220 and 260 cells/ μ L, respectively). Notably, there was no significant difference in EBC between the non-asthmatic groups.

The study identified 230 cells/ μ L as the most effective cut-off point for predicting asthma, though the sensitivity and specificity, 63% and 61%, respectively, suggest the test alone is not definitive. Importantly, a linear relationship was found: for every 100 cells/ μ L increase in EBC, the risk of developing asthma rose by 18%.

These findings indicate that, while EBC is not a perfect diagnostic tool, it does provide valuable prognostic information. The data support using EBC as a quantitative indicator of asthma risk in young children with acute wheezing. Clinicians are urged to consider EBC alongside other clinical features, given the moderate predictive accuracy, to guide early management decisions.



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