AAAAI 2026 Clinical and AI / ML Preview

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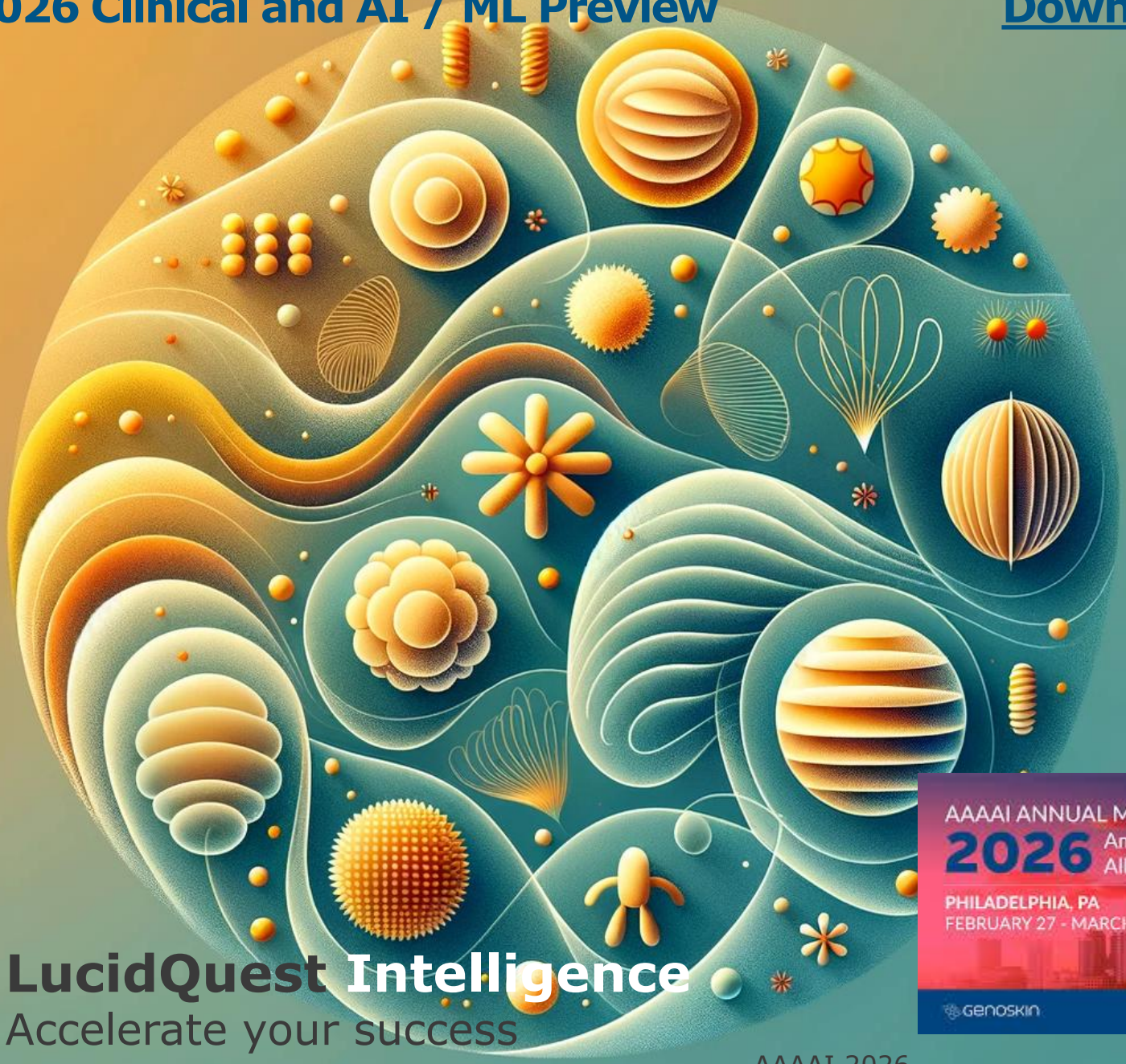

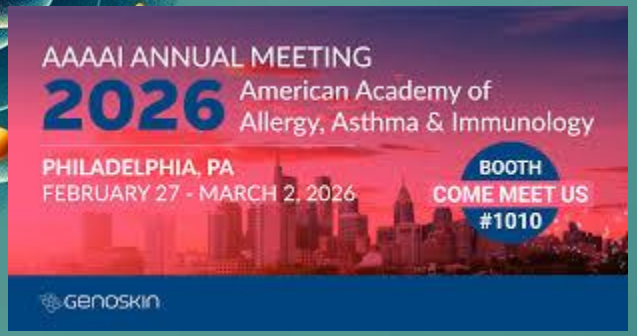

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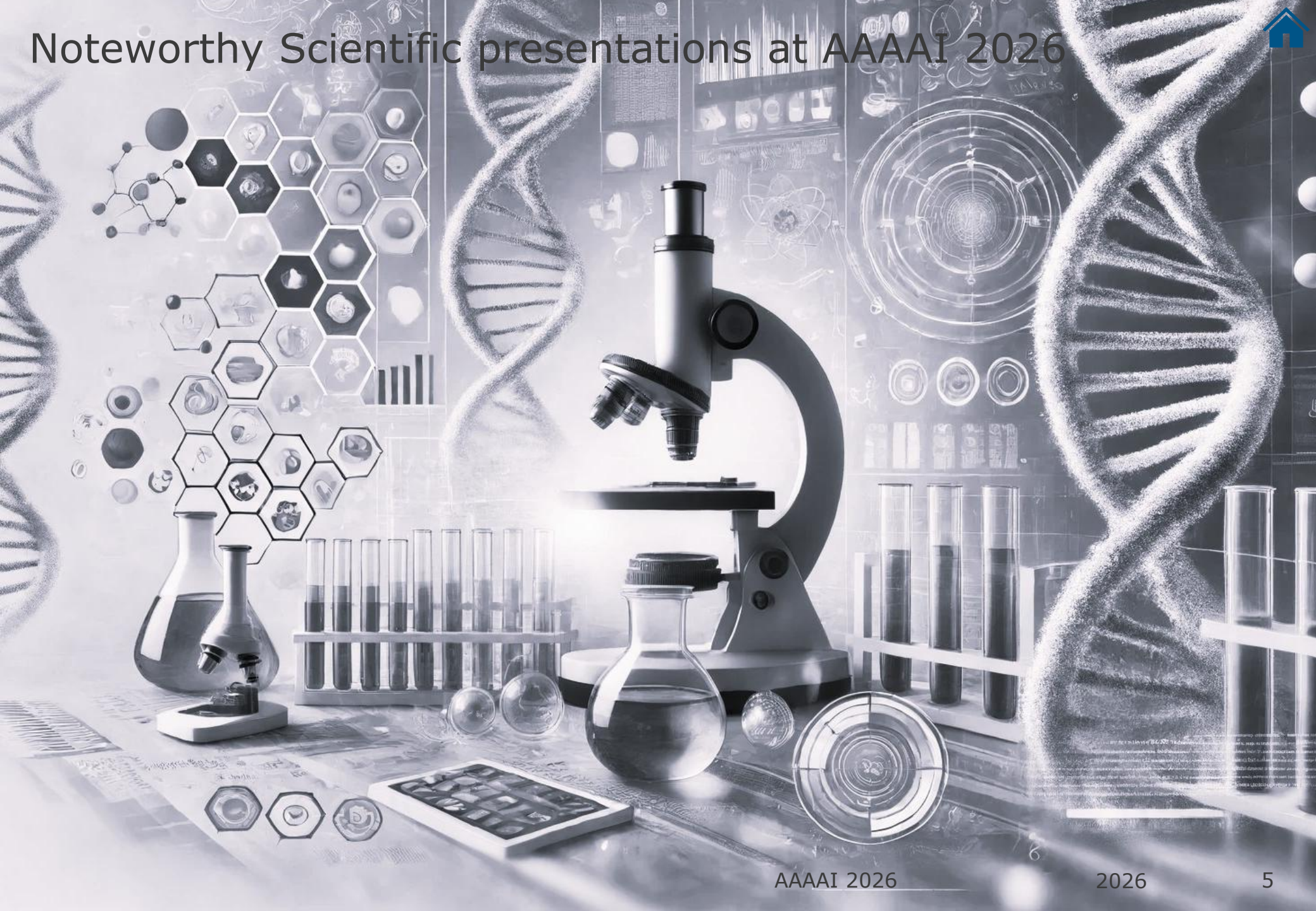
AAAAI 2026 – General Overview

- **Global Attendance and Collaboration:** The conference will attract leading global experts in allergy, asthma, and immunology, fostering cross-border scientific collaboration and knowledge exchange
- **Innovative Treatment Updates:** Cutting-edge research on novel biologics, immunotherapies, and targeted treatments for asthma, allergic diseases, and immune disorders will be highlighted throughout the event
- **Emerging Technologies:** The meeting will focus on the role of digital health tools and AI in improving patient care and disease management in allergy and asthma
- **Comprehensive Clinical Insights:** Participants will receive in-depth discussions on real-world evidence, clinical trial data, and case studies on managing complex allergic and immunologic disorders
- **Interactive Learning Opportunities:** Hands-on workshops and sessions will enable participants to engage in practical learning on the latest techniques and diagnostic tools in allergy and immunology
- **Future Directions in Research:** New research directions and clinical applications will be presented, emphasizing the potential impact of innovative therapeutic approaches in the field of immunology

AAAAI 2026– Conference Themes

- **Biologic Therapies for Asthma:** Focus on monoclonal antibodies in asthma treatment, emphasizing long-term efficacy, safety, and diverse patient populations
- **Immunotherapy for Allergies:** Advancements in sublingual and oral immunotherapies for allergies, offering better efficacy and fewer side effects
- **Eosinophilic and Mast Cell Disorders:** Addressing novel treatments for eosinophilic asthma and mast cell disorders, with new therapeutic options
- **Asthma Exacerbation Prevention:** Personalized medicine and biomarkers to prevent asthma exacerbations, improving long-term control and patient outcomes
- **Environmental and Lifestyle Factors:** Impact of allergens, air pollution, and lifestyle choices on allergic diseases, with strategies for prevention
- **Improving Patient Adherence:** Strategies to improve patient adherence, focusing on digital health tools and tailored educational interventions

Noteworthy Scientific presentations at AAAAI 2026



Key Topics From Notable Presentations (1/6)

- **Asthma (Biologics, Outcomes, Epidemiology, Comorbidities):** Sessions are anticipated to demonstrate how improved adherence to biologics and personalized treatment strategies with tezepelumab will enhance asthma control, reduce exacerbations, and lead to better long-term outcomes for patients with severe asthma

  - Biologic Adherence and Severe Asthma: Sessions are anticipated to explore the critical relationship between biologic adherence and asthma exacerbations, highlighting how consistent adherence to biologics such as dupilumab, mepolizumab, and others will result in a significant reduction in asthma exacerbations, leading to better asthma management and improved patient outcomes, particularly in individuals with severe asthma

  - Tezepelumab in Severe Asthma Treatment: Sessions will focus on the promising potential of tezepelumab in achieving clinical remission in severe asthma patients, especially in biologic-naïve individuals. Presentations will examine how biomarkers, such as eosinophil counts and IgE levels, can predict treatment response, helping to guide more personalized and effective asthma management

Key Topics From Notable Presentations (2/6)

- **Atopic Dermatitis (AD) & Skin Barrier / Type 2 Dermatitis:** Emerging research will underscore the significance of skin microbiome imbalances in pediatric AD and demonstrate that roflumilast cream provides an effective long-term treatment option, potentially reducing the need for corticosteroids in managing childhood AD

  - Skin Microbiome and Atopic Dermatitis in Vietnamese Children: The study will examine the skin microbiome of children with AD in Vietnam, revealing reduced microbial diversity and a dominance of Staphylococcus in lesional skin. These findings will highlight the importance of the gut-skin axis in AD pathogenesis, with implications for targeted microbial therapies to improve clinical outcomes in pediatric AD

  - Roflumilast Cream Long-Term Efficacy for AD: Roflumilast cream's long-term efficacy in treating pediatric AD will be analyzed, with more than 55% of patients achieving vIGA-AD 0/1 at week 52. This will support its role as a viable alternative to corticosteroid treatments for ongoing AD management, providing a safe and effective long-term solution for controlling symptoms

Key Topics From Notable Presentations (3/6)

- **Chronic Rhinosinusitis (CRSwNP/CRSsNP), Allergic Rhinitis & Upper Airway Disease:** Sessions are anticipated to highlight how biologics like dupilumab, tezepelumab, verekitug, and depemokimab will revolutionize CRSwNP treatment, offering substantial improvements in nasal polyp size, congestion, and overall disease control, alongside real-world efficacy in patients with coexisting conditions

  - Dupilumab's Impact on CRSwNP and Coexisting Conditions: Sessions are anticipated to show dupilumab improving work productivity, absenteeism, and presenteeism in CRSwNP. It will also outperform omalizumab in improving nasal polyp scores and asthma control

  - Tezepelumab, Verekitug, and Depemokimab in CRSwNP: Tezepelumab will demonstrate benefits in sinonasal outcomes, verekitug will reduce symptoms and surgery need, and depemokimab will show efficacy in Chinese CRSwNP patients

Key Topics From Notable Presentations (4/6)

- **Eosinophilic, Mast Cell & Primary Immunodeficiency Disorders:** Sessions are expected to highlight dupilumab's role in treating EoE and demonstrate how Bezuclastinib addresses unmet needs in SM, offering significant improvements in both symptom control and long-term disease management

  - Dupilumab in Eosinophilic Esophagitis (EoE) Treatment: Sessions are anticipated to demonstrate that dupilumab significantly improves EoE symptoms in pediatric patients, with sustained benefits in histology and endoscopy, highlighting its potential as a long-term treatment for EoE

  - Systemic Mastocytosis (SM) and Bezuclastinib: Bezuclastinib will be shown to significantly reduce symptoms in patients with Non-Advanced Systemic Mastocytosis (NonAdvSM), with long-term treatment leading to improvements in disease burden, including reduced gastrointestinal symptoms and better bone health

Key Topics From Notable Presentations (5/6)

- **Food Allergy, Anaphylaxis & Allergen Immunotherapy:** Sessions are anticipated to emphasize the growing role of innovative food allergy treatments, such as food elimination diets and oral immunotherapy, along with advancements in epinephrine delivery systems for improved patient adherence and outcomes

- Food Allergy Education and Treatment Approaches: Sessions are anticipated to showcase innovative educational models, such as a culinary-STEM program, which improves food allergy literacy in children. Furthermore, dietary interventions like food elimination diets (FED) will demonstrate significant histologic remission, particularly with milk elimination, offering a first-line treatment option for pediatric eosinophilic colitis (EoC)

- Immunotherapy Advancements in Food Allergies: Sessions will highlight advancements in oral immunotherapy (OIT) for peanut and other food allergies, with studies showing promising results in desensitization and immunologic modulation. Additionally, needle-free epinephrine forms will be explored, with high patient preference for ease of use and portability, potentially improving adherence during anaphylaxis treatment

Key Topics From Notable Presentations (6/6)

- **Urticaria & Hereditary Angioedema (HAE):** Sessions will underscore promising treatment advancements in HAE and CSU, with a focus on biologics offering improved disease control and patient outcomes, particularly in chronic and acute phases of the diseases

  - Efficacy of Biologics in Urticaria and HAE: Sessions are anticipated to highlight the effectiveness of biologics like dupilumab and sebetralstat in chronic spontaneous urticaria (CSU) and hereditary angioedema (HAE), particularly focusing on symptom control and quality of life. Studies will also address treatment preferences in acute HAE management and the ongoing shift toward more convenient therapies, including oral options

  - Impact of New Treatments in HAE and Urticaria: Donidalorsen and deucrictibant will be discussed for their potential to significantly improve disease control and reduce HAE attack frequency, with a focus on long-term efficacy and safety. Additionally, SEP-631's role in modulating mast cell activation in CSU will be explored, providing insights into novel treatment avenues for refractory cases

Focus of Key Industry-Sponsored Sessions at AAAAI 2026 (1/4)

- **Ionis:**
  - Focus Areas: Long-Term Prophylaxis Paradigm in HAE
  - Discussions will focus on the first and only RNA-targeted therapy for HAE and the redefinition of long-term prophylaxis through shared decision-making and novel approaches
- **ARS Pharmaceuticals:**
  - Focus Areas: Asthma & Eosinophilic Disorders
  - The session will explore the reimagined epinephrine administration for emergency treatment through the innovative epinephrine nasal spray
- **AstraZeneca::**
  - Focus Areas: Epinephrine Nasal Spray
  - Presentations will highlight investigational asthma data, new treatment options for severe asthma, and advances in anti-alarmin care for asthma, CRSwNP, AR, and COPD, as well as tackling eosinophilic granulomatosis with polyangiitis and hypereosinophilic syndrome

Focus of Key Industry-Sponsored Sessions at AAAAI 2026 (2/4)

- **GSK:**
  - Focus Areas: Severe Asthma
  - Presentations will delve into clinical evidence supporting a new biologic option for eosinophilic phenotype severe asthma patients
- **Amgen and AstraZeneca:**
  - Focus Areas: Severe Asthma & CRSwNP
  - The session will explore epithelial-driven inflammation and its implications for patients with severe asthma and CRSwNP
- **Sanofi and Regeneron:**
  - Focus Areas: Dermatologic Diseases & Respiratory Conditions
  - Discussions will focus on treatment options for multiple dermatologic diseases, including atopic dermatitis, and the latest data on treatment for respiratory diseases driven by type 2 inflammation

Focus of Key Industry-Sponsored Sessions at AAAAI 2026 (3/4)

- **Genentech:**
  - Focus Areas: Food Allergies
  - Presentations will tackle the challenges of multi-allergen food allergies, including diagnosis dilemmas and treatment transitions
- **KalVista:**
  - Focus Areas: HAE Attack Management
  - Discussions will redefine HAE attack management strategies, focusing on improved clinical outcomes and patient care
- **Lilly:**
  - Focus Areas: Perennial Allergic Rhinitis & Atopic Dermatitis
  - Presentations will explore targeted treatment approaches for perennial allergic rhinitis and the role of IL-13 antibodies in achieving deep, long-term stability in moderate-to-severe atopic dermatitis

Focus of Key Industry-Sponsored Sessions at AAAAI 2026 (4/4)

- **CSL:**
  - Focus Areas: Hereditary Angioedema (HAE)
  - The session will focus on understanding Factor XIIa's role in hereditary angioedema (HAE) and its potential therapeutic implications
- **Novartis:**
  - Focus Areas: Respiratory Conditions
  - Presentations will highlight the new treatment option, RHAPSIDO®, providing a path forward in managing respiratory conditions
- **Bayer:**
  - Focus Areas: Rhinitis
  - The session will examine how tailoring intranasal antihistamine recommendations can improve symptom relief for rhinitis patients

Notable Presentations And Late-breaking Sessions At AAAAI 2026

Notable Presentations At AAAAI 2026
Asthma (1/18)

Date	Title	Author	Summary
27 Feb 2026	Biologic Adherence and Exacerbation Risk Among Patients With Severe Asthma in the CHRONICLE Study	Dennis Ledford	• **Introduction:** The impact of real-world biologic adherence on effectiveness in severe asthma (SA) is underexplored. This analysis of the CHRONICLE study examines the relationship between biologic adherence and asthma exacerbation reduction in US adults with severe asthma. • **Methodology:** CHRONICLE (NCT03373045) is an observational study of US adults with SA who initiated a biologic (benralizumab, dupilumab, mepolizumab, omalizumab, reslizumab, or tezepelumab) and remained on treatment for ≥52 weeks. Adherence was assessed via proportion of days covered, and its impact on asthma exacerbation rates was analyzed using a locally estimated scatterplot smoothing model. • **Results:** Data from 710 patients (mean age 52.6 years) revealed 47.3% had ≥90% adherence. Dupilumab showed lower adherence rates (<50%) compared to other biologics. Higher adherence was associated with fewer asthma exacerbations, particularly in patients with ≥2 exacerbations in the previous year. • **Conclusions:** Lower biologic adherence in US adults with severe asthma correlates with reduced effectiveness in preventing exacerbations, emphasizing the importance of maintaining high adherence for optimal treatment outcomes.
27 Feb 2026	Assessing Strategies to Increase Combination Inhaler Use for Asthma Rescue: A Multi-Phase Quality Improvement Project	Mohammad Al Fazal	• **Introduction:** GINA 2024 guidelines recommend combination inhalers (beta-agonist and inhaled corticosteroid) for asthma rescue instead of short-acting beta-agonist monotherapy. This quality improvement project at UAMS Northwest Arkansas clinic aimed to increase the use of combination inhalers and improve provider communication strategies for switching rescue inhalers. • **Methodology:** The study included asthma patients from electronic medical records (EMR). Phase 1 involved a brief lecture for primary care providers (PCPs) on GINA 2024 guidelines and toolkits. Data on asthma treatment (albuterol monotherapy, combination inhaler, montelukast) were collected 3 months pre- and post-intervention. • **Results:** Phase 1 (51 patients) showed no significant change in prescribing patterns. The rate of albuterol monotherapy was 62% vs 60%, combination inhaler 35% vs 28%, and montelukast 8% vs 4% pre- and post-intervention, respectively. • **Conclusions:** Phase 1 did not impact PCP prescribing behaviors, possibly due to the limited intervention duration and follow-up. Phase 2 will address these limitations with a longer intervention and multiple EMR alerts to improve guideline adherence.

Notable Presentations At AAAAI 2026
Asthma (2/18)

Date	Title	Author	Summary
27 Feb 2026	Baseline type 2 biomarkers as predictors of clinical remission with tezepelumab in biologic-naïve and biologics-experienced patients (TERESA study)	Keiko Kan-o	• **Introduction:** The TERESA study examines the role of baseline type 2 biomarkers in predicting clinical remission with tezepelumab in both biologic-naïve and biologics-experienced patients with severe asthma. • **Methodology:** Patients were categorized based on biologic treatment history (naïve vs. experienced). Baseline type 2 biomarkers (e.g., eosinophil counts, IgE levels) were analyzed to evaluate their predictive value for achieving clinical remission with tezepelumab. Data was collected across multiple clinical sites. • **Results:** Type 2 biomarkers at baseline were found to correlate with clinical remission in both patient groups, with stronger predictive values in biologic-naïve patients compared to experienced ones. Tezepelumab treatment resulted in significant asthma control improvements. • **Conclusions:** Baseline type 2 biomarkers effectively predicted clinical remission in biologic-naïve and experienced patients, supporting personalized treatment strategies with tezepelumab in severe asthma management.
27 Feb 2026	Prospective evaluation of clinical remission with tezepelumab in severe asthma (TERESA study): higher efficacy in biologic-naïve patients	Keiko Kan-o	• **Introduction:** Achieving clinical remission in severe asthma with biologics is an important therapeutic goal, but prospective data on clinical remission with tezepelumab is limited. This study investigates the clinical remission rate with tezepelumab in adult patients with uncontrolled severe asthma. • **Methodology:** A single-arm, multicenter prospective study in Japan (June 2023) enrolled 107 adult patients with severe asthma, regardless of prior biologic use. The primary endpoint was clinical remission at 52 weeks, and secondary outcomes included biomarker normalization and low disease activity. • **Results:** The clinical remission rate was 34.6% (95% CI 26.2-44.0), with a complete remission rate of 9.3% and low disease activity in 42.1%. Biologic-naïve patients had higher remission rates (47.4%) compared to those with prior biologic use (20.0%). Logistic regression identified biologic-naïve status as a significant predictor of clinical remission. • **Conclusions:** Tezepelumab demonstrated clinical remission in over one-third of patients, with higher rates in biologic-naïve individuals, supporting its efficacy in severe asthma, particularly for those not previously treated with biologics.

Notable Presentations At AAAAI 2026
Asthma (3/18)

Date	Title	Author	Summary
27 Feb 2026	Stopping biologic therapies in Severe Asthma: A Real-World Study in a Community Setting	Isabella Novoa Caicedo	• **Introduction:** The reasons for discontinuing biologic therapies in severe asthma remain poorly understood. This study aims to identify the causes of biologic therapy discontinuation in a real-world community setting. • **Methodology:** A retrospective, observational study analyzed 7,450 electronic medical records from a large US-based allergy and asthma clinic network. Patients diagnosed with severe asthma and treated with biologics were included. Reasons for discontinuation were determined by chart review, focusing on clinical and non-clinical factors. • **Results:** Of the 7,450 patients, 36.8% (2,742) discontinued their biologic therapy. The most common reasons were non-clinical (e.g., payer challenges), followed by side effects (omalizumab) and lack of efficacy (tezepelumab, mepolizumab). Remission of symptoms was the least frequent reason for discontinuation. • **Conclusions:** Non-clinical factors, such as payer challenges, were the primary reasons for biologic discontinuation, highlighting the complex nature of asthma care and the need to address both clinical and non-clinical barriers to biologic continuation.
27 Feb 2026	Baseline Predictors Of Clinical Remission In Children With Uncontrolled, Moderate-To-Severe Asthma Treated With Dupilumab: A Post Hoc Analysis Of The VOYAGE Study	Leonard Bacharier	• **Introduction:** Clinical remission is an emerging treatment goal in childhood asthma. This post hoc analysis of the phase 3 VOYAGE study (NCT02948959) evaluates the predictive value of baseline characteristics for achieving clinical remission in children with uncontrolled moderate-to-severe asthma. • **Methodology:** Children aged 6–11 years received either add-on dupilumab (100/200 mg) or placebo every 2 weeks for 52 weeks. Clinical remission was defined by four criteria, including no exacerbations, no oral corticosteroid use, asthma control, and FEV1/FVC ratios. A multivariate logistic regression model assessed predictors of remission. • **Results:** Dupilumab significantly increased clinical remission rates (43.2% vs 27.4% with placebo). Baseline blood eosinophils ≥150 cells/μL and FeNO ≥20 ppb were strong predictors of remission, with odds ratios of 2.56 and 3.18, respectively. No significant benefit was observed for lower eosinophil or FeNO levels. • **Conclusions:** In children with moderate-to-severe asthma, baseline eosinophils ≥150 cells/μL or FeNO ≥20 ppb significantly increased the likelihood of achieving clinical remission with dupilumab treatment, supporting biomarker-driven therapy.

Notable Presentations At AAAAI 2026
Asthma (4/18)

Date	Title	Author	Summary
27 Feb 2026	Effectiveness of Tezepelumab in T2-High Asthma: A Target Trial Emulation using Active Comparators	Tanawin Nopsopon	• **Introduction:** Tezepelumab has shown promising efficacy in clinical trials, but real-world effectiveness remains unclear. This study evaluates its effectiveness versus other biologics in biologic-naïve adults with T2-high asthma using a target trial emulation approach. • **Methodology:** A target trial was emulated using EHR data from a U.S. health system (2022–2024). Biologic-naïve adults with severe asthma and at least one T2-high feature were matched 1:1 with initiators of other biologics (dupilumab, anti-IL5/5R agents, or omalizumab). The primary outcome was the cumulative risk of exacerbations, estimated using logistic regression. • **Results:** 45 tezepelumab initiators were matched to 45 comparators. After 1 year, 37.8% of tezepelumab patients and 48.9% of comparators had ≥1 exacerbation. The cumulative incidence of exacerbations was 48.5% for tezepelumab and 57.8% for comparators, with a risk ratio of 0.84 (95% CI, 0.52 to 1.31). • **Conclusions:** Tezepelumab was associated with a lower, but not statistically significant, 1-year risk of exacerbations compared with other T2 biologics in biologic-naïve adults with severe asthma. Larger, longer studies are needed to refine these findings.
27 Feb 2026	Benralizumab for Severe Eosinophilic Asthma in Pediatric Patients: Rationale and Design of the Multicenter, Randomized, Double-Blind, Placebo-Controlled Phase 3 DOMINICA Study	Theresa Guilbert	• **Introduction:** Pediatric patients with severe eosinophilic asthma (SEA) face an unmet therapeutic need. The DOMINICA study (NCT05692180) aims to evaluate the efficacy and safety of benralizumab in treating SEA in children aged 6 to <18 years. • **Methodology:** The multicenter, phase 3, randomized, double-blind, placebo-controlled study will enroll ≥200 pediatric patients with SEA. Participants will be randomized to receive benralizumab or placebo subcutaneously every 4 weeks for three doses, followed by every 8 weeks. The study will assess the time to first asthma exacerbation, with secondary endpoints focused on asthma control, symptoms, and quality of life. • **Results:** Results are not yet available as the study is still recruiting patients. • **Conclusions:** The DOMINICA study introduces an innovative design to minimize placebo exposure and assess benralizumab's impact on pediatric SEA, with promising potential for improving asthma management in this population.

Notable Presentations At AAAAI 2026
Asthma (5/18)

Date	Title	Author	Summary
27 Feb 2026	Effectivity of mepolizumab and determinants of treatment response in patients with severe eosinophilic asthma (SEA) treated in Poland: a real-life observational study	Marcin Kurowski	• **Introduction:** Mepolizumab's real-life effectiveness in severe eosinophilic asthma (SEA) and the factors influencing treatment response remain under investigation. This study evaluates the effects of mepolizumab over 52 weeks, focusing on concomitant features that may influence treatment outcomes. • **Methodology:** The study involved 130 adults with SEA across 7 Polish centers, with complete data from 106 participants (median age 56.5 years). Data on asthma control (ACQ-6, AQLQ), lung function, eosinophil count, oral corticosteroid-treated exacerbations, and chronic OCS use were collected at baseline, week 24, and week 52. Multivariate logistic regression identified determinants of asthma remission. • **Results:** Mepolizumab significantly improved asthma control, lung function, exacerbation rates, and hospitalizations at both 24 and 52 weeks. Atopic patients showed greater improvement in ACQ-6 scores at week 24. Atopy increased the likelihood of remission (OR: 3.54), while a higher number of severe exacerbations prior to treatment decreased remission probability (OR: 0.87). • **Conclusions:** Mepolizumab was effective in treating SEA regardless of age, eosinophil count, and comorbidities. Atopy was identified as a key factor increasing the likelihood of achieving clinical remission in patients with severe eosinophilic asthma.
27 Feb 2026	Assessment of Self-Reported Asthma Control and Exacerbation Risk in the United States: Baseline Results from the Asthma Impairment and Risk Questionnaire (AIRQ) and Education Study	Krisha Patel	• **Introduction:** This study presents baseline findings from a longitudinal study evaluating digital education combined with an asthma control assessment tool to improve asthma management. • **Methodology:** Adults with asthma prescribed (SABA without inhaled corticosteroids in the prior year were identified from Walgreens' Retail Pharmacy Database. Participants received asthma management educational materials and completed the Asthma Impairment and Risk Questionnaire (AIRQ) to assess asthma impairment and exacerbation risk. • **Results:** Among 2,078 participants, 14% had well-controlled asthma, 37% had poorly controlled asthma, and 49% had very poorly controlled asthma. After reviewing educational materials, 69% learned something new, 96% were more likely to discuss asthma treatment with their doctor, and 98% found the materials helpful. • **Conclusions:** Despite favorable socioeconomic factors, most participants had uncontrolled asthma, indicating gaps in current management. Combining the AIRQ tool with asthma education offers a promising approach to improving self-management and outcomes in asthma care.

Notable Presentations At AAAAI 2026
Asthma (6/18)

Date	Title	Author	Summary
28 Feb 2026	Sublingual Immunotherapy Achieves Greater Asthma Control Than Subcutaneous Allergoids: A 2-Year Head-to-Head Trial	Jimena Prieto	• **Introduction:** This study compares the clinical effectiveness of sublingual immunotherapy (SLIT) and subcutaneous allergoid immunotherapy in patients with allergic asthma and rhinitis, focusing on symptom control, quality of life, and FeNO as an inflammatory biomarker. • **Methodology:** A longitudinal cohort study with 180 patients receiving either SLIT or allergoid immunotherapy, assessing outcomes at baseline and 24 months using validated questionnaires and FeNO measurements. • **Results:** SLIT demonstrated superior improvements in asthma control, rhinitis control, quality of life, and FeNO reduction compared to subcutaneous immunotherapy. • **Conclusions:** SLIT showed greater improvements in asthma and rhinitis management, making it a clinically effective treatment option for allergic respiratory diseases.
28 Feb 2026	Fracture Risk Among Pediatric Asthma Patients Treated With Inhaled Corticosteroids: A Retrospective Cohort Study	Lynchi Nguyen	• **Introduction:** Asthma is a common chronic condition in children, with concerns about inhaled corticosteroids (ICS) potentially affecting bone integrity. This study compares fracture risk between ICS-containing regimens and SABA-only therapy. • **Methodology:** A retrospective cohort analysis using the TriNetX U.S. Collaborative Network, categorizing children into SABA-only, ICS-only, and ICS + LABA therapy groups, assessing first-time fractures ≥1 year after medication initiation. • **Results:** ICS-only therapy was associated with a lower fracture risk compared to SABA-only (RR 1.18), with no significant difference between ICS + LABA and controls. • **Conclusions:** ICS use, either alone or with LABA, does not increase fracture risk and may provide modest skeletal protection, supporting early ICS use in pediatric asthma management.

Notable Presentations At AAAAI 2026
Asthma (7/18)

Date	Title	Author	Summary
28 Feb 2026	Remission and Persistence of Childhood Asthma in the Korean Childhood Asthma Study (KAS): 7-Year Cohort Follow-up	Jisun Yoon	• **Introduction:** The determinants of childhood asthma remission are not well understood in South Korea. This study identifies predictors of asthma remission and persistence from childhood to early adulthood using the Korean Childhood Asthma Study (KAS) cohort. • **Methodology:** A total of 1,009 children aged 5–15 years with physician-diagnosed asthma were enrolled, and 329 completed a 7-year follow-up. Participants were classified as having persistent asthma (symptoms and bronchial hyperresponsiveness) or in remission. Logistic regression analyses identified predictors of remission. • **Results:** After 7 years, 61.5% of children were in remission. Higher baseline FEV_1 and mid-expiratory flow (MMEF) were associated with increased odds of remission. Children with moderate-to-severe asthma at enrollment were less likely to achieve remission. Sensitization to pets increased the risk of asthma persistence (aOR 2.07). • **Conclusions:** About two-thirds of children achieved asthma remission, with baseline lung function, asthma severity, and allergic sensitization serving as early prognostic indicators. Early management and long-term monitoring are essential to improving childhood asthma outcomes.
28 Feb 2026	Primary Prevention of Asthma: the ORBEX trial	Fernando Martinez	• **Introduction:** Oral treatment with inactivated bacterial extracts has been shown to decrease wheezing incidence in preschoolers, with effects persisting for up to six months. • **Methodology:** The ORBEX study is a primary prevention trial that enrolled children aged 6 to 18 months with a history of atopic dermatitis or a first-degree relative with asthma. Participants received either oral bacterial lysates (OM-85 Bronchovaxom) or placebo for 10 days each month for two years. The primary outcome is the time to the first wheezing episode requiring oral corticosteroids or lasting >24 hours, with asthma at age 6 as a secondary outcome. • **Results:** 822 children were enrolled between 2017 and 2020, with 69% having eczema and 69% having a first-degree relative with asthma. The cohort was 59% White, 23% Black, and 14% Hispanic. The final participant will complete the observation period by January 2026, with results to be presented at the 2026 AAAAI meeting. • **Conclusions:** The ORBEX trial will assess whether early exposure to oral bacterial extracts can prevent wheezing episodes and asthma by age 6, potentially offering a new approach for primary prevention in at-risk children.

Notable Presentations At AAAAI 2026
Asthma (8/18)

Date	Title	Author	Summary
28 Feb 2026	Efficacy of a Cloud-Integrated Smart Management System for Pediatric Asthma Control: A Randomized Controlled Trial	Ya Wang	• **Introduction:** Asthma is a common chronic respiratory condition that significantly affects the quality of life, especially in children. This study evaluates the efficacy of a cloud-integrated smart management system for pediatric asthma compared to traditional management approaches. • **Methodology:** A randomized controlled trial with 208 pediatric asthma patients compared a trial group using the smart management system to a control group following conventional management practices. Key outcomes included asthma control, unplanned hospital visits, healthcare costs, caregiver anxiety, and quality of life. • **Results:** The trial group showed significantly improved asthma control ($P<0.001$), fewer unplanned hospital visits ($P<0.001$), and reduced healthcare costs ($P<0.001$). Caregiver anxiety scores decreased ($P<0.001$), and lung function and quality of life both improved ($P<0.001$). • **Conclusions:** The cloud-integrated smart management system for pediatric asthma significantly improved asthma control, reduced exacerbations and healthcare costs, and enhanced both patient and caregiver quality of life, offering a promising alternative to traditional management.
28 Feb 2026	Evaluation Of Different Levels Of Depression And Its Association With Asthma Control: A Real-World Study	Jessica Cruz Perez	• **Introduction:** This study evaluates how depression severity affects asthma outcomes in real-world conditions. • **Methodology:** A cross-sectional study included 255 adult asthma patients attending a tertiary care allergy service. Clinical outcomes included asthma control, treatment adherence, ICS dose, lung function, quality of life, and allergy biomarkers. Bivariate and multivariate analyses were conducted. • **Results:** Depression was found in 49.4% of patients, with 30.2% having mild depression and 19.2% M-SD. The M-SD group had significantly poorer asthma control, lower adherence, and greater ICS requirements compared to non-depressed and mildly depressed patients. No significant differences were seen in lung function, biomarkers, or emergency visits. • **Conclusions:** Nearly half of asthma patients had depression, with moderate-to-severe depression showing significant associations with worse asthma outcomes. Recognizing depression severity can aid allergists in optimizing asthma management through integrated mental health assessments.

Notable Presentations At AAAAI 2026
Asthma (9/18)

Date	Title	Author	Summary
28 Feb 2026	Association between Glucagon-Like Peptide-1 Receptor Agonists and Asthma Exacerbations in Non-Diabetic Patients with Obesity: Cohort Study	Ruchi Patel	• **Introduction:** Recent studies suggest that glucagon-like peptide-1 receptor agonists (GLP-1) may reduce asthma exacerbations, though most findings are preliminary and primarily involve diabetic populations. This study explores the association between GLP-1 receptor agonists and asthma exacerbation rates in non-diabetic patients with varying levels of obesity. • **Methodology:** This cohort study used data from the TriNetX global network, comparing asthma exacerbation rates over three years between non-diabetic overweight, obese, and morbidly obese patients initiating GLP-1 receptor agonists and matched controls not using GLP-1 treatments. • **Results:** After propensity matching, 710 overweight, 1,515 obese, and 1,249 morbidly obese patients were included. In each cohort, GLP-1 initiation was significantly associated with a reduced risk of asthma exacerbation: overweight (RR 0.748, risk difference 14.6%), obese (RR 0.790, risk difference 12.2%), and morbidly obese (RR 0.780, risk difference 13.3%), with all results being statistically significant ($p<0.0001$). • **Conclusions:** GLP-1 receptor agonist treatment was significantly associated with reduced asthma exacerbation risk in non-diabetic asthmatics across all excess weight groups.
28 Feb 2026	Predictors of Study Attrition in a Mobile Health Asthma Intervention: Findings from the ASTHMAXcel PRO Randomized Clinical Trial	Serena Zhang	• **Introduction:** This study examines demographic and health literacy predictors of attrition in the ASTHMAXcel PRO decentralized randomized controlled trial for asthma self-management. • **Methodology:** Adult asthma patients on daily controller medications were recruited from Bronx primary care facilities and randomized to either the intervention (ASTHMAXcel PRO) or usual care group. Demographic and health literacy data were collected at baseline. Time-to-dropout was analyzed using Cox proportional hazards models adjusted for age, gender, race/ethnicity, distress, health literacy, and education level. • **Results:** Among 103 participants, 43 (41.7%) dropped out before the fourth visit. Education level was a significant predictor of dropout: participants with some college education had higher dropout risk (HR = 2.43) compared to those with high school or less. Higher health literacy trended toward lower dropout (HR = 0.82). Intervention status was not associated with dropout (HR = 1.36). • **Conclusions:** Education and health literacy were key predictors of attrition in this asthma self-management trial. Targeted support for patients at higher risk of dropout may help reduce attrition, with larger studies needed to refine retention strategies in mobile health asthma trials.

Notable Presentations At AAAAI 2026
Asthma (10/18)

Date	Title	Author	Summary
1 Mar 2026	Glucagon-Like Peptide-1 Receptor Agonists Reduce Asthma Exacerbations In Obese But Not Non-Obese Type 2 Diabetics: A Global Study	Anthony Balolong-Reyes	• **Introduction:** GLP-1 receptor agonists (GLP-1RAs) have shown anti-inflammatory effects, but their impact on asthma exacerbations in obese versus non-obese type 2 diabetic patients remains unclear. This study hypothesizes that GLP-1RA use reduces asthma exacerbations more significantly in obese, diabetic patients. • **Methodology:** A retrospective cohort study using the TriNetX global database included adult patients with asthma and diabetes, stratified by obesity status and GLP-1 RA use. Cohorts were matched using propensity scoring. The primary outcome was asthma exacerbations occurring within 6 months of starting a GLP-1 RA, with risk difference (RD), risk ratio (RR), and odds ratio (OR) calculated. • **Results:** Among obese diabetic patients, GLP-1RA treatment resulted in a 23% relative risk reduction in asthma exacerbations (RD −0.45%, p=0.0001, RR 0.77, OR 0.76). No significant reduction was observed in non-obese patients (RD −0.043%, p=0.91, RR 0.97, OR 0.97). • **Conclusions:** GLP-1RA treatment significantly reduced asthma exacerbations in obese diabetic patients, but not in non-obese patients. Further studies should focus on identifying specific diabetic asthmatic phenotypes to guide precision care.
1 Mar 2026	Treatment Pattern Changes in Chinese Patients with Uncontrolled Moderate-to-severe Asthma: A Prospective, Multicenter, Real-world Study	Li Yu	• **Introduction:** This study examines the treatment pattern changes in Chinese patients with uncontrolled moderate-to-severe asthma. Despite the availability of effective treatments, a significant portion of patients remains uncontrolled, highlighting unmet treatment needs. • **Methodology:** The PRESENT study (NCT06422663) is a 24-week, prospective, observational study conducted across 35 Chinese hospitals. It included patients aged ≥12 years diagnosed with moderate-to-severe asthma and uncontrolled asthma (ACT score ≤19, frequent or serious exacerbations). Treatment pattern changes were recorded through medical records. • **Results:** 498 patients were enrolled, with 264 having uncontrolled asthma. From Week 0–12, 34.5% of patients changed their treatment patterns, including discontinuation of ICS in 5.3%. From Week 12–24, 35.2% changed treatment, with ICS discontinuation rising to 20.5%. 41.7% of patients remained uncontrolled at Week 24. Treatment changes were more frequent among patients on low-dose ICS compared to medium-dose ICS. • **Conclusions:** Many Chinese patients with uncontrolled asthma did not receive adequate treatment escalation, particularly those on medium-dose ICS, possibly due to limited escalation options like biologics. A large proportion of patients remained uncontrolled, underscoring the need for improved treatment strategies in China.

Notable Presentations At AAAAI 2026
Asthma (11/18)

Date	Title	Author	Summary
1 Mar 2026	Disease Burden in Chinese Patients with Moderate-to-severe Asthma: A Prospective, Multicenter, Real-world Study	Li Yu	• **Introduction:** This study evaluates the disease burden in Chinese patients with moderate-to-severe asthma, focusing on asthma control and exacerbation rates. • **Methodology:** PRESENT (NCT06422663) is a 24-week, prospective, observational study involving 498 patients from 35 hospitals. Disease burden was assessed using the annualized asthma exacerbation rate (AAER), ACT scores, and lung function. • **Results:** AAER decreased from 0.3 to 0.1. ACT scores improved from 19.3 to 21.4. Despite improvements, 22.5% of patients did not reach an ACT score of ≥20, with a significant portion of patients still not achieving optimal symptom control. • **Conclusions:** Although disease burden improved, asthma control remains suboptimal, particularly in uncontrolled patients who need clinical attention.
1 Mar 2026	Factors Affecting Treatment Escalation in Chinese Patients with Moderate-to-severe Asthma: A Prospective, Multicenter, Real-world Study	Li Yu	• **Introduction:** This study examines treatment escalation patterns in Chinese patients with moderate-to-severe asthma, focusing on ACT scores and exacerbation histories. • **Methodology:** PRESENT (NCT06422663) is a prospective, observational study involving 498 patients from 35 hospitals. Patients were stratified by ACT scores and exacerbation histories, with treatment escalation data collected at Weeks 0 and 12. • **Results:** At Week 12, patients with ACT scores ≤19 had more treatment escalations (add-ons: 14.3%, ICS dose increase: 6.3%) than those with ACT ≥20. Escalation was similar in patients with and without prior exacerbations. • **Conclusions:** Physicians seemed to prioritize ACT scores over exacerbation history when escalating treatment, suggesting that exacerbation history might be underemphasized in decision-making.

Notable Presentations At AAAAI 2026
Asthma (12/18)

Date	Title	Author	Summary
1 Mar 2026	Toward Decentralized Asthma Research: Harnessing Remote Data Collection to Monitor Asthma Exacerbations in Clinical Trials	Allison Burbank	• **Introduction:** This study investigates the feasibility of decentralized research for asthma exacerbations in adolescents, aiming to enhance research accessibility through home-based data collection. • **Methodology:** Adolescents aged 12–21 with asthma and recent exacerbations were enrolled. Participants used home spirometers, symptom-tracking apps, and smart inhalers for 1 year. Data from home- and clinic-collected nasal samples were compared, and exacerbations were defined by changes in FEV1 or symptom thresholds. • **Results:** 40 adolescents were enrolled, 29 completed the study. Adherence to daily tasks was low, and a modest decrease in cytokine levels was noted. Most exacerbations were triggered by FEV1 decline. • **Conclusions:** Decentralized trials are feasible but face challenges with adherence, device syncing, and data collection.
1 Mar 2026	Asthma Status (active vs. inactive) and Subsequent Risk of Infections in Children with Asthma: A Birth Cohort Study	Chung-il Wi	• **Introduction:** This study investigates whether the risk of infections differs based on asthma status (active vs. inactive) in children. • **Methodology:** A retrospective cohort study followed the 1997-2005 Mayo Clinic Birth Cohort using electronic health records. Children with asthma onset before 6 years were classified as having active or inactive asthma based on asthma-related events in the prior three years. Infections associated with asthma (e.g., pneumonia) were assessed during the subsequent 3-year period. Complementary log-log regression models were used to analyze infection risk, adjusting for clinical variables. • **Results:** Among 1,399 children at 6 years, 1,312 at 9 years, and 1,004 at 12 years post-asthma onset, the proportion of children with active asthma decreased over time (65.4%, 54.6%, 40.9%, respectively). Although univariate analysis showed sporadic increased infection risk in children with active asthma, no infections remained significant in multivariable analysis. • **Conclusions:** Despite evidence suggesting a higher infection risk in children with asthma, the study found no significant difference in infection rates based on asthma status. Preventive efforts should focus on all children with asthma, including those in remission.

Notable Presentations At AAAAI 2026
Asthma (13/18)

Date	Title	Author	Summary
1 Mar 2026	Asthma Phenotypes and Control in 22q11.2 Deletion Syndrome: A Single-Center Retrospective Study	Cody Shopper	• **Introduction:** This study explores whether asthma control and severity differ in patients with 22q11.2 deletion syndrome compared to the general population. • **Methodology:** A retrospective cohort study was conducted using electronic medical records of patients with 22q11.2 deletion syndrome and asthma. Primary outcomes included ACT scores, averaged over 12 months. Asthma control was defined as an ACT score of ≥20 and less than two oral steroid courses in the prior year. Secondary outcomes included inhaler use, biologic therapy, emergency visits, hospitalizations, and asthma-related mortality. • **Results:** Among 104 patients with 22q11.2 deletion syndrome, 14.4% (15 patients) had moderate persistent asthma. Of this subgroup, 40% had uncontrolled asthma and 27% had comorbid lung conditions. No patients were diagnosed with severe persistent asthma. • **Conclusions:** Moderate persistent asthma was found in 14.4% of patients with 22q11.2 deletion syndrome, with 40% of this group having uncontrolled asthma. This highlights a significant burden of uncontrolled asthma and comorbidities, emphasizing the need for targeted management strategies for this population.
1 Mar 2026	Tezepelumab in Allergic Rhinitis and Asthma Study (TEZARS): Improvement in asthma symptoms and quality of life 6-months post-treatment	Abigail Davis	• **Introduction:** Tezepelumab has not been studied in individuals with comorbid allergic rhinitis (AR) and asthma using a controlled Nasal Allergen Challenge (NAC) model. This study aims to evaluate the effects of tezepelumab on asthma and AR symptoms in such individuals. • **Methodology:** Seven participants with moderate-to-severe asthma and AR to common allergens underwent a baseline NAC (BNAC), followed by six months of tezepelumab treatment. A follow-up NAC was performed, and asthma control was assessed using the Total Asthma Safety Score (TASS) and Asthma Control Questionnaire 5 (ACQ-5). • **Results:** No significant differences were observed in TASS time-course or ACQ-5 between BNAC and 6M-NAC. However, TASS AUC0-24h decreased from 13.7 to 7.3 at 6M-NAC, with a 3.17-point reduction in the late-phase asthma response post-treatment. ACQ-5 scores improved from 1.40 to 0.771, surpassing the minimally clinically important difference of 0.5. • **Conclusions:** While no significant changes in early-phase responses were detected, a reduction in late-phase asthma symptoms was observed post-tezepelumab treatment. The NAC model validated safety and suggested a potential benefit in reducing late-phase asthma symptoms, with improvements in ACQ-5 scores aligning with previous studies.

Notable Presentations At AAAAI 2026
Asthma (14/18)

Date	Title	Author	Summary
1 Mar 2026	Association between Systemic Corticosteroid and Tendino-myopathy in Pediatric Asthma: A Self-Controlled Case Series from a Nationwide Population-based Study	Kyunghoon Kim	• **Introduction:** This study investigates this association using a self-controlled case series with Korean National Health Insurance Service data. • **Methodology:** Patients aged 6–18 years with asthma diagnoses from 2006 to 2020 were included. Those with at least one diagnosis of myopathy or tendinopathy were identified. Incidence rate ratios (IRRs) for myopathy or tendinopathy occurrence were estimated using conditional Poisson regression, comparing risk periods (1–30 days after corticosteroid therapy) to non-exposure periods. • **Results:** Among 6,832 asthma patients, 5,038 received systemic corticosteroids. The incidence of myopathy and tendinopathy was higher during the risk period (IRR 1.29; P<0.001). Sensitivity analysis showed the highest risk in the first 1–7 days after corticosteroid therapy (IRR 3.30; P<0.001), with a reduced but still significant risk during days 8–14 (IRR 1.59; P<0.001). The risk was not significant after 15–30 days (IRR 1.11; P=0.272). • **Conclusions:** Systemic corticosteroid therapy in pediatric asthma is associated with an increased risk of myopathy and tendinopathy, particularly in the early period after treatment. These findings highlight the need for careful monitoring of musculoskeletal adverse events following corticosteroid use in this population.
1 Mar 2026	Association between Asthma and Heart Failure: Findings from the Multi-Ethnic Study of Atherosclerosis	Andrea Yue-En Sun	• **Introduction:** Previous studies, including those from the Multi-Ethnic Study of Atherosclerosis (MESA), indicated a higher CVD risk in persistent asthmatics, but the relationship between asthma and specific CVD outcomes, such as heart failure (HF), remains unclear. • **Methodology:** Asthma severity was categorized into non-asthmatics, intermittent asthmatics (no medications required), and persistent asthmatics (requiring ≥1 medication). Incident HF was defined using symptoms, NT-proBNP levels, and echocardiographic findings. Cox proportional hazards regression models were used to estimate hazard ratios (HRs) and 95% confidence intervals, adjusting for various baseline factors. • **Results:** Among 6,782 participants, 7.5% had intermittent asthma and 1.6% had persistent asthma, with a median follow-up of 13.9 years. After adjusting for race, age, sex, smoking, BMI, diabetes, and hypertension, persistent asthma was associated with a higher risk of HF events. No significant association was found between intermittent asthma and HF risk. • **Conclusions:** Persistent asthma significantly increases the risk of heart failure, whereas intermittent asthma does not. These findings underscore the importance of considering asthma severity when stratifying cardiovascular risk.

Notable Presentations At AAAAI 2026
Asthma (15/18)

Date	Title	Author	Summary
1 Mar 2026	Asthma Severity and Risk of Atrial Fibrillation in the Multi-Ethnic Study of Atherosclerosis (MESA)	Benjamin Hsieh	• **Introduction:** Asthma, linked to cardiovascular morbidity, is suspected to influence atrial fibrillation (AF) risk. However, the impact of asthma severity on AF, especially depending on detection method, remains unclear. • **Methodology:** The Multi-Ethnic Study of Atherosclerosis (MESA) cohort, involving 6,782 adults free of AF at baseline, examined asthma severity's relationship with incident AF, identified via hospital records and self-report over 14.1 years. • **Results:** Persistent asthma was associated with a higher risk of hospital-reported AF, while no link was found for self-reported AF or intermittent asthma. • **Conclusions:** Asthma severity, particularly persistent asthma, may elevate AF risk, emphasizing the need for tailored cardiovascular monitoring in asthma patients, especially those with hospital-detected AF.
1 Mar 2026	Individual and Interactive Effects of Air Pollutants and Ragweed on Asthma Exacerbations: A Population-Based Study	Albert Chong	• **Introduction:** Asthma exacerbations are a significant concern for patients, with air pollution and allergens like ragweed playing key roles in triggering attacks. This study investigates the independent and interactive effects of air pollutants and ragweed on asthma exacerbations, providing real-world data within a planetary health framework. • **Methodology:** Population-based study in Maricopa County, Arizona, from February 1, 2023, to September 30, 2023. Data on asthma-related emergency department visits and hospital admissions were obtained. Air pollutant data were sourced from the U.S. EPA. Multiple regression analyses assessed the effects of pollutants and ragweed • **Results:** NO_2, CO, and PM2.5 were independently associated with increased asthma exacerbation risk, with specific pollutant concentration ranges showing significant risk ratios. Interaction analyses revealed a synergistic effect between ragweed and NO_2/CO, further increasing asthma exacerbation risks. • **Conclusions:** This study confirms that air pollutants, both independently and in synergy with ragweed, trigger asthma exacerbations in Maricopa County. These findings emphasize the need for addressing environmental factors in asthma management and prevention strategies.

Notable Presentations At AAAAI 2026
Asthma (16/18)

Date	Title	Author	Summary
1 Mar 2026	Long-Term Safety and Efficacy of Depemokimab in Patients with Type 2 Asthma: A Single-Arm, Open-Label Extension Study (AGILE)	Michael Wechsler	• **Introduction:** Depemokimab, a novel ultra-long-acting biologic with enhanced interleukin-5 binding affinity and extended half-life, offers a potential treatment option for asthma with twice-yearly dosing. The long-term safety and efficacy of depemokimab were further evaluated in the AGILE study following Phase III SWIFT-1/-2 trials. • **Methodology:** In this open-label extension (OLE) study, 629 adults with type 2 asthma received depemokimab 100 mg subcutaneously at Weeks 0 and 26 for up to 52 weeks. Safety and exacerbation rates were assessed. • **Results:** Adverse events were similar between the depemokimab and placebo groups. Annualized exacerbation rates were low for both groups, with better outcomes in those previously on depemokimab. • **Conclusions:** Depemokimab was well-tolerated, with sustained efficacy over 52 weeks, confirming its long-term safety and efficacy in asthma management.
1 Mar 2026	Dupilumab Improves Lung Function And Reduces Total And Specific IgE Levels In Patients With Asthma And Allergic Bronchopulmonary Aspergillosis: The Phase 2 LIBERTY ABPA AIRED Study	Jonathan Corren	• **Introduction:** Allergic bronchopulmonary aspergillosis (ABPA) is a type 2 inflammatory disease caused by hypersensitivity to Aspergillus fumigatus in asthma patients. Current treatments are inadequate and associated with severe side effects. Dupilumab, an anti-IL-4/IL-13 monoclonal antibody, targets the drivers of type 2 inflammation and may offer therapeutic benefits for ABPA. • **Methodology:** 62 adults with asthma and ABPA were randomized to receive dupilumab 300 mg or placebo every 2 weeks for 24–52 weeks. Primary endpoint: change in FEV1 at Week 24. Secondary endpoints: severe exacerbations and IgE levels. • **Results:** Dupilumab improved FEV1, reduced severe exacerbations by 55.2%, and significantly lowered total and A. fumigatus-specific IgE levels compared to placebo. • **Conclusions:** Dupilumab significantly improved lung function and reduced exacerbations and IgE levels in ABPA patients, suggesting its potential as an effective treatment.

Notable Presentations At AAAAI 2026
Asthma (17/18)

Date	Title	Author	Summary
1 Mar 2026	Effect of Exposure to Radon decay products on Asthma Morbidity in the School Inner-City Asthma Study	Yeside Akinbolagbe	• **Introduction:** Radon exposure is hypothesized to increase asthma morbidity in children. This study aimed to investigate the relationship between radon-derived alpha-particle radioactivity and asthma outcomes in school-aged children. • **Methodology:** 250 children (ages 4-14) with asthma were included in the School Inner-City Asthma Study. Exposure was quantified through alpha-particle radioactivity in dust samples, with asthma outcomes measured by maximum asthma symptom-days and lung function (FEV1/FVC). • **Results:** Alpha-particle radioactivity was associated with decreased lung function (FEV1/FVC) and increased symptom-days, especially in children with allergen sensitization. • **Conclusions:** Radon decay products are identified as a significant risk factor for asthma morbidity, highlighting the need to address indoor environmental exposures in asthma management.
1 Mar 2026	New Submission: Biomarkers of Inflammation Associated with Radon Decay Products Exposure in the School Inner-City Asthma Study (SICAS)	Saleh Alsulami	• **Introduction:** Particle radioactivity (PR), particularly from radon decay, is a novel environmental risk factor linked to asthma. This study investigates the association between PR and inflammatory biomarkers in children with asthma. • **Methodology:** LLA from archived PM2.5 filters was measured across seasons. Schools were classified into high vs. low seasonal variability based on LLA. IL-5 levels were measured and regressed on LLA variability, adjusting for potential confounders. • **Results:** High-variability schools showed higher LLA levels, and students had elevated IL-5 levels, a TH2 cytokine linked to asthma inflammation. • **Conclusions:** Increased seasonal PR exposure is associated with elevated IL-5, suggesting a connection between indoor radioactivity and allergic inflammation in asthmatic children.

Notable Presentations At AAAAI 2026
Asthma (18/18)

Date	Title	Author	Summary
2 Mar 2026	Risk of Respiratory Tract Infections with Asthma Biologics - A Retrospective Population-Based Study	Shane Stone	• **Introduction:** This study evaluates the risk of respiratory infections associated with FDA-approved asthma biologics, as targeting type 2 inflammation may affect infection susceptibility. • **Methodology:** A retrospective matched cohort study using TriNetX assessed patients on biologics (dupilumab, omalizumab, anti–IL-5 agents, or tezepelumab) compared to non-biologic controls. The study analyzed the 3-year probability of upper respiratory tract infections, pneumonia, and sinusitis. • **Results:** Biologic use was not linked to increased respiratory infection risk, with a trend toward reduced pneumonia risk, particularly with dupilumab and anti–IL-5 agents. • **Conclusions:** In real-world practice, asthma biologics, including dupilumab and anti–IL-5 agents, do not increase infection risk and may lower pneumonia incidence.
2 Mar 2026	Bronchial thermoplasty for severe asthma: a systematic review and meta-analysis of randomized controlled trials	Daniel Rayner	• **Introduction:** The efficacy and safety of bronchial thermoplasty (BT) for severe asthma remain unclear. This review assesses BT's impact on asthma control, quality of life, and exacerbations. • **Methodology:** A meta-analysis of six RCTs, including 573 adults, comparing BT to sham or standard care for severe asthma. Asthma control, quality of life, exacerbations, and harms were evaluated. • **Results:** BT likely increases severe exacerbations and serious respiratory events during the procedure phase. Post-procedurally, it may reduce exacerbations and improve asthma control and quality of life. • **Conclusions:** BT may improve asthma control and quality of life but likely increases severe exacerbations and serious respiratory events during the procedure phase.

Notable Presentations At AAAAI 2026
CRSwNP/CRSsNP, Allergic Rhinitis & Upper Airway Disease (1/11)

Date	Title	Author	Summary
27 Feb 2026	Dupilumab Improved Work Productivity in Patients with CRSwNP: Results from the Global AROMA Registry	Anju Peters	• **Introduction:** Chronic rhinosinusitis with nasal polyps (CRSwNP) significantly impacts quality of life and work productivity. While dupilumab improves symptoms in clinical trials, its effect on work productivity, absenteeism, and presenteeism in real-world settings has not been fully explored. • **Methodology:** The AROMA study (NCT04959448) is a phase 4, global, prospective registry of adults with CRSwNP initiating dupilumab in real-world practice. This post-hoc analysis assessed changes in work productivity and activity impairment (WPAI) over 18 months. WPAI measures overall impairment, absenteeism, and presenteeism, with data compared to baseline • **Results:** 389 patients were included. Significant improvements in overall impairment, absenteeism, and presenteeism were observed at M3, M12, and M18 (all $p<0.0001$ for overall impairment and presenteeism). Absenteeism decreased significantly at M3 ($p<0.0001$) and M12 ($p=0.0172$), with improvements sustained at M18. • **Conclusions:** Dupilumab significantly improved work productivity, absenteeism, and presenteeism in real-world CRSwNP patients, with improvements seen as early as M3 and maintained through 18 months.
27 Feb 2026	Concurrent Improvement in Nasal Polyp Score and Forced Expiratory Volume in One Second with Dupilumab vs Omalizumab in Patients with Severe CRSwNP and Coexisting Asthma: Results from the EVEREST Study	Anju Peters	• **Introduction:** In the EVEREST trial, dupilumab demonstrated superior efficacy over omalizumab in treating CRSwNP and coexisting asthma. This post-hoc analysis compares the minimum clinically important difference (MCID) improvements in nasal polyp score (NPS) and pre-bronchodilator forced expiratory volume. • **Methodology:** EVEREST (NCT04998604) randomized adults with severe CRSwNP and coexisting asthma to receive either dupilumab 300 mg every 2W or omalizumab 75-600 mg every 2W or 4W for 24 weeks. The proportion of patients achieving MCID in NPS (≥1) and FEV1 (≥100 ml increase) was determined. • **Results:** Dupilumab led to greater MCID improvements in NPS at W4 (61.9% vs 35.8%), W12 (74.0% vs 43.0%), and W24 (79.0% vs 40.2%) compared to omalizumab. A higher proportion of patients on dupilumab achieved ≥100 ml increase in FEV1 at W4 (53.6% vs 39.1%), W12 (55.8% vs 42.5%), and W24 (54.7% vs 49.2%). Concurrent improvements in both NPS and FEV1 were also more common with dupilumab at all time points. • **Conclusions:** Dupilumab outperformed omalizumab in achieving concurrent improvements in both nasal polyp symptoms (NPS) and asthma control (FEV1) in patients with severe CRSwNP and coexisting asthma.

Notable Presentations At AAAAI 2026
CRSwNP/CRSsNP, Allergic Rhinitis & Upper Airway Disease (2/11)

Date	Title	Author	Summary
27 Feb 2026	Efficacy of dupilumab vs omalizumab in patients with severe chronic rhinosinusitis with nasal polyps coexisting with asthma and allergic rhinitis: Results from the head-to-head, prospective, randomized EVEREST study	John Oppenheimer	• **Introduction:** In the EVEREST study, dupilumab demonstrated superior outcomes over omalizumab in patients with severe chronic rhinosinusitis with nasal polyps (CRSwNP) and coexisting asthma. This post hoc analysis assessed patients with allergic rhinitis (AR) in addition to CRSwNP and asthma. • **Methodology:** Adults with severe CRSwNP and asthma were randomized to dupilumab or omalizumab for 24 weeks, alongside intranasal corticosteroids. Primary endpoints were changes in nasal polyp score (NPS) and smell identification (UPSIT). Secondary endpoints included FEV1 and Asthma Control Questionnaire (ACQ-7). • **Results:** Dupilumab outperformed omalizumab across all outcomes in patients with CRSwNP, asthma, and AR, including NPS, UPSIT, FEV1, and ACQ-7. • **Conclusions:** Dupilumab provides superior efficacy compared to omalizumab for patients with severe CRSwNP, asthma, and AR, highlighting its potential in managing coexisting type 2 respiratory diseases.
27 Feb 2026	Increased Risk of Incident Cancer in Patients With Chronic Rhinosinusitis With and Without Nasal Polyps: A Bi-National Population-Based Cohort Study in South Korea and Japan	Seoyoung Park	• **Introduction:** This study investigates whether chronic rhinosinusitis (CRS) is associated with an increased risk of epithelium-derived and overall cancers, particularly lung and colorectal cancers. • **Methodology:** A bi-national cohort study used data from the Korean National Health Insurance Service and Japanese Medical Data Center. CRS was classified into CRS with nasal polyps (CRSwNP) or without (CRSsNP), and cancer incidence was tracked using ICD-10 codes. Cox proportional hazards models estimated the risk. • **Results:** CRS was linked to an increased risk of overall cancer (aHR 1.18) and lung cancer (aHR 1.28), particularly in CRSsNP. The pattern was similar in the Japanese cohort. • **Conclusions:** CRS, especially CRSsNP, is associated with a higher risk of lung and overall cancer, highlighting the need for long-term monitoring.

Notable Presentations At AAAAI 2026
CRSwNP/CRSsNP, Allergic Rhinitis & Upper Airway Disease (3/11)

Date	Title	Author	Summary
27 Feb 2026	Dupilumab Led to Rapid Improvements in Nasal Congestion and Loss of Smell in Patients With Chronic Rhinosinusitis With Nasal Polyps: Results From the Global AROMA Registry	Kathleen Buchheit	• **Introduction:** Nasal congestion (NC) and loss of smell (LoS) significantly impact the quality of life in patients with chronic rhinosinusitis with nasal polyps (CRSwNP). While dupilumab has shown rapid improvement in these symptoms in clinical trials, real-world data is lacking. • **Methodology:** The AROMA study (NCT04959448) is a phase 4, prospective, global registry of adults with CRSwNP initiating dupilumab in real-world practice. This post-hoc analysis evaluated early changes in NC and LoS symptoms over the first 28 days of treatment, using severity scores for both symptoms (0-3 scale). • **Results:** 681 patients were included in the analysis. NC scores improved by 31.3% (55.6%) from baseline, with notable improvements at Days 7 (18.9%), 14 (25.7%), and 21 (31.4%). LoS scores improved by 30.8% (44.3%), with improvements at Days 7 (14.8%), 14 (19.6%), and 21 (30.6%). • **Conclusions:** In the real-world AROMA study, dupilumab led to rapid and significant improvements in NC and LoS symptoms within the first 28 days of treatment, supporting its efficacy in managing these key CRSwNP symptoms
27 Feb 2026	Real-World Dupilumab Effectiveness Through 18 Months in Patients with CRSwNP and Coexisting Allergic Rhinitis: Results from the Global AROMA Registry	Drew White	• **Introduction:** Allergic rhinitis (AR) is a common type 2 comorbidity in patients with chronic rhinosinusitis with nasal polyps (CRSwNP). While dupilumab is known to be effective for CRSwNP, real-world evidence regarding its impact on patients with both CRSwNP and AR is limited. • **Methodology:** The AROMA phase 4 global registry (NCT04959448) tracks adults with CRSwNP initiating dupilumab in real-world settings across multiple countries. AR symptoms were assessed using the AR-VAS (0-100 scale) at baseline, 6, 12, and 18 months. • **Results:** Of 691 patients treated with dupilumab, 67.1% had AR. AR-VAS scores improved progressively, with mean scores at baseline, 6, 12, and 18 months being 52.3, 21.3, 19.2, and 18.5, respectively. In patients with coexisting asthma, the improvements were similarly significant. Those with AR but no asthma showed less improvement after 18 months. • **Conclusions:** Dupilumab significantly improved AR symptoms in patients with CRSwNP and coexisting AR, with or without asthma, in real-world clinical practice, supporting its long-term efficacy for managing both conditions.

Notable Presentations At AAAAI 2026
CRSwNP/CRSsNP, Allergic Rhinitis & Upper Airway Disease (4/11)

Date	Title	Author	Summary
27 Feb 2026	Efficacy of Tezepelumab in North American and European Patients With CRSwNP, Overall and by History of Nasal Polyp Surgery: Results From the WAYPOINT Study	Seong Cho	• **Introduction:** Tezepelumab has shown significant improvements in sinonasal outcomes for adults with chronic rhinosinusitis with nasal polyps (CRSwNP) in the WAYPOINT trial. This post-hoc analysis evaluates its efficacy in North American and European patients, considering prior nasal polyp (NP) surgery and geographic variations in type 2 inflammation. • **Methodology:** Adults with uncontrolled CRSwNP were randomized to receive tezepelumab 210 mg or placebo every 4 weeks for 52 weeks. The analysis focused on patients from North America and Europe. Key outcomes included changes in total NP score (NPS), nasal congestion score (NCS), Sinonasal Outcome Test-22 (SNOT-22), and loss of smell. • **Results:** 312 patients were included (157 tezepelumab, 155 placebo). Significant improvements in NPS, NCS, SNOT-22, and loss of smell were observed in both patients with and without prior NP surgery. Tezepelumab showed greater improvements overall, with patients having prior surgery showing the most significant reductions in NPS and NCS. • **Conclusions:** Tezepelumab demonstrated high efficacy in improving sinonasal outcomes in CRSwNP patients, with significant benefits for those with and without prior NP surgery. These findings highlight the effectiveness of tezepelumab in North American and European populations
27 Feb 2026	Twice-Yearly Depemokimab Improved Nasal Polyp Burden and Nasal Obstruction in Chinese Patients with Chronic Rhinosinusitis with Nasal Polyps (CRSwNP): Subpopulation Analysis of Phase 3 ANCHOR-1/2 Trials	Mu Xian	• **Introduction:** Depemokimab, an ultra-long-acting biologic for type-2 inflammation, showed significant improvements in nasal polyps and nasal obstruction in the global ANCHOR-1/2 trials. This study assesses the efficacy and safety of depemokimab in the Chinese subpopulation of patients with chronic rhinosinusitis with nasal polyps (CRSwNP). • **Methodology:** Adults with CRSwNP, NPS ≥5, moderate-to-severe nasal obstruction, and a history of CRSwNP surgery or prior systemic corticosteroid treatment were randomized 1:1 to receive depemokimab 100 mg or placebo every 26 weeks for 52 weeks. Co-primary endpoints included changes in total endoscopic NPS at Week 52 and VRS from Weeks 49–52. • **Results:** In 63 Chinese participants, depemokimab showed improvements in total NPS (treatment difference: -0.5) and nasal obstruction score (treatment difference: -0.18) versus placebo. Adverse event rates were similar between treatment groups, with a lower incidence of serious adverse events in the depemokimab group (3% vs 14%). • **Conclusions:** Depemokimab demonstrated significant improvements in nasal polyps and nasal obstruction in Chinese patients with CRSwNP, with safety and tolerability profiles consistent with global findings.

Notable Presentations At AAAAI 2026
CRSwNP/CRSsNP, Allergic Rhinitis & Upper Airway Disease (5/11)

Date	Title	Author	Summary
27 Feb 2026	Absence of Hypereosinophilia in Patients with Chronic Rhinosinusitis with Nasal Polyps (CRSwNP) Treated with Tezepelumab: Results from the WAYPOINT Study	Joshua Jacobs	• **Introduction:** Hypereosinophilia has been observed with biologics targeting IL-4 and IL-13 signaling. This post-hoc analysis of the phase 3 WAYPOINT study (NCT04851964) evaluates the incidence of hypereosinophilia following tezepelumab treatment in patients with uncontrolled chronic rhinosinusitis with nasal polyps (CRSwNP). • **Methodology:** Adults with uncontrolled CRSwNP received either tezepelumab 210 mg or placebo every 4 weeks for 52 weeks. The incidence of hypereosinophilia (defined as blood eosinophil count [BEC] ≥1500 cells/μL or ≥3000 cells/μL) was assessed during the study period. • **Results:** In the analysis of 408 patients (203 tezepelumab, 205 placebo), none receiving tezepelumab developed hypereosinophilia, while four placebo patients experienced it (1.5% ≥1500 cells/μL and 0.5% ≥3000 cells/μL). • **Conclusions:** Tezepelumab treatment did not result in hypereosinophilia, while a low incidence was observed in the placebo group. The blockade of TSLP and IL-5 with tezepelumab may prevent eosinophilia, differentiating it from biologics targeting only IL-4 and IL-13.
27 Feb 2026	Comparative Effectiveness of Dupilumab Versus Endoscopic Sinus Surgery in Severe Chronic Rhinosinusitis with Nasal Polyps: A Prospective 12-Month Cohort Study	Eugene Chang	• **Introduction:** This study compares the long-term outcomes of these therapies, focusing on polyp recurrence, olfactory function, and sinonasal symptom burden. • **Methodology:** In a 12-month prospective cohort study, adults with refractory CRSwNP were treated with either dupilumab (n=20) or ESS (n=30). Key outcomes included SNOT-22, Nasal Polyp Score (NPS), University of Pennsylvania Smell Identification Test (UPSIT-40), and Nasal Congestion Score (NCS). • **Results:** Both therapies significantly improved symptoms, olfaction, and polyp burden ($p<0.001$). ESS provided faster early relief (3-month SNOT-22: 17.5 vs 32.6), while dupilumab showed superior long-term control (12-month SNOT-22: 8.5 vs 23.8) and better olfactory recovery (UPSIT-40: 32.8 vs 24.9). NPS improvements were faster with ESS but converged by 12 months. Dupilumab provided consistent benefits across high-risk groups such as asthma, female sex, former smokers, and non-Hispanic ethnicity. • **Conclusions:** ESS and dupilumab both improve CRSwNP, but dupilumab offers more durable control and consistent benefits across high-risk subgroups, supporting its use in precision treatment based on patient phenotyping.

Notable Presentations At AAAAI 2026
CRSwNP/CRSsNP, Allergic Rhinitis & Upper Airway Disease (6/11)

Date	Title	Author	Summary
27 Feb 2026	Tezepelumab Modulates Expression of Nasal Polyp Genes Associated with Polyp Pathophysiology and Epithelial Health in Chronic Rhinosinusitis with Nasal Polyps: Results from the Phase 3 WAYPOINT Study	Brian Lipworth	• **Introduction:** Tezepelumab, targeting TSLP to reduce type 2 inflammation, showed promise in the WAYPOINT study by reducing nasal polyp size and congestion in CRSwNP. This study explores its effects on gene expression in nasal polyps. • **Methodology:** Participants with CRSwNP received tezepelumab (210 mg every 4 weeks) or placebo for 52 weeks. RNA sequencing on nasal polyp samples from 134 participants assessed gene expression and clinical response via NPS, NCS, and SNOT-22 scores. • **Results:** Tezepelumab significantly altered 669 genes, impacting pathways linked to polyp pathophysiology and epithelial health, reducing inflammatory cell types, and showing efficacy in T2-skewed endotypes. • **Conclusions:** Tezepelumab effectively reduces inflammation and restores epithelial function in CRSwNP.
27 Feb 2026	Biologics for Chronic Rhinosinusitis with Nasal Polyps: A Belgian Real-World Prospective Cohort Study	Manon Blauwblomme	• **Introduction:** Monoclonal antibody therapies targeting type 2 inflammation have demonstrated efficacy in randomized controlled trials (RCTs) for chronic rhinosinusitis with nasal polyps (CRSwNP), but real-world comparative data across approved biologics remain scarce. • **Methodology:** This multicenter Belgian prospective cohort study included 344 patients with severe CRSwNP initiating biologic therapy between March 2022 and December 2024 (omalizumab n=65, mepolizumab n=242, dupilumab n=37). Clinical assessments at baseline and 6 months included Total Nasal Polyp Score (TNPS), SNOT-22, visual analogue scales (VAS), and the UPSIT smell test. • **Results:** All biologics significantly reduced TNPS ($p<0.001$ within groups). SNOT-22 scores improved similarly across groups. Dupilumab showed the greatest improvement in VAS smell and UPSIT Using the EUFOREA criteria, 75.9% of dupilumab-treated patients were good-to-excellent responders, compared with 42.6% with omalizumab and 47.3% with mepolizumab. • **Conclusions:** In this real-world cohort, biologic therapies significantly improved both objective and patient-reported outcomes in severe CRSwNP. Dupilumab demonstrated the most substantial impact on nasal polyp size, olfactory function, and overall treatment response.

Notable Presentations At AAAAI 2026
CRSwNP/CRSsNP, Allergic Rhinitis & Upper Airway Disease (7/11)

Date	Title	Author	Summary
27 Feb 2026	A Phase 2b, Randomized, Double-Blind, Placebo-Controlled, Multicenter Study of the Efficacy and Safety of Brensocatib in Participants with Chronic Rhinosinusitis Without Nasal Polyps (CRSsNP) – The BiRCh Study	Philippe Gevaert	• **Introduction:** Neutrophilic inflammation is key to the pathophysiology of chronic rhinosinusitis with nasal polyps (CRSsNP), causing persistent symptoms and a poor quality of life. Brensocatib, an oral DPP1 inhibitor targeting neutrophilic inflammation, is in clinical development for CRSsNP and is approved in the US for non-cystic fibrosis bronchiectasis. • **Methodology:** This study (NCT06013241) randomized 288 patients with CRSsNP to receive brensocatib 10mg, 40mg, or placebo for 24 weeks, alongside daily mometasone furoate nasal spray (MFNS). Primary efficacy was assessed by change in Sinus Total Symptom Score (sTSS) at week 24. Secondary endpoints included safety, pharmacokinetics, and additional efficacy measures. • **Results:** Primary and key secondary results, including changes in sTSS, sinus opacification, Lund-MacKay CT score, and other nasal congestion scores, will be reported. Safety and pharmacokinetic outcomes are also assessed. • **Conclusions:** Brensocatib is being evaluated as a promising new treatment for CRSsNP, addressing the neutrophilic-driven inflammation characteristic of this disease. Results from this study will provide insights into its therapeutic potential.
28 Feb 2026	Long-term benefits of allergen immunotherapy in local allergic rhinitis: A 10-year follow-up study.	Trinidad Gaitan Nievas	• **Introduction:** This study evaluates the sustained clinical and preventive impact of AIT in LAR patients over a 10-year period. • **Methodology:** LAR patients who showed clinical improvement after a 1-year randomized controlled trial of subcutaneous AIT were included. They received a full 3-year AIT course and were followed for 7 additional years. A matched non-AIT LAR group was also followed. Primary outcomes included nasal-ocular symptom scores (VAS), rescue medication use, and medication-free days (MFD). Secondary outcomes included asthma incidence, lung function (FEV_1), QoL, and new sensitizations via nasal allergen challenge (NAC). • **Results:** 66 patients were enrolled. The AIT group showed sustained reductions in nasal-ocular symptoms and increased MFD from year 3. Asthma developed in 40.7% of non-AIT patients compared to 8.0% in the AIT group. New sensitizations were more frequent in non-AIT patients FEV_1 improved in the AIT group and declined in the non-AIT group. • **Conclusions:** AIT provides sustained clinical improvement, significantly reduces asthma development, and prevents new sensitizations in LAR, supporting its role as a long-term disease-modifying therapy.

Notable Presentations At AAAAI 2026
CRSwNP/CRSsNP, Allergic Rhinitis & Upper Airway Disease (8/11)

Date	Title	Author	Summary
28 Feb 2026	Distinct nasal epithelial transcriptomic responses of early- and late-phase ragweed-allergic subjects in a controlled pollen exposure chamber	Koa Hosoki	• **Introduction:** EPR and LPR exhibit different allergic rhinitis phenotypes, but their nasal epithelial responses to allergens have not been explored. This study aimed to characterize these responses. • **Methodology:** Participants underwent ragweed exposure in a controlled chamber. Nasal samples were collected at baseline, after exposure, and 7 hours post-exposure. RNA sequencing and pathway analyses were performed to distinguish EPR, LPR, and non-allergic controls. • **Results:** LPR showed robust transcriptional activation post-exposure, while EPR and healthy controls exhibited minimal changes. Pathway analysis revealed significant differences in leukocyte activation, TLR signaling, and eosinophil migration between LPR, EPR, and controls. • **Conclusions:** Distinct nasal epithelial responses to allergens in EPR, LPR, and controls reveal mechanisms of late-phase allergic reactions, aiding targeted therapies.
1 Mar 2026	Dupilumab for Treatment of Allergic Fungal Rhinosinusitis in Adults and Children Aged 6 and Over: Results from LIBERTY-AIMS Study	Amber Luong	• **Introduction:** Allergic fungal rhinosinusitis (AFRS) is marked by intense type 2 inflammation. Dupilumab, effective in chronic rhinosinusitis, may benefit AFRS patients by blocking IL-4/IL-13 • **Methodology:** LIBERTY-AIMS, a phase 3 placebo-controlled study, enrolled AFRS patients aged ≥6. Patients received dupilumab or placebo for 52 weeks, with key endpoints including Lund-Mackay CT score (LMK-CT), nasal congestion (NC), and nasal polyp score (NPS). • **Results:** Dupilumab significantly improved LMK-CT, NC, and NPS scores at Weeks 24 and 52 compared to placebo. Fewer adverse events were reported with dupilumab. • **Conclusions:** Dupilumab demonstrated significant clinical benefits in AFRS, improving key symptoms and being well-tolerated.

Notable Presentations At AAAAI 2026
CRSwNP/CRSsNP, Allergic Rhinitis & Upper Airway Disease (9/11)

Date	Title	Author	Summary
1 Mar 2026	Synthetic TLR4 agonist rapidly reduces TNSS in ragweed-allergic subjects in a Phase 1 NAC trial	Shannon Miller	• **Introduction:** INI-2004, a synthetic TLR4 agonist, was tested as a disease-modifying allergy immunotherapy in ragweed-allergic subjects. • **Methodology:** A double-blind, placebo-controlled Phase 1b trial (NCT06038279) randomized participants to receive intranasal INI-2004 or placebo, followed by ragweed allergen challenge at multiple timepoints. Nasal symptom scores and nasal congestion were measured. • **Results:** INI-2004 reduced total nasal symptom scores (TNSS) and nasal congestion in a dose-dependent manner, with significant improvements observed with 0.5 mg after each challenge ($p=0.0182$). • **Conclusions:** INI-2004 demonstrated rapid, durable effects in reducing TNSS and nasal congestion, supporting its potential as a disease-modifying treatment for ragweed allergy.
1 Mar 2026	Disease-modifying effects of Dupilumab in CRSwNP: A randomised-placebo controlled trial	An-Sofie Viskens	• **Introduction:** Dupilumab, targeting type 2 inflammation, has shown potential as a disease-modifying treatment for chronic rhinosinusitis with nasal polyps (CRSwNP). This study investigates its effects on the nasal epithelial barrier and airway remodeling. • **Methodology:** 24 CRSwNP patients were randomized to dupilumab or placebo for 24 weeks. Clinical parameters, nasal biopsies, serum samples, and secretions were collected at baseline, 3, and 6 months. • **Results:** Dupilumab upregulated tight-junction genes, downregulated T2 genes, and reduced basal-cell remodeling markers. Clinically, dupilumab improved nasal symptoms, smell scores, and quality of life (all $p<0.05$). • **Conclusions:** Dupilumab modulates the epithelial barrier, reduces T2 inflammation, and enhances clinical outcomes, supporting its disease-modifying role in CRSwNP.

Notable Presentations At AAAAI 2026
CRSwNP/CRSsNP, Allergic Rhinitis & Upper Airway Disease (10/11)

Date	Title	Author	Summary
1 Mar 2026	Efficacy and Safety of Verekitug (UPB-101) in Chronic Rhinosinusitis With Nasal Polyps: Results of the Phase 2 VIBRANT Trial	Joseph Han	• **Introduction:** Chronic rhinosinusitis with nasal polyps (CRSwNP), driven by TSLP-mediated inflammation, causes significant symptom burden and reduced quality of life. Verekitug, a potent TSLP receptor monoclonal antibody, may offer therapeutic benefit. • **Methodology:** VIBRANT, a double-blind, placebo-controlled Phase 2 trial, randomized patients with severe CRSwNP to receive either 100 mg verekitug or placebo every 12 weeks for 24 weeks. Primary endpoint: change in endoscopic nasal polyp score (NPS) at Week 24. • **Results:** Verekitug significantly reduced NPS, nasal congestion, total symptom score, difficulty with smell, and Lund-Mackay score. It also reduced the need for surgery or systemic corticosteroids by 76%. • **Conclusions:** Verekitug improves nasal polyp size, symptoms, and reduces the need for surgery in severe CRSwNP, with a favorable safety profile.
1 Mar 2026	Efficacy of Dupilumab in Eosinophilic Chronic Rhinosinusitis without Nasal Polyps: A Single Center, Randomized, Double-Blind, Placebo-Controlled Trial	Darshana Balasubramaniam	• **Introduction:** Dupilumab is approved for chronic rhinosinusitis with nasal polyps (CRSwNP), but its efficacy in chronic rhinosinusitis without nasal polyps (CRSsNP) remains unclear. This study investigates the therapeutic effects of dupilumab for CRSsNP. • **Methodology:** A single-center, randomized, double-blind, placebo-controlled trial enrolled adults with eosinophilic CRSsNP unresponsive to intranasal corticosteroids. Participants received dupilumab 300 mg or placebo every two weeks for 24 weeks. Primary endpoint: change in Lund-Mackay CT score. Secondary endpoints: UPSIT, SNOT-22, TNSS, and biomarkers. • **Results:** Dupilumab significantly improved Lund-Mackay score and olfactory function (UPSIT). Biomarker reductions favored dupilumab but were not statistically significant. • **Conclusions:** Dupilumab shows promise in improving disease burden and olfactory function in CRSsNP, warranting further investigation in larger trials.

Notable Presentations At AAAAI 2026
CRSwNP/CRSsNP, Allergic Rhinitis & Upper Airway Disease (11/11)

Date	Title	Author	Summary
1 Mar 2026	Predictors of Nasal Polyps Recurrence in Allergic Fungal Rhinosinusitis: A Retrospective Cohort Study	Adeeb Bulkhi	• **Introduction:** Allergic fungal rhinosinusitis (AFRS) is a severe form of chronic rhinosinusitis (CRS) linked to type-2 inflammation. This study investigates reliable predictors for recurrence after surgery in AFRS patients. • **Methodology:** A retrospective review of 108 AFRS patients analyzed demographic, clinical, and laboratory data to identify predictors of polyp recurrence. Predictors with univariate $p<0.10$ were evaluated using multivariable logistic regression. • **Results:** Recurrence occurred in 63.9% of patients. Baseline eosinophils, IgE, and SNOT-22 scores were significant predictors. Eosinophils, female sex, and time since last surgery were independently associated with recurrence. • **Conclusions:** Eosinophilic inflammation is a key predictor of AFRS recurrence. Combining eosinophil counts with clinical features can guide follow-up strategies. Further validation is needed.

Notable Presentations At AAAAI 2026
Urticaria & Hereditary Angioedema (HAE) (1/10)

Date	Title	Author	Summary
27 Feb 2026	Characteristics of IgE Deficient Patients with Chronic Urticaria: A Retrospective Study	Lauren Koralnik	• **Introduction:** Chronic urticaria (CU) pathobiology in IgE-deficient (IgE<2 kU/L) patients remains poorly defined. This study compares comorbidities and disease control between IgE-deficient (IED) and non-IED CU populations. • **Methodology:** A retrospective, age- and sex-matched (1:3) cohort study was conducted at Montefiore Medical Center (2015–2025). Thirty-three IED CU patients were matched to 99 non-IED controls. Chart review assessed demographics, laboratory parameters, comorbidities, treatment response, and omalizumab outcomes. • **Results:** IED patients were less likely Hispanic and exhibited higher vitamin D deficiency, basopenia, neutropenia, cancer history, and low IgM levels. Standard antihistamine response was significantly lower (31.5% vs 62%). Omalizumab use was similar; relapse after de-escalation was frequent in both groups. • **Conclusions:** IED CU associates with immune dysregulation markers and reduced antihistamine responsiveness, suggesting a potentially distinct, more refractory phenotype warranting prospective validation.
27 Feb 2026	Safety and Efficacy in Patients With Hereditary Angioedema After Switching to Garadacimab: Interim Analysis of a Phase 4, Open-Label Study	Jonathan Bernstein	• **Introduction:** Hereditary angioedema (HAE) management aims for complete attack suppression and quality-of-life normalization. Garadacimab, a monoclonal antibody targeting activated factor XII, is approved for long-term prophylaxis; real-world switching data remain limited. • **Methodology:** This ongoing, multicenter, single-arm Phase 4 study enrolled patients ≥12 years with HAE switching from ≥3 months of prior prophylaxis (lanadelumab or plasma-derived C1-esterase inhibitor) to garadacimab (400 mg SC loading, then 200 mg monthly). No washout was required. Primary endpoint: TEAEs; secondary: AESIs, SAEs; exploratory: attack rate. • **Results:** Six patients (median exposure ≤2.6 months) switched therapy. One mild, unrelated TEAE occurred; no AESIs, SAEs, discontinuations, or deaths. Pre-switch attack frequency was 0–3 over 3 months. No attacks occurred during garadacimab treatment. • **Conclusions:** Early data suggest favorable safety and complete short-term attack suppression post-switch, supporting further evaluation in larger cohorts.

Notable Presentations At AAAAI 2026
Urticaria & Hereditary Angioedema (HAE) (2/10)

Date	Title	Author	Summary
27 Feb 2026	Response Drivers in Sebetralstat Placebo-controlled Clinical Trials	Jonathan Bernstein	• **Introduction:** Sebetralstat, an oral plasma kallikrein inhibitor, demonstrated efficacy in placebo-controlled phase 2/3 trials for acute hereditary angioedema (HAE). This analysis identified determinants of time to initial symptom relief. • **Methodology:** Pooled phase 2/3 data (≥1 dose: 300mg/600mg or placebo; non-responders excluded) underwent parametric time-to-event modeling. Covariates included attack location, baseline severity, time to treatment, dose, and dosing frequency. A Gompertz hazard model with Bayesian information criterion–guided stepwise selection identified key predictors. Simulations (n=5000) evaluated 600mg dosing within 30 minutes. • **Results:** Time to treatment ≤30 minutes was the dominant predictor of symptom relief. Other covariates did not significantly improve model performance. Simulation predicted 88.5% (95% CI: 81.2–93.9%) achieving relief within 12 hours with early 600mg dosing. • **Conclusions:** Early oral intervention is the principal determinant of rapid symptom control, reinforcing guideline-aligned prompt treatment strategies in HAE.
27 Feb 2026	On-demand Treatment Patterns of Hereditary Angioedema (HAE) Attacks with Sebetralstat in the KONFIDENT-S Study	Marc Riedl	• **Introduction:** Real-world studies indicate that 50%–70% of hereditary angioedema (HAE) attacks are treated with injectable on-demand therapies. This analysis from the KONFIDENT-S study assesses treatment preferences between sebetralstat and conventional therapies for acute HAE attacks. • **Methodology:** Participants in KONFIDENT-S self-administered 600mg sebetralstat for each attack, with a second dose allowed ≥3 hours. Conventional treatments were permitted if symptoms were severe. Treatment choices were at the participant's discretion. Attack management data were collected, with treatment patterns analyzed. • **Results:** Of 2077 attacks reported, 98.1% were treated: 82.1% with sebetralstat, 16% with conventional treatment. Sebetralstat was preferred for most attacks. Conventional treatment was more commonly used for initial attacks. Subcutaneous attacks and those without long-term prophylaxis were less likely to be treated. • **Conclusions:** The strong preference for sebetralstat reflects its practicality and participant willingness to treat mild attacks, resulting in higher treatment rates compared to real-world data.

Notable Presentations At AAAAI 2026
Urticaria & Hereditary Angioedema (HAE) (3/10)

Date	Title	Author	Summary
27 Feb 2026	Dupilumab Efficacy In Pooled LIBERTY-CSU CUPID Study A And Study C Regardless Of Baseline Serum Total IgE Levels	Sarbjit Saini	• **Introduction:** Chronic spontaneous urticaria (CSU) is a chronic inflammatory condition with pruritic wheals, and serum total IgE levels may guide therapy. This study evaluates dupilumab's efficacy in CSU patients with elevated IgE, despite standard antihistamine treatment. • **Methodology:** The LIBERTY-CSU CUPID Study A and Study C were 24-week, phase 3 trials of dupilumab in omalizumab-naive patients with symptomatic CSU. Patients received dupilumab or placebo subcutaneously every 2 weeks. Efficacy endpoints included Itch Severity Score (ISS7) and Urticaria Activity Score (UAS7) at Week 24, stratified by baseline serum total IgE levels. • **Results:** Dupilumab improved both itch and urticaria activity across IgE subgroups, showing consistent benefits regardless of baseline IgE levels. Mean changes in ISS7 and UAS7 favored dupilumab over placebo in all IgE categories, with no significant interaction effects. • **Conclusions:** Dupilumab effectively improved CSU symptoms regardless of baseline serum total IgE, reinforcing its broad applicability in CSU management.
27 Feb 2026	Chronic Urticaria With And Without Angioedema: Updated Cohort Study In Pediatric And Adult Populations	Angie Moshutz	• **Introduction:** Chronic urticaria (CU) is characterized by wheals and/or angioedema (AE), with AE indicating more severe disease. Pediatric and adult presentations and management strategies remain poorly defined. This study provides updated findings on CU and AE in pediatric versus adult populations. • **Methodology:** CU patients from the Pediatric Allergy Clinic at Montreal Children's Hospital and an external clinic were stratified by age (pediatric <18 years, adult ≥18 years) and AE status. Data included demographics, clinical scores (UAS7, UCT), treatments (antihistamines, omalizumab), and biomarkers (IgG anti-TPO). • **Results:** AE was present in 20% of pediatric and 44% of adult patients. AE+ children had higher treatment needs (high-dose antihistamines, omalizumab) and more frequent anti-TPO elevations compared to AE−. AE in adults predominantly affected hands, feet, and eyelids, with similar treatment patterns and anti-TPO levels. • **Conclusions:** AE necessitated treatment escalation in both age groups, with distinct biomarker profiles suggesting different AE phenotypes. These findings support tailored management strategies for CU based on AE status and patient age.

Notable Presentations At AAAAI 2026
Urticaria & Hereditary Angioedema (HAE) (4/10)

Date	Title	Author	Summary
27 Feb 2026	Substantial Burden Of Disease In Pediatric Patients With Hereditary Angioedema (HAE): Results From A Multinational Caregiver Survey	Francisco Alberto Contreras-Verduzco	• **Introduction:** Lanadelumab is an approved long-term prophylaxis (LTP) for hereditary angioedema (HAE) in patients aged ≥2 years. However, the disease burden in pediatric HAE patients is poorly documented. This survey explores the burden of HAE in children from multiple countries. • **Methodology:** A non-interventional, web-based survey was conducted between September 2019 and February 2023. Caregivers of pediatric HAE patients (<18 years) from Argentina, Brazil, Colombia, Mexico, Saudi Arabia, and Türkiye provided data on demographics, disease characteristics, and the impact of HAE on the child's life. • **Results:** Data from 99 children (mean age 10.2 years) were analyzed. On average, children experienced 13.3 attacks in the last 6 months, with 18 having throat/larynx involvement. Over 30% expressed emotional distress, and 74% had impaired daily activities. Most (78%) were not receiving LTP, and 5.0 school days were missed on average. • **Conclusions:** The significant humanistic burden of HAE in children highlights the need for effective LTP, as many children remain untreated and experience considerable emotional and functional distress.
27 Feb 2026	Navenibart Delays Time to First Attack in Hereditary Angioedema: Results from ALPHA-STAR	Raffi Tachdjian	• **Introduction:** Hereditary angioedema (HAE) is a rare disorder marked by recurrent swelling. The ALPHA-STAR trial (NCT05695248) evaluated the safety and efficacy of navenibart, a monoclonal antibody inhibitor of plasma kallikrein, in HAE patients, focusing on time to first attack post-treatment. • **Methodology:** Adults with HAE were enrolled in three treatment cohorts: 450 mg (Day 1), 600 mg (Day 1) and 300 mg (Day 84), and 600 mg (Day 1) and 600 mg (Day 28). Participants were followed for 6 months. The primary endpoint was safety, with secondary endpoints assessing time to first attack using Kaplan-Meier estimates. • **Results:** Twenty-nine participants were enrolled, with a mean age of 46.4 years. Baseline attack rate of 2.23/month was reduced to 0.31/month post-treatment. Median time to first attack was 241 days, with 7/12 participants in the 600 mg/600 mg cohort experiencing no attacks. • **Conclusions:** Navenibart demonstrated significant efficacy in reducing HAE attacks, supporting further investigation in Phase 3 trials, with promising data for less frequent dosing regimens.

Notable Presentations At AAAAI 2026
Urticaria & Hereditary Angioedema (HAE) (5/10)

Date	Title	Author	Summary
27 Feb 2026	Safety and Efficacy of Donidalorsen in Adolescent Patients With Hereditary Angioedema: 1-Year Results From OASISplus	H. James Wedner	• **Introduction:** In the phase 3 OASIS-HAE study, donidalorsen reduced hereditary angioedema (HAE) attack rates, including in adolescents. The OASISplus study (NCT05392114) reports 1-year safety and efficacy results for adolescents switching from prior HAE long-term prophylactic (LTP) medications to donidalorsen. • **Methodology:** Adolescent patients (12–17 years) stable on berotralstat, intravenous or subcutaneous C1INH, or lanadelumab switched to donidalorsen 80 mg SC every 4 weeks without washout. The primary endpoint was treatment-emergent adverse events (TEAEs), and secondary endpoints included HAE attack rate, Angioedema Quality of Life (AE-QoL), and plasma prekallikrein (PKK). • **Results:** Six adolescents switched to donidalorsen, with 4 completing 1 year of treatment. TEAEs were reported in 75% of patients, none serious or treatment-related. HAE attack rates decreased by 85%, plasma PKK reduced by 66%, and AE-QoL scores improved by 4.8 points. • **Conclusions:** Donidalorsen showed an acceptable safety profile in adolescents, improving HAE attack rates and quality of life, confirming overall positive outcomes from OASISplus
27 Feb 2026	Navenibart Demonstrates Durable Efficacy and Tolerability Across Biological Sexes: Subgroup Analysis from the ALPHA-STAR Trial	Karl Sitz	• **Introduction:** Hereditary angioedema (HAE) is characterized by recurrent swelling attacks, with biological sex influencing disease severity and symptom burden. This study evaluates sex-based differences in response to navenibart, a monoclonal antibody targeting plasma kallikrein. • **Methodology:** ALPHA-STAR (NCT05695248), a Phase 1b/2 dose-ranging trial, assessed navenibart's safety and efficacy in adults with HAE. Participants received navenibart in three cohorts (450 mg, 600 mg/300 mg, and 600 mg/600 mg) for up to 9 months. This post-hoc analysis compared attack frequency and severity based on biological sex. • **Results:** Of 29 participants (55.2% female, 44.8% male), females had a higher baseline attack rate (2.60 vs 1.77). Both sexes showed substantial reductions in monthly attack rates (84.1% in females, 89.8% in males). TEAEs were mild to moderate, with no significant sex differences in adverse events. • **Conclusions:** Navenibart demonstrated consistent efficacy and safety regardless of biological sex, supporting further Phase 3 evaluation in HAE.

Notable Presentations At AAAAI 2026
Urticaria & Hereditary Angioedema (HAE) (6/10)

Date	Title	Author	Summary
27 Feb 2026	New SubmissionInitial Results From A Phase 2, Open-label Extension Study To Evaluate The Long-term Safety And Efficacy Of The Anti-KIT Briquilimab Antibody In Adults With Chronic Urticaria	Martin Metz	• **Introduction:** Briquilimab is an investigational aglycosylated IgG1 monoclonal antibody that inhibits stem cell factor binding to KIT on mast cells, affecting KIT signaling and promoting mast cell apoptosis. It is being evaluated in phase 1b/2a trials for chronic spontaneous urticaria (CSU) and chronic inducible urticaria (CIndU). • **Methodology:** This open-label extension study administered 180 mg briquilimab subcutaneously every 8 weeks to adult participants with CSU or CIndU who completed a prior study. The primary endpoint was safety, and secondary endpoints included provocation testing thresholds (CIndU), UAS7 score (CSU), and UCT score. • **Results:** As of July 2025, 44 participants (31 CSU, 13 CIndU) were enrolled. In CSU patients, 73% (8/11) achieved complete response in UAS7 at Week 12. Briquilimab was well-tolerated, with no dose delays or discontinuations related to KIT blockade. Data for CIndU patients is pending. • **Conclusions:** Briquilimab demonstrated rapid and durable control of CSU symptoms with a favorable safety profile, supporting further investigation in chronic urticaria treatment.
27 Feb 2026	Results from SPOTLIGHT, a Phase 1b/2a Dose Escalation Study of the anti-c-Kit Briquilimab Antibody in Adults with Inducible Urticaria (CIndU) Who Remain Symptomatic Despite H-1 Antihistamine Treatment	Martin Metz	• **Introduction:** Chronic inducible urticaria (CIndU) involves recurrent hives and/or angioedema triggered by specific stimuli, such as cold, heat, or pressure. Briquilimab, an aglycosylated antibody targeting SCF/c-Kit signaling, aims to inhibit mast cell degranulation, addressing the pathogenesis of CIndU. • **Methodology:** SPOTLIGHT is an open-label, single ascending dose study of briquilimab in adults with symptomatic ColdU or SD despite H1 antihistamine treatment. Primary endpoints focused on safety/tolerability, with efficacy evaluated through provocation testing (TempTest® for ColdU, FricTest® for SD) and the urticaria control test (UCT). • **Results:** 27 participants received briquilimab (40 mg, 120 mg, or 180 mg). 92% of those on 180 mg achieved a complete response within 12 weeks. Dose-dependent serum tryptase reductions correlated with clinical improvement. Adverse events (AEs) occurred in 88.9% of participants, with no serious or hypersensitivity reactions. • **Conclusions:** Briquilimab demonstrated dose-dependent efficacy and was well-tolerated, leading to rapid and significant improvement in CIndU symptoms, supporting its potential as an effective treatment for poorly controlled cases.

Notable Presentations At AAAAI 2026
Urticaria & Hereditary Angioedema (HAE) (7/10)

Date	Title	Author	Summary
27 Feb 2026	Long-Term Prophylactic Treatment with Oral Deucrictibant Improved Health-Related Quality of Life in Participants with Hereditary Angioedema: Final Results of the Phase 2 CHAPTER-1 Open-Label Extension Study	Michael Manning	• **Introduction:** Deucrictibant, a potent bradykinin B2 receptor antagonist, is under development for hereditary angioedema (HAE). Prior Phase 2 results showed improvement in health-related quality of life (HRQoL) from as early as week 4 of treatment. This study evaluates the impact of deucrictibant on HRQoL during the open-label extension (OLE) phase. • **Methodology:** 30 participants who completed the randomized controlled trial (RCT) continued into the OLE, self-administering 40 mg/day deucrictibant. HRQoL was assessed using the Patient Global Assessment of Change (PGA-C) and Angioedema QoL Questionnaire (AE-QoL). • **Results:** All participants reported significant HRQoL improvement at week 86, with a 26.9-point improvement in AE-QoL. The greatest improvements were seen in "functioning" and "fear/shame" domains. • **Conclusions:** Deucrictibant significantly improves HRQoL in HAE patients, with long-term benefits supported by OLE data
27 Feb 2026	Additional Benefit of Switching to Donidalorsen for Patients with Hereditary Angioedema Having Breakthrough Attacks: Findings from the OASISplus Study	Marc Riedl	• **Introduction:** This study explores the impact of switching to donidalorsen on disease control and quality of life (QoL), based on baseline HAE attack rates. • **Methodology:** A post-hoc analysis of the 52-week OASISplus study (NCT05392114) was conducted in 64 patients who switched from prior LTP therapies (lanadelumab, C1-INH, or berotralstat) to donidalorsen. Disease control was measured using the Angioedema Control Test (AECT), and QoL was assessed using the AE-QoL and HAE-QoL. Changes in scores were analyzed by baseline attack rate subgroups (low: <1.0 vs high: ≥1.0 attacks/month). • **Results:** Improvements were seen in AECT, AE-QoL, and HAE-QoL scores after switching to donidalorsen. Patients with higher baseline attack rates showed significantly greater improvements in AECT (ES=1.36), AE-QoL (ES=1.12), and HAE-QoL (ES=0.90) compared to those with lower baseline attack rates. • **Conclusions:** Switching to donidalorsen led to improvements in disease control and QoL in HAE patients, with those experiencing more frequent breakthrough attacks benefiting the most, highlighting donidalorsen's potential for patients with higher disease burden.

Notable Presentations At AAAAI 2026
Urticaria & Hereditary Angioedema (HAE) (8/10)

Date	Title	Author	Summary
1 Mar 2026	LP-003 Significantly Decreases Chronic Spontaneous Urticaria Disease Activity and is Well Tolerated: Top Line Results from a Phase 2 Trial	Yuxiang Zhi	• **Introduction:** LP-003, a novel anti-IgE antibody, has higher IgE binding affinity, stronger FcεRI inhibition, and a longer half-life than Omalizumab. This study investigates the efficacy and safety of LP-003 in patients with refractory chronic spontaneous urticaria (CSU). • **Methodology:** In this multi-center, double-blind Phase 2 clinical trial (NCT06228560), patients were randomized to receive 100 mg Q8W, 200 mg Q8W, or 200 mg Q4W of LP-003, 300 mg Omalizumab, or placebo. Primary endpoints included the proportion of patients achieving UAS7=0 and the mean change in UAS7 from baseline at Week 12. • **Results:** A total of 202 patients were enrolled. At Week 12, the proportion of patients achieving UAS7=0 was higher for LP-003 200 mg Q8W (66.7%) and 200 mg Q8W+Q4W (57.5%) compared to Omalizumab (43.6%) and placebo (10.8%) (200 mg Q8W vs. Omalizumab p=0.0405). LS mean changes in UAS7 were also significantly better for LP-003 (200 mg Q8W: -26.60, p=0.0137; 200 mg group Q8W+Q4W: -24.72, p<0.0001). • **Conclusions:** LP-003 demonstrated clinically meaningful and statistically significant improvements in UAS7 compared to Omalizumab in patients with refractory CSU, along with a favorable safety profile. These results support further development of LP-003 in this setting.
1 Mar 2026	Significant HAE Attack Reduction with BW-20805, a Long-Acting Prophylactic Injection-An Ongoing Phase 2 Study in Adult with Hereditary Angioedema	Yuxiang Zhi	• **Introduction:** Plasma prekallikrein (PKK) is a validated target for hereditary angioedema (HAE) therapy. BW-20805, a GalNAc-conjugated siRNA, is designed to suppress hepatic PKK expression, offering a long-acting preventive approach for HAE attacks. • **Methodology:** This open-label, international, multicenter study evaluated BW-20805 in 24 adults with HAE types I/II, divided into three dosing regimens: 600 mg Q24W, 300 mg Q24W, and 300 mg Q12W (n=8/group). Changes in time-normalized HAE attack rates were assessed from Day 29 after the first dose, with data collection continuing through September 30, 2025. • **Results:** 14 participants were randomized and dosed. 80% (8/10) remained attack-free. Time-normalized HAE attack rates decreased by 100% in the 600 mg Q24W group, 89% in the 300 mg Q24W group, and 87% in the 300 mg Q12W group. PKK levels decreased by approximately 97% in the 600 mg Q24W group and 92% in pooled 300 mg groups by Day 85. BW-20805 was generally well-tolerated, with mild transient injection-site reactions and no SAEs. • **Conclusions:** BW-20805 significantly reduced HAE attacks and was well-tolerated. Sustained PKK suppression supports further evaluation, particularly for the Q24W dosing regimen. The Phase 2 study is ongoing, with more data expected.

Notable Presentations At AAAAI 2026
Urticaria & Hereditary Angioedema (HAE) (9/10)

Date	Title	Author	Summary
1 Mar 2026	JYB1904, A Novel Recombinant Humanized Half-Life Extended Anti-IgE Monoclonal Antibody for Chronic Spontaneous Urticaria（CSU）: Week 16 Interim Analysis Results of a Phase 2 Study versus Omalizumab	Yingyun Shi	• **Introduction:** JYB1904, a next-generation anti-IgE antibody, has shown favorable safety, pharmacokinetics (PK), and pharmacodynamics (PD) in Phase 1 trials. This Phase 2 study evaluates its efficacy, safety, and tolerability in chronic spontaneous urticaria (CSU) patients, comparing it with omalizumab. • **Methodology:** 135 adult CSU patients, inadequately controlled by H1 antihistamines, were randomized to receive JYB1904 (single dose or Q8W) or omalizumab (Q4W). Primary endpoint: change in urticaria activity score (UAS7). Secondary endpoints: UAS7=0, itch severity, hive severity, and other safety markers. • **Results:** JYB1904 showed similar efficacy to omalizumab, with more frequent dosing. Both JYB1904 groups demonstrated significant improvements in UAS7 compared to omalizumab. Safety and tolerability were comparable. • **Conclusions:** JYB1904 shows comparable efficacy with less frequent dosing and similar safety to omalizumab in CSU, supporting further development.
1 Mar 2026	First-In-Human, Proof-of-Mechanism Phase 1 Study of the Oral MRGPRX2 Antagonist SEP-631 Utilizing Short Wave Infrared Imaging to Assess Response to an Icatibant Skin Challenge	Jody Tversky	• **Introduction:** Chronic spontaneous urticaria (CSU) is marked by recurrent hives, with MRGPRX2 activation implicated in its pathogenesis. SEP-631, a negative allosteric modulator of MRGPRX2, is being investigated for its ability to inhibit mast cell degranulation. • **Methodology:** This first-in-human, double-blind, placebo-controlled study evaluates SEP-631 in healthy volunteers using single and multiple ascending doses (SAD, MAD). Skin challenges with icatibant, an MRGPRX2 agonist, assessed target engagement, with skin wheals measured via short-wave infrared imaging (AllergyScope). • **Results:** The study was near completion with favorable safety and tolerability. Pharmacokinetic and pharmacodynamic data are pending. • **Conclusions:** SEP-631 demonstrated pharmacodynamic responses consistent with MRGPRX2 inhibition, and SWIR imaging accurately quantified inflammatory responses. Further data to confirm findings.

Notable Presentations At AAAAI 2026
Urticaria & Hereditary Angioedema (HAE) (10/10)

Date	Title	Author	Summary
1 Mar 2026	Oral Deucrictibant Immediate-Release Capsule in Treatment of Hereditary Angioedema Attacks: Results of the Phase 3 RAPIDe-3 Study	Marc Riedl	• **Introduction:** Deucrictibant is an orally administered bradykinin B2 receptor antagonist for treating hereditary angioedema (HAE) attacks, aiming to reduce bradykinin-induced symptoms. • **Methodology:** RAPIDe-3 is a Phase 3, double-blind, placebo-controlled trial evaluating the efficacy and safety of deucrictibant 20 mg capsules in adolescents and adults with HAE. Participants received either deucrictibant or placebo to treat non-severe HAE attacks. • **Results:** The study achieved target enrollment (N=120), with primary endpoints focusing on time to symptom relief. Secondary outcomes included attack severity reduction and attack resolution. • **Conclusions:** The trial aims to confirm the efficacy of deucrictibant for HAE attacks, with results expected by Q4 2025.
1 Mar 2026	Long-Term Safety and Efficacy of Oral Deucrictibant for Prophylaxis in Hereditary Angioedema: Final Results of the Phase 2 CHAPTER-1 Open-Label Extension Study	John Anderson	• **Introduction:** Deucrictibant is a potent bradykinin B2 receptor antagonist being evaluated for the prophylactic treatment of hereditary angioedema (HAE) attacks. • **Methodology:** The CHAPTER-1 study comprised a 12-week randomized controlled trial (RCT) followed by a 30-month open-label extension (OLE). Participants who completed the RCT (N=34) continued into the OLE, receiving deucrictibant 40 mg/day. • **Results:** The final OLE analysis (N=30) showed a significant reduction in attack rate from 2.18 to 0.12 during the OLE. Deucrictibant was well tolerated with minimal adverse events. • **Conclusions:** Deucrictibant demonstrated long-term safety and efficacy for HAE prophylaxis, with a substantial reduction in attack frequency.

Notable Presentations At AAAAI 2026
Food Allergy, Anaphylaxis & Allergen Immunotherapy (1/14)

Date	Title	Author	Summary
27 Feb 2026	Food Elimination is an Effective Treatment in Pediatric Eosinophilic Colitis: A Retrospective Study	Divya Reddy Voladri	• **Introduction:** Eosinophilic colitis (EoC), a rare eosinophilic gastrointestinal disease, lacks robust data on dietary treatment response. This study evaluated histologic outcomes following food elimination diets (FED) in pediatric EoC. • **Methodology:** Retrospective cohort (2012–2024) at a single EGID center. FED selection was shared decision-making. Histologic response was categorized as complete (normalization), partial (≥50% eosinophil reduction), or non-response. • **Results:** Among 33 patients, 18 received FED alone. Complete response occurred in 78%, partial in 5%, non-response in 17%. Milk elimination alone accounted for 60% of responders. • **Conclusions:** FED, particularly milk elimination, achieved high histologic remission rates, supporting dietary therapy as first-line pediatric EoC management.
27 Feb 2026	Improving Food Allergy Knowledge in Middle School Students: Results from a College Student-Led Cooking and STEM Summer Program	Michael Yang	• **Introduction:** Food allergy affects over 30 million Americans, yet youth education remains inadequate. This study evaluated a student-led culinary-STEM model integrating structured food allergy education. • **Methodology:** Two 3-hour programs (n=36; ages 10–13) combined didactic instruction and hands-on cooking. Pre/post assessments included a six-item multiple-choice quiz and Top 9 allergen recall, adapted from CFAAR materials. • **Results:** Multiple-choice scores improved from 56.5% to 82.4% ($p<0.001$). Allergen identification increased from 13.9% to 56.8% ($p<0.0001$), demonstrating robust short-term knowledge gains. • **Conclusions:** Culinary-integrated education significantly improves pediatric food allergy literacy, supporting scalable, community-based prevention strategies.

Notable Presentations At AAAAI 2026
Food Allergy, Anaphylaxis & Allergen Immunotherapy (2/14)

Date	Title	Author	Summary
27 Feb 2026	Availability and Uptake of Food Allergy Resources – Results from a National Survey	Carla Godoy	• **Introduction:** Access to food allergy (FA) education, counseling, and specialist referral may improve outcomes, yet disparities persist. This study assessed availability and uptake of FA educational resources in a nationally representative population. • **Methodology:** An IRB-exempt online survey (n=2079) of food-allergic adults/caregivers evaluated resource provision, utilization, and information sources. Analyses examined associations with insurance status and race/ethnicity. • **Results:** Allergen avoidance (69%), label guidance (62%), and allergist referral (57%) were most commonly provided. Insurance status significantly influenced access ($p<0.04$). Black and Latino respondents more frequently reported inadequate resources ($p<0.0001$). • **Conclusions:** Persistent gaps and disparities highlight the need for equitable, accessible FA educational strategies.
27 Feb 2026	(263) Pilot Study of the Effect of Antifungal Treatment on Environmental and Food Allergies	Angela Liu	• **Introduction:** Airway mycosis-related allergic disorders (AMRADs) respond to antifungals in asthma and chronic rhinosinusitis, but effects on broader atopy remain unclear. This study evaluated antifungal impact on total and specific IgE. • **Methodology:** Retrospective analysis of 20 U.S. veterans with confirmed airway mycosis (positive fungal culture or fungal-specific IgE). Paired t-tests compared pre/post-treatment total and environmental/food-specific IgE; GERD with aspiration and odontogenic infection were excluded. • **Results:** Total IgE significantly decreased ($p=0.048$). Significant reductions occurred for timothy grass, soybean, and cottonwood; trends for Alternaria, Penicillium, and bermuda grass. One shrimp-anaphylactic patient tolerated shrimp post four-fold IgE decline. • **Conclusions:** Airway mycosis may amplify systemic atopy; antifungals warrant prospective evaluation in allergic rhinitis and food allergy.

Notable Presentations At AAAAI 2026
Food Allergy, Anaphylaxis & Allergen Immunotherapy (3/14)

Date	Title	Author	Summary
28 Feb 2026	IgE-Mediated Chlorhexidine Hypersensitivity: A 10-Year Retrospective Cohort Study in Thailand	Chawitsin Pinchumphonsaeng	• **Introduction:** Chlorhexidine is an underrecognized trigger of periprocedural IgE-mediated hypersensitivity, capable of severe anaphylaxis. This study characterized confirmed chlorhexidine allergy in a tertiary Thai center. • **Methodology:** Retrospective review (2014–2024) of confirmed IgE-mediated cases (n=22) among 240 labeled patients. Clinical features, exposure routes, severity (Ring and Messmer), and diagnostic testing (specific IgE, skin testing, basophil activation, tryptase) were analyzed. • **Results:** Twenty-nine reactions occurred: 17 anaphylactic (76% grade 3). Anaphylaxis patients were older (p=0.047) with faster onset. Skin exposure predominated (76%). Specific IgE showed highest sensitivity (82%); tryptase elevated in 8/9 anaphylaxis cases. • **Conclusions:** Chlorhexidine causes severe IgE-mediated reactions; accurate diagnosis is essential to prevent recurrence.
28 Feb 2026	Hypersensitivity Reactions to Iodinated Contrast Media in Latin America and the Iberian Peninsula: First Multicenter Study Bridging European and US Practices	Cristina Pesantez Mendez	• **Introduction:** Hypersensitivity reactions (HSR) to iodinated contrast media (ICM) lack standardized management globally. This study evaluated diagnostic and therapeutic approaches among allergists in Latin America and the Iberian Peninsula. • **Methodology:** Cross-sectional, 25-item survey of 109 allergists in referral centers. Descriptive statistics and association testing (Chi-square/Fisher's exact; $p<0.05$) assessed diagnostic strategies, testing practices, and management patterns. • **Results:** Skin testing was used by 73.4%, though only 44% applied standardized concentrations. Diagnostic approaches were largely personalized (57.8%). Culprit identification ≥50% was achieved by 22%. Management varied, with avoidance common and selective provocation performed in severe, test-negative cases. • **Conclusions:** Marked heterogeneity reflects hybrid European testing and US empirical avoidance models, underscoring need for regional consensus.

Notable Presentations At AAAAI 2026
Food Allergy, Anaphylaxis & Allergen Immunotherapy (4/14)

Date	Title	Author	Summary
28 Feb 2026	Penicillin allergy testing among patients evaluated in allergy clinic: An observational study assessing clinical and social determinants associated with completion of testing	Samantha Novotny	• **Introduction:** Penicillin allergy delabeling improves antimicrobial stewardship and patient outcomes, yet many labeled patients fail to complete confirmatory testing. This study examined clinical and social determinants influencing testing completion. • **Methodology:** Retrospective cohort (8/2023–4/2024) of 225 patients with penicillin allergy labels in an academic clinic. Completion within 1 year was assessed. Multivariable logistic regression adjusted for demographics, Distressed Community Index, referral reason, and pregnancy. • **Results:** Overall completion was 52.9%. Pregnancy strongly predicted completion (83.3% vs 31.3%; aOR 0.11, p<0.001). Referral specifically for penicillin allergy also reduced non-completion odds (aOR 0.29, p=0.001). • **Conclusions:** Pregnancy represents a high-yield window for delabeling; structural strategies, including same-day testing, warrant evaluation.
28 Feb 2026	Timing is Everything: The Effect of Circadian Phase on Influenza Vaccination Effectiveness	Payson Broome	• **Introduction:** The circadian clock modulates immune function and vaccine responsiveness. This proof-of-concept study examined whether physiological circadian phase, rather than clock time alone, influences influenza vaccine antibody responses. • **Methodology:** Twenty healthy adults were randomized to vaccination eight hours apart. Circadian phase was quantified using continuous heart rate and core body temperature monitoring (Corsano device). Baseline and 1-month hemagglutinin inhibition assays measured antibody titers; ESR screened inflammation. • **Results:** All 40 assays completed. Preliminary data indicate higher post-vaccination titers in individuals vaccinated further from their peak core body temperature phase. • **Conclusions:** Physiological circadian timing may meaningfully modulate vaccine immunogenicity.

Notable Presentations At AAAAI 2026
Food Allergy, Anaphylaxis & Allergen Immunotherapy (5/14)

Date	Title	Author	Summary
28 Feb 2026	Seasonal Dynamics of Airborne Pollen on the Ecuadorian Coast: A Two-year Aerobiological Study	Ivan Cherrez Ojeda	• **Introduction:** Outdoor pollen drives respiratory morbidity, particularly in atopic populations. Aerobiologic data from tropical regions remain limited. This study characterized annual airborne pollen patterns in coastal urban Ecuador. • **Methodology:** Continuous December 2023–November 2024 sampling using a Burkard 7-day trap per National Allergy Bureau protocol. Daily Pollen Concentrations informed Seasonal (SPIn) and Annual Pollen Integrals (APIn), stratified by wet and dry seasons. • **Results:** Poaceae, Cupressus, and Pinus predominated. Arboreal pollen peaked during the rainy season (notably April). Poaceae persisted year-round, higher in dry months. Ambrosia surged late dry season. • **Conclusions:** Distinct seasonal aerobiologic patterns exist despite tropical climate stability, informing allergy forecasting and management.
28 Feb 2026	Pancake Oral Immunotherapy For Egg Allergy: A Randomized Controlled Trial (POET Study)	Kok Wee Chong	• **Introduction:** Egg oral immunotherapy (OIT) achieves high desensitization but carries safety concerns. Baked egg is safer yet less effective. This trial evaluated a novel pancake-based OIT strategy in egg-allergic children. • **Methodology:** Open-label randomized controlled trial (2:1) comparing pancake OIT versus avoidance (n=21; median age 4.4 years). Primary endpoint: desensitization to 4443 mg cooked egg at 12 months. Secondary outcomes: sustained unresponsiveness (SU), safety, immunologic markers, quality of life. • **Results:** Desensitization occurred in 62% OIT vs 38% controls (p=0.211). SU achieved in 57% of responders. Reactions occurred in 10.5% doses; no anaphylaxis. Significant IgE and skin test reductions were observed. • **Conclusions:** Pancake OIT appears safe with immunomodulatory effects and promising efficacy signals.

Notable Presentations At AAAAI 2026
Food Allergy, Anaphylaxis & Allergen Immunotherapy (6/14)

Date	Title	Author	Summary
28 Feb 2026	Retrospective Study of Agreements between Food Allergy Diagnostic Tests	Tal Neiman	• **Introduction:** Skin prick testing (SPT) and specific IgE (sIgE) are standard food allergy diagnostics but yield high false positives. Discordant results lack standardized interpretation, complicating diagnosis and quality of life. • **Methodology:** Retrospective review (2019–2023) of 224 patients with paired SPT–sIgE results (n=1112 pairs) within 12 months. Positivity thresholds: SPT ≥3 mm; sIgE ≥0.35 kU/L. Agreement assessed using Cohen's κ with 95% CI. • **Results:**Disagreement occurred in 20.7% of pairs. Agreement ranged from moderate (egg white κ=0.44) to substantial (shellfish κ=0.66). Concordance increased with age (R^2=0.72, p=0.02). Racial distribution may influence agreement patterns. • **Conclusions:** Standardized, demographically informed diagnostic frameworks are needed to enhance food allergy test interpretation.
28 Feb 2026	The Influence of Age and Treatment Duration on Specific Food IgE to Total IgE (sIgE/tIgE) Ratio Reduction During Oral Immunotherapy (OIT): A Retrospective Study	Destiny Portman	• **Introduction:** The specific-to-total IgE ratio (sIgE/tIgE) may predict oral food challenge outcomes and track progression to sustained unresponsiveness/remission (SU/R). Early nut oral immunotherapy (OIT) may enhance immune modulation. • **Methodology:** Retrospective cohort of peanut, sesame, cashew, and walnut OIT patients with paired baseline/follow-up sIgE and tIgE. Linear mixed-effects models assessed age and treatment duration effects on percent ratio change. • **Results:** Significant multi-year reductions in sIgE/tIgE occurred for peanut (2–4 and >4 years) and cashew (all maintenance intervals; p≤0.001). Sesame and walnut showed non-significant trends. • **Conclusions:** Early, sustained OIT—particularly for peanut and cashew—promotes favorable immunologic remodeling, supporting early initiation.

Notable Presentations At AAAAI 2026
Food Allergy, Anaphylaxis & Allergen Immunotherapy (7/14)

Date	Title	Author	Summary
28 Feb 2026	Results of Food Allergy Panels: Do They Change Management?	Kathryn Brady	• **Introduction:** Indiscriminate food allergy (FA) IgE panels are frequently over-ordered and may drive unnecessary interventions. This study evaluated downstream consequences of positive versus negative panels. • **Methodology:** Retrospective review of 85 pediatric patients (2024–2025). Panels were positive if >0.35 kUA/L. Indications, referrals, epinephrine prescriptions, and dietary changes were analyzed using Fisher's exact test. • **Results:** Only 11% were ordered for suspected IgE-mediated FA. Positive panels (36%) were associated with increased epinephrine prescribing ($p<0.001$) and referrals ($p=0.01$). Confirmed FA occurred in only 3 cases despite frequent positive results. • **Conclusions:** Over-ordered FA panels drive unnecessary healthcare utilization with low diagnostic yield.
28 Feb 2026	A Cross-Sectional Study of Allergen Labeling Practices in Chain and Local Grocery Stores in the Bronx	Adam Haines	• **Introduction:** Accurate allergen labeling is essential to prevent accidental exposure in food-allergic individuals. Store ownership type may influence sourcing, labeling accuracy, and regulatory compliance. • **Methodology:** Cross-sectional analysis of 325 prepackaged foods from large chain and small independent Bronx stores. Allergen presence, labeling accuracy, placement, and language were recorded. Chi-square tests compared proportions. • **Results:** Small stores had higher incorrect milk (7.4% vs 0.5%, $p<0.001$) and wheat (5.9% vs 0.5%, $p=0.004$) labeling. Large stores showed better placement compliance (95.1% vs 89.4%) but fewer multilingual labels (7.0% vs 31.6%). • **Conclusions:** Store type influences allergen labeling accuracy and accessibility, underscoring need for clearer regulatory oversight.

Notable Presentations At AAAAI 2026
Food Allergy, Anaphylaxis & Allergen Immunotherapy (8/14)

Date	Title	Author	Summary
28 Feb 2026	Immunological response after shrimp oral immunotherapy treatment: A pilot study	Porntipa Suebsarakam	• **Introduction:** Shrimp allergy is prevalent in the Asia-Pacific region, yet oral immunotherapy (OIT) data remain limited. This trial evaluated clinical efficacy, immunologic modulation, and safety of shrimp OIT. • **Methodology:** Single-center, open-label randomized controlled trial (1:1) in participants aged 12–40 years. Shrimp-specific sIgE and sIgG4 (f24, rPen a 1) were measured at baseline and 3, 6, 12 months. • **Results:** OIT significantly increased eliciting dose (3233 mg vs 25 mg; p<0.001). Trends toward reduced sIgE and increased sIgG4 were observed. Quality of life improved in 88%. One systemic reaction occurred. • **Conclusions:** Shrimp OIT enhances clinical tolerance with favorable immunologic shifts toward desensitization.
28 Feb 2026	Efficacy and Safety of the Tree Sublingual Immunotherapy Tablet in Canadian Children with Allergic Rhinitis and/or Conjunctivitis: Phase III Trial Results	Remi Gagnon	• **Introduction:** Birch-group tree pollen is a major cause of pediatric allergic rhinitis/conjunctivitis (AR/C) in Canada. This post-hoc analysis evaluated tree sublingual immunotherapy (SLIT)-tablet efficacy in Canadian children within a phase 3 trial. • **Methodology:** Children aged 5–17 years were randomized to daily tree SLIT-tablet or placebo for up to 12 months. Primary endpoint: average total combined score (TCS) during birch pollen season. • **Results:** In the total population (N=952), SLIT significantly reduced TCS across birch, tree, and oak seasons (p≤0.003). In Canadians (n=87), greater relative reductions were observed, notably 46.6% during oak season. Treatment was well tolerated. • **Conclusions:** Tree SLIT-tablet provides clinically meaningful, safe symptom reduction in Canadian pediatric AR/C.

Notable Presentations At AAAAI 2026
Food Allergy, Anaphylaxis & Allergen Immunotherapy (9/14)

Date	Title	Author	Summary
28 Feb 2026	Supportive Short-term Safety Profile In Pediatric Participants For PQ Grass In a Phase III Long-term Adaptive Pediatric Trial	Lawrence Dubuske	• **Introduction:** Grass pollen–induced seasonal allergic rhinitis (SAR) is prevalent in children. PQ Grass (27600 SU) subcutaneous allergen immunotherapy is being evaluated in a long-term Phase III pediatric trial. • **Methodology:** G308 is a sequential adaptive, double-blind, placebo-controlled trial across seven European countries (ages 5–16). Part A assessed one-year safety/efficacy; progression to a five-year extension incorporates questionnaire and machine learning–guided selection. • **Results:** Among 190 participants completing Part A, systemic adverse events occurred in 4.7%, mostly Grade 1; none ≥Grade 3. Discontinuation was low (2.6%), with no safety signal in labs, vitals, or spirometry. • **Conclusions:** PQ Grass demonstrated favorable short-term safety and high retention in pediatric SAR.
28 Feb 2026	The addition of dupilumab enhances desensitization and reduces gastrointestinal symptoms in omalizumab-facilitated multi-allergen oral immunotherapy in the COMBINE trial	Sayantani Sindher	• **Introduction:** Omalizumab-facilitated multi-allergen oral immunotherapy (mOIT) improves safety and efficacy in food allergy. This trial evaluated whether adjunct dupilumab enhances sustained unresponsiveness (SU) and tolerability. • **Methodology:** In this randomized trial (NCT03679676), 108 multi-food allergic participants received omalizumab followed by placebo-dupilumab+mOIT (OPmOIT) or dupilumab+mOIT (ODmOIT). SU was assessed at week 44 via DBPCFC. • **Results:** SU rates were 39% (OPmOIT) vs 55% (ODmOIT; p=0.16). ODmOIT improved high-dose desensitization (92% vs 63%; p=0.013), reduced gastrointestinal symptoms, and prevented AE-related withdrawals. • **Conclusions:** Adjunct dupilumab enhances desensitization depth and safety, though SU gains were not statistically significant.

Notable Presentations At AAAAI 2026
Food Allergy, Anaphylaxis & Allergen Immunotherapy (10/14)

Date	Title	Author	Summary
28 Feb 2026	First In Human Phase I Trial Of INP20, A Novel Oral Immunotherapy For Peanut Allergy: Safety And Early Immune Modulation	Marta Ferrer	• **Introduction:** INP20 is a novel oral peanut immunotherapy targeting TLR2 and TLR4 to promote immune tolerance. This first-in-human Phase 1 trial evaluated safety and early immunologic effects. • **Methodology:** Randomized, double-blind, placebo-controlled dose-escalation study in 52 peanut-allergic patients (≥12 years). Six cohorts (0.15–30 mg) received daily INP20 or placebo for 14 days. Safety and immunologic markers were assessed. • **Results:** INP20 was well tolerated through mid-dose cohorts; mostly mild oral symptoms. Three epinephrine-treated reactions occurred at higher doses. Active treatment induced marked peanut-specific IgG4 increases within 14 days. • **Conclusions:** INP20 shows favorable safety and rapid immunologic modulation, supporting further clinical development.
28 Feb 2026	Pediatric Oral Immunotherapy in Clinical Practice: A Real-World Cohort Study	Priya Chopra	• **Introduction:** Oral immunotherapy (OIT) is increasingly implemented in pediatric food allergy care, yet real-world outcome data remain limited. This study characterized clinical outcomes at a tertiary center. • **Methodology:** Retrospective review (2021–2025) of 121 pediatric OIT encounters (ages 7 months–14 years) for peanut, tree nuts, sesame, egg, or sunflower. Induction, updosing, maintenance outcomes, adverse events, and discontinuation were descriptively analyzed. • **Results:** Median induction age was 2.5 years; peanut predominated (n=83). Adverse reactions occurred in 6.7% of updosing visits; epinephrine use was 1.7%. Maintenance was achieved in 52% (median 16.7 months). Discontinuation (22%) reflected adherence barriers; one eosinophilic esophagitis case occurred. • **Conclusions:** Real-world OIT demonstrated favorable safety with manageable adherence challenges, supporting its feasibility in pediatric practice.

Notable Presentations At AAAAI 2026
Food Allergy, Anaphylaxis & Allergen Immunotherapy (11/14)

Date	Title	Author	Summary
28 Feb 2026	Preliminary Safety and Tolerability Results from ALLIANCE, a Phase I/II Trial of a Peanut Sublingual Immunotherapy Tablet	Edwin Kim	• **Introduction:** Sublingual immunotherapy (SLIT)-tablets are effective for aeroallergens and represent a potential modality for peanut allergy. The ALLIANCE phase I/II trial evaluated safety and tolerability of a peanut SLIT-tablet. • **Methodology:** Participants aged 4–65 years underwent a 3-part trial. Part 1 (n=34) assessed escalating daily doses over 2 weeks. Part 2 (n=32) evaluated a 5-step up-dosing regimen. Primary endpoint: dose tolerability. • **Results:** All Part 1 participants tolerated assigned doses without systemic reactions. In Part 2, 27/32 reached highest dose. Mostly mild oral AEs occurred; no anaphylaxis or eosinophilic esophagitis. • **Conclusions:** Preliminary data support favorable tolerability of peanut SLIT-tablet across age groups.
28 Feb 2026	Nanotechnology Based Immunotherapy With VLP Peanut Shows Strong Immuno-Modulatory Action With Benign Safety Profile In Phase I/IIA	Wayne Shreffler	• **Introduction:** VLP Peanut is a novel hypoallergenic therapy for peanut allergy. This Phase I/IIA trial (PROTECT) evaluated its safety, tolerability, and biomarker efficacy in healthy and peanut-allergic (PA) adults. • **Methodology:** Subcutaneous dose escalation was performed in healthy (Phase I, n=16) and PA adults (Phase IIA, n=24). Phase I was open-label, while Phase IIA was double-blind, placebo-controlled. Safety and efficacy outcomes, including biomarkers, were assessed across multiple dosing cohorts. • **Results:** VLP Peanut was well tolerated, with mild local and influenza-like symptoms in both cohorts. In PA cohorts, systemic adverse events were mild (Grade 1) in 33.3% of participants. Significant increases in Ara h2 and peanut-specific IgG were observed in healthy participants. PA cohorts showed dose-dependent immunological responses, including reduced wheal size and Ara h2-specific IgG production. • **Conclusions:** VLP Peanut demonstrated favorable safety and immunomodulatory effects, supporting its potential as a therapeutic for peanut allergy.

Notable Presentations At AAAAI 2026
Food Allergy, Anaphylaxis & Allergen Immunotherapy (12/14)

Date	Title	Author	Summary
01 Mar 2026	Articulating Unmet Needs Among Current Epinephrine Patients and Caregivers: Results of a US Survey	Mitu Patel	• **Introduction:** Needle phobia and size impact adherence to self-injectable epinephrine for anaphylaxis. Needle-free epinephrine alternatives offer a potentially more convenient option, but patient preferences are unclear. • **Methodology:** An online survey of 210 patients and caregivers of children at risk of anaphylaxis assessed preferences for current and in-development epinephrine forms, including behavioral trends and adherence based on administration methods. • **Results:** 90% preferred needle-free epinephrine, and 89% favored more portable forms. Most valued ease of use (77%) and portability (71%). Needle-free forms were anticipated to be used 3 minutes faster during an allergic reaction than auto-injectors. • **Conclusions:** There is strong preference for needle-free, portable epinephrine forms, suggesting higher adherence and faster use during anaphylaxis, potentially improving patient outcomes.
01 Mar 2026	Clinical Characteristics of Anaphylaxis Presenting to the Emergency Department of a Tertiary Hospital: A 15-Year Retrospective Study	Da Woon Sim	• **Introduction:** Anaphylaxis is a severe, life-threatening allergic reaction, often requiring emergency care. This study aimed to describe the clinical characteristics and management of anaphylaxis cases in the emergency department (ED) of a tertiary hospital. • **Methodology:** Retrospective review of ED cases from March 2010 to March 2025. Patients meeting diagnostic criteria for anaphylaxis were included. Data on clinical features, laboratory results, management, and causative factors were analyzed. • **Results:** Of 760 cases reviewed, 570 met the diagnostic criteria. Drugs (42%) were the leading cause, followed by food (32%), insect stings (16%), and idiopathic causes (6%). NSAIDs, contrast media, and antibiotics were the most common drug triggers. One-fifth of patients experienced recurrence, and epinephrine autoinjectors were prescribed in nearly half of non-drug-related cases. • **Conclusions:** Of 760 cases reviewed, 570 met the diagnostic criteria. Drugs (42%) were the leading cause, followed by food (32%), insect stings (16%), and idiopathic causes (6%). NSAIDs, contrast media, and antibiotics were the most common drug triggers. One-fifth of patients experienced recurrence, and epinephrine autoinjectors were prescribed in nearly half of non-drug-related cases.

Notable Presentations At AAAAI 2026
Food Allergy, Anaphylaxis & Allergen Immunotherapy (13/14)

Date	Title	Author	Summary
01 Mar 2026	Impact of Early Allergen Introduction on Dietary Diversity: Findings from the CANDO Study	Michael Yang	• **Introduction:** Early allergen introduction may prevent food allergies, but its impact on overall dietary patterns is unclear. This study assessed food group intake in the CANDO study. • **Methodology:** Participants were randomized to early allergen introduction (SEED) or standard practices (HUGS). Food consumption (>1/day) was measured at 32 and 45 weeks. • **Results:** SEED participants consumed more allergenic foods, protein, and dairy but fewer vegetables, fruits, grains, and fats. Compared to NHANES data, both groups had higher intakes of protein and fruits. • **Conclusions:** Allergen introduction should be combined with strategies to promote dietary diversity and nutritional adequacy. Further research is needed.
01 Mar 2026	Examining the Natural History of Peanut Allergy Resolution and Its Association with Clinical Predictors in a Multicenter Cohort Study	Mark Mathews	• **Introduction:** There is limited data on the long-term trajectory of peanut allergy and the clinical factors predicting natural tolerance. This study aimed to identify predictors of peanut allergy resolution using clinical and laboratory data from the FORWARD study. • **Methodology:** Long-term follow-up data from 1014 peanut-allergic children (mean age 6.04 years) were analyzed. Clinical parameters and peanut-specific IgE (sIgE) levels were evaluated to identify predictors of tolerance and anaphylaxis. • **Results:** Approximately 5% outgrew their peanut allergy. Those who outgrew their allergy had earlier diagnoses ($p<0.001$) and lower peanut sIgE (<5.82, AUC=0.810). Higher sIgE correlated with increased odds of peanut anaphylaxis (OR 1.34, $p=0.021$). • **Conclusions:** Early diagnosis and peanut sIgE < 5.82 were associated with a higher likelihood of outgrowing peanut allergy, providing valuable insights for clinical decision-making.

Notable Presentations At AAAAI 2026
Food Allergy, Anaphylaxis & Allergen Immunotherapy (14/14)

Date	Title	Author	Summary
01 Mar 2026	Food Allergies in the Latino Population – Results from a National Survey	Carla Godoy	• **Introduction:** Racial and ethnic disparities in food allergies (FA) are well-documented in the U.S., but limited data exist for the Latino population. This study explores FA-related challenges in U.S. Latino individuals, focusing on barriers to care and psychosocial impact. • **Methodology:** An online, IRB-exempt survey was completed by 2079 food-allergic adults or caregivers, with 173 identifying as Latino. Data analyzed using R assessed access to care, medication, resources, food access, and psychosocial factors. • **Results:** Latino respondents faced greater barriers: fewer saw an allergist (50.2% vs 61.8%, p≤0.00015), more reported concerns about medication costs (p<0.01), and 36.1% struggled with food access (cost/availability). Anxiety (41.4%) and fear of eating (30%) were common, and caregivers reported higher bullying rates. • **Conclusions:** Latino individuals with FA face significant medical, economic, and psychosocial challenges. Culturally informed interventions are needed to address these disparities in care and outcomes.
02 Mar 2026	Increased Anaphylaxis Risk in Pediatric Food Protein Induced Enterocolitis Syndrome: A Retrospective Cohort Study	Sable Thompson	• **Introduction:** Food protein-induced enterocolitis syndrome (FPIES) is a non-IgE-mediated food allergy with elevated rates of atopic comorbidities. This study aimed to assess anaphylaxis risk in pediatric FPIES patients compared to controls. • **Methodology:** A retrospective cohort study using TriNetX data (2015-2023) included children with FPIES (diagnosed ≤5 years) and matched controls. Anaphylaxis (ICD-10 T78.0, T78.2) was the primary outcome. Kaplan-Meier analysis and Cox proportional hazards modeling assessed anaphylaxis risk. • **Results:** FPIES patients had higher anaphylaxis risk (3.13% vs 0.80%; RR 3.92, p<0.0001). Kaplan-Meier analysis showed reduced anaphylaxis-free survival (HR 6.12). Adjusted modeling showed FPIES was independently associated with anaphylaxis (HR 4.60), highest in infants (HR 4.74). • **Conclusions:** Pediatric FPIES patients face significantly increased anaphylaxis risk, particularly in infancy. Further studies are needed to refine these findings and adjust for IgE-mediated allergies.

Notable Presentations At AAAAI 2026
Atopic Dermatitis (AD) & Skin Barrier / Type 2 Dermatitis (1/6)

Date	Title	Author	Summary
27 Feb 2026	Long-Term Safety Analysis of Ruxolitinib Cream in Pediatric Patients With Atopic Dermatitis: An Integrated Analysis of 8 Clinical Trials	Dareen Siri	• **Introduction:** Ruxolitinib cream, a JAK1/JAK2 inhibitor, has shown effectiveness in treating pediatric atopic dermatitis (AD). This analysis evaluates the safety of ruxolitinib cream in pediatric patients, particularly regarding systemic JAK inhibition concerns. • **Methodology:** Exposure-adjusted incidence rates (EAIRs) for adverse events (AEs) were calculated for 461 children (2-17 years) using ruxolitinib cream twice daily for up to 1 year across 8 clinical trials. • **Results:** No systemic JAK inhibitor-related AEs (e.g., MACE, thromboembolic events, malignancies) were reported. Low EAIRs were observed for common AD treatment-related AEs (e.g., acne, application site reactions, headache) and herpes zoster. • **Conclusions:** Ruxolitinib cream demonstrated a favorable safety profile, with low and stable AE rates over time, indicating minimal systemic risks in pediatric AD treatment.
27 Feb 2026	Systemic Treatments Outcomes for Moderate-to-Severe Atopic Dermatitis in Children Aged Less Than 12 Years: PEDISTAD 5-Year Results	Donald Leung	• **Introduction:** This study evaluates the long-term effects of systemic therapies on clinician-reported outcomes in children <12 years with moderate-to-severe atopic dermatitis (AD) enrolled in the PEDISTAD registry. • **Methodology:** PEDISTAD (NCT03687359) is an ongoing 10-year registry assessing outcomes for children receiving dupilumab, methotrexate (MTX), or cyclosporine (CsA). Primary endpoints included changes in EASI scores and affected BSA. • **Results:** Dupilumab, MTX, and CsA showed significant EASI and BSA improvements. Dupilumab had the greatest mean EASI reduction (−13.4), followed by MTX (−9.3) and CsA (−4.5). Dupilumab also had the lowest discontinuation rate (31.6%). • **Conclusions:** Dupilumab demonstrated superior efficacy and lower discontinuation rates compared to MTX and CsA in treating pediatric AD, indicating it as a preferred option.

Notable Presentations At AAAAI 2026
Atopic Dermatitis (AD) & Skin Barrier / Type 2 Dermatitis (2/6)

Date	Title	Author	Summary
27 Feb 2026	Advancing Atopic Dermatitis Remission Criteria with Lebrikizumab Results in Adults and Adolescents with Moderate-to-Severe Atopic Dermatitis	Bob Geng	• **Introduction:** Lebrikizumab (LEBRI) has shown long-term efficacy for moderate-to-severe atopic dermatitis (AD). This post-hoc analysis evaluated the maintenance of combined skin and itch improvements in LEBRI responders through Week 52. • **Methodology:** W16 responders (IGA0/1 or ≥75% EASI improvement) were re-randomized to LEBRI 250 mg every 4 weeks, 2 weeks, or withdrawal. Combined efficacy endpoints (EASI75/EASI90, IGA0/1, and PNRS) were assessed at W52. • **Results:** EASI75+PNRS4 and EASI90+PNRS4 were maintained at high rates (75.1%-75.6%) through W52 for LEBRIQ2W/Q4W. EASI90+PNRS0/1 had high rates (70.6%, 53.0%) for continuous treatment, but lower with withdrawal. • **Conclusions:** LEBRI demonstrated durable AD remission, maintaining 90% skin clearance with minimal itch for 52 weeks, supporting inclusion of both skin and itch endpoints in remission criteria.
27 Feb 2026	Associations Between Dietary Patterns, Gut Microbiome Diversity, and Itch Severity in Preschool Aged Children with Atopic Dermatitis: A Cross-Sectional Study	Minyoung Jung	• **Introduction:** The diet-gut microbiota-disease axis is well-explored in infancy, but its role in preschool atopic dermatitis (AD) is unclear. This study investigates the relationship between diet, gut microbiota, and AD severity in preschool children. • **Methodology:** 75 children (3–6 years) were assessed, including 24 with AD and 51 healthy controls. AD severity was measured by EASI and SCORAD, and quality of life by CDLQI. Gut microbiota composition was analyzed using 16S rRNA sequencing. • **Results:** AD children following a processed food and snack (PS) diet had higher Dorea and Anaerostripes abundance, associated with worse AD symptoms and quality of life. Lower vitamin C intake correlated with higher microbiota abundance and greater AD severity. • **Conclusions:** A PS diet in preschool children with AD worsens symptoms and quality of life, suggesting that dietary modifications may help manage early childhood AD by modulating the diet–gut–skin axis.

Notable Presentations At AAAAI 2026
Atopic Dermatitis (AD) & Skin Barrier / Type 2 Dermatitis (3/6)

Date	Title	Author	Summary
27 Feb 2026	Rapid Improvement in Skin, Itch, and Sleep: Physician- and Patient-Reported Outcomes from the Phase 2 APEX Study of APG777 in Atopic Dermatitis	Amol Kamboj	• **Introduction:** IL-13 is a key driver of inflammation and skin barrier dysfunction in atopic dermatitis (AD). APG777, a half-life-extended anti-IL-13 antibody, aims to reduce injection burden while improving AD symptoms. This phase 2 APEX study reports the speed of response to APG777. • **Methodology:** Adults with moderate-to-severe AD (N=123) were randomized to receive APG777 or placebo. Treatment involved multiple doses over 16 weeks. EASI, I-NRS, and ADSS were assessed. • **Results:** APG777 led to a 71% reduction in EASI at Week 16 (vs. 33.8% for placebo; $p<0.001$), with significant improvements in itch (I-NRS) as early as Day 3. APG777 also improved sleep disturbance by Week 1. • **Conclusions:** APG777 provided rapid and sustained improvements in skin lesions, itch, and sleep with fewer injections, supporting further investigation of less frequent maintenance dosing in AD.
27 Feb 2026	Improvement In Sleep And Family Impact For Pediatric Patients Down To 2 Years Of Age With Atopic Dermatitis Treated With Tapinarof Cream 1% Once Daily In Two Pivotal Phase 3 Trials	Mark Boguniewicz	• **Introduction:** Atopic dermatitis (AD) disrupts sleep and quality of life in children and families. Tapinarof cream, a non-steroidal topical treatment, is FDA-approved for AD in children aged 2 years and older. This study assessed its impact on sleep and family life. • **Methodology:** Data from 654 children (2-17 years) with moderate-to-severe AD treated with tapinarof or vehicle for 8 weeks were analyzed. Sleep scores from the POEM and DFI questionnaires were evaluated by age group. • **Results:** Tapinarof showed significant improvements in POEM and DFI sleep scores by Week 8, with greater reductions in sleep disturbance in all age groups ($p<0.0001$ to $p=0.0283$). • **Conclusions:** Tapinarof improved sleep and reduced family impact in pediatric AD, demonstrating consistent benefits across age groups.

Notable Presentations At AAAAI 2026
Atopic Dermatitis (AD) & Skin Barrier / Type 2 Dermatitis (4/6)

Date	Title	Author	Summary
27 Feb 2026	Improvement in Atopic Dermatitis Signs and Symptoms With Once-Daily and Proactive Twice-Weekly Roflumilast Cream 0.15% or 0.05%: Results From the 52-Week Phase 3 INTEGUMENT-OLE Trial in Patients Aged ≥2 Years	Mark Boguniewicz	• **Introduction:** Roflumilast cream has shown efficacy and safety in treating atopic dermatitis (AD) in children ≥2 years. This study evaluated its long-term outcomes in the INTEGUMENT-OLE trial. • **Methodology:** Patients from previous trials used roflumilast cream for up to 52 weeks. Those with disease control after week 4 switched to twice-weekly (BIW) application. Efficacy and safety were assessed. • **Results:** At week 52, 55.7% (INTEGUMENT-1/2) and 63.1% (INTEGUMENT-PED) achieved vIGA-AD 0/1. Significant reductions in EASI and BSA were observed. Minimal adverse events occurred. • **Conclusions:** Roflumilast cream effectively improved AD long-term, supporting its use for ongoing control without corticosteroids.
27 Feb 2026	Profiling The Gut–Skin Axis In Vietnamese Pediatric Atopic Dermatitis: Initial Cohort Results	Mai Vu	• **Introduction:** Atopic dermatitis (AD) is a prevalent chronic skin disorder in children, with skin dysbiosis playing a key role. In Vietnam, eczema affects 15-20% of children, but microbiome studies are limited. • **Methodology:** 75 children with moderate-to-severe AD and 40 healthy controls were enrolled. Skin swabs from lesional and non-lesional sites, and stool samples were collected to explore the gut-skin axis. Microbiome composition was analyzed via 16S rRNA sequencing. • **Results:** Reduced alpha diversity was observed in lesional skin. Staphylococcus dominated both sites, but lesional skin had significantly higher Staphylococcus and lower Brevibacterium abundance (p=0.004 and p=0.01, respectively). • **Conclusions:** Lesional skin in Vietnamese children with AD showed altered microbial diversity, supporting further targeted assays to deepen biological insights and improve clinical applications.

Notable Presentations At AAAAI 2026
Atopic Dermatitis (AD) & Skin Barrier / Type 2 Dermatitis (5/6)

Date	Title	Author	Summary
28 Feb 2026	STMC-103H Reduces Risk of Atopic Dermatitis and Food Allergy in At-Risk Infants: Results of the Phase 1b/ 2 Randomized, Double-Blind, Placebo-Controlled ADORED Trial	Michael O'Sullivan	• **Introduction:** Early life interventions targeting the gut microbiome may prevent Type 1 hypersensitivity diseases in at-risk infants. This study evaluated the safety and preliminary efficacy of STMC-103H, a live biotherapeutic product, in neonates with a family history of atopic disease. • **Methodology:** A Phase 1b/2 randomized, double-blind, placebo-controlled trial enrolled 238 neonates (<14 days) at risk for atopic diseases. Subjects received STMC-103H or placebo for 336 days. The primary endpoint was physician-diagnosed atopic dermatitis (AD) at Day 336. • **Results:** STMC-103H reduced AD risk by 64% (23.3% vs 43.1%; OR=0.36, p=0.005), food allergy by 77% (4.7% vs 16.7%; OR=0.23, p=0.02), and serum IgE levels (p=0.03). The results were not significant when all infants were included. • **Conclusions:** STMC-103H demonstrated potential in preventing atopic diseases in at-risk infants, supporting further investigation in larger trials.
01 Mar 2026	Efficacy of APG777 in Patients with Atopic Dermatitis and Evidence of Type 2 Inflammatory Comorbidities: Results from the Phase 2 APEX Study	Amol Kamboj	• **Introduction:** APG777 is a half-life-extended anti-IL-13 antibody evaluated for atopic dermatitis (AD), often linked with type 2 inflammatory comorbidities. This study explored its efficacy in AD patients with and without asthma and sinonasal conditions. • **Methodology:** Adults (N=123) with moderate-to-severe AD were randomized to receive APG777 or placebo. The primary endpoint was achieving 75% improvement in EASI-75 at Week 16. Subgroups included patients with or without type 2 comorbidities. • **Results:** APG777 showed a 74.7% EASI-75 response vs 26.3% placebo (p<0.001). EASI-75 response rates were higher in both asthma/sinonasal (71.1%) and non-asthma (78.4%) subgroups. Greater responses were observed with higher baseline IgE and BEC. • **Conclusions:** APG777 demonstrated significant efficacy in improving AD symptoms, regardless of comorbid type 2 inflammatory conditions, with no new safety concerns.

Notable Presentations At AAAAI 2026
Atopic Dermatitis (AD) & Skin Barrier / Type 2 Dermatitis (6/6)

Date	Title	Author	Summary
01 Mar 2026	Heterogeneity in Atopic Dermatitis Treatment Responses: Early Results from the ADRN LEADS Cohort	Nathan Jackson	• **Introduction:** Atopic dermatitis (AD) is a heterogeneous disease with variable responses to treatment. The LEADS cohort aims to define molecular endotypes of AD and assess their impact on treatment response through transcriptomic skin analysis. • **Methodology:** 240 dupilumab-naïve AD participants were followed over 5 months. Treatment began with moisturizer, then topical corticosteroids (TCS), with dupilumab for non-responders. Clinical responses were assessed using the Eczema Area and Severity Index (EASI). • **Results:** Few responded to moisturizer (12% adults, 4% children). TCS responders were more common in adults (32% vs. 17%, p=0.055). Dupilumab showed substantial improvements, but 35% of adults and 42% of children did not achieve mild disease (EASI≤7). • **Conclusions:** Children showed less response to moisturizers and TCS, and clinical heterogeneity persisted despite dupilumab treatment. This underscores the need for mechanistic analyses to better define responsive and non-responsive AD endotypes.
01 Mar 2026	Rocatinlimab Does Not Impact Vaccination-Induced Immune Responses in Adults With Moderate-to-Severe Atopic Dermatitis: Results From the Phase 3 ROCKET-VOYAGER Trial	Weily Soong	• **Introduction:** Rocatinlimab (ROCA) is a T-cell rebalancing therapy targeting OX40, evaluated in moderate-to-severe atopic dermatitis (AD) patients. • **Methodology:** ROCKET-VOYAGER (NCT05899816) randomized 221 adults with AD to receive ROCA or placebo. Primary endpoints were immune responses to tetanus and meningococcal vaccines at weeks 20 and 24. • **Results:** ROCA and placebo had comparable vaccine responses (87.6% vs 92.3% for anti-tetanus). ROCA showed higher treatment-emergent adverse events (41.4% vs 30.9%), including chills and pyrexia. • **Conclusions:** ROCA did not impact vaccine responses and showed no new safety signals, supporting its use in moderate-to-severe AD.

Notable Presentations At AAAAI 2026
Eosinophilic, Mast Cell & Primary Immunodeficiency Dis.(1/9)

Date	Title	Author	Summary
27 Feb 2026	Dupilumab Maintains Histologic and Endoscopic Improvements Across Age Subgroups in Pediatric Patients with Eosinophilic Esophagitis (EoE) Over 52 Weeks: Pooled Analysis from Two Phase 3 Studies (EoE KIDS and LIBERTY EoE TREET)	Noam Zevit	• **Introduction:** Eosinophilic esophagitis (EoE) in pediatric patients was assessed for histologic and endoscopic improvements with dupilumab treatment, following prior studies (KIDS, LIBERTY EoE TREET). • **Methodology:** Pooled analysis of pediatric patients (<18 years) treated with dupilumab or placebo, evaluating outcomes over 52 weeks. Patients received weight-tiered dupilumab or 300 mg weekly, with post-treatment assessments at Week 16/24 and 52. • **Results:** Dupilumab significantly improved eosinophil count and EoE-Endoscopic Reference Score (EREFS) in all age groups at Weeks 16/24 and maintained or improved results by Week 52. • **Conclusions:** Dupilumab consistently improved EoE outcomes in pediatric patients, showing sustained benefits in histology and endoscopy across all age groups.
27 Feb 2026	Prevalence of Eosinophilic Esophagitis (EoE) Symptoms in a Rural Population: A Pilot Study	Emily McGowan	• **Introduction:** Eosinophilic esophagitis (EoE) is a chronic disorder leading to esophageal fibrosis. It is underdiagnosed in children, and this pilot study explores its prevalence in adults in a rural Kentucky population. • **Methodology:** A survey was distributed to adults (18-65 years) in Pikeville, Kentucky, assessing dysphagia and demographic data using the NIH PROMIS questionnaire for disrupted swallowing. • **Results:** 32% of participants experienced dysphagia in the past week; 18% had food impactions. Dysphagia was linked to higher nicotine use but not allergic conditions. • **Conclusions:** Dysphagia is prevalent in this rural area, strongly associated with nicotine use, but its relationship with EoE remains uncertain and requires further investigation.

Notable Presentations At AAAAI 2026
Eosinophilic, Mast Cell & Primary Immunodeficiency Dis.(2/9)

Date	Title	Author	Summary
27 Feb 2026	Dupilumab Leads to Sustained Treatment Response Up to 52 Weeks in Dysphagia and Odynophagia Associated with Eosinophilic Esophagitis in Adults and Adolescents: Post-Hoc Analysis of the LIBERTY EoE TREET Study	Noam Zevit	• **Introduction:** Dupilumab showed significant improvement in dysphagia in EoE patients in the LIBERTY EoE TREET study. This analysis examines the impact of continued dupilumab treatment on dysphagia and odynophagia from Week 24 to Week 52. • **Methodology:** Patients ≥12 years received dupilumab or placebo to W24, then continued dupilumab until W52. Dysphagia and odynophagia were assessed via the Dysphagia Symptom Questionnaire (DSQ), with days without symptoms analyzed every 2 weeks. • **Results:** Dupilumab-treated patients had more days without dysphagia and odynophagia at W24 ($P<0.0001$) and a higher rate of complete symptom resolution (36.1% vs 15.1%, $P<0.01$). Improvements were maintained through W52. • **Conclusions:** Dupilumab significantly improves and maintains the resolution of dysphagia and odynophagia in EoE patients through Week 52.
27 Feb 2026	Dupilumab Failures in Pediatric and Adolescent Eosinophilic Esophagitis: A Retrospective Cohort Study	Safin Attwal	• **Introduction:** Dupilumab is effective for most EoE patients, but non-responders exist. This study identifies factors associated with treatment failure and strategies used in dupilumab non-responders. • **Methodology:** Pediatric EoE patients (2-18 years) from the AC-EGID registry treated with dupilumab were categorized based on endoscopy response: responders, partial responders, or non-responders. Demographics, atopic history, symptoms, and prior treatments were assessed. • **Results:** Of 44 patients, 80% were responders, 4% partial responders, and 16% non-responders. 98% achieved symptom resolution. Non-responders were treated with dose adjustments, combination therapies, or clinical trials. • **Conclusions:** Dupilumab is effective for most, but non-responders require further personalized treatment strategies.

Notable Presentations At AAAAI 2026
Eosinophilic, Mast Cell & Primary Immunodeficiency Dis.(3/9)

Date	Title	Author	Summary
28 Feb 2026	Results From the Phase 2 Summit Trial of Bezuclastinib in Adults with Non-Advanced Systemic Mastocytosis: Patient Experience of Living with NonAdvSM	Cem Akin	• **Introduction:** Systemic mastocytosis (SM) with the KIT D816V mutation significantly impacts health-related quality of life (HRQoL) in Non-Advanced SM (NonAdvSM) patients. This study reports patient experiences from the Summit clinical trial, investigating bezuclastinib in NonAdvSM. • **Methodology:** The Phase 2 Summit trial assessed patients with inadequate symptom control. Entry interviews were conducted to capture patient-reported experiences and disease impact. • **Results:** 82 symptoms were reported across 70 interviews, with fatigue (96%), itching (94%), and difficulty concentrating (87%) being most common. Emotional health, lifespan concerns, and daily life limitations were major impacts. • **Conclusions:** NonAdvSM patients experience a range of debilitating symptoms affecting HRQoL, highlighting the need for better symptom management.
28 Feb 2026	Pregnancy Outcomes in Systemic Mastocytosis: A Global Real-World Study	Ann Marie Masiello	• **Introduction:** Systemic Mastocytosis (SM) is a rare mast cell disorder with potential impacts on pregnancy outcomes. This study explores whether SM increases the risk of complications like preterm labor, preeclampsia, and eclampsia. • **Methodology:** Using TriNetX, a global health research network, two cohorts were created: pregnant patients with SM and matched controls. Statistical analyses were performed to assess pregnancy outcomes. • **Results:** Among 307 SM patients, eclampsia was more common (3.3% vs 0%, p=0.001), while abortion rates were lower in the SM group (4.6% vs 11.1%, p=0.003). No significant differences were seen for other complications. • **Conclusions:** SM is linked to a lower risk of abortion and higher risk of eclampsia but does not significantly affect preeclampsia, gestational hypertension, or preterm labor.

Notable Presentations At AAAAI 2026
Eosinophilic, Mast Cell & Primary Immunodeficiency Dis.(4/9)

Date	Title	Author	Summary
28 Feb 2026	Avapritinib Durably Improves Gastrointestinal Symptoms of Indolent Systemic Mastocytosis: Long-Term Outcomes From the PIONEER Study	Matthew Giannetti	• **Introduction:** Indolent systemic mastocytosis (ISM) often causes debilitating gastrointestinal (GI) symptoms. Avapritinib, a selective KIT D816V inhibitor, has shown promise in improving GI symptoms in ISM patients. This study reports long-term GI outcomes from the PIONEER trial. • **Methodology:** Patients were treated with avapritinib 25 mg once daily and best supportive care, with up to 5 years of follow-up. GI symptoms were assessed using the ISM-Symptom Assessment Form (ISM-SAF), and reductions in supportive care usage were analyzed. • **Results:** At Month 36, significant reductions in abdominal pain (–52%), nausea (–72%), and diarrhea (–65%) were observed. Reduced use of cromolyn sodium and antihistamines was noted. No new safety concerns emerged. • **Conclusions:** Long-term avapritinib treatment resulted in sustained GI symptom improvement and reduced need for supportive care, supporting its use for ISM symptom management.
28 Feb 2026	Expanded Results From the Phase 2 Summit Trial: Bezuclastinib in Adults With Non-Advanced Systemic Mastocytosis	Nathan Boggs	• **Introduction:** Non-advanced systemic mastocytosis (NonAdvSM) is characterized by persistent symptoms despite best supportive care. Bezuclastinib, a selective KIT D816V inhibitor, is being evaluated for its efficacy in treating NonAdvSM patients in the Summit trial. • **Methodology:** Summit is a randomized, double-blind, placebo-controlled Phase 2 trial assessing bezuclastinib in patients with inadequate symptom control. The primary endpoint was the change in Mastocytosis Symptom Severity Daily Diary (MS2D2) total symptom score after 24 weeks. • **Results:** Bezuclastinib significantly improved symptoms compared to placebo (–24.3 vs –15.4, P=0.0002). All primary and secondary endpoints were met, with most adverse events being low grade and reversible. • **Conclusions:** Bezuclastinib significantly reduced symptom burden in NonAdvSM patients and was well tolerated. Further data from the Summit trial will be presented.

Notable Presentations At AAAAI 2026
Eosinophilic, Mast Cell & Primary Immunodeficiency Dis.(5/9)

Date	Title	Author	Summary
28 Feb 2026	Evaluation of Bone Formation Marker Changes in Summit, a Trial Assessing Bezuclastinib in Adults with Non-Advanced Systemic Mastocytosis : An Exploratory Analysis	Nathan Boggs	• **Introduction:** Non-advanced systemic mastocytosis (NonAdvSM) may cause skeletal complications, including osteopenia and osteoporosis, due to mast cell dysregulation. Bezuclastinib, a selective KIT D816V inhibitor, is being investigated for its impact on bone health in NonAdvSM patients. • **Methodology:** In the Summit trial, bone formation markers, including P1NP and osteocalcin, were evaluated after 24 weeks of bezuclastinib treatment in patients with NonAdvSM and inadequate symptom control. • **Results:** After 24 weeks, bezuclastinib increased bone formation markers (P1NP and osteocalcin), while the placebo group showed minimal changes. Many patients had a history of osteopenia or osteoporosis. • **Conclusions:** Bezuclastinib may promote bone formation in NonAdvSM patients, supporting its potential role in managing bone health in mastocytosis.
28 Feb 2026	Results in Subgroups with Unmet Need in the Summit Trial: Bezuclastinib in Adults with Non-Advanced Systemic Mastocytosis	John Fahrenholz	• **Introduction:** Non-advanced systemic mastocytosis (NonAdvSM) patients, especially those with smoldering systemic mastocytosis (SSM), face high unmet needs due to inadequate symptom control. Bezuclastinib, a selective KIT D816V inhibitor, is being evaluated in these groups in the Summit trial. • **Methodology:** Summit is a Phase 2, randomized, placebo-controlled trial assessing bezuclastinib in patients with NonAdvSM, including SSM, and inadequate symptom control despite best supportive care. • **Results:** 12 SSM patients were enrolled (8 bezuclastinib, 4 placebo). SSM patients exhibited significant disease burden with high serum tryptase, KIT p.D816V allele frequency, and bone marrow mast cell involvement. Baseline symptom severity (MS2D2 TSS) was 61.8. • **Conclusions:** SSM patients, with no approved disease-modifying therapies, show significant disease and symptom burden. Bezuclastinib may address this unmet need, with further data to follow.

Notable Presentations At AAAAI 2026
Eosinophilic, Mast Cell & Primary Immunodeficiency Dis.(6/9)

Date	Title	Author	Summary
28 Feb 2026	Long-Term Bone Health Outcomes in Patients Treated with Avapritinib for Indolent Systemic Mastocytosis: Findings from the PIONEER study	Mariana Castells	• **Introduction:** Indolent systemic mastocytosis (ISM) can cause premature bone loss, including osteopenia and osteoporosis. This study examines the impact of avapritinib, a selective KIT D816V inhibitor, on bone health in ISM patients. • **Methodology:** The PIONEER trial enrolled ISM patients with moderate-to-severe symptoms. DXA scans assessed bone mineral density (BMD), and bone formation (PINP) and resorption (TRAcP-5b) markers were analyzed. • **Results:** Avapritinib treatment led to significant increases in lumbar spine BMD (1.66% at Year 1, 4.05% at Year 3) and PINP (P=0.0005), approaching healthy control levels. TRAcP-5b increased, suggesting bone remodeling. • **Conclusions:** Avapritinib improved bone health in ISM patients, with increased BMD and PINP, supporting further research into disease-modifying therapies for bone health in ISM.
28 Feb 2026	Results from the Summit pivotal trial: Symptom improvement correlates with reductions in objective measures of disease in adults with non-advanced systemic mastocytosis	Tracy George	• **Introduction:** Non-advanced systemic mastocytosis (NonAdvSM) is characterized by KIT D816V-driven mast cell infiltration and symptoms. Diagnosis relies on abnormal mast cell characteristics, serum tryptase, and KIT p.D816V detection. Biomarkers such as serum tryptase, KIT p.D816V VAF, and bone marrow mast cell (BM MC) burden serve as secondary endpoints in clinical trials. • **Methodology:** In Summit Part 2, the relationship between symptom severity (MS2D2 TSS) and disease biomarkers (serum tryptase, KIT p.D816V VAF, BM MC percentage) was evaluated at Week 24. • **Results:** Symptom improvement (MS2D2 TSS) was significantly correlated (P<0.001) with reductions in serum tryptase, KIT p.D816V VAF, and BM MC burden. • **Conclusions:** The correlation between symptom improvement and disease burden reduction highlights the importance of achieving pathological responses in NonAdvSM.

Notable Presentations At AAAAI 2026
Eosinophilic, Mast Cell & Primary Immunodeficiency Dis.(7/9)

Date	Title	Author	Summary
28 Feb 2026	Drivers of Hospitalization in patients with Common Variable Immunodeficiency (CVID), 2015-2025: a single center study	Stephanie Jeong	• **Introduction:** CVID remains associated with significant morbidity. This study identifies causes of hospitalization and risk factors in CVID patients over the past decade. • **Methodology:** A retrospective study at Mount Sinai Hospital (2015-2025) analyzed clinical and hospitalization data. • **Results:** Out of 452 patients, 29.2% were hospitalized, primarily due to infections (40%) and inflammatory complications (31.3%), with enteropathy as the leading inflammatory cause. Norovirus was the most frequent infection. Risk factors included autoimmune cytopenia and ILD. • **Conclusions:** Enteropathy and norovirus are key contributors to hospitalization in CVID, underscoring unmet medical needs.
01 Mar 2026	Efficacy of Benralizumab by Organ Involvement in Hypereosinophilic Syndrome (HES): Exploratory Analyses from the NATRON Study	Princess Ogbogu	• **Introduction:** Hypereosinophilic syndrome (HES) is characterized by high eosinophil levels causing organ damage. This subgroup analysis evaluates the impact of benralizumab treatment in HES based on baseline organ involvement. • **Methodology:** NATRON is a Phase 3 trial assessing benralizumab in FIP1L1::PDGFRA-negative HES patients. Time to first HES flare was analyzed based on organ involvement (pulmonary, dermatologic, gastrointestinal, musculoskeletal, sinus). • **Results:** Benralizumab reduced the risk of HES flare in all subgroups compared to placebo. Hazard ratios ranged from 0.24 to 0.52 across different organ involvement subgroups. • **Conclusions:** Benralizumab effectively reduces the risk of HES flare regardless of organ involvement, demonstrating its broad therapeutic potential.

Notable Presentations At AAAAI 2026
Eosinophilic, Mast Cell & Primary Immunodeficiency Dis.(8/9)

Date	Title	Author	Summary
01 Mar 2026	Incidence and Prevalence of Hypereosinophilic Syndrome (HES) in the US: A Retrospective Claims Database Study	Thanai Pongdee	• **Introduction:** Hypereosinophilic syndrome (HES) is characterized by persistent hypereosinophilia leading to organ damage. This study investigates the incidence, prevalence, and demographics of HES in the U.S. since the introduction of the 2020 ICD-10-CM codes. • **Methodology:** The Optum Clinformatics® database was used to assess HES cases (ICD-10-CM D72 codes) among patients with ≥12 months of insurance coverage from 10/01/2020–06/30/2024. • **Results:** HES incidence was 2.01 per 100,000 person-years, with higher rates in older adults. Prevalence was 5.32 per 100,000, rising from 2020–2024, with an almost even female-to-male ratio. • **Conclusions:** HES incidence and prevalence remain low, but increasing rates in older adults suggest growing disease awareness and burden.
01 Mar 2026	Treatment Burden of Oral Corticosteroid Monotherapy Among Patients with Eosinophilic Granulomatosis with Polyangiitis: Real-world Evidence from a US Claims Study	Anna Kovalszki	• **Introduction:** This study examines patients with eosinophilic granulomatosis with polyangiitis (EGPA) receiving oral corticosteroid (OCS) monotherapy in the United States. • **Methodology:** A retrospective cohort study using Komodo Research Dataset assessed EGPA patients on OCS monotherapy from December 2017 to October 2023. Demographics, clinical characteristics, and OCS dosing patterns were evaluated. • **Results:** 964 patients were included (mean age 57.2 years; 58.7% female). The mean daily prednisone-equivalent dose at index was 20.8 mg. Over 56% had ≥1 OCS burst, with a cumulative annual corticosteroid dose of 1205 mg. • **Conclusions:** EGPA patients on OCS monotherapy had significant corticosteroid exposure, reflecting a high treatment burden and potential risk for complications.

Notable Presentations At AAAAI 2026
Eosinophilic, Mast Cell & Primary Immunodeficiency Dis.(9/9)

Date	Title	Author	Summary
01 Mar 2026	Improvements in Hypereosinophilic Syndrome (HES) Symptoms and Impacts with Benralizumab: Mixed-Methods Analysis of the NATRON In-Trial Interview Sub-Study	Calvin Ho	• **Introduction:** Hypereosinophilic syndrome (HES) is a rare disorder marked by high eosinophil levels and end-organ damage. This study evaluates the efficacy of benralizumab in improving symptoms and health-related quality of life (HRQoL) in HES patients. • **Methodology:** NATRON is a Phase 3 trial assessing benralizumab in HES. A sub-study involved 29 patients from Poland and the US, who participated in a telephone interview about treatment perceptions and symptom impacts. • **Results:** Benralizumab-treated patients showed higher treatment success perceptions (91.7%) and significant symptom improvements (coughing, fatigue) and HRQoL enhancements (physical activity, sleep) compared to placebo. • **Conclusions:** Benralizumab significantly improved symptoms and HRQoL in HES patients, supporting its therapeutic potential.
01 Mar 2026	Risk Factors for the Development of Hypogammaglobulinemia, Infection, and Mortality in a Large Cohort Study	Katherine Liu	• **Introduction:** Identifying risk factors for hypogammaglobulinemia, infections, and mortality is crucial for early immune deficiency recognition and monitoring adverse events. • **Methodology:** A cohort of 27,757 patients with hypogammaglobulinemia (IgG≤600mg/dL) was identified from the Massachusetts General Brigham Research Patient Data Registry. Risk factors, including demographics and treatment, were evaluated using logistic regression. • **Results:** B-cell therapy, CAR T-cell therapy, and hematologic malignancies increased the risk of moderate-severe hypogammaglobulinemia. Moderate hypogammaglobulinemia was linked to higher infection rates and increased mortality risk, particularly in patients with persistent low IgG levels. • **Conclusions:** Factors such as immunomodulatory therapy and underlying conditions heighten the risk of severe hypogammaglobulinemia, infections, and mortality, underscoring the need for careful monitoring.

Key Industry Sponsored Sessions Information

AAAAI 2026 Key Industry Sponsored Sessions Information (1/3)

Date	Sponsor	Title
26 Feb 2026	Ionis	Advancing the Long-Term Prophylaxis Paradigm: The First and Only RNA-Targeted Therapy for HAE
26 Feb 2026	ARS Pharmaceuticals	Reimagining Epinephrine Administration with Epinephrine Nasal Spray
27 Feb 2026	Astrazeneca	New Asthma Data Available for Investigational Use
27 Feb 2026	Blueprint Medicines, A Sanofi Company	Systemic Mastocytosis in Practice: Identifying Features and Understanding the Urgency
27 Feb 2026	GSK	Clinical Evidence in Severe Asthma: A New Biologic Option for Patients with an Eosinophilic Phenotype
27 Feb 2026	Amgen and Astrazeneca	Epithelial Driven Inflammation: What Could it Mean for Your Patients With Severe Asthma and CRSwNP
27 Feb 2026	Sanofi and Regeneron	Itching for Answers: Explore a Treatment Option for Multiple Dermatologic Diseases
27 Feb 2026	Blueprint Medicines, A Sanofi Company	The FIRST and ONLY Therapy Approved for the Treatment of Adults with Indolent Systemic Mastocytosis
27 Feb 2026	Ionis	HAE in Action: Redefining Control Through Shared Decision-Making and Novel Long-Term Prophylaxis

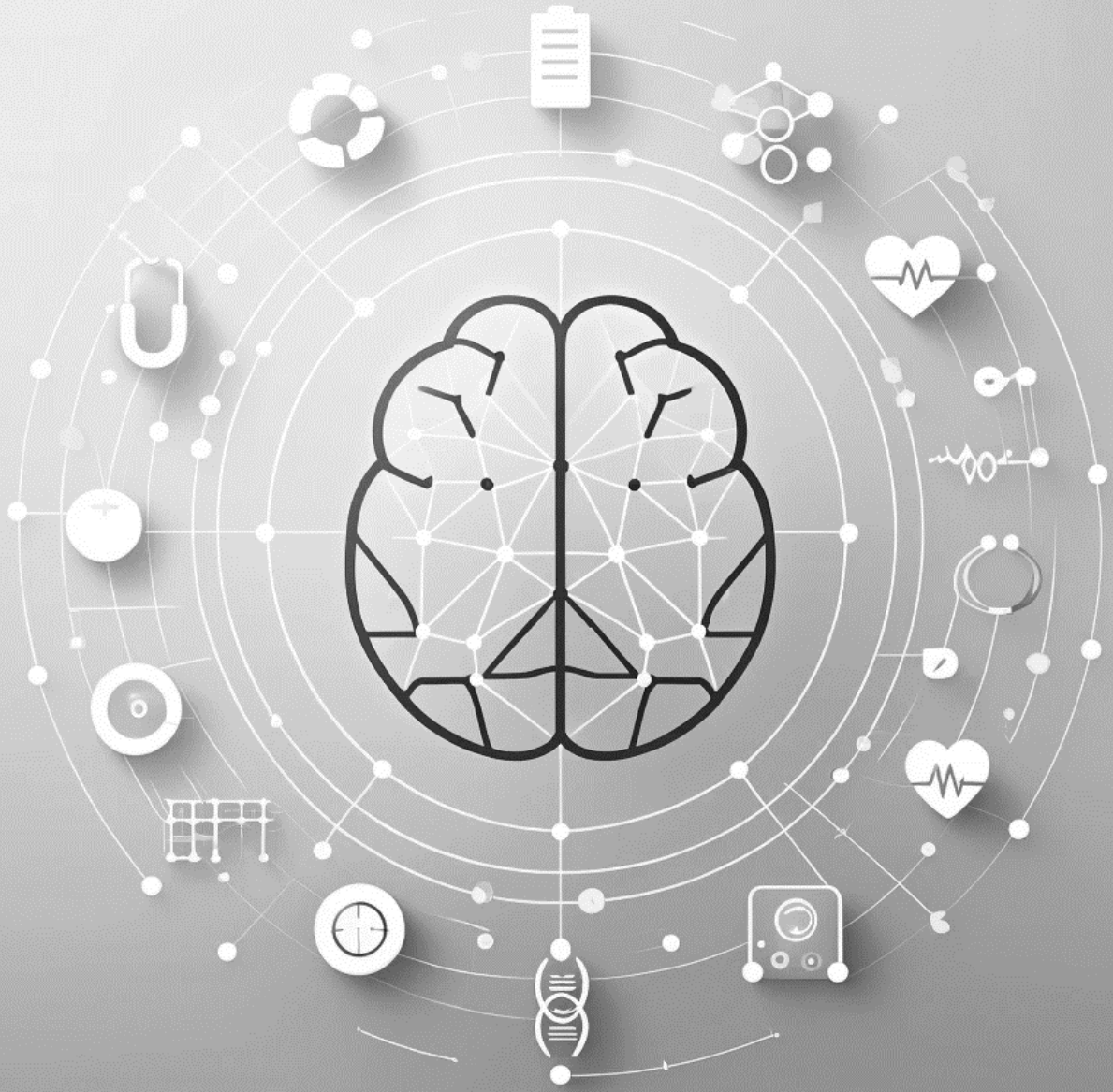
AAAAI 2026 Key Industry Sponsored Sessions Information (2/3)

Date	Sponsor	Title
27 Feb 2026	Genentech	Feuding With Food Allergies: Tackling Multi-Allergen Challenges, Diagnosis Dilemmas, and Treatment Transitions
27 Feb 2026	Pharvaris	Pathways and Mechanisms in Bradykinin-Mediated Angioedema: From Clinical Development to Clinical Practice
27 Feb 2026	Astrazeneca	Shared Pathways, Shared Solutions: Advancing Anti-Alarmin Care in Asthma, CRSwNP, AR, and COPD
28 Feb 2026	KalVista	Redefining HAE Attack Management
28 Feb 2026	Blueprint Medicines Corporation	SM Challenge: Competing to Master the Management of Nonadvanced SM
28 Feb 2026	DBV Technologies	Epicutaneous Immunotherapy (EPIT): Shaping the Future of Pediatric Food Allergy Treatment
28 Feb 2026	Astrazeneca	Evidence Expedition: An Interactive Journey Through Clinical Data For AIRSUPRA® (albuterol 90 mcg/ budesonide 80 mcg)
28 Feb 2026	Sanofi and Regeneron	The Atopic Spectrum: Understanding Diverse Trajectories and Multimorbidity
28 Feb 2026	Lilly	A Life Less Stuffy for Patients With Perennial Allergic Rhinitis: Exploring Targeted Treatment Approaches to Improve Quality of Life

AAAAI 2026 Key Industry Sponsored Sessions Information (3/3)

Date	Sponsor	Title
28 Feb 2026	CSL	Fact or Fiction? Understanding Factor XIIa in Hereditary Angioedema (HAE)
28 Feb 2026	Amgen and Kyowa Kirin	The Memory Behind the Disease: How OX40R and Memory T Cells Drive Chronicity and Heterogeneity in Moderate-to-Severe Atopic Dermatitis
01 March 2026	Eli Lilly	From Lab to Life: The Role of IL-13 Antibodies in Deep and Long-Term Stability in Moderate-to-Severe Atopic Dermatitis
01 March 2026	Astrazeneca	Tackling Eosinophilic Disorders: A Focus on Eosinophilic Granulomatosis with Polyangiitis and Hypereosinophilic Syndrome
01 March 2026	Sanofi and Regeneron	Multiple Diseases, One Treatment: Latest Data on a Treatment Option for Select Respiratory Diseases Driven in Part by Type 2 Inflammation
01 March 2026	BioCryst Pharmaceuticals	Advancing Pediatric HAE Care with Oral Prophylaxis
01 March 2026	Novartis	Now Approved: A New Path Forward with RHAPSIDO®
01 March 2026	Bayer	Is Flexibility the Missing Link in Symptom Relief? Tailoring Intranasal Antihistamine Recommendation
01 March 2026	Cogent Biosciences	Beyond Symptom Cycling: A New Era of Targeted Care in Non-Advanced Systemic Mastocytosis

Noteworthy AI / ML presentations at AAAAI 2026



Themes from key AI / ML presentations at AAAAI 2026 (1/3)

- **AI and machine learning are revolutionizing allergy and asthma care, enhancing predictive models for food allergies, improving real-time monitoring, and personalizing treatment. Innovations like social media analysis and AI-driven diagnostics will optimize patient care and decision-making**
- Check out the key AI / ML themes at AAAAI 2026 below:
- **Social Media and Peanut Allergy:**
  - AI will analyze social media posts to predict public sentiment and health outcomes related to peanut allergies, highlighting key health events like the FDA approval of Palforzia
- **Food Allergy Discourse During the Pandemic:**
  - ML will examine food allergy-related tweets during COVID-19, focusing on content creators' impact on public health narratives. Their contributions will shape food allergy communication
- **Peanut Oral Immunotherapy (PN-OIT) and Epitope-Specific Models:**
  - ML models will predict desensitization and remission outcomes from the IMPACT trial, guiding patient selection with AUCs of 0.78 and 0.84, respectively

Themes from key AI / ML presentations at AAAAI 2026 (2/3)

- **Predicting Systemic Reactions During Oral Food Challenges:**
  - ML models will improve allergy assessments by predicting systemic reactions during oral food challenges (OFCs), refining clinical decision-making using sIgE and clinical data
- **AI for Real-Time Pollen Monitoring:**
  - AI will create real-time pollen identification systems with 96.1% accuracy, offering scalable solutions for managing allergic airway diseases and improving patient outcomes
- **AI in Food Allergy Questioning and Diagnosis:**
  - AI bots, such as ChatGPT, will address food allergy questions, outperforming allergists in quality, thus enhancing healthcare communication with DISCERN scores of 4.5
- **Atopic Dermatitis (AD) Management with AI:**
  - AI will track emotional and clinical changes in AD patients, using data from 47,000 posts to assist in personalized care through AI-derived biomarkers
- **AI-Based Pollen Counting vs. Manual Methods:**
  - ML models will surpass manual methods in pollen counting, enabling faster and more accurate results for real-time allergy management and monitoring

Themes from key AI / ML presentations at AAAAI 2026 (3/3)

- **Predicting Eczema and Peanut Allergy Resolution Using AI:**
  - XGBoost models will predict eczema and peanut allergy resolution, helping guide pediatric care with C-indexes of 0.56 and 0.68, respectively, to improve decision-making
- **ML Models for Omalizumab Response in CSU:**
  - ML models will predict omalizumab non-response in CSU patients using baseline features, with the random forest model improving therapeutic decision-making
- **AI-Driven e-Nose for VOC Detection in Asthma:**
  - AI-powered e-nose technology will detect VOCs like formaldehyde, supporting personalized asthma management and real-time monitoring for respiratory diseases
- **Asthma Admissions Prediction via Google Search Data:**
  - ML will use Google search and environmental data to predict pediatric asthma admissions, achieving strong performance with an F1 score of 0.779 for improved hospital preparedness
- **ML/DL for Food Allergy Biomarker Discovery:**
  - ML and DL models will enhance food allergy diagnostics by improving accuracy by 10-15%, surpassing traditional methods like oral food challenges and skin prick tests

Noteworthy AI / ML presentations at AAAAI 2026

Notable Presentations At AAAAI 2026
AI / ML (1/7)

Date	Title	Author	Summary
28 Feb 2026	Leveraging Artificial Intelligence to Monitor Social Media Trends in Peanut Allergy Awareness	Laura Berzal Plaza	• **Introduction**: Peanut allergy is a significant global health issue, with over 1.6 million affected children in the U.S. alone. Social media offers valuable insights into public awareness and attitudes toward health topics, including allergies. • **Methodology:** A retrospective AI analysis of posts with #peanutallergy on platform X from June 1, 2019, to May 31, 2020, was conducted using the Symplur Signals platform, evaluating post frequency, message characteristics, and user profiles. • **Results:** 3,439 posts were identified, with a notable peak in January (656 posts), coinciding with the FDA approval of Palforzia. • **Conclusions:** AI-driven social media analysis reveals trends tied to health events, supporting informed public health decision-making.
28 Feb 2026	Analysis of Key User Groups in Food Allergy Discourse on Twitter (X) Using Artificial Intelligence.	Sofia Proano Mosquera	• **Introduction**: Social media, particularly Twitter (X), is a growing platform for health communication, including food allergies, a global health concern. This study explores the discourse on food allergies during the COVID-19 pandemic. • **Methodology:** 1,000 tweets with food allergy-related hashtags were analyzed using Symplur, focusing on the top 1% most active users classified as "content creators • **Results:** 710 unique users participated, with 53.3% from the U.S. and 40% from Canada. Content creators posted 95 times, significantly more than general users (p = 0.024) • **Conclusions:** Highly active content creators shape food allergy narratives, and identifying them can enhance public health communication strategies.

Notable Presentations At AAAAI 2026
AI / ML (2/7)

Date	Title	Author	Summary
28 Feb 2026	Machine Learning Models Using Epitope-Specific Antibodies Predict Desensitization and Remission in Early Peanut Oral Immunotherapy	Kyung Won Lee	• **Introduction**: The IMPACT trial suggested that early initiation of peanut oral immunotherapy (PN-OIT) improves desensitization and remission outcomes. This study explores whether epitope-specific IgE and IgG4 profiles can predict these outcomes. • **Methodology:** Data from 89 participants in the IMPACT trial were analyzed, measuring peanut-specific IgE and IgG4, along with 64 epitope-specific IgE and IgG4, using machine learning models to predict desensitization and remission. • **Results:** SCP features outperformed peanut-specific IgE for predicting desensitization. Epitope models improved performance (AUC=0.78), and baseline features, including PN-sIgE, predicted remission (AUC=0.84). • **Conclusions:** Epitope-based models enhance desensitization prediction, while baseline SCPs and PN-sIgE predict remission, aiding patient selection for PN-OIT.
28 Feb 2026	Predicting Outcomes of Oral Food Challenges for Peanut, Milk, Egg, and Tree Nut Allergy Using Bayesian a	Layla Mokhtar	• **Introduction**: Accurately predicting systemic reactions (SR) during oral food challenges (OFCs) for food allergies remains a challenge. This study integrates statistical and machine learning models to predict SR during OFCs to peanut, tree nuts, milk, and egg. • **Methodology:** Retrospective chart reviews of pediatric patients were conducted, collecting specific IgE levels, including Ara h 2 for peanuts, and clinical features. Logistic regression models with and without random effects were used to predict outcomes, assessed by AUROC. • **Results:** SR occurred in 19-37% of OFCs. Higher sIgE and a history of atopic dermatitis (AD) and rhinitis predicted increased SR risk. Continuous likelihood ratios (LRs) improved risk assessment over binary cut-offs. • **Conclusions:** Continuous LRs, integrating sIgE and clinical factors, support personalized risk prediction for OFCs, enhancing clinical decision-making.

Notable Presentations At AAAAI 2026
AI / ML (3/7)

Date	Title	Author	Summary
28 Feb 2026	Multigenic DNA and Image Linked Database for Real-Time AI Identification and Quantification of Airborne Pollen Species	Steven Stein	• **Introduction**: Airborne allergens like pollen trigger allergic airway diseases (AAD). Traditional monitoring methods are labor-intensive and lack real-time capabilities. This study introduces a platform combining DNA barcoding, microscopy, and AI for real-time pollen identification and quantification. • **Methodology:** An integrated database was created using images linked with multigenic DNA data from 126 pollen species. AI algorithms analyzed unstained pollen images based on morphological features to enable automated real-time identification and quantification. • **Results:** The AI achieved 96.1% accuracy in species identification and 90.2% in pollen quantification. Cross-validation confirmed the results. A mobile device for real-time pollen capture is under development. • **Conclusions:** This AI-integrated system offers a scalable, precise, and cost-effective solution for real-time pollen monitoring, enhancing AAD management.
28 Feb 2026	Artificial Intelligence Bots vs Board-certified Allergist/Immunologists : Analyzing Responses to Food Allergy Questions	Ofek Raviv	• **Introduction**: The integration of AI, specifically ChatGPT and other bots, into healthcare offers potential for enhancing patient care and medical education. This study evaluates the effectiveness of AI in answering food allergy-related questions, comparing it to responses from board-certified allergists. • **Methodology:** 15 food allergy questions from the AAAAI website were compared between ChatGPT 3.5, Grok 3, and expert physicians. The responses were evaluated using the DISCERN instrument for quality, with interrater agreement measured. • **Results:** AI responses were preferred for quality, receiving DISCERN scores of 4.5 for ChatGPT and 4.83 for Grok. Interrater agreement was fair (κ = 0.18-0.36), with Grok performing best. • **Conclusions:** AI bots can effectively address food allergy queries, potentially surpassing allergists in response quality, suggesting further research on AI integration in healthcare.

Notable Presentations At AAAAI 2026
AI / ML (4/7)

Date	Title	Author	Summary
28 Feb 2026	Deciphering unmet medical needs in atopic dermatitis through natural language processing and digital biomarkers: A cluster-transition analysis	Takeya Adachi	• **Introduction**: Atopic dermatitis (AD) management is complicated by biological and sociobehavioral variability, particularly corticosteroid avoidance. This study introduces an integrated framework combining patient narratives, treatment preferences, and AI digital biomarkers to address these challenges • **Methodology:** Data from Atopiyo, a web-based peer support platform, covering 20,439 person-years, was analyzed. Users were classified into clusters using unsupervised machine learning. NLP analyzed 47,000 posts to extract sentiment and topics. AI-derived Three Items Severity (AI-TIS) was used to track disease severity. • **Results:** Four patient clusters were identified, from standard-treatment users to those avoiding corticosteroids. NLP revealed emotional and thematic differences, with dynamic transitions observed during symptom flares, confirmed by AI-TIS. • **Conclusions:** This framework provides insights into the behavioral, emotional, and clinical diversity of AD patients, guiding personalized care and interventions
01 Mar 2026	Evaluation of a Machine Learning Model Against Traditional Manual Pollen Counting Methods	Laura Haya	• **Introduction**: Traditional pollen monitoring methods are prone to error and delay, limiting real-time data. This study evaluates an AI-based pollen counting tool compared to manual methods. • **Methodology:** Ragweed pollen was aerosolized and collected with rotational impact samplers. A dataset of 1341 microscope images was analyzed by a machine learning model (YOLOv11n) and five trained operators for pollen counts. • **Results:** No significant difference in pollen concentrations was found between the two methods ($t(79) = 0.658$, $p = 0.512$). The ML model outperformed manual methods with a faster analysis time (0.32s vs. 71.36s per image). • **Conclusions:** The AI-based ML model is superior, reducing manual counting errors and enabling near real-time pollen concentration reporting.

Notable Presentations At AAAAI 2026
AI / ML (5/7)

Date	Title	Author	Summary
01 Mar 2026	Machine Learning-Based Prediction of Eczema Resolution in a Multi-Center Pediatric Cohort	Caglar Onal	• **Introduction**: Eczema is common in children, but predicting resolution remains challenging. This study develops a machine learning survival model using XGBoost to estimate eczema resolution likelihood and identify key predictors. • **Methodology:** Data from 693 children in the FORWARD cohort were analyzed. A gradient boosting survival model with Cox proportional hazards loss was trained using demographic, clinical, and allergy-related variables. Performance was assessed using the concordance index (C-index), and SHAP values quantified predictor contributions. • **Results:** The model achieved a C-index of 0.56, with significant survival curve separation (p=0.01). SHAP analysis identified key predictors such as food allergy duration, asthma, and eczema extent. • **Conclusions:** The XGBoost model provides individualized predictions of eczema resolution, aiding personalized care strategies.
01 Mar 2026	Individualized Prediction Of Peanut Allergy Resolution With Machine Learning In A Multi-Center Pediatric Cohort	Caglar Onal	• **Introduction**: Peanut allergy is common in children, but predicting resolution is challenging. This study develops an XGBoost model to estimate resolution likelihood. • **Methodology:** Data from 740 children in the FORWARD cohort were analyzed using a gradient boosting survival model. Key predictors included age at diagnosis, oral allergy syndrome, asthma, and peanut-specific IgE • **Results:** The model achieved a C-index of 0.68, with strong survival curve separation (p<0.001). • **Conclusions:** The XGBoost model provides individualized predictions of peanut allergy resolution, supporting personalized care and decision-making.

Notable Presentations At AAAAI 2026
AI / ML (6/7)

Date	Title	Author	Summary
01 Mar 2026	Machine Learning Predictive Models for Omalizumab Response In Patients with Chronic Spontaneous Urticaria (CSU)	Seneca Simpson	• **Introduction**: Omalizumab is effective for CSU patients with antihistamine resistance, but response rates are suboptimal. This study explores machine learning (ML) models to predict omalizumab response based on baseline characteristics. • **Methodology:** Data from 363 CSU patients were analyzed using Pearson correlation and logistic regression. ML classifiers were trained using k-fold cross-validation, with model performance evaluated by AUC, sensitivity, PPV, and F1 score. • **Results:** The random forest model achieved the highest AUC (0.64) with good sensitivity (0.84) and precision (0.70). Key predictors included total IgE, disease duration, and UAS7 score. • **Conclusions:** ML models using baseline features can predict omalizumab non-responders in CSU patients.
01 Mar 2026	Sniffing Out Risk: Development of an Electronic Nose to Detect Triggers of Airway Inflammation	Noah Braunstein,	• **Introduction**: Volatile organic compounds (VOCs) exacerbate asthma and related conditions, but no point-of-care tools exist for VOC exposure monitoring. This study presents a machine-learning-driven electronic nose (e-nose) for detecting clinically relevant VOCs. • **Methodology:** An e-nose with a chemiresistive sensor array was developed to detect VOCs like formaldehyde and BTEX. VOC mixtures were analyzed with machine learning models in Python PyTorch. • **Results:** Formaldehyde was detected at 25 ppb, and toluene at 280 ppb. Random forest models accurately distinguished benzene and BTEX mixtures. • **Conclusions:** The e-nose enables real-time VOC detection, offering potential for personalized monitoring and prevention strategies in respiratory diseases.

Notable Presentations At AAAAI 2026
AI / ML (7/7)

Date	Title	Author	Summary
01 Mar 2026	From Searches to Surges: Machine Learning–Based Prediction of Pediatric Asthma Admissions from Google Queries and Environmental Data	Thinh Nguyen	• **Introduction**: This study predicts pediatric asthma admissions using Google search data and environmental factors to improve hospital planning. • **Methodology:** Asthma encounters and environmental data were analyzed from January 2023 to December 2024. Machine learning models predicted admissions three days in advance, evaluated with F1 score and ROC-AUC. • **Results:** Significant associations were found with Google search queries and environmental variables. k-Nearest Neighbors achieved the best forecast performance (ROC-AUC = 0.663, F1 = 0.779). • **Conclusions:** Google search activity and environmental data can predict pediatric asthma admissions, with k-Nearest Neighbors showing potential for hospital preparedness.
01 Mar 2026	Biomarker Discovery for Food Allergy Oral Food Challenge using Artificial Intelligence	Mckenzie Williams	• **Introduction**: This study explores the use of machine learning (ML) and deep learning (DL) to discover biomarkers for food allergies, aiming to create a safer, scalable diagnostic alternative to oral food challenges (OFCs), skin prick tests (SPTs), and allergen-specific IgE (sIgE). • **Methodology:** ML and DL models were trained on SPT, sIgE, and serum component proteins from 146 baseline peanut OFCs, focusing on children aged 1-<4 years. • **Results:** DL models improved diagnostic accuracy by 10-15%, with enhanced sensitivity (35%) and PPV (12-19%) over ML methods. • **Conclusions:** ML/DL techniques significantly improve food allergy diagnostics, potentially surpassing current methods.

Strategic Insights and Strategy Development is our focus