Prenatal Omega-3 and Omega-6 Polyunsaturated Fatty Acids and Childhood Atopic Dermatitis
Gardner et al 937

What is already known about this topic? Atopic dermatitis is a chronic inflammatory skin condition, which may be influenced by prenatal nutritional exposures. Prior evidence that prenatal polyunsaturated fatty acid (PUFA) exposure affects atopic dermatitis development in children is inconclusive.

What does this article add to our knowledge? This study finds that higher second trimester omega-6 PUFAs are associated with atopic dermatitis in children of women with atopy.

How does this study impact current management guidelines? Higher prenatal omega-6 PUFA exposure may increase the likelihood that a child with a familial predisposition to atopy develops atopic dermatitis, supporting that dietary PUFAs represent a modifiable risk factor in this disease.

Associations of Prenatal Dietary Inflammatory Potential with Childhood Respiratory Outcomes in Project Viva
Hanson et al 945

What is already known about this topic? Asthma and wheeze are common conditions in childhood, and inflammation may contribute to their development and progression. As dietary factors can contribute to inflammation, consideration of the inflammatory potential of diet may be relevant in these conditions.

What does this article add to our knowledge? This study shows an association between the inflammatory potential of diet during pregnancy and respiratory outcomes, including wheeze trajectory and lung function, later in life in the offspring.

How does the current study impact management guidelines? While recommending an anti-inflammatory diet during pregnancy seems prudent, future studies are needed to identify the mechanism linking diet to wheeze and asthma.

Bronchodilator Dose Responsiveness in Children and Adolescents: Clinical Features and Association with Future Asthma Exacerbations
Grunwell et al 953

What is already known about this topic? Bronchodilator reversibility has been identified in phenotypic subgroups of children with asthma and may contribute to differing clinical outcomes and disease trajectories. Whether bronchodilator dose responsiveness is also useful for phenotype definition and outcome assessment is not clear.

What does this add to our knowledge? Poor bronchodilator dose responsiveness was identified in <10% of participants but was associated with unique features (ie, type 2 inflammation, indoor exposures, prior severe exacerbations) and increased odds of future exacerbation and hospitalization, independent of airflow obstruction.

How does this study impact current management guidelines? In children and adolescents, poor bronchodilator dose responsiveness may be an independent predictor of future risk and may identify a group of patients at highest risk for life-threatening exacerbations.
Patient Portal Usage and Outcomes Among Adult Patients with Uncontrolled Asthma

Apter et al

What is already known about this topic? Patients increasingly are encouraged to communicate with their medical team through Internet-based portals tethered to the electronic medical record. Whether such communication is successful in low-income inner-city adults, a group with high asthma morbidity, is unknown.

What does this article add to our knowledge? In these adults with uncontrolled asthma, living in low-income neighborhoods, the portal is rarely used. Lack of access is an important barrier. For those who used the portal, there was no association with asthma outcomes.

How does this study impact current management guidelines? Expectations about and implementation of Web-based patient portals need revision to accommodate low-income patients with uncontrolled asthma and especially those with additional medical problems.

Phenotyping Occupational Asthma Caused by Acrylates in a Multicenter Cohort Study

Suojalehto et al

What is already known about this topic? Although several cases of acrylate-induced occupational asthma have been reported, the characteristics of this disease are not known and acrylates are not classified as respiratory sensitizers.

What does this article add to our knowledge? Work-related rhinitis was more frequent in acrylate-induced than in isocyanate-induced occupational asthma, and the increase in postchallenge fractional exhaled nitric oxide was greater than in occupational asthma induced by other low-molecular-weight agents or isocyanates.

How does this study impact current management guidelines? Our study shows that acrylate-induced occupational asthma has phenotypic characteristics suggesting that acrylates may induce occupational asthma through different immunologic mechanisms compared with mechanisms through which other low-molecular-weight (LMW) agents may induce asthma.

Atopy Modifies the Association Between Inhaled Corticosteroid Use and Lung Function Decline in Patients with Asthma

Marcon et al

What is already known about this topic? Inhaled corticosteroids are the mainstay of asthma treatment, but response to medication is variable.

What does this article add to our knowledge? Lung function decline over 2 decades was slower for adults with atopic asthma under sustained inhaled corticosteroid treatment compared with their nonatopic peers.

How does this study impact current management guidelines? Biomarkers of allergic inflammation could be useful to predict long-term response to inhaled corticosteroids among patients with asthma.

Real-World Assessment of Asthma Control and Severity in Children, Adolescents, and Adults with Asthma: Relationships to Care Settings and Comorbidities

Nyenhuis et al

What is already known about this topic? Patient-level factors and care settings impact asthma outcomes, but evidence is lacking in a real-world setting.

What does this article add to our knowledge? We have confirmed the association of specific demographic and comorbid conditions associated with uncontrolled asthma and greater asthma severity in a real-world population.

How does this study impact current management guidelines? An understanding of these associations in a real-world population will help clinicians manage their patients with asthma and aid in the development of interventions that target the comorbidities associated with greater asthma severity and poor asthma control.
Clinical Characterization and Predictors of IOS-Defined Small-Airway Dysfunction in Asthma
Cottini et al

**What is already known about this topic?** Small-airway dysfunction (SAD) is associated with worse control of asthma, a higher number of exacerbations, the presence of nocturnal asthma, more severe bronchial hyperresponsiveness, exercise-induced asthma, and the late-phase allergic response.

**What does this article add to our knowledge?** Patients with SAD have the worst asthma control and use higher inhaled corticosteroid dosage. Among others, exercise-induced asthma symptoms, overweight, asthma-related night awakenings, smoking, and older age are strong predictors of SAD in patients with community-managed asthma.

**How does this study impact current management guidelines?** SAD is present in almost two-third of community-treated patients, especially in those with worst asthma control. Impulse oscillometry for the detection of SAD should be performed; if not available, risk factors for SAD should be investigated during clinical history collection.

Bidirectional Association Between GERD and Asthma: Two Longitudinal Follow-Up Studies Using a National Sample Cohort
Kim et al

**What is already known about this topic?** It was speculated that gastroesophageal reflux disease (GERD) could elevate the risk of asthma. On the other hand, asthma has also been proposed to impact the development of GERD.

**What does this article add to our knowledge?** This study demonstrated the bidirectional relation between asthma and GERD, independent of demographic factors, medical histories, and lifestyle factors.

**How does this study impact current management guidelines?** The development of GERD should be assessed in the patients with asthma, and patients with GERD should be evaluated for asthma development.

Frequent Versus Infrequent Bathing in Pediatric Atopic Dermatitis: A Randomized Clinical Trial
Cardona et al

**What is already known about this topic?** Moisturizers and topical corticosteroids (TCS) are the mainstay of therapy for atopic dermatitis (AD), but studies on optimal bathing frequency are limited.

**What does this article add to our knowledge?** Added to standard-of-care TCS and moisturizer in pediatric moderate-to-severe AD, twice-daily soak-and-seal (SS) baths over 2 weeks demonstrated a statistically and clinically significant reduction in severity of symptoms, versus twice-weekly SS baths over 2 weeks.

**How does this study impact current management guidelines?** Our findings support twice-daily SS baths, as a safe and effective acute treatment intervention, to improve disease severity in children with moderate-to-severe AD.

A Multicenter Retrospective Study on Hypersensitivity Reactions to Nonsteroidal Anti-Inflammatory Drugs (NSAIDs) in Children: A Report from the European Network on Drug Allergy (ENDA) Group
Mori et al

**What is already known about this topic?** Diagnosis of nonsteroidal anti-inflammatory drugs (NSAIDs) and paracetamol hypersensitivity (HS) is complex, and the exact prevalence remains unknown.

**What does this article add to our knowledge?** To our knowledge, this is the first multicenter study to evaluate a large number of pediatric/adolescent patients from different European centers with suspected NSAID/paracetamol HS.

**How does this study impact current management guidelines?** This study highlights the importance of the drug provocation test (DPT) with the culprit NSAID/paracetamol in the allergy workup, showing that 1-day DPT is commonly sufficient to reach a confident diagnosis.
Natural Language Processing Combined with ICD-9-CM Codes as a Novel Method to Study the Epidemiology of Allergic Drug Reactions
Banerji et al

What is already known about this topic? The epidemiology of allergic drug reactions has been difficult to define because it is difficult to identify true cases in large data sets.

What does this article add to our knowledge? We describe a novel informatics research tool, natural language processing in combination with diagnosis codes, that improved our ability to study the epidemiology of allergic drug reactions using the electronic health record.

How does this study impact current management guidelines? Natural language processing can be used to identify allergic drug reactions. An accurate understanding of allergic drug reaction epidemiology is important to improve patient diagnosis and treatment.

Elevated Atopic Comorbidity in Patients with Food Protein–Induced Enterocolitis
Ruffner et al

What is already known about this topic? Food protein–induced enterocolitis syndrome is associated with high atopic comorbidity; however, there is little data examining potential mechanisms that underlie this association.

What does this article add to our knowledge? We performed longitudinal analysis in a primary care birth cohort. Although we observe high levels of atopic comorbidity, we did not find evidence for a direct causal relationship between prior FPIES and later atopy.

How does this study impact current management guidelines? Our data suggest a possible shared predisposition to FPIES and atopy, though provider bias toward diagnosing atopic disorders in patients with FPIES may contribute to these associations. Clinicians should monitor patients with FPIES for symptoms of atopic disorders.

Structural Noninfectious Manifestations of the Central Nervous System in Common Variable Immunodeficiency Disorders
van de Ven et al

What is already known about this topic? Central nervous system (CNS) involvement in common variable immunodeficiency (CVID) disorders is a rare but often severe disease manifestation.

What does this article add to our knowledge? CVID patients with CNS disease frequently have other disease manifestations, particularly autoimmune cytopenia and lymphoproliferation. Contrast-enhancing lesions of the brain and/or myelon were the most common findings on magnetic resonance imaging.

How does this study impact current management guidelines? Diagnostic evaluation aiming to rule out infectious causes is mandatory; a genetic evaluation is strongly recommended because the probability for an underlying monogenic disorder is high.

Interactions Between Air Pollution and Pollen Season for Rhinitis Using Mobile Technology: A MASK-POLLAR Study
Bédard et al

What is already known about this topic? The impact of air pollutants on the severity of allergic rhinitis symptoms and its modification by pollen exposure is still a matter of debate. Real-life studies have never been conducted using an mHealth app.

What does this article add to our knowledge? An association between air pollutants and rhinitis symptoms is observed in the grass pollen season but not in the birch pollen season, suggesting an interaction between air pollutants and grass pollen.

How does this study impact current management guidelines? This study is of primary importance in the development of next-generation GRADE (Grading of Recommendations, Assessment, Development and Evaluation) guidelines that will embed real-world evidence, aerobiology, and air pollution.
Sexual Functioning Is Frequently and Markedly Impaired in Female Patients with Chronic Spontaneous Urticaria

Ertas et al

What is already known about this topic? The impact of chronic spontaneous urticaria (CSU) on female sexual functioning remains largely unknown.

What does this article add to our knowledge? Our results show that sexual functioning is markedly reduced and sexual dysfunction is very frequent in female patients with CSU, especially in patients with angioedema.

How does this study impact current management guidelines? Physicians who treat patients with CSU should talk about sexual health and functioning with their patients and should take sexual dysfunctioning into account in the management of CSU.