Intranasal Corticosteroids Are Associated with Better Outcomes in Coronavirus Disease 2019

What is already known about this topic? Severe acute respiratory syndrome coronavirus 2 sites of entry are highly expressed in nasal epithelial cells.

What does this article add to our knowledge? Intranasal corticosteroid (INCS) therapy is associated with a lower risk for coronavirus disease 2019 (COVID-19)-related hospitalization, admission to the intensive care unit, and in-hospital mortality.

How does this study impact current management guidelines? Although our findings suggest a potential beneficial role for INCS use, randomized control trials are needed to determine if INCS reduces the risk for severe outcomes related to COVID-19.

The Association of Asthma with COVID-19 Mortality: An Updated Meta-Analysis Based on Adjusted Effect Estimates

What is already known about this topic? The pooled prevalence of asthma in COVID-19 patients has been reported to be similar to that in the general population. However, the association of asthma with the risk for COVID-19 mortality is less evident.

What does this article add to our knowledge? Asthma was significantly related to a reduced risk for COVID-19 mortality.

How does this study impact current management guidelines? Asthma was an independent protective factor for the mortality of COVID-19 patients. Routine interventions and treatment for asthma patients infected with severe acute respiratory syndrome coronavirus 2 should be continued.

Lower Use of Biologics for the Treatment of Asthma in Publicly Insured Individuals

What is already known about this topic? Publicly insured individuals are disproportionately affected by asthma, and those with severe uncontrolled disease may benefit from monoclonal antibody therapy. However, these biologics are costly, and little is known about their utilization by payer status.

What does this add to our knowledge? Biologic use is lower in publicly insured visits. Among publicly insured biologic treatment visits, Black patients, in particular, are underrepresented relative to White patients.

How does this study impact current management guidelines? Providers should be aware of possible disparities in the use of biologics among those with severe asthma who are publicly insured and continue to advocate for these individuals.

Personalized Medication Adherence Management in Asthma and Chronic Obstructive Pulmonary Disease: A Review of Effective Interventions and Development of a Practical Adherence Toolkit

What is already known about this topic? Nonadherence management in asthma and chronic obstructive pulmonary disease remains challenging despite many existing interventions. The Test of Adherence to Inhalers (TAI) can identify reasons for nonadherence, but it does not provide health care professionals with practical advice regarding how to act.

What does this article add to our knowledge? This research reports on effective adherence-enhancing interventions and the development of the TAI Toolkit to select evidence-based interventions. The Toolkit was rated as useful by a multidisciplinary panel.

How does this study impact current management guidelines? This study provides an overview of effective interventions on medication adherence in asthma and chronic obstructive pulmonary disease. Furthermore, the created TAI toolkit provides practical guidance for health care professionals for how to act effectively upon identified barriers for nonadherence.
Defining a Severe Asthma Super-Responder: Findings from a Delphi Process
Upham et al

What is already known about this topic? Clinicians recognize severe asthma patients in whom biologics and other add-on therapies lead to dramatic improvement, so-called super-responders. However, there is no consensus regarding the most appropriate super-responder definition.

What does this article add to our knowledge? Using a modified Delphi process, we developed a consensus definition of a severe asthma super-responder that includes exacerbation elimination, a large improvement in asthma control, cessation of maintenance oral steroids, having well-controlled asthma, and a large improvement in FEV₁.

How does this study impact current management guidelines? This consensus definition is an important prerequisite for better understanding super-responder prevalence, predictive factors, and the mechanisms involved. Super-response may become an important outcome measure in future studies of add-on therapies for severe asthma.

Hospital-Initiated Care Bundle, Posthospitalization Care, and Outcomes in Adults with Asthma Exacerbation
Nanishi et al

What is already known about this topic? Hospitalization for asthma exacerbation is an opportune setting for initiating preventive care for high-risk patients. However, little is known about the effect of implementing an evidence-based preventive care bundle during hospitalization on subsequent risk of asthma exacerbation.

What does this article add to our knowledge? In this study of adults hospitalized for asthma exacerbation, implementation of a hospital-initiated care bundle not only improved the quality of post-hospitalization asthma care but also reduced the rate of severe asthma exacerbation up to 30%.

How does this study impact current management guidelines? The present study underscores the importance of implementing evidence-based preventive asthma care in patients hospitalized with asthma exacerbation.

Metformin Use and Risk of Asthma Exacerbation Among Asthma Patients with Glycemic Dysfunction
Wu et al

What is already known about this topic? Metformin use has been associated with a lower risk of asthma exacerbation in claims-based studies. Results are limited by unmeasured confounding, particularly by glycemic control and body mass index.

What does this article add to our knowledge? In a retrospective cohort of adults with asthma and diabetes derived from an electronic health record, metformin use was associated with a lower risk of asthma-related emergency department visits and hospitalizations in a manner that was independent of glycemic control and obesity.

How does this study impact current management guidelines? Treatment of metabolic dysfunction with metformin may improve asthma control. Prospective investigation with measurement of metabolic intermediaries is necessary to understand potential mechanisms and subtypes of asthma that may benefit.

Response to Omalizumab in Black and White Patients with Allergic Asthma
Szefler et al

What is already known about this topic? Some studies have indicated that response to treatment may differ between White and Black populations with asthma, with steroid-insensitive asthma more common in Black populations.

What does this article add to our knowledge? Findings from this analysis are the first to suggest that Black and White patients with moderate to severe asthma experience similar improvements in exacerbations, FEV₁, and quality of life with omalizumab.

How does this study impact current management guidelines? Black and White patients with moderate to severe asthma should continue to be treated with omalizumab based on current prescribing information.
Airway Hyperresponsiveness to Inhaled Mannitol Identifies a Cluster of Noneosinophilic Asthma Patients with High Symptom Burden
Sverrild et al

What is already known about this topic? Measuring airway hyperresponsiveness to inhaled mannitol is an easily available diagnostic test for asthma that also reflects mast cell activation and response to inhaled corticosteroids that is otherwise not routinely measured.

What does this article add to our knowledge? Airway hyperresponsiveness to mannitol is a common feature in symptomatic, noneosinophilic patients with asthma and otherwise few treatable traits.

How does this study impact current management guidelines? Measuring airway hyperresponsiveness to inhaled mannitol may, in addition to its diagnostic properties, provide a treatable trait and a biomarker for mast cell activation in patients with symptomatic noneosinophilic asthma.

Prevalence and Burden of Chronic Cough in the United States
Meltzer et al

What is already known about this topic? Chronic cough is a common complaint in the United States.

What does this article add to our knowledge? The estimated prevalence of self-reported chronic cough among the U.S. adult population is 5%. Compared with matched controls without chronic cough, respondents with chronic cough more often reported lower health-related quality of life.

How does this study impact current management guidelines? These results highlight the burden of chronic cough in the United States.

One-Dilution Rapid Desensitization Protocol to Chemotherapeutic and Biological Agents: A Five-Year Experience
Sala-Cunill et al

What is already known about this topic? Rapid desensitization applying multibag protocols with serial dilutions is widely used in patients with hypersensitivity reactions to biologics and chemotherapeutic agents. Such procedures are time consuming, impacting patients and health care resources.

What does this article add to our knowledge? This article shows that the one-bag desensitization protocol (nondiluted), with chemotherapeutic and biological agents, is noninferior regarding efficacy and safety compared with the conventional three-dilution protocol.

How does this study impact current management guidelines? Implementing one-bag desensitization protocols may allow simplifying preparation in the pharmacy, reducing the workload for nurses (no bag change, fewer steps), decreasing the risk of errors, and shortening the duration of the procedure, without hampering efficacy or safety.

Exius et al

What is already known about this topic? The diagnosis of true amoxicillin allergy in children is challenging, and previous studies suggest poor sensitivity and high rate of false-positive skin test results.

What does this article add to our knowledge? Our study establishes that a direct graded oral challenge with no previous skin tests can be used accurately and safely to diagnose amoxicillin allergy in children reporting cutaneous nonvesicular rashes developing during amoxicillin treatment.

How does this study impact current management guidelines? In children reporting benign skin rashes in the course of amoxicillin treatment, direct challenge is an appropriate confirmatory test. Cephalexin-induced reactions can occur in just over 10% of children with confirmed amoxicillin allergy. However, reactions are mild and limited to the skin.
Ciclesonide Impacts Clinicopathological Features of Eosinophilic Esophagitis

What is already known about this topic? Ciclesonide is a topical steroid that was developed to increase local bioavailability in the lung and reduce systemic exposure. Limited reports identify its use in patients with eosinophilic esophagitis.

What does the article add to our knowledge? In 81 patients ranging in age from 2 to 23 years, ciclesonide reduced symptoms, improved esophageal endoscopic appearance, and decreased epithelial inflammation without any severe side effects.

How does this study impact current management guidelines? Ciclesonide provides effective treatment for eosinophilic esophagitis with limited systemic exposure, thus potentially reducing the risk of adrenal suppression.

Improving Severity Scoring of Food-Induced Allergic Reactions: A Global “Best-Worst Scaling” Exercise

What is already known about this topic? Existing severity scores used to grade food-induced allergic reactions have significant limitations, including an inability to discriminate between non-anaphylaxis reactions of different severities.

What does this article add to our knowledge? Using a novel, consensus-based approach to eliminate user scale bias, we report a best-worst scaling exercise to help define a potential, consensus-driven gold standard to improve existing severity scores for food-induced allergic reactions.

How does this study impact current management guidelines? This study identified specific limitations with existing severity scores as well as provided a potential method, free of user scale bias, toward defining a consensus-driven gold standard that can be used to guide and validate future severity scores.

Oral Immunotherapy–Related Awareness, Attitudes, and Experiences Among a Nationally Representative Sample of Food Allergy Patients/Caregivers

What is already known about this topic? Clinical trials have found oral immunotherapy (OIT) to be a promising method of food allergy (FA) treatment. However, data surrounding OIT awareness, attitudes, and experiences among FA patients and their parents/caregivers remains lacking.

What does this article add to our knowledge? This study provides valuable data on current OIT awareness, attitudes, and experiences among a nationally representative sample of U.S. adults with FA and caregivers of pediatric patients.

How does this study impact current management guidelines? This study shows that OIT awareness lies disproportionately with wealthier, more-educated FA patients and families. Future outreach efforts are needed to ensure equitable access to OIT.

Clinical Manifestations and Outcomes of Activated Phosphoinositide 3-Kinase δ Syndrome from the USIDNET Cohort

What is already known about this topic? Activated phosphoinositide 3-kinase δ syndrome is a combined primary immunodeficiency that exhibits a large range of phenotypes including respiratory and herpesvirus infections, lymphenadopathy, autoimmunity, and developmental delay.

What does this article add to our knowledge? This large activated phosphoinositide 3-kinase δ syndrome cohort exhibits similar frequencies of infections, lymphenadopathy, and developmental delay compared with previous cohort studies. A higher frequency of asthma and CD3 lymphenopia was observed in PIK3CD compared with PIK3R1 patients.

How does this study impact current management guidelines? Early genetic screening for activated phosphoinositide 3-kinase δ syndrome is recommended for those with symptoms consistent with a combined immunodeficiency including recurrent respiratory tract infections, herpesvirus infections, bronchiectasis, lymphoma, developmental delay, and atopic manifestations.
Disease-Modifying Effect of Japanese Cedar Pollen Sublingual Immunotherapy Tablets
Yonekura et al

What is already known about this topic? Previous reports from this trial demonstrated that Japanese cedar (JC) pollen sublingual immunotherapy (SLIT) provided sustained efficacy in a treatment duration-dependent manner; however, the magnitude and duration of disease modification after treatment cessation had not been evaluated.

What does this article add to our knowledge? Additional data from this 5-year study demonstrate that JC pollen SLIT administration for approximately 18 months also provides long-term benefits after treatment cessation, but that 3 years of treatment provides the more robust disease-modifying effect.

How does this study impact current management guidelines? More durable disease-modifying effects of JC pollen SLIT are obtained after 3 years compared with 18 months of continuous administration at an optimal dose.

Prevalence and Symptom Burden of Nasal Polyps in a Large Austrian Population
Campion et al

What is already known about this topic? Previous prevalence studies estimated the frequency of nasal polyps between 2.1% and 4.3%, but only incomplete data are available regarding polyp size, symptom burden and presence of silent polyps.

What does this article add to our knowledge? The adjusted prevalence of nasal polyposis assessed in more than 10,000 Europeans using nasal endoscopy is 1.95%. In addition, our data provide detailed information on polyp burden, quality of life and presence of symptoms of chronic rhinosinusitis in this population.

How does this study impact current management guidelines? Our study gives a useful estimation of the number of patients who would benefit from biological therapy.

High Prevalence of Sensitization to Mites and Insects in Greenhouses Using Biologic Pest Control
Suojalehto et al

What is already known about this topic? Mites and insects are widely used as biologic pest control in greenhouses. A few studies reported sensitization to mites among greenhouse workers, but sensitization rates to insects are not known.

What does this article add to our knowledge? Half of the greenhouse workers were sensitized to at least one of nine tested organisms; asthma symptoms were significantly associated with sensitization. Macrolophus pygmaeus insect sensitization had the highest prevalence.

How does this study impact current management guidelines? Our findings stress the importance of surveilling and preventing work-related allergic diseases among greenhouse workers. Regular health surveillance of exposed workers, including testing for specific sensitizations, should be considered.

Autoimmune Chronic Spontaneous Urticaria Detection with IgG Anti-TPO and Total IgE
Kolkhir et al

What is already known about this topic? Tests for diagnosis of autoimmune chronic spontaneous urticaria (aCSU) are not widely available and have limitations. Elevated levels of IgG anti–thyroid peroxidase and low levels of total IgE have been reported to be common in aCSU.

What does this article add to our knowledge? Combination of high IgG anti–thyroid peroxidase and low IgE levels is linked to known clinical and biological features of aCSU including positive basophil activation test result and poor treatment responses to second-generation H1-antihistamines.

How does this study impact current management guidelines? We developed a novel approach to diagnose aCSU in everyday clinical practice using a combination of easy-to-perform and cost-effective parameters, IgG anti–thyroid peroxidase and total IgE.