

Ausgewählte Publikationen CK-CARE**2018**

Aglas L, Gilles S, Bauer R, Huber S, Araujo GR, Mueller G, Scheiblhofer S, Amisi M, Dang HH, Briza P, Bohle B, Horejs-Hoeck J, Traidl-Hoffmann C, Ferreira F. Context matters: Th2 polarization resulting from pollen composition and not from protein-intrinsic allergenicity. *J Allergy Clin Immunol.* 2018 Sep;142(3):984-987.e6.

Altunbulakli C, Reiger M, Neumann AU, Garzorz-Stark N, Fleming M, Huelpuesch C, Castro-Giner F, Eyerich K, Akdis CA, Traidl-Hoffmann C. Relations between epidermal barrier dysregulation and Staphylococcus species-dominated microbiome dysbiosis in patients with atopic dermatitis. *J Allergy Clin Immunol.* 2018 Nov;142(5):1643-1647

Bachert C, Akdis CA. Specific allergy and asthma prevention coming to an age: A milestone in children. *J Allergy Clin Immunol.* 2018 Feb;141(2):527-528

Barcik W, Wawrzyniak M, Akdis CA, O'Mahony L. Immune regulation by histamine and histamine-secreting bacteria. *Curr Opin Immunol.* 2017 Oct;48:108-113

Boonpiyathad T, Sokolowska M, Morita H, Rückert B, Kast JI, Wawrzyniak M, Sangasapaviliya A, Pradubpongsa P, Fuengthong R, Thantivorasit P, Sirivichayakul S, Kwok WW, Ruxrungtham K, Akdis M, Akdis CA. Der p 1-specific regulatory T-cell response during house dust mite allergen immunotherapy. *Allergy.* 2018 Nov 28. doi: 10.1111/all.13684

Bousquet J, Agache I, Aliberti MR, et al. Transfer of innovation on allergic rhinitis and asthma multimorbidity in the elderly (MACVIA-ARIA) - EIP on AHA Twinning Reference Site (GARD research demonstration project). *Allergy* 2018;73:77-92.

Bousquet J, Devillier P, Anto JM, et al. Daily allergic multimorbidity in rhinitis using mobile technology: A novel concept of the MASK study. *Allergy* 2018;73:1622-31.

Braegelmann J, Braegelmann C, Bieber T, Wenzel J. Candida induces the expression of IL-36gamma in human keratinocytes: implications for a pathogen-driven exacerbation of psoriasis? *J Eur Acad Dermatol Venereol* 2018;32:e403-e6.

Cabanillas B, Cuadrado C, Rodriguez J, Dieguez MC, Crespo JF, Novak N. Boiling and Pressure Cooking Impact on IgE Reactivity of Soybean Allergens. *Int Arch Allergy Immunol.* 2018;175(1-2):36-43.

Cabanillas B, Jappe U, Novak N. Allergy to Peanut, Soybean, and Other Legumes: Recent Advances in Allergen Characterization, Stability to Processing and IgE Cross-Reactivity. *Mol Nutr Food Res.* 2018; 62(1).

Cabanillas B, Maleki S, Cheng H, Novak N. Differences in the uptake of Ara h 3 from raw and roasted peanut by monocyte-derived dendritic cells. *Int Arch Allergy Immunol* 2018; 177; 35-39.

Carreras-Badosa G, Runnel T, Plaas M, Kärner J, Rückert B, Lättেকivi F, Köks S, Akdis CA, Kingo K, Rebane A. microRNA-146a is linked to the production of IgE in mice but not in atopic dermatitis patients. *Allergy.* 2018 Dec;73(12):2400-2403

Delgado-Eckert E, Fuchs O, Kumar N, Pekkanen J, Dalphin JC, Riedler J, Lauener R, Kabesch M, Kupczyk M, Dahlen SE, Mutius EV, Frey U; PASTURE and BIOAIR Study groups. Functional phenotypes determined by fluctuation-based clustering of lung function measurements in healthy and asthmatic cohort participants. *Thorax.* 2018 Feb;73(2):107-115.

Ertl M, Weber S, Hammel G, Schroeder C, Krogias C. Transorbital Sonography for Early Prognostication of Hypoxic-Ischemic Encephalopathy After Cardiac Arrest. *J Neuroimaging.* 2018 Sep;28(5):542-548.

Eyerich S, Eyerich K, Traidl-Hoffmann C, Biedermann T. Cutaneous Barriers and Skin Immunity: Differentiating A Connected Network. *Trends Immunol.* 2018 Apr;39(4):315-327. (Review)

Frei R, Ferstl R, Roduit C et al Roger P. Lauener, and the teams of the PARSIFAL and PASTURE/EFRAIM study. Exposure to non-microbial N-Glycolylneuraminic acid protects farmers' children against airway inflammation and colitis. *J Allergy Clin Immunol*. 2018 Volume 141, Issue 1, Pages 382–390.

Frei R, Ferstl R, Roduit C, Ziegler M, Schiavi E, Barcik W, Rodriguez-Perez N, Wirz OF, Wawrzyniak M, Pugin B, Nehrbass D, Jutel M, Smolinska S, Konieczna P, Bieli C, Loeliger S, Waser M, Pershagen G, Riedler J, Depner M, Schaub B, Genuneit J, Renz H, Pekkanen J, Karvonen AM, Dalphin JC, van Hage M, Doekes G, Akdis M, Braun-Fahrländer C, Akdis CA, von Mutius E, O'Mahony L, Lauener RP; Prevention of Allergy Risk factors for Sensitization in Children Related to Farming and Anthroposopic Lifestyle (PARSIFAL) study group; Protection Against Allergy Study in Rural Environments (PASTURE)/Mechanisms of Early Protective Exposures on Allergy Development (EFRAIM) study group. Exposure to nonmicrobial N-glycolylneuraminic acid protects farmers' children against airway inflammation and colitis. *J Allergy Clin Immunol*. 2018 Jan;141(1):382-390

Frei R, Roduit C, Ferstl R et al Cezmi Akdis, Roger Lauener, Liam O'Mahony; on behalf of the PASTURE/EFRAIM study group. Butyrate and Propionate protect against the development of atopy and asthma. *Allergy*. 2018 Nov 3.

Gerth van Wijk R, Eguiluz-Gracia I, Gayraud J, Gutermuth J, Hamelmann E, Heffler E, Popov TA, Schmid-Grendelmeier P, Tomazic PV, Tsilochristou O, Muelleneisen N. The roadmap for allergology in Europe: The subspecialty of allergology as "stop-over" on the way to a full specialty. An EAACI position statement. *Allergy*. 2018 Mar;73(3):540-548

Gilles S, Akdis C, Lauener R, Schmid-Grendelmeier P, Bieber T, Schäppi G, Traidl-Hoffmann C. The role of environmental factors in allergy: A critical reappraisal. *Exp Dermatol*. 2018 Nov;27(11):1193-1200 (Review)

Gorlanova O, Illi S, Toncheva AA, Usemann J, Latzin P, Kabesch M, Dalphin JC, Lauener R, Pekkanen JR, Von Mutius E, Riedler J, Kuehni CE, Rööslü M, Frey U; BILD and PASTURE study groups. Protective effects of breastfeeding on respiratory symptoms in infants with 17q21 asthma risk variants. *Allergy*. 2018 Dec;73(12):2388-2392.

Guttman-Yassky E, Brunner PM, Neumann AU, Khattri S, Pavel AB, Malik K, Singer GK, Baum D, Gilleaudeau P, Sullivan-Whalen M, Rose S, Jim On S, Li X, Fuentes-Duculan J, Estrada Y, Garcet S, Traidl-Hoffmann C, Krueger JG, Lebwohl MG, Traidl-Hoffmann C. Efficacy and safety of fezakinumab (an anti-IL-22 monoclonal antibody) in adults with moderate-to-severe atopic dermatitis inadequately controlled by conventional treatments - A randomized, double-blind, phase 2a trial. *J Am Acad Dermatol*. 2018 May;78(5):872-881.

Hagl B, Spielberger BD, Thoene S, Bonnal S, Mertes C, Winter C, Nijman IJ, Verduin S, Eberherr AC, Puel A, Schindler D, Ruland J, Meitinger T, Gagneur J, Orange JS, van Gijn ME, Renner ED. Somatic alterations compromised molecular diagnosis of DOCK8 hyper-IgE syndrome caused by a novel intronic splice site mutation. *Sci Rep*. 2018 Nov 13;8(1):16719.

Heuson C, Traidl-Hoffmann C. [The significance of climate and environment protection for health under special consideration of skin barrier damages and allergic sequelae [Article in German]. *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz*. 2018 Jun;61(6):684-696.

Hellings PW, Borrelli D, Pietikainen S, Agache I, Akdis C, Bachert C, Bewick M, Botjes E, Constantinidis J, Fokkens W, Haahtela T, Hopkins C, Illario M, Joos G, Lund V, Muraro A, Pugin B, Seys S, Somekh D, Stjärne P, Valiulis A, Valovirta E, Bousquet J. European Summit on the Prevention and Self-Management of Chronic Respiratory Diseases: report of the European Union Parliament Summit (29 March 2017). *J Allergy Clin Immunol*. 2018 Jan;141(1):442-445

Hiller J, Hagl B, Effner R, Puel A, Schaller M, Mascher B, Eyerich S, Eyerich K, Jansson AF, Ring J, Casanova JL, Renner ED, Traidl-Hoffmann C. STAT1 Gain-of-function and Dominant Negative STAT3 Mutations Impair IL-17 and IL-22 Immunity Associated with CMC. *J Invest Dermatol*. 2018 Mar;138(3):711-714.

Iwamoto K, Numm TJ, Koch S, Herrmann N, Leib N, Bieber T. Langerhans and inflammatory dendritic epidermal cells in atopic dermatitis are tolerized toward TLR2 activation. *Allergy* 2018;73:2205-13.

Komlósi ZI, Kovács N, van de Veen W, Kirsch AI, Fahrner HB, Wawrzyniak M, Rebane A, Stanic B, Palomares O, Rückert B, Menz G, Akdis M, Losonczy G, Akdis CA. Human CD40 ligand-expressing type 3 innate lymphoid cells induce IL-10-producing immature transitional regulatory B cells. *J Allergy Clin Immunol*. 2018 Jul;142(1):178-194

Kucuksezer UC, Ozdemir C, Akdis M, Akdis CA. Chronic rhinosinusitis: pathogenesis, therapy options, and more. *Expert Opin Pharmacother*. 2018 Nov;19(16):1805-1815

Kucuksezer UC, Ozdemir C, Akdis M, Akdis CA. Precision/Personalized Medicine in Allergic Diseases and Asthma. *Arch Immunol Ther Exp (Warsz)*. 2018 Dec;66(6):431-442

Leib N, Herrmann N, Koch S, et al. MicroRNA-155 mediates downregulation of the high-affinity receptor for IgE through Toll-like receptor signaling. *J Allergy Clin Immunol* 2018;141:425-9 e6.

Lund RJ, Osmala M, Malonzo M, Lukkarinen M, Leino A, Salmi J, Vuorikoski S, Turunen R, Vuorinen T, Akdis C, Lähdesmäki H, Lahesmaa R, Jartti T. Atopic asthma after rhinovirus-induced wheezing is associated with DNA methylation change in the SMAD3 gene promoter. *Allergy*. 2018 Aug;73(8):1735-1740

Michaudel C, Mackowiak C, Maillat I, Fauconnier L, Akdis CA, Sokolowska M, Dreher A, Tan HT, Quesniaux VF, Ryffel B, Togbe D. Ozone exposure induces respiratory barrier biphasic injury and inflammation controlled by IL-33. *J Allergy Clin Immunol*. 2018 Sep;142(3):942-958

Monitoring inflammatory heterogeneity with multiple biomarkers for multidimensional endotyping of asthma. Agache I, Strasser DS, Pierlot GM, Farine H, Izuhara K, Akdis CA.

Nicklaus S, Divaret-Chauveau A, Chardon ML, Roduit C, Kaulek V, Ksiazek E, Dalphin ML, Karvonen AM, Kirjavainen P, Pekkanen J, Lauener R, Schmausser-Hechfellner E, Renz H, Braun-Fahrlander C, Riedler J, Vuitton DA, Mutius EV, Dalphin JC; Pasture Study Group. The protective effect of cheese consumption at 18 months on allergic diseases in the first 6 years. *Allergy*. 2018 Oct 28.

Palomares O, Akdis M, Martín-Fontecha M, Akdis CA. Mechanisms of immune regulation in allergic diseases: the role of regulatory T and B cells. *Immunol Rev*. 2017 Jul;278(1):219-236

Potaczek DP, Unger SD, Zhang N, Taka S, Michel S, Akdağ N, Lan F, Helfer M, Hudemann C, Eickmann M, Skevaki C, Megremis S, Sadewasser A, Alashkar Alhamwe B, Alhamdan F, Akdis M, Edwards MR, Johnston SL, Akdis CA, Becker S, Bachert C, Papadopoulos NG, Garn H, Renz H. Development and characterization of DNase candidates demonstrating significant efficiency against human rhinoviruses. *J Allergy Clin Immunol*. 2018 Aug 14. pii: S0091-6749

Roduit C, Frei R, Ferstl R, Loeliger S, Westermann P, Rhyner C, Schiavi E, Barcik W, Rodriguez-Perez N, Wawrzyniak M, Chassard C, Lacroix C, Schmausser-Hechfellner E, Depner M, von Mutius E, Braun-Fahrlander C, Karvonen A, Kirjavainen P, Pekkanen J, Dalphin JC, Riedler J, Akdis C, Lauener R, O'Mahony L; PASTURE/EFRAIM study group. High levels of butyrate and propionate in early life are associated with protection against atopy. *Allergy*. 2018

Sanchiz A, Cuadrado C, Dieguez MC, Ballesteros I, Rodríguez J, Crespo JF, Cuevas NL, Rueda J, Linacero R, Cabanillas B, Novak N. Thermal processing effects on the IgE-reactivity of cashew and pistachio. *Food Chem*. 2018;245:595-602.

Schiavi E, Plattner S, Rodriguez-Perez N, Barcik W, Frei R, Ferstl R, Kurnik-Lucka M, Groeger D, Grant R, Roper J, Altmann F, van Sinderen D, Akdis CA, O'Mahony L. Exopolysaccharide from *Bifidobacterium longum* subsp. *longum* 35624™ modulates murine allergic airway responses. *Benef Microbes*. 2018 Sep 18;9(5):761-773

Schiavi E, Plattner S, Rodriguez-Perez N, Barcik W, Frei R, Ferstl R, Kurnik-Lucka M, Groeger D, Grant R, Roper J, Altmann F, van Sinderen D, Akdis CA, O'Mahony L. Exopolysaccharide from *Bifidobacterium longum* subsp. *longum* 35624™ modulates murine allergic airway responses. *Benef Microbes*. 2018 May 4:1-14.

Simon HU, Bieber T. Allergy-Committed to progress in allergy and immunology. *Allergy* 2018;73:527.

Simpson EL, Flohr C, Eichenfield LF, et al. Efficacy and safety of lebrikizumab (an anti-IL-13 monoclonal antibody) in adults with moderate-to-severe atopic dermatitis inadequately controlled by topical corticosteroids: A randomized, placebo-controlled phase II trial (TREBLE). *J Am Acad Dermatol* 2018;78:863-71 e11.

Sokolowska M, Frei R, Lunjani N, Akdis CA, O'Mahony L. Microbiome and asthma. *Asthma Res Pract*. 2018

Sokolowska M, Frei R, Lunjani N, Akdis CA, O'Mahony L. Microbiome and asthma. *Asthma Res Pract.* 2018 Jan 5;4:1. SOCS 1 and SOCS3 target IRF7 degradation to suppress TLR7-mediated type I IFN production of human plasmacytoid dendritic cells. *J Immunol* **2018**; 200: 4024-4035.

Straub Piccirillo D, Schmid-Grendelmeier P, Hitzler M, Lauener R. Continuing medical education activities for improved management of allergy patients. *Allergy.* 2018 Jun;73(6):1351-1353.

Tofte SJ, Papp K, Sadick N, et al. Efficacy and safety of dupilumab for the treatment of moderate-to-severe atopic dermatitis in adults: A pooled analysis of two phase 2 clinical trials. *J Am Assoc Nurse Pract* 2018;30:529-41.

Twardziok M, Schröder PC, Krusche J, Casaca VI, Illi S, Böck A, Loss GJ, Kabesch M, Toncheva AA, Roduit C, Depner M, Genuneit J, Renz H, Roponen M, Weber J, Braun-Fahrlander C, Riedler J, Lauener R, Vuitton DA, Dalphin JC, Pekkanen J, von Mutius E, Schaub B; PASTURE Study Group.; Hyvärinen A, Karvonen AM, Kirjavainen PV, Remes S, Kaulek V, Dalphin ML, Ege M, Pfefferle PI, Doekes G. Asthmatic farm children show increased CD3⁺CD8^{low} T-cells compared to non-asthmatic farm children. *Clin Immunol.* 2017 Oct;183:285-292. doi: 10.1016/j.clim.2017.09.009. Epub 2017 Sep 13.

Wang M, Tan G, Eljaszewicz A, Meng Y, Wawrzyniak P, Acharya S, Altunbulakli C, Westermann P, Dreher A, Yan L, Wang C, Akdis M, Zhang L, Nadeau KC, Akdis CA. Laundry detergents and detergent residue after rinsing directly disrupt tight junction barrier integrity in human bronchial epithelial cells. *J Allergy Clin Immunol.* 2018 Nov 27. pii: S0091-6749

Weidinger S, Beck LA, Bieber T, Kabashima K, Irvine AD. Atopic dermatitis. *Nat Rev Dis Primers* 2018;4:1. Wilsmann-Theis D, Schnell LM, Ralser-Isselstein V, et al. Successful treatment with interleukin-17A antagonists of generalized pustular psoriasis in patients without IL36RN mutations. *J Dermatol* 2018;45:850-4.

Wirz OF, Głobińska A, Ochsner U, van de Veen W, Eller E, Christiansen ES, Halken S, Nielsen C, Bindslev-Jensen C, Antó JM, Bousquet J, Akdis CA, Akdis M. Comparison of regulatory B cells in asthma and allergic rhinitis. *Allergy.* 2018 Nov 18.

Wollenberg A, Barbarot S, Bieber T, Christen-Zaech S, Deleuran M, Fink-Wagner A, Gieler U, Girolomoni G, Lau S, Muraro A, Czarnecka-Operacz M, Schäfer T, Schmid-Grendelmeier P, Simon D, Szalai Z, Szepletowski JC, Taïeb A, Torrelo A, Werfel T, Ring J; European Dermatology Forum (EDF), the European Academy of Dermatology and Venereology (EADV), the European Academy of Allergy and Clinical Immunology (EAACI), the European Task Force on Atopic Dermatitis (ETFAD), European Federation of Allergy and Airways Diseases Patients' Associations (EFA), the European Society for Dermatology and Psychiatry (ESDaP), the European Society of Pediatric Dermatology (ESPD), Global Allergy and Asthma European Network (GA2LEN) and the European Union of Medical Specialists (UEMS). Consensus-based European guidelines for treatment of atopic eczema (atopic dermatitis) in adults and children: part II. *J Eur Acad Dermatol Venereol.* 2018 Jun;32(6):850-878

Wollenberg A, Barbarot S, Bieber T, Christen-Zaech S, Deleuran M, Fink-Wagner A, Gieler U, Girolomoni G, Lau S, Muraro A, Czarnecka-Operacz M, Schäfer T, Schmid-Grendelmeier P, Simon D, Szalai Z, Szepletowski JC, Taïeb A, Torrelo A, Werfel T, Ring J; European Dermatology Forum (EDF), the European Academy of Dermatology and Venereology (EADV), the European Academy of Allergy and Clinical Immunology (EAACI), the European Task Force on Atopic Dermatitis (ETFAD), European Federation of Allergy and Airways Diseases Patients' Associations (EFA), the European Society for Dermatology and Psychiatry (ESDaP), the European Society of Pediatric Dermatology (ESPD), Global Allergy and Asthma European Network (GA2LEN) and the European Union of Medical Specialists (UEMS). Consensus-based European guidelines for treatment of atopic eczema (atopic dermatitis) in adults and children: part I. *J Eur Acad Dermatol Venereol.* 2018 May;32(5):657-682