

## PUBLICATIONS 2021

Akkoc T, O'Mahony L, Ferstl R, Akdis C, Akkoc T. Mouse Models of Asthma: Characteristics, Limitations and Future Perspectives on Clinical Translation. *Adv Exp Med Biol.* 2021 Aug 17. doi: 10.1007/5584\_2021\_654. Online ahead of print. IPF 2.622

Agache I, Eguiluz-Gracia I, Cojanu C, Laculiceanu A, Del Giacco S, Zemelka-Wiacek M, Kosowska A, Akdis CA, Jutel M. Advances and highlights in asthma in 2021. *Allergy.* 2021 Nov;76(11):3390-3407. doi: 10.1111/all.15054. 34392546 Review. IPF 13.146

Agache I, Akdis CA, Akdis M, Brockow K, Chivato T, Del Giacco S, Eiwegger T, Eyerich K, Giménez-Arnau A, Gutermuth J, Guttman-Yassky E, Maurer M, Ogg G, Ong PY, O'Mahony L, Schwarze J, Warner A, Werfel T, Palomares O, Jutel M. EAACI Biologicals Guidelines-Omalizumab for the treatment of chronic spontaneous urticaria in adults and in the paediatric population 12-17 years old. *Allergy.* 2022 Jan;77(1):17-38. doi: 10.1111/all.15030. IPF 13.146

Agache I, Song Y, Posso M, Alonso-Coello P, Rocha C, Solà I, Beltran J, Akdis CA, Akdis M, Brockow K, Chivato T, Del Giacco S, Eiwegger T, Eyerich K, Giménez-Arnau A, Gutermuth J, Guttman-Yassky E, Maurer M, Ogg G, Ong PY, O'Mahony L, Schwarze J, Werfel T, Caneo-Aybar C, Palomares O, Jutel M. Efficacy and safety of dupilumab for moderate-to-severe atopic dermatitis: A systematic review for the EAACI biologicals guidelines. *Allergy.* 2021 Jan;76(1):45-58. doi: 10.1111/all.14510. IPF 13.146

Agache I, Akdis CA, Akdis M, Canonica GW, Casale T, Chivato T, Corren J, Chu DK, Del Giacco S, Eiwegger T, Flood B, Firini D, Gern JE, Hamelmann E, Hanania N, Hernández-Martín I, Knibb R, Mäkelä M, Nair P, O'Mahony L, Papadopoulos NG, Papi A, Park HS, Pérez de Llano L, Pfaar O, Quirce S, Sastre J, Shamji M, Schwarze J, Palomares O, Jutel M. EAACI Biologicals Guidelines-Recommendations for severe asthma. *Allergy.* 2021 Jan;76(1):14-44. doi: 10.1111/all.14425. IPF 13.146

Agache I, Song Y, Alonso-Coello P, Vogel Y, Rocha C, Solà I, Santero M, Akdis C, Akdis M, Canonica GW, Chivato T, Del Giacco S, Eiwegger T, Fokkens W, Georgalas C, Gevaert P, Hopkins C, Klimek L, Lund V, Naclerio R, O'Mahony L, Palkonen S, Pfaar O, Schwarze J, Soyka MB, Wang Y, Zhang L, Caneo-Aybar C, Palomares O, Jutel M. Efficacy and safety of treatment with biologicals for severe chronic rhinosinusitis with nasal polyps: A systematic review for the EAACI guidelines. *Allergy.* 2021 Mar 8. 76(8):2337-2353. doi: 10.1111/all.14809. IPF 13.146

Agache I, Rocha C, Pereira A, Song Y, Alonso-Coello P, Solà I, Beltran J, Posso M, Akdis CA, Akdis M, Brockow K, Chivato T, Del Giacco S, Eiwegger T, Eyerich K, Giménez-Arnau A, Gutermuth J, Guttman-Yassky E, Maurer M, Ogg G, Ong P, O'Mahony L, Schwarze J, Werfel T, Caneo-Aybar C, Palomares O, Jutel M. Efficacy and safety of treatment with omalizumab for chronic spontaneous urticaria: A systematic review for the EAACI Biologicals Guidelines. *Allergy.* 2021 Jan;76(1):59-70. doi: 10.1111/all.14547. IPF 13.146

Agache I, Akdis CA, Akdis M, Brockow K, Chivato T, Del Giacco S, Eiwegger T, Eyerich K, Giménez-Arnau A, Gutermuth J, Guttman-Yassky E, Maurer M, Ogg G, Ong PY, O'Mahony L, Schwarze J, Warner A, Werfel T, Palomares O, Jutel M. EAACI Biologicals Guidelines-dupilumab for children and adults with moderate-to-severe atopic dermatitis. *Allergy.* 2021 Apr;76(4):988-1009. doi: 10.1111/all.14690. IPF 13.146

Angelina A, Martín-Fontech M, Rückert B, Wawrzyniak P, Pérez-Diego M, López-Abente J, Akdis M, Akdis CA, Palomares O. The cannabinoid WIN55212-2 restores rhinovirus-induced epithelial barrier disruption. *Allergy.* 2021 Jun;76(6):1900-1902. doi: 10.1111/all.14707. IPF 5.018

Angelina A, Pérez-Diego M, Maldonado A, Rückert B, Akdis M, Martín-Fontech M, Akdis CA, Palomares O. The cannabinoid WIN55212-2 suppresses effector T cell responses and promotes regulatory T cells in human tonsils. *Allergy;* 2021 Oct 28. doi: 10.1111/all.15160. IPF 13.146.

Bousquet J, Anto JM, Czarlewski W, Haahrtela T, Fonseca SC, Iaccarino G, Blain H, Vidal A, Sheikh A, Akdis CA, Zuberbier T; ARIA group. Cabbage and fermented vegetables: From death rate heterogeneity in

countries to candidates for mitigation strategies of severe COVID-19. *Allergy*. 2021 Mar;76(3):735-750. doi: 10.1111/all.14549. IPF 13.146

Bousquet J, Jutel M, Akdis CA, Klimek L, Pfaar O, Nadeau KC, Eiwegger T, Bedbrook A, Ansotegui IJ, Anto JM, Bachert C, Bateman ED, Bennoor KS, Berghea EC, Bergmann KC, Blain H, Bonini M, Bosnic-Anticevich S, Boulet LP, Brussino L, Buhl R, Camargos P, Canonica GW, Cardona V, Casale T, Chinthurajah S, Akdis M, Chivato T, Christoff G, Cruz AA, Czarlewski W, Del Giacco S, Du H, El-Gamal Y, Fokkens WJ, Fonseca JA, Gao Y, Gaga M, Gemcioglu B, Gotua M, Haahtela T, Halpin D, Hamelmann E, Hoffmann-Sommergruber K, Humbert M, Ilina N, Ivancevich JC, Joos G, Khaitov M, Kirenga B, Knol EF, Ko FW, Koskinen S, Kowalski ML, Kraxner H, Kudlay D, Kuna P, Kupczyk M, Kvedariene V, Abdul Latiff AH, Le LT, Levin M, Larenas-Linnemann D, Louis R, Masjedi MR, Melén E, Mihaltan F, Milenkovic B, Mohammad Y, Morais-Almeida M, Mullol J, Namazova L, Neffen H, Nunes E, O'Byrne P, O'Hehir R, O'Mahony L, Ohta K, Okamoto Y, Onorato GL, Panzner P, Papadopoulos NG, Passalacqua G, Patella V, Pawankar R, Pham-Thi N, Pigearias B, Popov TA, Puggioni F, Regateiro FS, Rolla G, Rottem M, Samolinski B, Sastre J, Schwarze J, Sheikh A, Scichilone N, Soto-Quiros M, Soto-Martinez M, Sova M, Nicola S, Stelmach R, Suppli-Ulrik C, Taborda-Barata L, To T, Tomazic PV, Toppila-Salmi S, Tsiliogianni I, Usmani O, Valiulis A, Ventura MT, Viegi G, Vontetsianos T, Wang Y, Williams S, Wong GWK, Yorgancioglu A, Zernotti M, Zidarn M, Zuberbier T, Agache I. ARIA-EAACI statement on asthma and COVID-19 (June 2, 2020). *Allergy*. 2021 Mar;76(3):689-697. doi: 10.1111/all.14471. IPF 13.146

Bousquet J, Anto JM, Bachert C, Haahtela T, Zuberbier T, Czarlewski W, Bedbrook A, Bosnic-Anticevich S, Walter Canonica G, Cardona V, Costa E, Cruz AA, Erhola M, Fokkens WJ, Fonseca JA, Illario M, Ivancevich JC, Jutel M, Klimek L, Kuna P, Kvedariene V, Le L, Larenas-Linnemann DE, Laune D, Lourenço OM, Melén E, Mullol J, Niedoszytko M, Odemyr M, Okamoto Y, Papadopoulos NG, Patella V, Pfaar O, Pham-Thi N, Rolland C, Samolinski B, Sheikh A, Sofiev M, Suppli Ulrik C, Todo-Bom A, Tomazic PV, Toppila-Salmi S, Tsiliogianni I, Valiulis A, Valovirta E, Ventura MT, Walker S, Williams S, Yorgancioglu A, Agache I, Akdis CA, Almeida R, Ansotegui IJ, Annesi-Maesano I, Arnavelhe S, Basagaña X, D Bateman E, Bédard A, Bedolla-Barajas M, Becker S, Bennoor KS, Benveniste S, Bergmann KC, Bewick M, Bialek S, E Billo N, Bindslev-Jensen C, Bjermer L, Blain H, Bonini M, Bonniaud P, Bosse I, Bouchard J, Boulet LP, Bourret R, Boussery K, Braido F, Briedis V, Briggs A, Brightling CE, Brozek J, Brusselle G, Brussino L, Buhl R, Buonaiuto R, Calderon MA, Camargos P, Camuzat T, Caraballo L, Carriazo AM, Carr W, Cartier C, Casale T, Cecchi L, Cepeda Saravia AM, H Chavannes N, Chkhartishvili E, Chu DK, Cingi C, Correia de Sousa J, Costa DJ, Courbis AL, Custovic A, Cvetkoski B, D'Amato G, da Silva J, Dantas C, Dokic D, Dauvilliers Y, De Feo G, De Vries G, Devillier P, Di Capua S, Dray G, Dubakiene R, Durham SR, Dykewicz M, Ebisawa M, Gaga M, El-Gamal Y, Heffler E, Emuzyte R, Farrell J, Fauquert JL, Fiocchi A, Fink-Wagner A, Fontaine JF, Fuentes Perez JM, Gemcioğlu B, Gamkrelidze A, Garcia-Aymerich J, Gevaert P, Gomez RM, González Diaz S, Gotua M, Guldemond NA, Guzmán MA, Hajjam J, Huerta Villalobos YR, Humbert M, Iaccarino G, Ierodiakonou D, Iinuma T, Jassem E, Joos G, Jung KS, Kaidashev I, Kalayci O, Kardas P, Keil T, Khaitov M, Khaltaev N, Kleine-Tebbe J, Kouznetsov R, Kowalski ML, Kritikos V, Kull I, La Grutta S, Leonardini L, Ljungberg H, Lieberman P, Lipworth B, Lodrup Carlsen KC, Lopes-Pereira C, Loureiro CC, Louis R, Mair A, Mahboub B, Makris M, Malva J, Manning P, Marshall GD, Masjedi MR, Maspero JF, Carreiro-Martins P, Makela M, Mathieu-Dupas E, Maurer M, De Manuel Keenoy E, Melo-Gomes E, Meltzer EO, Menditto E, Mercier J, Michel Y, Miculinic N, Mihaltan F, Milenkovic B, Mitsias DI, Moda G, Mogica-Martinez MD, Mohammad Y, Montefort S, Monti R, Morais-Almeida M, Mösges R, Münter L, Muraro A, Murray R, Naclerio R, Napoli L, Namazova-Baranova L, Neffen H, Nekam K, Neou A, Nordlund B, Novellino E, Nyembue D, O'Hehir R, Ohta K, Okubo K, Onorato GL, Orlando V, Ouedraogo S, Palamarchuk J, Pali-Schöll I, Panzner P, Park HS, Passalacqua G, Pépin JL, Paulino E, Pawankar R, Phillips J, Picard R, Pinnoch H, Plavec D, Popov TA, Portejoie F, Price D, Prokopakis EP, Psarros F, Pugin B, Puggioni F, Quinones-Delgado P, Raciborski F, Rajabian-Söderlund R, Regateiro FS, Reitsma S, Rivero-Yeverino D, Roberts G, Roche N, Rodriguez-Zagal E, Rolland C, Roller-Wirnsberger RE, Rosario N, Romano A, Rottem M, Ryan D, Salimäki J, Sanchez-Borges MM, Sastre J, Scadding GK, Scheire S, Schmid-Grendelmeier P, Schünemann HJ, Sarquis Serpa F, Shamji M, Sisul JC, Sofiev M, Solé D, Somekh D, Sooronbaev T, Sova M, Spertini F, Spranger O, Stellato C, Stelmach R, Thibaudon M, To T, Toumi M, Usmani O, Valero AA, Valenta R, Valentin-Rostan M, Pereira MU, van der Kleij R, Van Eerd M, Vandenberghe O, Vasankari T, Vaz Carneiro A, Vezzani G, Viart F, Viegi G, Wallace D, Wagenmann M, Wang Y, Waserman S, Wickman M, Williams DM, Wong G, Wroczynski P, Yiallouros PK, Yusuf OM, Zar HJ, Zeng S, Zernotti ME, Zhang L, Shan Zhong N, Zidarn M. ARIA digital anamorphosis: Digital transformation of health and care in airway diseases from research to practice. *Allergy*. 2021 Jan;76(1):168-190. doi: 10.1111/all.14422. IPF:13.146

Bousquet J, Agache I, Blain H, Jutel M, Ventura MT, Worm M, Del Giacco S, Benetos A, Bilo MB, Czarlewski W, Abdul Latiff AH, Al-Ahmad M, Angier E, Annesi-Maesano I, Atanaskovic-Markovic M, Bachert C, Barbaud A, Bedbrook A, Bennoor KS, Berghea EC, Bindslev-Jensen C, Bonini S, Bosnic-Anticevich S, Brockow K, Brussino L, Camargos P, Canonica GW, Cardona V, Carreiro-Martins P, Carriazo A, Casale T, Caubet JC, Cecchi L, Cherubini A, Christoff G, Chu DK, Cruz AA, Dokic D, El-Gamal Y, Ebisawa M, Eberlein B, Farrell J, Fernandez-Rivas M, Fokkens WJ, Fonseca JA, Gao Y, Gavazzi G, Gawlik R, Gelincik A, Gemicioğlu B, Gotua M, Guérin O, Haahtela T, Hoffmann-Sommergruber K, Hoffmann HJ, Hofmann M, Hrubisko M, Ienalllario M, Irani C, Ispayeva Z, Ivancevich JC, Julge K, Kaidashev I, Khaitov M, Knol E, Kraxner H, Kuna P, Kvedariene V, Lauferma A, Le LT, Le Moing V, Levin M, Louis R, Lourenco O, Mahler V, Martin FC, Matucci A, Milenkovic B, Miot S, Montella E, Morais-Almeida M, Mortz CG, Mullol J, Namazova-Baranova L, Neffen H, Nekam K, Niedoszytko M, Odemyr M, O'Hehir RE, Okamoto Y, Ollert M, Palomares O, Papadopoulos NG, Panzner P, Passalacqua G, Patella V, Petrovic M, Pfaar O, Pham-Thi N, Plavec D, Popov TA, Recto MT, Regateiro FS, Reynes J, Roller-Winsberger RE, Rolland Y, Romano A, Rondon C, Rottem M, Rouadi PW, Salles N, Samolinski B, Santos AF, Serpa FS, Sastre J, Schols JMGA, Scichilone N, Sediva A, Shamji MH, Sheikh A, Skypala I, Smolinska S, Sokolowska M, Sousa-Pinto B, Sova M, Stelmach R, Sturm G, Suppli Ulrik C, Todo-Bom AM, Toppila-Salmi S, Tsiligianni I, Torres M, Untersmayr E, Urrutia Pereira M, Valiulis A, Vitte J, Vultaggio A, Wallace D, Walusiak-Skorupa J, Wang DY, Waserman S, Yorgancioglu A, Yusuf OM, Zernotti M, Zidam M, Chivato T, Akdis CA, Zuberbier T, Klimek L. Management of anaphylaxis due to COVID-19 vaccines in the elderly. *Allergy*. 2021 Apr 2. doi: 10.1111/all.14838. Online ahead of print. PMID: 33811358. IPF 13.146

Bousquet J, Anto JM, Czarlewski W, Haahtela T, Fonseca SC, Iaccarino G, Blain H, Vidal A, Sheikh A, Akdis CA, Zuberbier T; ARIA group. Cabbage and fermented vegetables: From death rate heterogeneity in countries to candidates for mitigation strategies of severe COVID-19. *Allergy*. 2021 Mar;76(3):735-750. doi: 10.1111/all.14549. IPF 13.146

Cabanillas B, Akdis CA, Novak N. COVID-19 vaccine anaphylaxis: IgE, complement or what else? A reply to: "COVID-19 vaccine anaphylaxis: PEG or not?". *Allergy*. 2021 Jun;76(6):1938-1940. doi: 10.1111/all.14725. IPF 13.146

Cabanillas B, Akdis CA, Novak N. COVID-19 vaccines and the role of other potential allergenic components different from PEG. A reply to: "Other excipients than PEG might cause serious hypersensitivity reactions in COVID-19 vaccines". *Allergy*. 2021 Jun;76(6):1943-1944. doi: 10.1111/all.14761. IPF 13.146

Cabanillas B, Akdis CA, Novak N. Allergic reactions to the first COVID-19 vaccine: A potential role of polyethylene glycol? *Allergy*. 2021 Jun;76(6):1617-1618. doi: 10.1111/all.14711. IPF 13.146

Cabanillas B, Novak N, Akdis CA. The form of PEG matters: PEG conjugated with lipids and not PEG alone could be the specific form involved in allergic reactions to COVID-19 vaccines. *Allergy*. 2021 Nov 24. doi: 10.1111/all.15187. Online ahead of print. IPF 13.146

Cevheras L, Ma S, Stanic B, Ochsner U, Jansen K, Ferstl R, Frei R, Chijioke O, Münz C, Zhang L, O'Mahony L, Akdis M, van de Veen W. IL-10 induces IgG4 production in NOD-scid Il2rnnull mice humanized by engraftment of peripheral blood mononuclear cells. *Allergy*. 2021 Nov;76(11):3525-3529. doi: 10.1111/all.15031. IPF 13.15

Chantveerawong T, Sangkangjanavanich S, Chiewchalermsri C, Pradubpongso P, Mitthamsiri W, Jindarat S, Wang M, Akdis M, Sokolowska M, Akdis CA, Sangasapaviliya A, Boonpiyathad T. Increased circulating CTRH2 + Tregs are associated with asthma control and exacerbation. *Allergy*. 2021 Oct 22. doi: 10.1111/all.15145. Online ahead of print. IPF 13.146

Delgado-Dolset MI, Obeso D, Rodríguez-Coira J, Tarin C, Tan G, Cumplido JA, Cabrera A, Angulo S, Barbas C, Sokolowska M, Barber D, Carrillo T, Villaseñor A, Escribese MM. Understanding uncontrolled severe allergic asthma by integration of omic and clinical data. *Allergy*. 2021 Nov 28. doi: 10.1111/all.15192. Online ahead of print. IPF 13.146

Du H, Dong X, Zhang JJ, Cao YY, Akdis M, Huang PQ, Chen HW, Li Y, Liu GH, Akdis CA, Lu XX, Gao YD. Clinical characteristics of 182 pediatric COVID-19 patients with different severities and allergic status. *Allergy*. 2021 Feb;76(2):510-532. doi: 10.1111/all.14452. IPF 13.146

Fernandez-Santamaria R, Satitsuksanoa P. Engineered IL-10: A matter of affinity. *Allergy*. 2021 Oct 9. doi: 10.1111/all.15132. Online ahead of print. IPF 13.146

Gao Y, Ding M, Dong X, Zhang J, Azkur AK, Azkur D, Gan H, Sun Y, Fu W, Li W, Liang H, Cao Y, Yan Q, Can C, Gao H, Brüggen M, van de Veen W, Sokolowska M, Akdis M, Akdis CA. Risk factors for severe and critically ill COVID-19 patients: a review. *Allergy*. 2021 Feb;76(2):428-455. doi: 10.1111/all.14657. IPF 13.146

Hagemann J, Onorato GL, Jutel M, Akdis CA, Agache I, Zuberbier T, Czarlewski W, Mullol J, Bedbrook A, Bachert C, Bennoor KS, Bergmann KC, Braido F, Camargos P, Caraballo L, Cardona V, Casale T, Cecchi L, Chivato T, Chu DK, Cingi C, Correia-de-Sousa J, Del Giacco S, Dokic D, Dykewicz M, Ebisawa M, El-Gamal Y, Emuzyte R, Fauquert JL, Fiocchi A, Fokkens WJ, Fonseca JA, Gemicioglu B, Gomez M, Maia G, Haahela T, Hamelmann E, Iinuma T, Ivancevich JC, Jassem E, Kalayci O, Kardas P, Khaitov M, Kuna P, Kvedariene V, Larenas-Linnemann DE, Lipworth B, Makris M, Maspero JF, Miculinic N, Mihaltan F, Mohammad Y, Montefort S, Morais-Almeida M, Mösges R, Naclerio R, Neffen H, Niedoszytko M, O'Hehir RE, Ohta K, Okamoto Y, Okubo K, Panzner P, Papadopoulos NG, Passalacqua G, Patella V, Pereira A, Pfaar O, Plavec D, Popov TA, Prokopakis EP, Puggioni F, Raciborski F, Reijula J, Regateiro FS, Reitsma S, Romano A, Rosario N, Rottem M, Ryan D, Samolinski B, Sastre J, Solé D, Sova M, Stellato C, Suppli-Ulrik C, Tsiligianni I, Valero A, Valiulis A, Valovirta E, Vasankari T, Ventura MT, Wallace D, Wang Y, Williams I, Yorgancioglu A, Yusuf OM, Zernotti M, Bousquet J, Klimek L. Differentiation of COVID-19 signs and symptoms from allergic rhinitis and common cold- An ARIA-EAACI-GA2 LENconsensus. *Allergy*. 2021 Aug;76(8):2354-2366. doi: 10.1111/all.14815. IPF 13.146

Jansen K, Cevherdas L, Ma S, Satitsuksanoa P, Akdis M, van de Veen W. Regulatory B cells, A to Z. *Allergy*. 2021 Sep;76(9):2699-2715. doi: 10.1111/all.14763. Review. IPF 13.146

Jansen K, Satitsuksanoa P, Wirz OF, Schneider SR, van de Veen W, Tan G, Sokolowska M, Message SD, Kebadze T, Glanville N, Mallia P, Akdis CA, Moniuszko M, Johnston SL, Nadeau K, Akdis M. T regulatory cells from atopic asthmatic individuals show a Th2-like phenotype. *Allergy*. 2021 Dec 4. doi: 10.1111/all.15193. Online ahead of print. IPF 13.146

Klimek L, Agache I, Cooke E, Jutel M, Akdis CA, O'Hehir R. COVID-19 vaccines-The way forward. *Allergy*. 2022 Jan;77(1):15-16. doi: 10.1111/all.14995. IPF 13.146

Klimek L, Novak N, Cabanillas B, Jutel M, Bousquet J, Akdis CA. Allergenic components of the mRNA-1273 vaccine for COVID-19: possible involvement of polyethylene glycol and IgG-mediated complement activation. *Allergy*. 2021 Nov;76(11):3307-3313. doi: 10.1111/all.14794. Review. IPF 13.146

Klimek L, Jutel M, Akdis CA, Bousquet J, Akdis M, Torres MJ, Agache I, Canonica GW, Del Giacco S, O'Mahony L, Shamji MH, Schwarze J, Untersmayr E, Ring J, Bedbrook A, Worm M, Zuberbier T, Knol E, Hoffmann-Sommergruber K, Chivato T. ARIA-EAACI statement on severe allergic reactions to COVID-19 vaccines - An EAACI-ARIA Position Paper. *Allergy*. 2021 Jun;76(6):1624-1628. doi: 10.1111/all.14726. IPF 13.146

Klimek L, Akdis CA, Jutel M, Zuberbier T, Bousquet J. Inhaled corticosteroids in early COVID-19-A tale of many facets. *Allergy*. 2021 Nov;76(11):3540-3542. doi: 10.1111/all.15041. IPF 13.146

Klimek L, Jutel M, Bousquet J, Agache I, Akdis CA, Hox V, Gevaert P, Tomazic PV, Rondon C, Cingi C, Toppila-Salmi S, Karavelia A, Bozkurt B, Förster-Ruhrmann U, Becker S, Chaker AM, Wollenberg B, Mösges R, Huppertz T, Hagemann J, Bachert C, Fokkens W. Management of patients with chronic rhinosinusitis during the COVID-19 pandemic-An EAACI position paper. *Allergy*. 2021 Mar;76(3):677-688. doi: 10.1111/all.14629. IPF 13.146

Mitamura Y, Schulz D, Oro S, Li N, Kolm I, Lang C, Ziadlou R, Tan G, Bodenmiller B, Steiger P, Marzano A, de Prost N, Caudin O, Levesque M, Stoffel C, Schmid-Grendelmeier P, Maverakis E, Akdis CA, Brüggen MC. Cutaneous and systemic hyperinflammation drives maculopapular drug exanthema in severely ill COVID-19 patients. *Allergy*. 2021 Jun 22:10.1111/all.14983. doi: 10.1111/all.14983. Online ahead of print. IPF 13.146

Korath ADJ, Janda J, Untersmayr E, Sokolowska M, Feleszko W, Agache I, Adel Seida A, Hartmann K, Jensen-Jarolim E, Pali-Schöll I. One Health: EAACI Position Paper on coronaviruses at the human-animal interface, with a specific focus on comparative and zoonotic aspects of SARS-CoV-2. *Allergy*. 2022 Jan;77(1):55-71. doi: 10.1111/all.14991. IPF 13.146

Lunjani N, Tan G, Dreher A, Sokolowska M, Groeger D, Wawrzyniak M, Altunbulakli C, Westermann P, Basera W, Hobane L, Botha M, Gray C, Mankahla A, Gray C, Nadeau KC, Hlela C, Levin M, O'Mahony L, Akdis CA. Environment-dependent alterations of immune mediators in urban and rural south African children with atopic dermatitis. *Allergy*. 2021 Jun 4. doi: 10.1111/all.14974. Online ahead of print. PMID: 34086351. IPF 13.146

Maurer DJ, Liu C, Xepapadaki P, Stanic B, Bachert C, Finotto S, Gao YD, Graser A, Jartti T, Kistler W, Kowalski M, Lukkarinen H, Pasolati M, Tan G, Villiger M, Zhang L, Zhang N, Akdis M, Papadopoulos NG, Akdis CA. Physical activity in asthma control and its immune modulatory effect in asthmatic preschoolers. *Allergy*. 2021 Sep 21. doi: 10.1111/all.15105. PMID: 34547110. IPF 13.146

Nadeau KC, Agache I, Jutel M, Annesi Maesano I, Akdis M, Sampath V, D'Amato G, Cecchi L, Traidl-Hoffmann C, Akdis CA. Climate change: A call to action for the United Nations. *Allergy*. 2021 Sep 3. 2021;00:1-4. doi: 10.1111/all.15079. IPF 13.146

Novotny EN, White SJ, Wilson AD, Stefánsdóttir SB, Tijhaar E, Jónsdóttir S, Frey R, Reiche D, Rose H, Rhynier C, Schüpbach-Regula G, Torsteinsdóttir S, Alcocer M, Marti E. Component-resolved microarray analysis of IgE sensitization profiles to Culicoides recombinant allergens in horses with insect bite hypersensitivity. *Allergy*. 2021 Aug 11; 74(4):1147-1157. DOI: 10.1111/all.14556. IPF 13.146

Ogulur I, Pat Y, Ardicli O, Barletta E, Cevheras L, Fernandez-Santamaria R, Huang M, Bel Imam M, Koch J, Ma S, Maurer DJ, Mitamura Y, Peng Y, Radzikowska U, Rinaldi AO, Rodriguez-Coira J, Satitsuksanao P, Schneider SR, Wallmann A, Zhakparov D, Ziadiou R, Brüggen MC, van de Veen W, Sokolowska M, Baerenfaller K, Zhang L, Akdis M, Akdis CA. Advances and highlights in biomarkers of allergic diseases. *Allergy*. 2021 Sep 14. doi: 10.1111/all.15089. IPF 13.146

Orimo K, Tamari M, Takeda T, Kubo T, Rückert B, Motomura K, Sugiyama H, Yamada A, Saito K, Arae K, Kuriyama M, Hara M, Soyka MB, Ikutani M, Yamaguchi S, Morimoto N, Nakabayashi K, Hata K, Matsuda A, Akdis CA, Sudo K, Saito H, Nakae S, Tamaoki J, Tagaya E, Matsumoto K, Morita H. Direct platelet adhesion potentiates group 2 innate lymphoid cell functions. *Allergy*. 2021 Aug 17. doi: 10.1111/all.15057. Online ahead of print. IPF 13.146

Pat Y, Ogulur I. The epithelial barrier hypothesis: a 20-year journey. *Allergy*. 2021 Nov;76(11):3560-2. doi: 10.1111/all.14899. IPF 13.146

Pawankar R, Castells M, Akdis M, Nadeau K, Leung ASY. Women in science and medicine. *Allergy*. 2021 Dec;76(12):3578-3580. doi: 10.1111/all.14967. IPF 13.146

Pfaar O, Torres MJ, Akdis CA. COVID-19: A series of important recent clinical and laboratory reports in immunology and pathogenesis of SARS-CoV-2 infection and care of allergy patients. *Allergy*. 2021 Mar;76(3):622-625. doi: 10.1111/all.14472. IPF 13.146

Pfaar O, Klimek L, Jutel M, Akdis CA, Bousquet J, Breiteneder H, Chinthurajah S, Diamant Z, Eiwegger T, Fokkens WJ, Fritsch HW, Nadeau KC, O'Hehir RE, O'Mahony L, Rief W, Sampath V, Schedlowski M, Torres MJ, Traidl-Hoffmann C, Wang Y, Zhang L, Bonini M, Brehler R, Brough HA, Chivato T, Del Giacco SR, Dramburg S, Gawlik R, Gelincik A, Hoffmann-Sommergruber K, Hox V, Knol EF, Lauerman A, Matricardi PM, Mortz CG, Ollert M, Palomares O, Riggioni C, Schwarze J, Skypala I, Untersmayr E, Walusiak-Skorupa J, Ansotegui IJ, Bachert C, Bedbrook A, Bosnic-Anticevich S, Brussino L, Canonica GW, Cardona V, Carreiro-Martins P, Cruz AA, Czarlewski W, Fonseca JA, Gotua M, Haahtela T, Ivancevich JC, Kuna P, Kvedariene V, Larenas-Linnemann DE, Abdul Latiff AH, Mäkelä M, Morais-Almeida M, Mullol J, Naclerio R, Ohta K, Okamoto Y, Onorato GL, Papadopoulos NG, Patella V, Regateiro FS, Samoliński B, Suppli Ulrik C, Toppila-Salmi S, Valiulis A, Ventura MT, Yorgancioglu A, Zuberbier T, Agache I. COVID-19 pandemic:

Practical considerations on the organization of an allergy clinic-An EAACI/ARIA Position Paper. *Allergy*. 2021 Mar;76(3):648-676. doi: 10.1111/all.14453. IPF 13.146

Pfaller B, Yepes-Nuñez JJ, Agache I, Akdis CA, Alsalamah M, Baybek S, Bossios A, Boyman O, Chaker A, Chan S, Chatzipetrou A, du Toit G, Jutel M, Kauppi P, Kolios A, Li C, Matucci A, Marson A, Bendien S, Palomares O, Rogala B, Szepfalusi Z, Untersmayr E, Vultaggio A, Eiwegger T. Biologicals in atopic disease in pregnancy: an EAACI position paper. *Allergy*. 2021 Jan;76(1):71-89. doi: 10.1111/all.14282. IPF 13.146

Rinaldi AO, Korsfeldt A, Ward S, Burla D, Dreher A, Gautschi M, Stolpe B, Tan G, Bersuch E, Melin D, Askary Lord N, Grant S, Svedenhag P, Tsekova K, Schmid-Grendelmeier P, Möhrenschlager M, Renner ED, Akdis CA. Electrical impedance spectroscopy for the characterization of skin barrier in atopic dermatitis. *Allergy*. 2021 Apr 8. doi: 10.1111/all.14842. Online ahead of print. PMID: 33830511. IPF 13.146

Sahiner UM, Layhadi JA, Golebski K, István Komlósi Z, Peng Y, Sekerel B, Durham SR, Brough H, Morita H, Akdis M, Turner P, Nadeau K, Spits H, Akdis C, Shamji MH. Innate lymphoid cells: The missing part of a puzzle in food allergy. *Allergy*. 2021 Jul;76(7):2002-2016. doi: 10.1111/all.14776. Review. IPF 13.146

Sampath V, Rabinowitz G, Shah M, Jain S, Diamant Z, Jesenak M, Rabin R, Vieths S, Agache I, Akdis M, Barber D, Breiteneder H, Chinthurajah S, Chivato T, Collins W, Eiwegger T, Fast K, Fokkens W, O'Hehir RE, Ollert M, O'Mahony L, Palomares O, Pfaar O, Riggioni C, Shamji MH, Sokolowska M, Jose Torres M, Traidl-Hoffmann C, van Zelm M, Wang Y, Zhang L, Akdis CA, Nadeau KC. Vaccines and allergic reactions: The past, the current COVID-19 pandemic, and future perspectives. *Allergy*. 2021 Jun;76(6):1640-1660. doi: 10.1111/all.14840. IPF 13.146

Satitsuksanoa P, Daanje M, Akdis M, Boyd SD, van de Veen W. Biology and dynamics of B cells in the context of IgE-mediated food allergy. *Allergy*. 2021 Jun;76(6):1707-1717. doi: 10.1111/all.14684. IPF 13.146

Sokolowska M, Rovati GE, Diamant Z, Untersmayr E, Schwarze J, Lukasik Z, Sava F, Angelina A, Palomares O, Akdis C, O'Mahony L, Sanak M, Dahlen SE, Woszczeck G. Current perspective on eicosanoids in asthma and allergic diseases - EAACI Task Force consensus report, part I. *Allergy*. 2021 Jan;76(1):114-130. doi: 10.1111/all.14295. IPF 13.146

Sokolowska M, Eiwegger T, Ollert M, Torres MJ, Barber D, Del Giacco S, Jutel M, Nadeau KC, Palomares O, Rabin RL, Riggioni C, Vieths S, Agache I, Shamji MH. EAACI statement on the diagnosis, management and prevention of severe allergic reactions to COVID-19 vaccines. *Allergy*. 2021 Jun;76(6):1629-1639. doi: 10.1111/all.14739. IPF 13.146

\*Tynecka M, \*Radzikowska U, Eljaszewicz E. IL-10-producing innate lymphoid cells: Did we find a missing piece of the puzzle? *Allergy*. 2021 Jun 16; 76(12):3849-3851. doi: 10.1111/all.14980 \*equal first authorship. IPF 13.146

Tramper-Stranders G, Ambrožej D, Arcolaci A, Atanaskovic-Markovic M, Boccabella C, Bonini M, Karavelia A, Mingomataj E, O' Mahony L, Sokolowska M, Untersmayr E, Feleszko W; EAACI Task Force on Conscious and Rational use of Antibiotics in Allergic Diseases. Dangerous liaisons: Bacteria, antimicrobial therapies, and allergic diseases. *Allergy*. 2021 Nov;76(11):3276-3291. doi: 10.1111/all.15046. IPF 13.146

Vlieg-Boerstra B, de Jong N, Meyer R, Agostoni C, De Cosmi V, Grimshaw K, Milani GP, Muraro A, Oude Elberink H, Pali-Schöll I, Roduit C, Sasaki M, Skypala I, Sokolowska M, van Splunter M, Untersmayr E, Venter C, O'Mahony L, Nwaru BI. Nutrient supplementation for prevention of viral respiratory tract infections in healthy subjects: A systematic review and meta-analysis. *Allergy*. 2021 Oct 9;00:1-16. doi: 10.1111/all.15136. Online ahead of print. IPF 13.146

Wang M, Bu X, Fang G, Luan G, Huang Y, Akdis CA, Wang C, Zhang L. Distinct expression of SARS-CoV-2 receptor ACE2 correlates with endotypes of chronic rhinosinusitis with nasal polyps. *Allergy*. 2021 Mar;76(3):789-803. doi: 10.1111/all.14665. IPF 13.146

Wawrzyniak P, Krawczyk K, Acharya S, Tan G, Wawrzyniak M, Karouzakis E, Dreher A, Jakielo B, Altunbulakli C, Sanak M, O'Mahony L, Nadeau K, Akdis CA. Inhibition of CpG methylation improves the

barrier integrity of bronchial epithelial cells in asthma. *Allergy*. 2021 Jun;76(6):1864-1868. doi: 10.1111/all.14667. IPF 13.146

Wiehn E, Ricci C, Alvarez-Perea A, Perkin MR, Jones CJ, Akdis C, Bousquet J, Eigenmann P, Grattan C, Apfelbacher CJ, Genuenit J; Task Force 'Adherence to reporting guidelines in articles published in EAACI Journals: a systematic review' of the EAACI Working Group on Epidemiology. Adherence to the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) checklist in articles published in EAACI Journals: A bibliographic study. *Allergy*. 2021 Dec;76(12):3581-3588. doi: 10.1111/all.14951. IPF 13.146

Wirz OF, Jansen K, Satitsuksanoa P, van de Veen W, Tan G, Sokolowska M, Mirer D, Stanić B, Message SD, Kebadze T, Glanville N, Mallia P, Gern JE, Papadopoulos N, Akdis CA, Johnston SL, Nadeau K, Akdis M. Experimental rhinovirus infection induces an antiviral response in circulating B cells which is dysregulated in patients with asthma Allergy. 2022 Jan;77(1):130-142. doi: 10.1111/all.14985. IPF 13.146

Zhang JJ, Cao YY, Tan G, Dong X, Wang BC, Lin J, Yan YQ, Liu GH, Akdis M, Akdis CA, Gao YD. Clinical, radiological, and laboratory characteristics and risk factors for severity and mortality of 289 hospitalized COVID-19 patients. *Allergy*. 2021 Feb;76(2):533-550. doi: 10.1111/all.14496. IPF 13.146

Zhang L, Akdis CA. The Past, Present and Future of Allergic Diseases in China. *Allergy*. 2022 Jan 7. doi: 10.1111/all.15213. IPF 13.146

Zhang L, Akdis CA. The inspirational journey of Chinese scholars in the field of allergy. *Allergy*. 2021 Feb;76(2):422-424. doi: 10.1111/all.14676. IPF 13.146

Zhou Y, Li Q, Pan R, Wang Q, Zhu X, Yuan C, Cai F, Gao YD, Cui Y. Regulatory roles of three miRNAs on allergen mRNA expression in *Tyrophagus putrescentiae*. *Allergy*. 2021 Sep 27. doi: 10.1111/all.15111. Online ahead of print. IPF 13.146

Shang J, Wang Q, Zhang H, Wang X, Wan J, Yan Y, Gao Y, Cheng J, Li Z, Lin J. The Relationship Between Diabetes Mellitus and COVID-19 Prognosis: A Retrospective Cohort Study in Wuhan, China. *Am J Med*. 2021 Jan; 134(1): e6–e14. Published online 2020 Jul 10. doi: 10.1016/j.amjmed.2020.05.033. IPF 4.529

Wang YM, Xu WJ, Xiang LL, Ding M, Zhang JJ, Lu JY, Xie BJ, Gao YD. Store-operated calcium entry-associated regulatory factor regulates airway inflammation and airway remodeling in asthma mice models. *Am J Physiol Lung Cell Mol Physiol*. 2021 Sep 1;321(3):L533-L544. doi: 10.1152/ajplung.00079.2020. PMID: 34231388. IPF 5.464

Jiang SY, Smith EM, Vo V, Akdis C, Nadeau KC. Non-immunoglobulin E-mediated allergy associated with Pfizer-BioNTech coronavirus disease 2019 vaccine excipient polyethylene glycol. *Ann Allergy Asthma Immunol*. 2021 Dec;127(6):694-696. doi: 10.1016/j.anai.2021.09.012. IPF 6.347

Bates AE, Primack RB, Duarte CM, PAN-Environment Working Group\*. Global COVID-19 lockdown highlights humans as both threats and custodians of the environment. *Biol Conserv*. 2021. Nov; 263: 109175, doi: 10.1016/j.biocon.2021.109175. IPF 5.405

Wallimann A, Hildebrand M, Groeger D, Stanic B, Akdis CA, Zeiter S, Richards RG, Moriarty TF, O'Mahony L, Thompson K. An Exopolysaccharide Produced by *Bifidobacterium longum* 35624® Inhibits Osteoclast Formation via a TLR2-Dependent Mechanism. *Calcif Tissue Int*. 2021 May;108(5):654-666. doi: 10.1007/s00223-020-00790-4. IPF 3.423

Kern U, Fröhlich K, Bedacht J, Schmidt N, Biniossek ML, Gensch N, Baerenfaller K, Schilling O. Impact of DJ-1 and Helix 8 on the Proteome and Degradome of Neuron-Like Cells. *Cells* 2021, 10(2), 404. doi.org/10.3390/cells10020404. IPF 6.600

Ptaszynska-Kopczynska K, Eljaszewicz A, Marcinkiewicz-Siemion M, Sawicka-Smiarowska E, Tarasiuk E, Lisowska A, Tynecka M, Grubczak K, Radzikowska U, Janucik A, Moniuszko M, Charkiewicz K, Laudanski

P, Sobkowicz B, Kaminski KA. Monocyte subsets in patients with cardiac resynchronization therapy. *Cells* 2021, 10(12), 3482. DOI: 10.3390/cells10123482. IPF 6.600

Angelina A, Pérez-Diego M, Maldonado A, Rückert B, Akdis M, Martín-Fontechá M, Akdis CA, Palomares O. The cannabinoid WIN55212-2 impairs peanut allergic sensitization and promotes the generation of allergen-specific regulatory T cells. *Clin Exp Allergy*. 2022 Jan 7. doi: 10.1111/cea.14092. IPF 5.018.

Bousquet J, Pfaar O, Agache I, Bedbrook A, Akdis CA, Canonica GW, Chivato T, Al-Ahmad M, Abdul Latiff AH, Ansotegui IJ, Bachert C, Baharuddin A, Bergmann KC, Bindslev-Jensen C, Bjermer L, Bonini M, Bosnic-Anticevich S, Bosse I, Brough HA, Brussino L, Calderon MA, Caraballo L, Cardona V, Carreiro-Martins P, Casale T, Cecchi L, Cepeda Sarabia AM, Chkhartishvili E, Chu DK, Cirule I, Cruz AA, Czarlewski W, Del Giacco S, Demoly P, Devillier P, Dokic D, Durham SL, Ebisawa M, El-Gamal Y, Emuzyte R, Gamkrelidze A, Fauquert JL, Fiocchi A, Fokkens WJ, Fonseca JA, Fontaine JF, Gawlik R, Gelincik A, Gemicioglu B, Gereda JE, Gerth van Wijk R, Gomez RM, Gotua M, Grisle I, Guzmán MA, Haahtela T, Halken S, Heffler E, Hoffmann-Sommergruber K, Hossny E, Hrubiško M, Irani C, Ivancevich JC, Ispayeva Z, Julge K, Kaidashev I, Kalayci O, Khaitov M, Klimek L, Knol E, Kowalski ML, Kraxner H, Kull I, Kuna P, Kvedariene V, Kritikos V, Lauferma A, Lau S, Laune D, Levin M, Larenas-Linnemann DE, Lodrup Carlsen KC, Lombardi C, Lourenço OM, Mahboub B, Malling HJ, Manning P, Marshall GD, Melén E, Meltzer EO, Miculinic N, Milenkovic B, Moin M, Montefort S, Morais-Almeida M, Mortz CG, Mösges R, Mullol J, Namazova Baranova L, Neffen H, Nekam K, Niedoszytko M, Odemir M, O'Hehir RE, Ollert M, O'Mahony L, Ohta K, Okamoto Y, Okubo K, Pajno GB, Palomares O, Palkonen S, Panzner P, G Papadopoulos N, Park HS, Passalacqua G, Patella V, Pawankar R, Pham-Thi N, Plavec D, Popov TA, Recto M, Regateiro FS, Riggioni C, Roberts G, Rodriguez-Gonzales M, Rosario N, Rottem M, Rouadi PW, Ryan D, Samolinski B, Sanchez-Borges M, Serpa FS, Sastre J, Scadding GK, Shamji MH, Schmid-Grendelmeier P, Schünemann HJ, Sheikh A, Scichilone N, Sisul JC, Sofiev M, Solé D, Sooronbaev T, Soto-Martinez M, Soto-Quiros M, Sova M, Schwarze J, Skypala I, Suppli-Ulrik C, Taborda-Barata L, Todo-Bom A, Torres MJ, Valentin-Rostan M, Tomazic PV, Valero A, Toppila-Salmi S, Tsiligianni I, Untersmayr E, Urrutia-Pereira M, Valiulis A, Valovirta E, Vandenplas O, Ventura MT, Vichyanond P, Wagenmann M, Wallace D, Walusiak-Skorupa J, Wang Y, Waserman S, Wong GW, Yorgancioglu A, Yusuf OM, Zernotti M, Zhang L, Zidarn M, Zuberbier T, Jutel M. ARIA-EAACI care pathways for allergen immunotherapy in respiratory allergy. *Clin Transl Allergy*. 2021 Jun 9;11(4):e12014. doi: 10.1002/clt2.12014. IPF 5.871

Ding M, Dong X, Sun YL, Sokolowska M, Akdis M, van de Veen W, Azkur AK, Azkur D, Akdis CA, Gao YD. Recent advances and developments in COVID-19 in the context of allergic diseases. *Clin Transl Allergy*. 2021 Sep;11(7):e12065. doi: 10.1002/clt2.12065. PMID: 34582102. IPF 5.871

Ivaska LE, Silvoniemi A, Palomares O, Turunen R, Waris M, Mikola E, Puhakka T, Söderlund-Venermo M, Akdis M, Akdis CA, Jartti T. Persistent human bocavirus 1 infection and tonsillar immune responses. *Clin Transl Allergy*. 2021 Jul;11(6):e12030. doi: 10.1002/clt2.12030. IPF 5.871

Mitamura Y, Okulur I, Pat Y, Rinaldi AO, Ardicli O, Cevhertaş L, Brüggen MC, Traidl-Hoffmann C, Akdis M, Akdis CA. Dysregulation of the epithelial barrier by environmental and other exogenous factors. *Contact Dermatitis*. 2021 Dec; 85(6):615-26. doi:10.1111/cod.13959. IPF 6.600

Wallimann A, McGrath W, Thompson K, Moriarty T, Richards RG, Akdis CA, O'Mahony L, Hernandez CJ. Gut microbial-derived short-chain fatty acids and bone: a potential role in fracture healing. *Eur Cell Mater*. 2021 Apr 21;41:454-470. doi: 10.22203/eCM.v041a29. IPF 3.942

Cossarizza A, Chang HD, Radbruch A, Abrignani S, Addo R, Akdis M, Andrä I, Andreata F, Annunziato F, Arranz E, Bacher P, Bari S, Barnaba V, Barros-Martins J, Baumjohann D, Beccaria CG, Bernardo D, Boardman DA, Borger J, Böttcher C, Brockmann L, Burns M, Busch DH, Cameron G, Cammarata I, Cassotta A, Chang Y, Chirdo FG, Christakou E, Čičin-Šain L, Cook L, Corbett AJ, Cornelis R, Cosmi L, Davey MS, De Biasi S, De Simone G, Del Zotto G, Delacher M, Di Rosa F, Santo JD, Diefenbach A, Dong J, Dörner T, Dress RJ, Dutertre CA, Eckle SBG, Eede P, Evrard M, Falk CS, Feuerer M, Fillatreau S, Fiz-Lopez A, Follo M, Foulds GA, Fröbel J, Gagliani N, Galletti G, Gangaev A, Garbi N, Garrote JA, Geginat J, Gherardin NA, Gibellini L, Ginhoux F, Godfrey DI, Gruarin P, Haftmann C, Hansmann L, Harpur CM, Hayday AC, Heine G, Hernández DC, Herrmann M, Hoelsken O, Huang Q, Huber S, Huber JE, Huehn J, Hundemer M, Hwang WYK, Iannacone M, Ivison SM, Jäck HM, Jani PK, Keller B, Kessler N, Ketelaars S, Knop L,

Knopf J, Koay HF, Kobow K, Kriegsmann K, Kristyanto H, Krueger A, Kuehne JF, Kunze-Schumacher H, Kvistborg P, Kwok I, Latorre D, Lenz D, Leving MK, Lino AC, Liotta F, Long HM, Lugli E, MacDonald KN, Maggi L, Maini MK, Mair F, Manta C, Manz RA, Mashreghi MF, Mazzoni A, McCluskey J, Mei HE, Melchers F, Melzer S, Mielenz D, Monin L, Moretta L, Multhoff G, Muñoz LE, Muñoz-Ruiz M, Muscate F, Natalini A, Neumann K, Ng LG, Niedobitek A, Niemz J, Almeida LN, Notarbartolo S, Ostendorf L, Pallett LJ, Patel AA, Percin GI, Peruzzi G, Pinti M, Pockley AG, Pracht K, Prinz I, Pujol-Autonell I, Pulvirenti N, Quatrini L, Quinn KM, Radbruch H, Rhys H, Rodrigo MB, Romagnani C, Saggau C, Sakaguchi S, Sallusto F, Sanderink L, Sandrock I, Schauer C, Scheffold A, Scherer HU, Schiemann M, Schildberg FA, Schober K, Schoen J, Schuh W, Schüler T, Schulz AR, Schulz S, Schulze J, Simonetti S, Singh J, Sitnik KM, Stark R, Starosom S, Stehle C, Szelinski F, Tan L, Tarnok A, Tornack J, Tree TIM, van Beek JJP, van de Veen W, van Gisbergen K, Vasco C, Verheyden NA, von Borstel A, Ward-Hartstonge KA, Warnatz K, Waskow C, Wiedemann A, Wilharm A, Wing J, Wirz O, Wittner J, Yang JHM, Yang J. Guidelines for the use of flow cytometry and cell sorting in immunological studies (third edition). *Eur J Immunol*. 2021 Dec;51(12):2708-3145. doi: 10.1002/eji.202170126. IPF 5.179

Krug J, Kiefer A, Koelle J, Vuorinen T, Xepapadaki P, Stanic B, Chiriac MT, Akdis M, Zimmermann T, Papadopoulos NG, Finotto S. TLR7/8 regulates type I and type III interferon signalling in rhinovirus 1b-induced allergic asthma. *Eur Respir J*. 2021 May 6;57(5):2001562. doi: 10.1183/13993003.01562-2020. IPF 16.67

Costa S, Saguner AM, Gasperetti A, Akdis D, Brunckhorst C, Duru F. The Link Between Sex Hormones and Susceptibility to Cardiac Arrhythmias: From Molecular Basis to Clinical Implications. *Front Cardiovasc Med*. 2021 Feb 17;8:644279. doi: 10.3389/fcvm.2021.644279. IPF 4.79

Rodriguez-Coira J, Villaseñor A, Izquierdo E, Huang M, Barker-Tejeda TC, Radzikowska U, Sokolowska M, Barber D. The Importance of Metabolism for Immune Homeostasis in Allergic Diseases. The Importance of Metabolism for Immune Homeostasis in Allergic Diseases. *Front Immunol*. 2021 Jul 28;12:692004. doi: 10.3389/fimmu.2021.692004. IPF 6.429

Ma S, Satitsuksanoa P, Jansen K, Cevheratas L, van de Veen W, Akdis M. B regulatory cells in allergy. *Immunol Rev*. 2021 Jan;299(1):10-30. doi: 10.1111/imr.12937. IPF 13.939

Bousquet J, Czarlewski W, Zuberbier T, Mullol J, Blain H, Cristol JP, De La Torre R, Pizarro Lozano N, Le Moing V, Bedbrook A, Agache I, Akdis CA, Canonica GW, Cruz AA, Fiocchi A, Fonseca JA, Fonseca S, Gemicioğlu B, Haahtela T, Iaccarino G, Ivancevich JC, Jutel M, Klimek L, Kraxner H, Kuna P, Larenas-Linnemann DE, Martineau A, Melén E, Okamoto Y, Papadopoulos NG, Pfaar O, Regateiro FS, Reynes J, Rolland Y, Rouadi PW, Samolinski B, Sheikh A, Toppila-Salmi S, Valiulis A, Choi HJ, Kim HJ, Anto JM. Potential Interplay between Nrf2, TRPA1, and TRPV1 in Nutrients for the Control of COVID-19. *Int Arch Allergy Immunol*. 2021;182(4):324-338. doi: 10.1159/000514204. Review. IPF 2.917

Bousquet J, Czarlewski W, Zuberbier T, Mullol J, Blain H, Cristol JP, De La Torre R, Le Moing V, Pizarro Lozano N, Bedbrook A, Agache I, Akdis CA, Canonica GW, Cruz AA, Fiocchi A, Fonseca JA, Fonseca S, Gemicioğlu B, Haahtela T, Iaccarino G, Ivancevich JC, Jutel M, Klimek L, Kuna P, Larenas-Linnemann DE, Melén E, Okamoto Y, Papadopoulos NG, Pfaar O, Reynes J, Rolland Y, Rouadi PW, Samolinski B, Sheikh A, Toppila-Salmi S, Valiulis A, Choi HJ, Kim HJ, Anto JM. Spices to Control COVID-19 Symptoms: Yes, but Not Only....*Int Arch Allergy Immunol*. 2021;182(6):489-495. doi: 10.1159/000513538. IPF 2.917

Gao YD, Agache I, Akdis M, Nadeau K, Klimek L, Jutel M, Akdis CA. The effect of allergy and asthma as a comorbidity on the susceptibility and outcomes of COVID-19. *Int Immunol*. 2021 Nov 12:dxab107. doi: 10.1093/intimm/dxab107. Online ahead of print. IPF 4.813

Peng YQ, Chen DH, Xu ZB, Fang SB, He BX, Liu XQ, Akdis CA, Fu QL. IL-33 receptor expression on myeloid and plasmacytoid dendritic cells after allergen challenge in patients with allergic rhinitis. *Int Immunopharmacol*. 2021 Dec;101(Pt B):108233. doi: 10.1016/j.intimp.2021.108233. IPF 4.56

Li N, Mirzakhani H, Kiefer A, Koelle J, Vuorinen T, Rauh M, Yang Z, Krammer S, Xepapadaki P, Lewandowska-Polak A, Lukkarinen H, Zhang N, Stanic B, Zimmermann T, Kowalski ML, Jartti T, Bachert C, Akdis M, Papadopoulos NG, Raby BA, Weiss ST, Finotto S. Regulated on Activation, Normal T cell

Expressed and Secreted (RANTES) drives the resolution of allergic asthma. *iScience*. 2021 Sep 25;24(10):103163. doi: 10.1016/j.isci.2021.103163. IPF 5.458

Maintz L, Welchowski T, Hermann N, Brauer J, Kläschens AS, Fimmers R, Schmid M, Bieber B, CK-CARE Study Group, Schmid-Grendelmeier P, Traidl-Hoffmann C, Akdis CA, Lauener R, Brüggen MC, Rhyner C, Bersuch E, Renner E, Reiger M, Dreher A, Hammel G, Luschkova D, Lang C. Machine Learning-Based Deep Phenotyping of Atopic Dermatitis: Severity-Associated Factors in Adolescent and Adult Patients. *JAMA Dermatol*. 2021 Dec 1;157(12):1414-1424. doi: 10.1001/jamadermatol.2021.3668. IPF 10.3

Warren CM, Snow TT, Lee AS, Shah MM, Heider A, Blomkalns A, Betts B, Buzzanco AS, Gonzalez J, Chinthurajah RS, Do E, Chang I, Dunham D, Lee G, O'Hara R, Park H, Shamji MH, Schilling L, Sindher SB, Sisodiya D, Smith E, Tsai M, Galli SJ, Akdis C, Nadeau KC. Assessment of Allergic and Anaphylactic Reactions to mRNA COVID-19 Vaccines With Confirmatory Testing in a US Regional Health System. *JAMA Netw Open*. 2021 Sep 1;4(9):e2125524. doi: 10.1001/jamadermatol.2021.3668. IPF 8.483

Akdis CA. The epithelial barrier hypothesis proposes a comprehensive understanding of the origins of allergic and other chronic noncommunicable diseases. *J Allergy Clin Immunol*. 2022 Jan;149(1):41-44. doi: 10.1016/j.jaci.2021.11.010. IPF 10.793

Eljaszewicz A, Ruchti F., Radzikowska U, Globinska A, Boonpiyathad T, Gschwend A, Morita H, Helbling A, Arasi S, Kahlert H, Berek N, Nandy A, Akdi Ms, Willers C, Moniuszko M, Akdis CA, Sokolowska M. Trained immunity and tolerance in innate lymphoid cells, monocytes, and dendritic cells during allergen specific immunotherapy. *J Allergy Clin Immunol*. 2021 May;147(5):1865-1877. doi: 10.1016/j.jaci.2020.08.042. IPF 10.793

Jansen K, Wirz OF, van de Veen W, Tan G, Mirer D, Sokolowska M, Satitsuksanoa P, Message SD, Kebadze T, Glanville N, Mallia P, Skiepko R, Eljaszewicz A, Moniuszko M, Cardoso C, Gern JE, Papadopoulos NG, Akdis CA, Johnston SL, Nadeau KC, Akdis M. Loss of regulatory capacity in Treg cells following rhinovirus infection. *J Allergy Clin Immunol*. 2021 Oct;148(4):1016-1029.e16. doi: 10.1016/j.jaci.2021.05.045. IPF 10.793

Sampath V, Abrams EM, Adlou B, Akdis C, Akdis M, Brough HA, Chan S, Chatchatee P, Chinthurajah RS, Cocco RR, Deschildre A, Eigenmann P, Galvan C, Gupta R, Hossny E, Koplin JJ, Lack G, Levin M, Shek LP, Makela M, Mendoza-Hernandez D, Muraro A, Papadopoulos NG, Pawankar R, Perrett KP, Roberts G, Sackesen C, Sampson H, Tang MLK, Togias A, Venter C, Warren CM, Wheatley LM, Wong GWK, Beyer K, Nadeau KC, Renz H. Food allergy across the globe. *J Allergy Clin Immunol*. 2021 Dec;148(6):1347-1364. doi: 10.1016/j.jaci.2021.10.018. IPF 10.793

Satitsuksanoa P, van de Veen W, Akdis M. B cells in food allergy. *J Allergy Clin Immunol*. 2021 Jan;147(1):49-51. doi: 10.1016/j.jaci.2020.11.014. IPF 10.793

Fu W, Xu S, Dong X, Xie Q, Gao Y. Aspirin "Allergy"-Induced Thrombocytopenia: A Case Report. *J Asthma Allergy*. 2021 Mar 9;14:201-205. doi: 10.2147/JAA.S292567. IPF 4.258

Wallimann A, Magrath W, Pugliese B, Stocker N, Westermann P, Heider A, Gehweiler D, Zeiter S, Claesson MJ, Richards RG, Akdis CA, Hernandez CJ, O'Mahony L, Thompson K, Moriarty TF. Butyrate inhibits osteoclast activity In vitro and regulates systemic inflammation and bone healing in a murine osteotomy model compared to antibiotic-treated mice. *Mediators Inflamm*. 2021 Dec 10;2021:8817421. doi: 10.1155/2021/8817421. IPF 4.06

Komlósi ZI, van de Veen W, Kovács N, Szűcs G, Sokolowska M, O'Mahony L, Akdis M, Akdis CA. Cellular and molecular mechanisms of allergic asthma. *Mol Aspects Med*. 2021 Aug 4:100995. doi: 10.1016/j.mam.2021.100995. Online ahead of print. IPF 14.235

Angelina A, Pérez-Diego M, López-Abente J, Rückert B, Nombela I, Akdis M, Martín-Fontecha M, Akdis C, Palomares O. Cannabinoids induce functional Tregs by promoting tolerogenic DCs via autophagy and metabolic reprogramming. *Mucosal Immunol*; 2021. doi: 10.1038/s41385-021-00455-x. IPF 7.313.

Akdis CA. Does the epithelial barrier hypothesis explain the increase in allergy, autoimmunity and other chronic conditions? *Nat Rev Immunol.* 2021 Nov;21(11):739-751. doi: 10.1038/s41577-021-00538-7. Review. IPF 53.106

Acevedo N, Alashkar Alhamwe B, Caraballo L, Ding M, Ferrante A, Garn H, Garssen J, Hii CS, Irvine J, Llinás-Caballero K, López JF, Miethe S, Perveen K, Pogge von Strandmann E, Sokolowska M, Potaczek DP, van Esch BCAM. Perinatal and Early-Life Nutrition, Epigenetics, and Allergy. *Nutrients.* 2021 Feb 25;13(3):724. doi: 10.3390/nu13030724. IPF 5.717

Genuneit J, Jayasinghe S, Riggioni C, Peters RL, Chu DK, Munblit D, Boyle RJ, Du Toit G, Skypala I, Santos AF; EAACI Food Allergy Guidelines Expert Group, the EAACI Research, Outreach Committee Food Allergy Group. Protocol for a systematic review of the diagnostic test accuracy of tests for IgE-mediated food allergy. *Pediatr Allergy Immunol.* 2022 Jan;33(1):e13684. doi: 10.1111/pai.13684. IPF 6.377

Wawrzyniak M, Groeger D, Frei R, Ferstl R, Wawrzyniak P, Krawczyk K, Pugin B, Barcik W, Westermann P, Dreher A, Scharl M, Jutel M, Akdis CA, O Mahony L. Spermidine and spermine exert protective effects within the lung. *Pharmacol Res Perspect.* 2021 Aug;9(4):e00837. doi: 10.1002/prp2.837. IPF 2.794

Fan X, Xu ZB, Li CL, Zhang HY, Peng YQ, He BX, Liu XQ, Chen DH, Chen D, Akdis CA, Fu QL. Mesenchymal stem cells regulate type 2 innate lymphoid cells via regulatory T cells through ICOS-ICOSL interaction. *Stem Cells.* 2021 Jul;39(7):975-987. doi: 10.1002/stem.3369. Online ahead of print. IPF 6.022

Rostaher A, Rodriguez-Campos S, Deplazes P, Zwickl L, Akdis AC, Urwyler A, Wheeler DW, Audergon S, Fischer NM, Favrot C. Atopic dermatitis in West Highland white terriers - Part III: early life peripheral blood regulatory T cells are reduced in atopic dermatitis. *Vet Dermatol.* 2021 Jun;32(3):239-e63. doi: 10.1111/vde.12939. IPF: 1.697

## BOOK CHAPTERS 2021

Escribese MM, Baerenfaller K, Villaseñor A, Gomez-Casado C, Barber D. Omics. In: Global Atlas of Asthma, 2nd edition. Editors: Agache I, Akdis CA. Publisher: European Academy of Allergy and Clinical Immunology (EAACI), Date: 2021, Place of Publication: Zurich, Page: 197-199