

# Scientific references - Immunology Investor Event

MARCH 29, 2022

		AMLITELIMAB	
ATOPIC DERMATITIS	PHASE 2A	Weidinger S, Cork M, Reich A, Bieber T, Gilbert S, Brennan N, Wilson R, Quaratino S, Porter-Brown, B. A Phase 2a study of KY1005, a novel non-depleting anti-OX40Ligand (OX40L) mAb in patients with moderate to severe AD. <i>European Academy of Dermatology and Venereology 2021 Late Breaking Abstract #D1T01.3:2729</i>	EADV 2021 SLIDES
ATOPIC DERMATITIS	PHASE 2A	Weidinger S, Bieber T, Cork M, Reich A, Gilbert S, Brennan N, Quaratino S, Wilson R, Porter-Brown, B. Sustained and durable response up to 24 weeks after last dose observed in a Phase 2a study (NCT03754309) of Amlitelimab (KY1005, SAR445229) a novel non-depleting anti-OX40Ligand (OX40L) mAb in patients with moderate to severe Atopic Dermatitis (AD). <i>American Academy of Dermatology 2022 Abstract #33781</i>	AAD 2022 POSTER
ATOPIC DERMATITIS	PHASE 2A	Weidinger S, Cork M, Reich A, Bieber T, Wilson R, Gilbert S, Brennan N, Lucchesi D, Rynkiewicz N, Stebegg M, Quaratino S, Porter-Brown, B. Treatment with Amlitelimab (KY1005, SAR445229) - a novel non-depleting anti-OX40Ligand (OX40L) mAb - reduces IL-13 serum levels in a Phase 2a randomized placebo-controlled trial in patients with moderate to severe Atopic Dermatitis. <i>American Academy of Dermatology 2022 Abstract #34312</i>	AAD 2022 SLIDES
		DUPILUMAB	
PRURIGO NODULARIS	PRIME-2 PHASE 3 TRIAL	Yosipovitch G, Mollanazar N, Ständer S, Kwatra SG, Kim BS, Amin N, Mannent LP, Laws E, Bansal A, O'Malley JT. Dupilumab Significantly Improves Itch and Skin Lesions in Patients With Prurigo Nodularis: Results From a Phase 3 Trial (LIBERTY-PN PRIME2)). <i>American Academy of Dermatology 2022 Late Breaking Session #S026</i>	AAD 2022
CHRONIC SPONTANEOUS URTICARIA	CUPID-A PHASE 3 TRIAL	Maurer M, Casale TB, Saini SS, Ben-Shoshan M, Amin N, Radin A, Akinlade B, Fan C, Bauer D, Laws E, Mannent LP, Stjepanovic A. Dupilumab Significantly Reduces Itch and Hives in Patients With Chronic Spontaneous Urticaria: Results From a Phase 3 Trial (LIBERTY-CSU CUPID Study A). <i>Journal of Allergy and Clinical Immunology, Vol 149, Issue 2, Supplement, 2022, AB312</i>	AAAAI 2022
EOSINOPHILIC ESOPHAGITIS	TREET PHASE 3 TRIAL	Rothenberg M, Dellon E, Bredenoord A, Collins M, Hirano I, Chehade M, Lucendo A, Spergel J, Sun X, Hamilton J, Mujumdar U, McCann E, Mannent L, Akinlade B, Laws E, Amin N, Giannelou A, Patel K, Beazley B, Shabbir A. Dupilumab Improves Clinical and Histologic Aspects of Disease in Adult and Adolescent Patients With Eosinophilic Esophagitis at Week 24: Results from Part B of the 3-Part LIBERTY EoE TREET Study. <i>Journal of Allergy and Clinical Immunology, Vol 149, Issue 2, Supplement, 2022, AB312</i>	AAAAI 2022

EOSINOPHILIC ESOPHAGITIS	TREET PHASE 3 TRIAL	Dellon ES, Rothenberg ME, Collins MH, Hirano I, Chehade M, Bredenoord AJ, Lucendo AJ, Spergel JM, Zhao Q, Hamilton JD, Mujumdar U, Kamat S, Mannent LP, Akinlade B, Laws E, Amin N, Shumel B, Rowe PJ, Deniz Y, Jacob-Nara JA, Patel K, Maloney J, Mas Casullo V. Dupilumab Efficacy and Safety up to 52 Weeks in Adult and Adolescent Patients With Eosinophilic Esophagitis: Results From Part A and C of a Randomized, Placebo-Controlled, Three-Part, Phase 3 LIBERTY EoE TREET Study. <i>United European Gastroenterology Journal</i> 2021 9:10 (1204-1207), LB10	UEG 2021
EOSINOPHILIC ESOPHAGITIS	PHASE 2	Hirano I, Dellon ES, Hamilton JD, Collins MH, Peterson K, Chehade M, Schoepfer AM, Safroneeva E, Rothenberg ME, Falk GW, Assouline-Dayana Y, Zhao Q, Chen Z, Swanson BN, Pirozzi G, Mannent L, Graham NMH, Akinlade B, Stahl N, Yancopoulos GD, Radin A. Efficacy of Dupilumab in a Phase 2 Randomized Trial of Adults With Active Eosinophilic Esophagitis. <i>Gastroenterology</i> , Volume 158, Issue 1, 2020, Pages 111-122.e10.	<a href="https://doi.org/10.1053/j.gastro.2019.09.042">https://doi.org/10.1053/j.gastro.2019.09.042</a>
NASAL POLYPS	SINUS-24 & 52 PHASE 3 TRIALS	Bachert C, Han JK, Desrosiers M, Hellings PW, Amin N, Lee SE, Mullol J, Greos LS, Bosso JV, Laidlaw TM, Cervin AU, Maspero JF, Hopkins C, Olze H, Canonica GW, Paggiaro P, Cho SH, Fokkens WJ, Fujieda S, Zhang M, Lu X, Fan C, Draikiwicz S, Kamat SA, Khan A, Pirozzi G, Patel N, Graham NMH, Ruddy M, Staudinger H, Weinreich D, Stahl N, Yancopoulos GD, Mannent LP. Efficacy and safety of dupilumab in patients with severe chronic rhinosinusitis with nasal polyps (LIBERTY NP SINUS-24 and LIBERTY NP SINUS-52): results from two multi centre, randomized, double-blind, placebo-controlled, parallel-group phase 3 trials. <i>The Lancet</i> , Volume 394, Issue 10209, 2019, Pages 1638-1650	<a href="https://doi.org/10.1016/S0140-6736(19)31881-1">https://doi.org/10.1016/S0140-6736(19)31881-1</a>
ASTHMA	VOYAGE PHASE 3 TRIAL	L.B. Bacharier, J.F. Maspero, C.H. Katelaris, A.G. Fiocchi, R. Gagnon, I. de Mir, N. Jain, L.D. Sher, X. Mao, D. Liu, Y. Zhang, A.H. Khan, U. Kapoor, F.A. Khokhar, P.J. Rowe, Y. Deniz, M. Ruddy, E. Laws, N. Patel, D.M. Weinreich, G.D. Yancopoulos, N. Amin, L.P. Mannent, D.J. Lederer, and M. Hardin. Dupilumab in Children with Uncontrolled Moderate-to-Severe Asthma for the Liberty Asthma VOYAGE Investigators <i>N Engl J Med</i> 385;24 nejm.org December 9, 2021	<a href="https://doi.org/10.1056/NEJMoa2106567">https://doi.org/10.1056/NEJMoa2106567</a>
ASTHMA	TRAVERSE OLE TRIAL	Wechsler ME, Ford LB, Maspero JF, Pavord ID, Papi A, Bourdin A, Watz H, Castro M, Nenasheva NM, Tohda Y, Langton D, Cardona G, Domingo C, Park HS, Chapman KR, Mao X, Zhang Y, Khan AH, Deniz Y, Rowe PJ, Kapoor U, Khokhar FA, Mannent LP, Ruddy M, Laws E, Amin N, Hardin M. Long-term safety and efficacy of dupilumab in patients with moderate-to-severe asthma (TRAVERSE): an open-label extension study. <i>Lancet Respir Med</i> . 2022 Jan;10(1):11-25.	<a href="https://doi.org/10.1016/s2213-2600(21)00322-2">https://doi.org/10.1016/s2213-2600(21)00322-2</a>
ASTHMA	QUEST PHASE 3 TRIAL	Castro M, Corren J, Pavord ID, Maspero J, Wenzel S, Rabe KF, Busse WW, Ford L, Sher L, FitzGerald JM, Katelaris C, Tohda Y, Zhang B, Staudinger H, Pirozzi G, Amin N, Ruddy M, Akinlade B, Khan A, Chao J, Martincova R, Graham NMH, Hamilton JD, Swanson BN, Stahl N, Yancopoulos GD, Teper A. Dupilumab Efficacy and Safety in Moderate-to-Severe Uncontrolled Asthma. <i>N Engl J Med</i> . 2018 Jun 28;378(26):2486-2496.	<a href="https://doi.org/10.1056/nejmoa1804092">https://doi.org/10.1056/nejmoa1804092</a>
ASTHMA	VENTURE PHASE 3 TRIAL	Rabe KF, Nair P, Brusselle G, Maspero JF, Castro M, Sher L, Zhu H, Hamilton JD, Swanson BN, Khan A, Chao J, Staudinger H, Pirozzi G, Antoni C, Amin N, Ruddy M, Akinlade B, Graham NMH, Stahl N, Yancopoulos GD, Teper A. Efficacy and Safety of Dupilumab in Glucocorticoid-Dependent Severe Asthma. <i>N Engl J Med</i> . 2018 Jun 28;378(26):2475-2485. doi: 10.1056/NEJMoa1804093.	<a href="https://doi.org/10.1056/nejmoa1804093">https://doi.org/10.1056/nejmoa1804093</a>

ATOPIC DERMATITIS	AD OLE TRIAL	Wollenberg A, Beck L, Deleuran MS, Blauvelt A, Thyssen J, de Bruin-Weller M, Chen Z, Khokhar F, Rodriguez-Marco A, Levit N. Safety of Long-Term Dupilumab Treatment in Adults with Moderate-to-Severe Atopic Dermatitis up to 172 Weeks: Results from an Open-Label Extension (OLE) Trial. <i>Journal of Allergy and Clinical Immunology</i> , Volume 149, Issue 2, Supplement, 2022, AB10	<a href="https://doi.org/10.1016/j.jaci.2021.12.074">https://doi.org/10.1016/j.jaci.2021.12.074</a>
ATOPIC DERMATITIS	BALISTAD PHASE 4 TRIAL	Berdyshev E, Goleva E, Bissonnette R, Bronova I, Bronoff AS, Richers B, Garcia S, Ramirez Gama M, Taylor P, Bologna G, Agueusop I, Boguniewicz M, Harel S, Levit N, Rossi A, Zhang A, Leung D. Dupilumab treatment significantly improves skin barrier function in adult and adolescent patients with moderate to severe atopic dermatitis. <i>Journal of Allergy and Clinical Immunology</i> , Volume 149, Issue 2, Supplement, 2022, AB10	<a href="https://doi.org/10.1016/j.jaci.2021.12.073">https://doi.org/10.1016/j.jaci.2021.12.073</a>
ATOPIC DERMATITIS	PEDISTAD STUDY	Paller A, Antila M, Marcoux D, Betloch I, Kataoka Y, Liu C, Tong T, Zhang A. The Patient Burden of Moderate-to-Severe Atopic Dermatitis (AD) in Children Aged <12 Years: Results From 732 Patients in the PEDiatic STudy in Atopic Dermatitis (PEDISTAD) Observational Study. <i>Journal of Allergy and Clinical Immunology</i> , Volume 149, Issue 2, Supplement, 2022, AB8	<a href="https://doi.org/10.1016/j.jaci.2021.12.066">https://doi.org/10.1016/j.jaci.2021.12.066</a>
ATOPIC DERMATITIS	PRESCHOOL PHASE 3 TRIAL	Paller AS, Simpson EL, Siegfried EC, Cork MJ, Wollenberg A, Arkwright PD, Soong W, Gonzalez ME, Schneider LC, Sidbury R, Lockshin B, Wang Z, Mannent LP, Amin N, Sun Y, Laws E, Akinlade B, Kosloski MP, Dubost-Brama A, O'Malley JT, Bansal A. Efficacy and Safety of Dupilumab in Children Aged ≥ 6 Months to < 6 Years With Moderate-to-Severe Atopic Dermatitis <i>Revolutionizing Atopic Dermatitis 2021 LB</i> .	RAD 2021
ATOPIC DERMATITIS	PEDS PHASE 3 TRIAL	Paller AS, Siegfried EC, Thaçi D, Wollenberg A, Cork MJ, Arkwright PD, Gooderham M, Beck LA, Boguniewicz M, Sher L, Weisman J, O'Malley JT, Patel N, Hardin M, Graham NMH, Ruddy M, Sun X, Davis JD, Kamal MA, Khokhar FA, Weinreich DM, Yancopoulos GD, Beazley B, Bansal A, Shumel B. Efficacy and safety of dupilumab with concomitant topical corticosteroids in children 6 to 11 years old with severe atopic dermatitis: A randomized, double-blinded, placebo-controlled phase 3 trial. <i>J Am Acad Dermatol</i> . 2020 Nov;83(5):1282-1293.	<a href="https://doi.org/10.1016/j.jaad.2020.06.054">https://doi.org/10.1016/j.jaad.2020.06.054</a>
ATOPIC DERMATITIS	PEDS OLE TRIAL	Cork M.J., Thaçi D., Eichenfield L., Arkwright P.D., Chen Z., Delevry D., O'Malley J.T., Bansal A. Efficacy and Safety of Dupilumab in Children Aged 6-11 Years with Uncontrolled Moderate-to-Severe Atopic Dermatitis: Results from an Open-Label Extension Trial up to 1 Year <i>Revolutionizing Atopic Dermatitis 2021</i>	RAD 2021
ATOPIC DERMATITIS	ADOL PHASE 3 TRIAL	Simpson EL, Paller AS, Siegfried EC, Boguniewicz M, Sher L, Gooderham MJ, Beck LA, Guttman-Yassky E, Pariser D, Blauvelt A, Weisman J, Lockshin B, Hultsch T, Zhang Q, Kamal MA, Davis JD, Akinlade B, Staudinger H, Hamilton JD, Graham NMH, Pirozzi G, Gadkari A, Eckert L, Stahl N, Yancopoulos GD, Ruddy M, Bansal A. Efficacy and Safety of Dupilumab in Adolescents With Uncontrolled Moderate to Severe Atopic Dermatitis: A Phase 3 Randomized Clinical Trial. <i>JAMA Dermatol</i> . 2020 Jan 1;156(1):44-56.	<a href="https://doi.org/10.1001/jamadermatol.2019.3336">https://doi.org/10.1001/jamadermatol.2019.3336</a>
ATOPIC DERMATITIS	CAFE PHASE 3 TRIAL	de Bruin-Weller M, Thaçi D, Smith CH, Reich K, Cork MJ, Radin A, Zhang Q, Akinlade B, Gadkari A, Eckert L, Hultsch T, Chen Z, Pirozzi G, Graham NMH, Shumel B. Dupilumab with concomitant topical corticosteroid treatment in adults with atopic dermatitis with an inadequate response or intolerance to ciclosporin A or when this treatment is medically inadvisable: a placebo-controlled, randomized phase III clinical trial (LIBERTY AD CAFÉ). <i>Br J Dermatol</i> . 2018 May;178(5):1083-1101.	<a href="https://doi.org/10.1111/bjd.16156">https://doi.org/10.1111/bjd.16156</a>

ATOPIC DERMATITIS	CHRONOS PHASE 3 TRIAL	Blauvelt A, de Bruin-Weller M, Gooderham M, Cather JC, Weisman J, Pariser D, Simpson EL, Papp KA, Hong HC, Rubel D, Foley P, Prens E, Griffiths CEM, Etoh T, Pinto PH, Pujol RM, Szepietowski JC, Ettler K, Kemény L, Zhu X, Akinlade B, Hultsch T, Mastey V, Gadkari A, Eckert L, Amin N, Graham NMH, Pirozzi G, Stahl N, Yancopoulos GD, Shumel B. Long-term management of moderate-to-severe atopic dermatitis with dupilumab and concomitant topical corticosteroids (LIBERTY AD CHRONOS): a 1-year, randomized, double-blinded, placebo-controlled, phase 3 trial. <i>Lancet</i> . 2017 Jun 10;389(10086):2287-2303.	<a href="https://doi.org/10.1016/s0140-6736(17)31191-1">https://doi.org/10.1016/s0140-6736(17)31191-1</a>
ATOPIC DERMATITIS	SOLO-1 & 2 PHASE 3 TRIALS	Simpson EL, Bieber T, Guttman-Yassky E, Beck LA, Blauvelt A, Cork MJ, Silverberg JI, Deleuran M, Kataoka Y, Lacour JP, Kingo K, Worm M, Poulin Y, Wollenberg A, Soo Y, Graham NM, Pirozzi G, Akinlade B, Staudinger H, Mastey V, Eckert L, Gadkari A, Stahl N, Yancopoulos GD, Ardeleanu M; SOLO 1 and SOLO 2 Investigators. Two Phase 3 Trials of Dupilumab versus Placebo in Atopic Dermatitis. <i>N Engl J Med</i> . 2016 Dec 15;375(24):2335-2348.	<a href="https://doi.org/10.1056/nejmoa1610020">https://doi.org/10.1056/nejmoa1610020</a>
<b>ITEPEKIMAB</b>			
COPD	PHASE 2A	Rabe KF, Celli BR, Wechsler ME, Abdulai RM, Luo X, Boomsma MM, Staudinger H, Horowitz JE, Baras A, Ferreira MA, Ruddy MK, Nivens MC, Amin N, Weinreich DM, Yancopoulos GD, Goulaouic H. Safety and efficacy of itepekimab in patients with moderate-to-severe COPD: a genetic association study and randomized, double-blind, phase 2a trial. <i>Lancet Respir Med</i> . 2021 Nov;9(11):1288-1298.	<a href="https://doi.org/10.1016/s2213-2600(21)00167-3">https://doi.org/10.1016/s2213-2600(21)00167-3</a>
<b>RILZABRUTINIB</b>			
Immune Thrombocytopenia	LUNA2 PHASE 3 TRIAL	Kuter D.J., Bussel J.B., Cooper N., Gernsheimer T., Lambert M.P., Liebman H., Tarantino M.D., Bandman O., Arora P., Neale A., Burns R., Yao M., Ghanima W. LUNA3 Phase III Multicenter, Double-Blind, Randomized, Placebo-Controlled Trial of the Oral BTK Inhibitor Rilzabrutinib in Adults and Adolescents with Persistent or Chronic Immune Thrombocytopenia. <i>Blood</i> 2021 138 Supplement 1 (1010)	ASH 2021