Supported by independent educational grants from Arcutis Biotherapeutics, Inc.; Incyte Corporation; Janssen Biotech Inc, administered by Janssen Scientific Affairs, LLC; Sun Pharmaceuticals Industries, Inc; and UCB Pharma, Inc.

A SUPPLEMENT TO

cutis®

CUTANEOUS MEDICINE FOR THE PRACTITIONER

REFERENCED IN *INDEX MEDICUS*

VOL. 113 | NO. 1S | JANUARY 2024 | mdedge.com/dermatology

FALL ABSTRACT COMPENDIUM

LAS VEGAS DERMATOLOGY SEMINAR

LAS VEGAS, NEVADA; NOVEMBER 2–4, 2023

FALL
ABSTRACT
LAS VEGAS DERMATOLOGY SEMINAR
COMPENDIUM
LAS VEGAS, NEVADA; NOVEMBER 2–4, 2023

Atopic Dermatitis

Abstract AD-01

Understanding the Burden of Disease in Pediatric/Adolescent Patients With Moderate or Severe Atopic Dermatitis: A Real-World Study in the US, UK, and Europe

Lawrence F Eichenfield, MD[1]; Vivian Y Shi, MD[2]; JiaDe Yu, MD[3,4]; Evangeline J Pierce, PhD[5]; Amber Reck Atwater, MD[5]; Jenny Austin, BSc[6]; Phoebe Salmon, MSc[6]; James Piercy, MSc[6]; Peter Anderson, BSc[6]; Amy S Paller, MD[7]

[1]Departments of Dermatology and Pediatrics, University of California San Diego School of Medicine and Rady Children's Hospital San Diego, San Diego, USA; [2]Department of Dermatology, University of Arkansas for Medical Sciences, Little Rock, USA; [3]Department of Dermatology Massachusetts General Hospital, Boston, USA; [4]Harvard Medical School, Boston, USA; [5]Eli Lilly and Company, Indianapolis, USA; [6]Adelphi Real World, Bollington, UK; [7]Department of Dermatology, Northwestern University Feinberg School of Medicine, Chicago, USA

BACKGROUND: Atopic dermatitis (AD) is a chronic heterogeneous inflammatory skin disorder characterized by pruritus and eczematous lesions. Currently, real-world data on pediatric/adolescent AD are limited, with feelings and quality of life (QoL) related to the impact of AD largely unknown.

METHODS: Data were taken from the 2019 Pediatric AD Disease Specific Programme conducted in the US, France, Germany, Italy, Spain, and the UK. Physicians provided information on patient demographics and clinical severity. Patients (≤17 years of age) or their caregivers completed the Children's Dermatology Life Quality Index (CDLQI) and additional agree/disagree questions regarding their feelings about AD.

RESULTS: Of those who completed the CDLQI, 441 (44.3%) patients had physician-assessed moderate AD (M-AD) and 317 (31.8%) had severe AD (S-AD), with the total number of respondents to each agree/disagree question varying slightly. Mean CDLQI was 11.7 for M-AD and 15.2 for S-AD patients (scores ≤6 indicate a small to no impact on QoL). 38.0% of M-AD and 60.9% of S-AD patients selected very much or quite a lot in response to the CDLQI question, "Over the last week, how embarrassed or self-conscious, upset or sad have you been because of your skin?". When responding to agree/disagree questions, most M-AD and S-AD patients disagreed with the statement "I am ok with the way my skin is", 64.9% and 79.0%, respectively. M-AD and S-AD patients, 47.3% and 63.0% respectively, agreed with the statement "My skin affects what I feel like doing". More than half of patients agreed with the statement "My skin makes me upset", 54.3% M-AD and 72.3% S-AD.

CONCLUSIONS: Pediatric/adolescent patients with moderate and severe AD are impacted by their disease beyond clinical signs and symptoms, with more than half indicating they are not ok with the way their skin is and that their skin appearance makes them upset. These results highlight the emotional impact of AD on patients, which should be considered in the management of AD.

ACKNOWLEDGMENTS: The DSP is a wholly owned Adelphi Real World multi-subscriber product. Eli Lilly and Company is one of a number of subscribers to the DSP. Analysis funded by Eli Lilly & Company. Abstract previously presented at Society for Pediatric Dermatology (SPD 2023); Asheville, USA; 13-16 July 2023.

DISCLOSURES: LF Eichenfield, V Shi, and AS Paller are in receipt of consultancy payments with Eli Lilly and Company. EJ Pierce, and AR Atwater are employees of Eli Lilly and Company. J Austin, P Salmon, J Piercy, and P Anderson are employees of Adelphi Real World.

Abstract AD-02

Long-Term Efficacy of Dupilumab in Adults With Moderate to Severe Atopic Dermatitis: Results From an Open-Label Extension Trial Up to 5 Years

Krystal Ngo, PharmD[1*]; Robert Bissonnette, MD[2]; Mette Deleuran, MD[3]; Takeshi Nakahara, MD, PhD[4]; Ryszard Galus, MD, PhD[5]; Faisal A. Khokhar, MD[6]; Anna Coleman, MS[7]; Guy Gherardi, MD[8]; Jing Xiao, PhD[6]; Robert Dingman, PhD[6]; Christine Xu, PhD[9]; Elena Avetisova, MD[6]; Ariane Dubost-Brama, MD[10]; Arsalan Shabbir, MD[6]

[1]Sanofi, Irvine, CA, USA; [2]Innovaderm Research, Montreal, QC, Canada; [3]Aarhus University Hospital, Aarhus, Denmark; [4]Kyushu University, Fukuoka, Japan; [5]Medical University of Warsaw, Warsaw, Poland; [6]Regeneron Pharmaceuticals Inc., Tarrytown, NY, USA; [7]Regeneron Pharmaceuticals Inc., Dublin, Ireland; [8]Sanofi, Reading, UK; [9]Sanofi, Bridgewater, NJ, USA; [10]Sanofi, Chilly-Mazarin, France

*This author has been included to serve as a presenter.

BACKGROUND: Topical therapies often cannot sufficiently control moderate to severe atopic dermatitis (AD), a chronic inflammatory skin disease. Systemic immunosuppressants are not recommended for the long-term treatment of moderate to severe AD due to safety concerns. Dupilumab is a fully human monoclonal antibody that blocks the shared receptor component for interleukin (IL)-4 and IL-13, inhibiting the key drivers of type 2 inflammation. Data from the open-label extension (OLE) study, LIBERTY AD OLE, (NCT01949311) previously demonstrated acceptable safety and sustained efficacy of dupilumab in adult patients for up to 204 weeks (approximately 4 years).

OBJECTIVE: To assess the long-term efficacy and safety of dupilumab in adult patients with moderate to severe AD up to 5 years (the end of this OLE study).

METHODS: Adults (≥18 years) with moderate to severe AD who had participated in any dupilumab parent study (Phase 1 through Phase 3) were enrolled into the long-term, multicenter OLE with a duration of up to 5 years. Initially, patients enrolled in the OLE were treated with 300 mg dupilumab weekly. In 2019, patients remaining in the study transitioned to dupilumab 300 mg every 2 weeks in alignment with the approved dupilumab dose regimen. Concomitant treatments for AD were permitted, including topical corticosteroids and topical calcineurin inhibitors. Data are presented as observed for the overall study population (N=2677).

RESULTS: Of the 2677 patients who enrolled, 2207 completed treatment up to Week 52, 362 up to Week 172, and 334 up to Week 260. The most common reason for study withdrawals during the OLE study period was dupilumab approval and commercialization in the patient's country of enrollment (708 [51.3%]). 50 (1.9%) patients withdrew due to lack of efficacy. At the end of the study period, 88.9% of patients achieved a 75% reduction in Eczema Area and Severity Index (EASI) score from parent study baseline (PSBL) and 76.2% of patients achieved a 90% reduction in EASI score from PSBL. At Week 260, 66.5% of patients achieved a ≥4-point reduction in the Peak Pruritus Numerical Rating Scale score from PSBL. A total of 2276 (85.0%) patients reported treatment-emergent adverse events, and 101 (3.8%) patients discontinued treatment permanently due to reported adverse events. Dupilumab had an acceptable safety profile over 5 years of treatment.

CONCLUSIONS: In this long-term (5 year/260 week) open-label study, dupilumab demonstrated robust efficacy substantiated by sustained improvement of AD signs and symptoms (including skin lesions and pruritus) in adult patients with moderate to severe AD. The safety profile was acceptable and consistent with the known safety profile observed in previous dupilumab placebo-controlled studies.

ACKNOWLEDGMENTS AND FUNDING SOURCES: Research sponsored by Sanofi and Regeneron Pharmaceuticals Inc. ClinicalTrials.gov Identifiers: NCT01949311. Medical writing/editorial assistance was provided by Jamie Church, PhD of Excerpta Medica, and was funded by Sanofi and Regeneron Pharmaceuticals Inc., according to the Good Publication Practice guideline.

DISCLOSURES: Krystal Ngo: Sanofi – employee. Robert Bissonnette: AbbVie, Aquinox Pharmaceuticals, Arcutis Biotherapeutics, Asana BioSciences, Astellas Pharma, Boehringer Ingelheim, Brickell Biotech, Dermavant, Dermira, Dignity Sciences, Eli Lilly, Galderma, Glenmark, Hoffman-La Roche, Incyte, Kiniksa Pharmaceuticals, LEO Pharma, NeoKera, Pfizer, Ralexar Therapeutics, Regeneron Pharmaceuticals Inc., Sanofi, Stiefel, Vitae Pharmaceuticals – consultant and/or grants/research support; Innovaderm Research – shareholder. Mette Deleuran: AbbVie, Arena Pharmaceuticals, Aslan Pharmaceuticals, Eli Lilly, Galapagos, Incyte, La Roche-Posay, LEO Pharma, Pfizer, Pierre Fabre, Regeneron Pharmaceuticals Inc., Sanofi – research support/consulting/advisory board agreements, and/or honoraria for lectures. Takeshi Nakahara: Maruho – laboratory funds; Maruho, Sanofi – speaker fees. Ryszard Galus: Amgen, Boehringer Ingelheim, Chugai, Dermira, Galderma, Incyte, Janssen, Pfizer, Regeneron Pharmaceuticals Inc., Sanofi, UCB – investigator/consulting. Faisal A. Khokhar, Anna Coleman, Jing Xiao, Robert Dingman, Elena Avetisova, Arsalan Shabbir: Regeneron Pharmaceuticals Inc. – employees and shareholders. Guy Gherardi, Christine Xu, Ariane Dubost-Brama: Sanofi – employees, may hold stock and/or stock options in the company.

Abstract AD-03

Gene Expression Differences Identified in Skin Samples of Early-Stage Mycosis Fungoides, Atopic Dermatitis, and Psoriasis

Ann P. Quick, PhD[1*]; Aaron S. Farberg, MD[2,3]; Matthew S. Goldberg, MD[1]; Olga Zolochevska, PhD[1]; Jeff Wilkinson, PhD[1]; Jonathan I. Silverberg, MD, PhD, MPH[4]; Peter A. Lio, MD[5]; John Koo, MD[6]; Jeffrey M. Weinberg, MD[7]; Mark Lebwohl, MD[7]

[1]Castle Biosciences, Inc, Friendswood, TX; [2]Baylor Scott & White Health System, Dallas, TX; [3]Bare Dermatology, Dallas, TX; [4]The George Washington University School of Medicine and Health Sciences, Washington, DC; [5]Northwestern Feinberg School of Medicine, Chicago, IL; [6]University of California San Fransisco School of Medicine, San Francisco, CA; [7]Icahn School of Medicine at Mount Sinai, New York, NY

BACKGROUND: Recent advances in the understanding of the molecular mechanisms underlying atopic dermatitis (AD) and psoriasis (PSO) have led to the development of multiple targeted therapies. Yet, molecular heterogeneity contributes to inconsistent clinical presentation and therapeutic response. Further, systemic treatment of presumed AD or PSO can lead to delays in both diagnosis and proper treatment of patients with a true diagnosis of mycosis fungoides (MF) – a potentially dangerous clinical mimic of AD and PSO that requires a rigorous histologic and molecular workup to diagnose. Therefore, a non-invasive method to distinguish MF from AD and PSO could accelerate accurate diagnoses and avoid inappropriate treatment of MF. We have previously shown transcriptomic differences in AD and PSO samples obtained by a non-invasive scraping technique. However, this technique has not been used to assess differences in gene expression profiles of MF samples.

OBJECTIVES: To identify gene expression differences based on diagnosis of MF, AD, or PSO and response to targeted systemic AD or PSO therapies.

METHODS: Lesional baseline samples were assessed from 76 patients (AD, n=24; PSO, n=48; and MF, n=4) enrolled in one of two IRB-approved studies (IDENTITY or SIGNAL-MF). Lesional samples were collected by epidermal scraping and preserved in RNA buffer. Library preparation and next generation RNA sequencing was performed using the Ion AmpliSeq Transcriptome Human Gene Expression panel on the S5 Prime sequencer (ThermoFisher). Clinical responses for AD and PSO were further assessed over 3 months using the eczema and psoriasis area and severity index (EASI and PASI, respectively). Genes were considered differentially expressed if there was a $\log_2$fold change $>|1.0|$ and $p_{adj} < .05$.

RESULTS: Statistically significant differences in gene expression were observed between AD, PSO, and MF lesions. Further, genes were differentially expressed in baseline skin scrapings obtained from super-responders to dupilumab, which blocks both IL-4 and IL-13 signaling, and PSO therapies including the IL-23 inhibitor risankizumab relative to those who did not achieve ≥90% improvement.

CONCLUSIONS: A non-invasive molecular test could be developed to distinguish between AD, PSO, and MF, and further identify super-responders to targeted PSO and AD therapies.

FUNDING SOURCE AND RELATED DISCLOSURES: This study is sponsored by Castle Biosciences, Inc. ASF, JIS, PAL, JK, JMW, and ML are consultants for Castle Biosciences, Inc. APQ, MSG, and JW are employees and shareholders of Castle Biosciences, Inc. Christine N. Bailey (Castle Biosciences, Inc. employee and shareholder) contributed to the data analysis.

OTHER DISCLOSURES: ASF, advisor (Sanofi and Regeneron, Janssen, Pfizer, Sun Pharma, Bristol Myers Squibb, Galderma, Novartis); JIS, advisor/consultant (Abbvie, Afyx, AObiome, Arena, Asana, Aslan, BioMX, Biosion, Bluefin, Bodewell, Boehringer-Ingelheim, Cara, Castle Biosciences, Celgene, Connect Biopharma, Dermavant, Dermira, Dermtech, Eli Lilly, Galderma, GlaxoSmithKline, Incyte, Kiniksa, Leo Pharma, Luna, Menlo, Novartis, Optum, Pfizer, RAPT, Regeneron, Sanofi-Genzyme, Shaperon, Sidekick Health; speaker for Abbvie, Eli Lilly, Leo Pharma, Pfizer) and grants (Galderma, Pfizer); PAL, grants/funding (AbbVie, AOBiome, Eczema Foundation, National Eczema Association), speaker (AbbVie, Eli Lilly, Galderma, Hyphens Pharma, Incyte, La Roche-Posay/L'Oreal, MyOR Diagnostics, ParentMD, Pfizer, Pierre-Fabre Dermatologie, Regeneron/Sanofi Genzyme), consultant/advisor (AbbVie, Almirall, Amyris, Arbonne, ASLAN, Bodewell, Boston Skin Science, Bristol Myers Squibb, Burt's Bees, Genzyme, Sibel Health, Skinfix, Sonica, Theraplex, UCB, Unilever, Verrica, Yobee Care; stock options with LearnSkin/Learn Health, Medable, Micreos, Modernizing Medicine, Yobee Care), patent pending (Theraplex product with royalties), board member/scientific advisory committee member (National Eczema Association); JK, speaker and/or consultant (AbbVie, Amgen, Celgene, Janssen, Eli Lilly, Leo Pharma, Novartis, Pfizer, UCB, Sun Pharma, Ortho Dermatologics, Regeneron, Sanofi, EPI Pharmaceuticals); JMW, speaker/ research grants (Regeneron, Abbvie, and Incyte), ML, research funds (Abbvie, Amgen, Arcutis, Avotres, Boehringer Ingelheim, Cara therapeutics, Dermavant Sciences, Eli Lilly, Incyte, Janssen Research & Development, LLC, Ortho Dermatologics, Regeneron, and UCB, Inc), consultant (Aditum Bio, Almirall, AltruBio Inc., AnaptysBio, Arcutis, Inc., Arena Pharmaceuticals, Aristea Therapeutics, Avotres Therapeutics, BiomX, Brickell Biotech, Boehringer-Ingelheim, Bristol Myers Squibb, Cara Therapeutics, Castle Biosciences, Celltrion, Corevitas, Dermavant Sciences, Evommune, Inc., Facilitation of International Dermatology Education, Forte Biosciences, Foundation for Research and Education in Dermatology, Hexima Ltd., LEO Pharma, Meiji Seika Pharma, Mindera, Pfizer, Seanergy, Trevi, and Verrica).

Abstract AD-04 was redacted prior to presentation at the conference.

Abstract AD-05

A Case Series of Live Attenuated Vaccine Administration in Dupilumab-Treated Children With Atopic Dermatitis

Elaine C Siegfried, MD[1,2]; Krystal Ngo, PharmD[3*]; Lara Wine Lee, MD, PhD[4]; Jonathan M Spergel, MD PhD[5]; Sumeet Uppal, MS[6]; Anna Coleman, MS[7]; Brad Shumel, MD[6]; Randy Prescilla, MD[8]; Ashish Bansal, MD[6]; Sonya L Cyr, PhD[6]

[1]Saint Louis University, St. Louis, MO, USA; [2]Cardinal Glennon Children's Hospital, St. Louis, MO, USA; [3]Sanofi, Irvine, CA, USA; [4]Medical University of South Carolina, Charleston, SC, USA; [5]Children's Hospital of Philadelphia, Philadelphia, PA, USA; [6]Regeneron Pharmaceuticals, Inc., Tarrytown, NY, USA; [7]Regeneron Pharmaceuticals, Inc., Dublin, Ireland; [8]Sanofi, Cambridge, MA, USA

BACKGROUND: Current medical consensus and regulatory labelling recommends completing age-appropriate non-live vaccinations according to immunization guidelines ≥4 weeks prior to starting dupilumab and to avoid use of live vaccines in patients treated with dupilumab. For patients in the LIBERTY AD PED open-label extension (OLE; NCT02612454) who required a live attenuated vaccine, protocol specified that study drug be discontinued for 12 weeks prior to planned administration and could be re-initiated 4 weeks after vaccination. However, 1 patient in the 16-week LIBERTY AD PRESCHOOL (NCT03346434, Part B) study received a live attenuated vaccine with a ≤12 weeks gap between dupilumab administration and vaccination and 8 patients in the LIBERTY AD PED-OLE received a live attenuated vaccine, 4 patients were vaccinated with a ≤12 weeks gap and 4 patients >12 weeks after discontinuing dupilumab.

OBJECTIVES: To describe the clinical course of children with moderate to severe AD administered a live attenuated vaccine during the LIBERTY AD PRESCHOOL or LIBERTY AD PED-OLE study.

METHODS: Pediatric patients with moderate to severe AD who participated in the Phase 2, open-label, multicenter, sequential study LIBERTY AD PRESCHOOL (Part A; 3 or 6mg/kg dupilumab single dose) or the randomized, double-blind, placebo-controlled, Phase 3 study LIBERTY AD PRESCHOOL (Part B; 200mg dupilumab every 4 weeks [q4w]: 5-<15 kg, or 300mg q4w: 15-<30kg baseline weight) were subsequently enrolled into the LIBERTY AD PED-OLE study (200mg dupilumab q4w: 5-<15kg, 300mg q4w: 15-<30kg, or 200mg q2w: 30-<60kg baseline weight). This case series included 9 patients with severe AD at the parent study baseline (Investigator's Global Assessment score=4) and Peak Pruritus Numerical Rating Scale (0–10) scores of 5.2 (n=1), 8 (n=2), 9 (n=4), or 10 (n=2), who were administered a live attenuated vaccine, with or without pause, during dupilumab treatment in the LIBERTY AD PRESCHOOL (Part B; n=1) or LIBERTY AD PED-OLE study (n=8).

Results: Of 9 patients in this case series, 8 were male. All were diagnosed with AD between 0-6 months of age. Age at enrollment varied from 8-56 months. Dupilumab treatment duration up to the date of vaccination with live attenuated measles, mumps, rubella (MMR) and varicella vaccines (n=5) or MMR vaccine only (n=4) ranged from 85-840 days. No adverse events (AEs), including serious AEs, treatment-emergent infections and infestations, or serious infections were observed in the 4-week window post vaccination.

CONCLUSIONS: In this limited prospective case series of children with moderate to severe AD who also received the live attenuated MMR vaccine, with or without live attenuated varicella vaccine, no serious AEs were observed within 4 weeks, or after 4 weeks post-vaccination. Additional research is needed to assess the safety of live attenuated vaccines in patients on dupilumab treatment and to investigate whether dupilumab treatment impacts vaccine efficacy.

ACKNOWLEDGMENTS: Research sponsored by Sanofi and Regeneron Pharmaceuticals, Inc. ClinicalTrials.gov Identifiers: NCT03346434 and NCT02612454. Medical writing/editorial assistance was provided by Jamie Church, PhD, of Excerpta Medica, and was funded by Sanofi and Regeneron Pharmaceuticals, Inc., according to the Good Publication Practice guideline.

DISCLOSURES: Elaine C Siegfried: Dermavant, Eli Lilly, Pfizer, Regeneron Pharmaceuticals, Inc., Verrica Pharmaceuticals – consultant; GSK, LEO Pharma, Novan – data and safety monitoring board member; Eli Lilly, Janssen, Regeneron Pharmaceuticals, Inc., Stiefel, Verrica Pharmaceuticals – Principal Investigator in clinical trials. Krystal Ngo: Sanofi – employee. Lara Wine Lee: Castle Creek Biosciences, Eli Lilly, Pfizer, Regeneron Pharmaceuticals, Inc. – advisory board member; AbbVie, Amryt Pharma, Krystal Biotech, Novartis, Kimberly Clark – consultant; AbbVie, Amgen, Amryt Pharma, Arcutis Biotherapeutics, Castle Creek Biosciences, Celgene, Eli Lilly, Galderma, Incyte, Mayne Pharmaceuticals, Novartis, Pfizer, Regeneron Pharmaceuticals, Inc., Sanofi, Target Pharma, Trevi Therapeutics, UCB – investigator; Amryt Pharma – speaker. Jonathan M Spergel: Allakos, DBV Technologies, Novartis, Regeneron Pharmaceuticals, Inc., Shire/Takeda – consultant; DBV Technologies, Regeneron Pharmaceuticals, Inc. – grant support. Randy Prescilla: Sanofi – employees, may hold stock and/or stock options in the company. Sumeet Uppal, Anna Coleman, Brad Shumel, Ashish Bansal, Sonya L Cyr: Regeneron Pharmaceuticals, Inc. – employees and shareholders.

Abstract AD-06

Tapinarof Cream 1% Once Daily: Significant Efficacy in the Treatment of Moderate to Severe Atopic Dermatitis in Two Pivotal Phase 3 Trials in Adults and Children Down to 2 Years of Age

Jonathan I Silverberg, MD, PhD, MPH[1]; Lawrence F Eichenfield, MD[2]; Adelaide A Hebert, MD[3]; Eric Simpson, MD, MCR[4]; Linda Stein Gold, MD[5]; Robert Bissonnette, MD, FRCPC[6]; Kim A Papp, MD, PhD, FRCPC[7,8]; John C Browning, MD, FAAD, FAAP[9]; Pearl Kwong, MD, PhD[10]; Neil J Korman, MD, PhD[11]; Philip M Brown, MD, JD[12]; David S Rubenstein, MD, PhD[12]; Stephen C Piscitelli, PharmD[12]; Matthew C Somerville, MS[12]; Anna M Tallman, PharmD[12]; Leon Kircik, MD[13]

[1]The George Washington University School of Medicine and Health Sciences, Washington, DC, USA; [2]University of California San Diego and Rady Children's Hospital, San Diego, CA, USA; [3]UTHealth McGovern School of Medicine and Children's Memorial Hermann Hospital, Houston, TX, USA; [4]Oregon Health & Science University, Portland, OR, USA; [5]Henry Ford Health System, Detroit, MI, USA; [6]Innovaderm Research Inc., Montreal, QC, Canada; [7]Probity Medical Research Inc. and Alliance Clinical Trials, Waterloo, ON, Canada; [8]University of Toronto, Toronto, ON, Canada; [9]UT Health San Antonio, TX, USA; [10]Solutions through Advanced Research, Jacksonville, FL, USA; [11]University Hospitals Cleveland Medical Center, Cleveland, OH, USA; [12]Dermavant Sciences, Inc., Morrisville, NC, USA; [13]Icahn School of Medicine at Mount Sinai, New York, NY, USA

BACKGROUND: Tapinarof cream 1% once daily (QD) demonstrated efficacy versus vehicle and was well tolerated in adults and adolescents with moderate to severe atopic dermatitis (AD) in a previously reported phase 2 trial.
OBJECTIVES: Here, we report pivotal phase 3 efficacy and safety results for tapinarof cream 1% QD in the treatment of adults and children down to 2 years of age with moderate to severe AD.
METHODS: ADORING 1 and 2 were two identical phase 3, randomized, double-blind, vehicle-controlled trials. Eligibility criteria included a Validated Investigator Global Assessment for Atopic Dermatitis™ (vIGA-AD™) score of ≥3, Eczema Area and Severity Index (EASI) score of ≥6, and body surface area (BSA) involvement of 5–35%. Patients were randomized 2:1 to receive tapinarof cream 1% or vehicle cream QD for 8 weeks. The primary efficacy endpoint was vIGA-AD™ response, defined as a score of clear (0) or almost clear (1) and ≥2-grade improvement from baseline at Week 8. Secondary efficacy endpoints included ≥75% improvement in EASI score (EASI75) and proportion of patients (aged ≥12 years) with a baseline Peak Pruritus-Numerical Rating Scale (PP-NRS) score of ≥4 who achieved a ≥4-point reduction at Week 8. Adverse events (AEs) included rates of AEs of special interest (AESIs): contact dermatitis, follicular event, and headache.
RESULTS: 407 and 406 patients aged 2–81 years were randomized in ADORING 1 and 2, respectively. At baseline, 84.0–89.9% of patients had a vIGA-AD™ score of 3 (moderate), mean EASI score of 12.5–13.3, and mean BSA affected of 16.7–16.9% across trials. At Week 8, both the primary and all secondary efficacy endpoints were met with statistical significance in the tapinarof groups versus vehicle: vIGA-AD™ response rates were 45.4% vs 13.9% and 46.4% vs 18.0% (both $P<0.0001$); EASI75 response rates were 55.8% vs 22.9% and 59.1% vs 21.2% (both $P<0.0001$); and a ≥4-point reduction in PP-NRS was achieved by 55.8% vs 34.2% ($P=0.0366$) and 52.8% vs 24.1% ($P=0.0015$), in ADORING 1 and 2, respectively. AEs were mostly mild or moderate; the most frequent (≥5% in any group) were folliculitis, headache, and nasopharyngitis. Trial discontinuation rates due to AEs were lower with tapinarof versus vehicle (ADORING 1: 1.9% vs 3.6%; ADORING 2: 1.5% vs 3.0%, respectively). Rates of AESIs with tapinarof versus vehicle were: contact dermatitis 1.5% vs 2.2% and 1.1% vs 1.5%; follicular events 10.0% vs 0.7% and 8.9% vs 1.5%; and headache 7.0% vs 2.2% and 1.5% vs 0%, in each trial, respectively.
CONCLUSIONS: Tapinarof cream 1% QD demonstrated statistically significant efficacy compared with vehicle for primary and secondary efficacy endpoints in adults and children down to 2 years of age with moderate to severe AD. Tapinarof was well tolerated, with no new safety or tolerability signals. AEs were mostly mild to moderate and led to low rates of trial discontinuation, demonstrating the predictable safety profile of tapinarof cream 1% QD.
ACKNOWLEDGMENTS: Dermavant Sciences, Inc.
DISCLOSURES: Jonathan I Silverberg has received honoraria as a consultant and/or advisory board member for AbbVie, Alamar, Aldena, Amgen, AObiome, Arcutis, Arena, Asana, Aslan, BioMX, Biosion, Bodewell, Boehringer Ingelheim, Bristol Myers Squibb, Cara, Castle Biosciences, Celgene, Connect Biopharma, Corevitas, Dermavant Sciences, Inc., Dermira, Dermtech, Eli Lilly, Galderma, GlaxoSmithKline, Incyte, Kiniksa, LEO Pharma, Menlo, Novartis, Optum, Pfizer, RAPT, Recludix, Regeneron, Sanofi-Genzyme, Shaperon, TARGET-RWE, Union, and UpToDate; speaker for AbbVie, Eli Lilly, LEO Pharma, Pfizer, Regeneron, and Sanofi-Genzyme; institution received grants from Galderma, Incyte, and Pfizer. Lawrence F Eichenfield has served as a consultant, advisor, or investigator for AbbVie, Almirall, Amgen, Arcutis, Arena, Aslan, Dermavant Sciences, Inc., Eli Lilly, Forté, Galderma, Incyte, Janssen, LEO Pharma, Novartis, Ortho Dermatologics, Pfizer, Regeneron, Sanofi Genzyme, and UCB Pharma. Adelaide A Hebert has received research support paid to the medical school from AbbVie, Arcutis, Dermavant Sciences Inc., and Pfizer; honoraria received from GSK, Sanofi Regeneron, and Ortho Dermatologics (as part of a Data Safety Monitoring Board); honoraria received from Dermavant Sciences, Inc., Incyte, LEO Pharma, Pfizer, Arcutis, Sun Pharma, Galderma, Novan, and Verrica. Eric Simpson reports grants and fees for participation as a consultant and principal investigator from Eli Lilly and Company, LEO Pharma, Pfizer, and Regeneron; grants for participation as a principal investigator from Galderma and Merck & Co.; and fees for consultant services from AbbVie, Boehringer Ingelheim, Dermavant Incyte, Forte Bio, Pierre Fabre Dermo, and Sanofi Genzyme. Linda Stein Gold has served as a consultant, and/or has received payment for the development of educational presentations, and/or has received grants from Amgen, Arcutis, Bristol Myers Squibb, Dermavant Sciences, Inc., Eli Lilly, LEO Pharma, Ortho Dermatologics,

Pfizer, and UCB Biopharma. Robert Bissonnette has served as a consultant/investigator/advisory board member for AbbVie, Alumis, Almirall, Amgen, AnaptysBio, Arcutis, Aristea, Bausch Health, Boehringer Ingelheim, Boston Pharmaceuticals, Bristol Myers Squibb, Dermavant Sciences, Inc., Eli Lilly, Escalier, Janssen, Kyowa Kirin, LEO Pharma, Nimbus, Novartis, Pfizer, Regeneron, Sienna, and UCB Biopharma; and is an employee and shareholder of Innovaderm Research. Kim A Papp has served as a consultant/speaker/scientific officer/has attended advisory boards for, or received grants or honoraria from, AbbVie, Akros, Amgen, Anacor, Arcutis, Astellas, Bausch Health/Valeant, Baxalta, Boehringer Ingelheim, Bristol Myers Squibb, Can-Fite Biopharma, Celgene, Coherus, Dermira, Dow Pharma, Eli Lilly, Evelo, Galapagos, Galderma, Genentech, Gilead, GlaxoSmithKline, Janssen, Kyowa Kirin, LEO Pharma, Medimmune, Meiji Seika Pharma, Merck (MSD), Merck-Serono, Mitsubishi Pharma, Moberg Pharma, Novartis, Pfizer, PRCL Research, Regeneron, Roche, Sanofi-Aventis/Genzyme, Sun Pharma, Takeda, and UCB Biopharma. John C Browning has served as an investigator for AbbVie, Acelyrin, Amgen, Arcutis, Dermavant, Inc., Eli Lilly, Galderma, Janssen, LEO Pharma, Novartis, Pfizer, Regeneron, Sanofi, UCB Pharma, and Vyne, and as a speaker for Regeneron, Pfizer, and Krystal. Pearl Kwong has served as a paid advisory board consultant for Verrica Pharmaceuticals Inc. Neil J Korman has served as an investigator and speaker for Abbott Labs, Genentech and Astellas; received grants and honoraria; served on the advisory board and was an investigator for Centocor; received grants and residency/fellowship program funding; and was investigator and speaker for Amgen, receiving grants and honoraria. Philip M Brown, David S Rubenstein, Stephen C Piscitelli, Matthew C Somerville, and Anna M Tallman are employees of Dermavant Sciences, Inc., with stock options. Leon Kircik has served as a consultant, speaker, investigator, or advisory board member for Abbott Laboratories, AbbVie, Ablynx, Aclaris, Acambis, Allergan, Inc., Almirall, Amgen, Inc., Anacor Pharmaceuticals, AnaptysBio, Arcutis Biotherapeutics, Arena Pharmaceuticals, Assos Pharmaceuticals, Astellas Pharma US, Inc., Asubio Pharmaceuticals, Bausch Health, Berlex Laboratories (Bayer HealthCare Pharmaceuticals), Biogen Idec, BioLife, Biopelle, Bristol Myers Squibb, Boehringer Ingelheim, Breckenridge Pharma, Cassiopea SpA, Centocor, Inc., Cellceutix, Cipher Pharmaceuticals, Coherus BioSciences, Colbar LifeScience, Combinatrix, Connetics Corporation, Coria Laboratories, Dermavant Sciences, Inc., Dermira, Dermik Laboratories, Dow Pharmaceutical Sciences, Inc., Dr. Reddy's Laboratories, DUSA Pharmaceuticals, Embil Pharmaceutical Co. Ltd., Eli Lilly, EOS, Exeltis, Ferndale Laboratories, Inc., Ferrer, Foamix Pharmaceuticals, Galderma, Genentech, Inc., GlaxoSmithKline, Glenmark Pharmaceuticals, Healthpoint, Ltd, Idera Pharmaceuticals, Incyte, Intendis, Innocutis, Innovail, ISDIN, Johnson & Johnson, Kyowa Kirin, Laboratory Skin Care Inc., LEO Pharma, L'Oréal, 3M, Maruho Co., Ltd., Medical International Technologies, Merck, Medicis Pharmaceutical Corp., Merz Pharma, NanoBio, Novartis AG, Noven Pharmaceuticals, Nucryst Pharmaceuticals Corp., Obagi, Onset Dermatologics, Ortho Neutrogena, Pediapharma, Pfizer, Promius Pharma, PuraCap, Pharmaderm, QLT, Inc., Quinnova Pharmaceuticals, Quatrix, Regeneron, Sanofi, Serono (Merck Serono International SA), SkinMedica, Inc., Stiefel Laboratories, Inc., Sun Pharma, Taro Pharmaceutical Industries, Toler Rx, Triax Pharmaceuticals, UCB Pharma, Valeant Pharmaceuticals Intl., Warner Chilcott, XenoPort, and ZAGE.

Abstract AD-07

Efficacy and Safety of Roflumilast Cream 0.15% in Adults and Children Aged ≥6 With Mild to Moderate Atopic Dermatitis in Two Phase 3 Trials (INTEGUMENT-1 and INTEGUMENT-2)

Eric Simpson, MD[1]; Lawrence Eichenfield, MD[2]; Melinda Gooderham, MD[3]; Mercedes E Gonzalez, MD[4]; Adelaide Hebert, MD[5]; Kim Papp, MD[6]; Vimal Prajapati, MD[7]; David Krupa, MS[8]; Patrick Burnett, MD, PhD[8]; David Berk, MD[8]; Robert Higham, MPAS[8]

[1]Oregon Health & Science University, Portland, OR, USA; [2]University of California, San Diego and Rady Children's Hospital, San Diego, CA, USA; [3]SKiN Centre for Dermatology, Probity Medical Research and Queen's University, Peterborough, ON, Canada; [4]Pediatric Skin Research, LLC Miami, FL, USA; [5]UT Health McGovern Medical School, Houston, TX, USA; [6]Probity Medical Research and Alliance Clinical Research, Waterloo, ON, Canada; [7]Dermatology Research Institute, Skin Health & Wellness Centre, University of Calgary, and Probity Medical Research, Calgary, AB, Canada; [8]Arcutis Biotherapeutics, Inc., Westlake Village, CA, USA.

BACKGROUND: Roflumilast is a selective, highly potent phosphodiesterase 4 inhibitor under investigation as a non-steroidal, once-daily cream for treatment of atopic dermatitis (AD). INTEGUMENT-1 (n=654; NCT04773587) and INTEGUMENT-2 (n=683; NCT04773600) were identical phase 3 randomized controlled trials conducted in patients with AD aged ≥6 years with baseline Eczema Area and Severity Index (EASI) score ≥5 and Validated Investigator Global Assessment-AD (vIGA-AD) score of Mild or Moderate.

METHODS: Patients were randomized 2:1 to apply once-daily roflumilast cream 0.15% or vehicle for 4 weeks. The primary efficacy endpoint was vIGA-AD Success (defined as score of 0 [clear] or 1 [almost clear] with 2-grade improvement from baseline) at Week 4. Secondary endpoints included 75% improvement in EASI (EASI-75).

RESULTS: At Week 4, significantly more roflumilast-treated than vehicle-treated patients achieved vIGA-AD Success (INTEGUMENT-1: 32.2% vs 15.2%; $P<0.0001$; INTEGUMENT-2: 28.9% vs 12.0%; $P<0.0001$) and EASI-75 (INTEGUMENT-1: 43.2% vs 22.0%; $P<0.0001$; INTEGUMENT-2: 42.0% vs 19.7%; $P<0.0001$). Incidence of Treatment-Emergent Adverse Events (AEs) was low in both arms, with most assessed as mild to moderate in severity. No AE occurred in more than 3.5% of patients in either arm with low rates of application site pain in both the roflumilast- and vehicle-treated patients (INTEGUMENT-1: 2.1% vs 0.5%; INTEGUMENT-2: 0.9% vs 0.9%). Local tolerability was favorable with >90% of roflumilast-treated patients reporting no or mild sensation across arms in both trials at any timepoint.

CONCLUSIONS: Once-daily roflumilast cream 0.15% improved AD across multiple efficacy endpoints while demonstrating favorable safety and tolerability in two phase 3 trials.

ACKNOWLEDGMENTS: Sponsored by Arcutis Biotherapeutics, Inc.

DISCLOSURES: ES, LE, MG, MEG, AH, KP, and VHP are investigators and/or consultants for Arcutis Biotherapeutics, Inc. and received grants/research funding and/or honoraria; DK, PB, DB, and RH are employees of Arcutis Biotherapeutics, Inc. Additional disclosures provided on request.

Abstract AD-08

Dupilumab Treatment in Patients With Hand and Foot Atopic Dermatitis: Results From a Phase 3, Randomized, Double-Blind, Placebo-Controlled Trial

Eric L Simpson, MD[1]; Krystal Ngo, PharmD[2*]; Jonathan I Silverberg, MD, PhD, MPH[3]; Margitta Worm, MD[4]; Golara Honari, MD[5]; Koji Masuda, MD, PhD[6]; Ewa Sygula, MD, PhD[7]; Jennifer Maloney, MD[8]; Leda P Mannent, MD[9]; Jing Xiao, PhD[8]; Ariane Dubost-Brama, MD[9]; Ashish Bansal, MD[8]

[1]Oregon Health & Science University, Portland, OR, USA; [2]Sanofi, Irvine, CA, USA; [3]The George Washington School of Medicine and Health Sciences, Washington, DC, USA; [4]Charité-Universitätsmedizin Berlin, Berlin, Germany; [5]Stanford University School of Medicine, Redwood City, CA, USA; [6]Kyoto Prefectural University of Medicine, Kyoto, Japan; [7]Andrzej Mielęcki Memorial Independent Public Clinical Hospital, Katowice, Poland; [8]Regeneron Pharmaceuticals, Inc., Tarrytown, NY, USA; [9]Sanofi, Chilly-Mazarin, France

BACKGROUND: Atopic dermatitis (AD) of the hands and/or feet is often chronic, difficult to treat, and substantially impacts patient's quality of life.

OBJECTIVES: We investigated the efficacy/safety of dupilumab in patients with hand and foot (H/F) AD using dedicated/validated clinical and patient-reported instruments.

METHODS: The Phase 3, randomized, double-blind, LIBERTY-AD-HAFT (NCT04417894) trial enrolled patients ≥12 years with moderate to severe (Investigator's Global Assessment [IGA] 3/4) H/F AD. Patients were randomized to dupilumab monotherapy 300 mg every 2 weeks (q2w) in adults; 200/300 mg q2w in adolescents, or placebo for 16 weeks. The primary endpoint was IGA (H/F) 0/1 score at Week 16. Safety/tolerability was assessed.

RESULTS: The 133 patients enrolled were randomized to dupilumab (n=67) or placebo (n=66). At Week 16, the primary and all secondary endpoints were met. Significantly more patients in the dupilumab vs placebo group achieved IGA 0/1 (40.3% vs 16.7%; P=0.003; primary endpoint) and ≥4-point improvement in the H/F Peak Pruritus Numerical Rating Scale (52.2% vs 13.6%; P<0.0001; a key secondary endpoint). Dupilumab-treated patients experienced significant improvement in percent change from baseline in the modified Total Lesion Sign Score for H/F lesions vs placebo (LS mean [SE], −69.4 [5.8] vs −31.0 [5.9]; P<0.0001) and Hand Eczema Severity Index (LS mean [SE], −74.8 [6.3] vs −39.9 [6.2]; P<0.0001). The most common treatment emergent adverse events (TEAEs; ≥10%) were nasopharyngitis (16% vs 11%) and dermatitis atopic (5% vs 18%).

CONCLUSIONS: Dupilumab significantly improved signs and symptoms in patients with H/F AD and had an acceptable safety profile.

ACKNOWLEDGMENTS: Research sponsored by Sanofi and Regeneron Pharmaceuticals, Inc. ClinicalTrials.gov Identifier: NCT04417894. Medical writing/editorial assistance was provided by Nigel De Melo, PhD, of Excerpta Medica, and was funded by Sanofi and Regeneron Pharmaceuticals, Inc., according to the Good Publication Practice guideline.

DISCLOSURES: Eric L. Simpson: AbbVie, Eli Lilly, Galderma, Kyowa Hakko Kirin, LEO Pharma, Merck, Pfizer, Regeneron Pharmaceuticals, Inc. – investigator; AbbVie, Boehringer Ingelheim, Dermavant, Eli Lilly, Forté, Incyte, LEO Pharma, Menlo Therapeutics, Pfizer, Pierre Fabre Dermo-Cosmetics, Regeneron Pharmaceuticals, Inc., Sanofi, Valeant – consultant fees. Krystal Ngo: Sanofi – employee. Jonathan I. Silverberg: AbbVie, Bristol Myers Squib, Eli Lilly, GSK, Incyte, LEO Pharma, Realm Therapeutics, Regeneron Pharmaceuticals, Inc., Roche – investigator; AbbVie, Anacor Pharmaceuticals, Eli Lilly, Galderma, GSK, Incyte, Kiniksa Pharmaceuticals, LEO Pharma, MedImmune, Menlo Therapeutics, Pfizer, Procter & Gamble, Realm Therapeutics, Regeneron Pharmaceuticals, Inc. – consultant; Regeneron Pharmaceuticals, Inc., Sanofi – speaker. Margitta Worm: AbbVie, Allmiral, Boehringer Ingelheim, Bayer, Amgen, LEO Pharma, Eli Lilly, Novartis, Pfizer, Regeneron Pharmaceuticals, Inc., Sanofi, Viatris – advisory board and/or consulting fees. Golara Honari: Nipera, Regeneron Pharmaceuticals, Inc. – research funding; AbbVie, Biolinq, Myesontooth – consultant. Koji Masuda: Sanofi – speaker; Eli Lilly - investigator. Ewa Sygula: Nothing to disclose. Jennifer Maloney, Jing Xiao, Ashish Bansal: Regeneron Pharmaceuticals, Inc. – employees and shareholders. Leda P. Mannent, Ariane Dubost-Brama: Sanofi – employees, may hold stock and/or stock options in the company.

Abstract AD-09

Rapid and Early Onset of Itch Relief With Tapinarof Cream 1% Once Daily in Two Pivotal Phase 3 Trials in Adults and Children Down to Two Years of Age With Moderate to Severe Atopic Dermatitis

Eric Simpson, MD, MCR[1]; Jonathan I Silverberg, MD, PhD, MPH[2]; Robert Bissonnette, MD, FRCPC[3]; Linda Stein Gold, MD[4]; April W Armstrong, MD, MPH[5]; Adelaide A Hebert, MD[6]; Rocco T Serrao, MD[7]; Jeannette R Jakus, MD, MBA, FAAD, FAAP[8]; Philip M Brown, MD, JD[9]; David S Rubenstein, MD, PhD[9]; Stephen C Piscitelli, PharmD[9]; Anna M Tallman, PharmD[9]; Lawrence F Eichenfield, MD[10]

[1]Oregon Health & Science University, Portland, OR, USA; [2]The George Washington University School of Medicine and Health Sciences, Washington, DC, USA; [3]Innovaderm Research Inc., Montreal, QC, Canada;[4]Henry

Ford Health System, Detroit, MI, USA; [5]Keck School of Medicine, University of Southern California, Los Angeles, CA, USA; [6]UTHealth McGovern School of Medicine and Children's Memorial Hermann Hospital, Houston, TX, USA; [7]Dermatologists of Southwest Ohio, Mason, OH, USA; [8]SUNY Downstate Health Sciences University, New York, NY, USA; [9]Dermavant Sciences, Inc., Morrisville, NC, USA; [10]University of California San Diego and Rady Children's Hospital, San Diego, CA, USA

BACKGROUND: Itch, the most bothersome symptom for patients with atopic dermatitis (AD), has significant negative impact on health-related quality of life. Rapid onset of pruritus relief with sustained efficacy is a key outcome for AD therapies. In ADORING 1 and 2, two identical phase 3, double-blind, vehicle-controlled trials, tapinarof cream 1% once daily (QD) demonstrated significant efficacy and was well tolerated in adults and children down to 2 years of age with moderate to severe AD.

OBJECTIVES: Here, we evaluate time to onset of itch relief in the pivotal phase 3 trials with tapinarof cream 1% QD in the treatment of adults and children down to 2 years of age with moderate to severe AD.

METHODS: Patients with a Validated Investigator Global Assessment for Atopic Dermatitis™ score of ≥3, an Eczema Area and Severity Index score of ≥6, and body surface area involvement of 5–35% were randomized 2:1 to tapinarof cream 1% or vehicle QD for 8 weeks. Efficacy endpoints that evaluated itch relief were mean changes in Peak Pruritus-Numerical Rating Scale (PP-NRS) score (daily and by visit [Weeks 1, 2, 4, and 8]) from baseline through Week 8. The PP-NRS considers a person's worst itch over the past 24 hours, assessed on an 11-point scale (0 indicates "no itch" and 10 is "worst imaginable itch"). Daily PP-NRS scores were recorded in diaries. Patients aged ≥12 years self-completed the PP-NRS, while caregivers completed it for children aged <12 years.

RESULTS: 407 and 406 patients were randomized in ADORING 1 and 2. At baseline, mean (standard deviation [SD]) PP-NRS scores were 6.7 (2.4) and 6.8 (2.3) in both trials, respectively. For daily evaluations of itch from baseline, greater reductions in PP-NRS scores (mean [SD]) for tapinarof versus vehicle were observed as early as Day 1, 24 hours after initial application, in ADORING 1 (–1.2 [2.2] vs –0.9 [2.0]) and Day 2 in ADORING 2 (–1.6 [2.4] vs –1.4 [2.1]). Improvements in daily PP-NRS scores (mean [SD]) with tapinarof versus vehicle continued through the first 2 weeks (Day 14; –3.0 [2.8] vs –2.0 [2.4] and –2.9 [2.7] vs –1.8 [2.6]), and through Week 8 of both trials. There were statistically significant and clinically meaningful reductions in mean weekly PP-NRS scores as early as Week 1, the first assessment, for patients treated with tapinarof compared with vehicle (–2.0 vs –1.2 [P<0.0001]) and (–2.0 vs –1.3 [P=0.0010]), in ADORING 1 and 2, respectively. Significantly greater reductions in mean PP-NRS scores with tapinarof versus vehicle were seen for all visits through Week 8 (–4.1 vs –2.6 and –4.1 vs –2.4 [both P<0.0001]), for both trials.

CONCLUSIONS: Tapinarof cream 1% QD demonstrated rapid, clinically meaningful, and significant onset of pruritus relief as early as 24 hours after initial application compared with vehicle. Improvements in itch with tapinarof cream increased through Week 8 in both trials in adults and children down to 2 years with moderate to severe AD.

ACKNOWLEDGMENTS: Dermavant Sciences, Inc.

DISCLOSURES: Eric Simpson reports grants and fees for participation as a consultant and principal investigator from Eli Lilly and Company, LEO Pharma, Pfizer, and Regeneron; grants for participation as a principal investigator from Galderma and Merck & Co.; and fees for consultant services from AbbVie, Boehringer Ingelheim, Dermavant Sciences, Inc., Incyte, Forte Bio, Pierre Fabre Dermo, and Sanofi Genzyme. Jonathan I Silverberg has received honoraria as a consultant and/or advisory board member for AbbVie, Alamar, Aldena, Amgen, AObiome, Arcutis, Arena, Asana, Aslan, BioMX, Biosion, Bodewell, Boehringer Ingelheim, Bristol Myers Squibb, Cara, Castle Biosciences, Celgene, Connect Biopharma, Corevitas, Dermavant Sciences, Inc., Dermira, Dermtech, Eli Lilly, Galderma, GlaxoSmithKline, Incyte, Kiniksa, LEO Pharma, Menlo, Novartis, Optum, Pfizer, RAPT, Recludix, Regeneron, Sanofi-Genzyme, Shaperon, TARGET-RWE, Union, and UpToDate; speaker for AbbVie, Eli Lilly, LEO Pharma, Pfizer, Regeneron, and Sanofi-Genzyme; institution received grants from Galderma, Incyte, and Pfizer. Robert Bissonnette has served as a consultant/investigator/advisory board member for AbbVie, Alumis, Almirall, Amgen, AnaptysBio, Arcutis, Aristea, Bausch Health, Boehringer Ingelheim, Boston Pharmaceuticals, Bristol Myers Squibb, Dermavant Sciences, Inc., Eli Lilly, Escalier, Janssen, Kyowa Kirin, LEO. Pharma, Nimbus, Novartis, Pfizer, Regeneron, Sienna, and UCB Biopharma; and is an employee and shareholder of Innovaderm Research. Linda Stein Gold has served as a consultant, and/or has received payment for the development of educational presentations, and/or has received grants from Amgen, Arcutis, Bristol Myers Squibb, Dermavant Sciences, Inc., Eli Lilly, LEO Pharma, Ortho Dermatologics, Pfizer, and UCB Biopharma. April W Armstrong has served as a research investigator and/or scientific advisor for AbbVie, Boehringer Ingelheim, Bristol Myers Squibb, Dermavant Sciences, Inc., Dermira, EPI, Incyte, Janssen, LEO Pharma, Eli Lilly, Modmed, Novartis, Ortho Dermatologics, Pfizer, Regeneron, Sun Pharma, Sanofi, and UCB Biopharma. Adelaide A Hebert has received research support paid to the medical school from AbbVie, Arcutis, Dermavant Sciences Inc., and Pfizer; honoraria received from GSK, Sanofi Regeneron, and Ortho Dermatologics (as part of a Data Safety Monitoring Board); honoraria received from Dermavant Sciences, Inc., Incyte, LEO Pharma, Pfizer, Arcutis, Sun Pharma, Galderma, Novan, and Verrica. Rocco T Serrao has served as a consultant and/or has received payment for the development of educational presentations, and/or has received grants from Abbott, AbbVie, Arcutis, Bristol Myers Squibb, Dermavant Sciences, Inc., Eli Lilly, Incyte, Janssen, Pfizer, Regeneron, and Sanofi Genzyme. Jeannette R Jakus is a clinical investigator for the ADORING trials and is an employee of SUNY Downstate Health Sciences University, which received compensation from Dermavant Sciences, Inc. for trial participation. She has also served as an investigator, advisor, and/or consultant for Amgen, Arcutis, Galderma, Incyte, Pfizer, Regeneron, and Verrica. Philip M Brown, David S Rubenstein, Stephen C Piscitelli, and Anna M Tallman are employees of Dermavant Sciences, Inc., with stock options. Lawrence F Eichenfield has served as a consultant, advisor, or investigator for AbbVie, Almirall, Amgen, Arcutis, Arena, Aslan, Dermavant Sciences, Inc., Eli Lilly, Forté, Galderma, Incyte,

Janssen, LEO Pharma, Novartis, Ortho Dermatologics, Pfizer, Regeneron, Sanofi Genzyme, and UCB Pharma.

Abstract AD-10

Lebrikizumab Reduced Itch Interference on Sleep Over 52 Weeks in Patients With Moderate to Severe Atopic Dermatitis Not Achieving Protocol-Defined Response Criteria After Initial 16 Weeks of Therapy

Sonja Ständer, MD[1]; David Rosmarin, MD[2]; Peter A Lio, MD[3,4]; Esther Serra-Baldrich, MD[5]; Franz J Legat, MD[6]; Laia Bardolet, MS[7]; Eric Meskimen, BA[8]; Marta Casillas, PhD[8]; Evangeline Pierce, PhD[8]; Chenjia Xu, PhD[8]; Maria Silk, PhD[8]; Jinglin Zhong, MS[9]; Gil Yosipovitch, MD[10]

[1]University Hospital Münster, Münster, Germany; [2]Tufts University School of Medicine, Boston, USA; [3]Northwestern University Feinberg School of Medicine, Chicago, USA; [4]Medical Dermatology Associates of Chicago, Chicago, USA; [5]Hospital de la Santa Creu i Sant Pau, Barcelona, Spain; [6]Medical University of Graz, Graz, Austria; [7]Almirall S.A., Barcelona, Spain; [8]Eli Lilly and Company, Indianapolis, USA; [9]IQVIA, Durham, USA; [10]University of Miami Miller School of Medicine, Miami, USA

BACKGROUND: In patients with atopic dermatitis (AD), interference of itch on sleep greatly impairs quality of life. Lebrikizumab, a high-affinity monoclonal antibody, reduced interference of itch on sleep in patients with moderate to severe AD at Week 16 in 2 identical randomized, double-blind, placebo-controlled Phase 3 trials (ADvocate1, NCT04146363; ADvocate2, NCT04178967).

OBJECTIVES: To investigate lebrikizumab efficacy on interference of itch on sleep over 52 weeks in lebrikizumab-treated patients who did not achieve protocol-defined response criteria at Week 16.

METHODS: At Week 16, non-responders to lebrikizumab 250 mg every 2 weeks (LEB Q2W; patients who did not achieve Investigator's Global Assessment 0,1 with ≥2-point improvement or 75% improvement in Eczema Area and Severity Index or received rescue medication) continued LEB Q2W in the escape arm to Week 52. The 5-point Sleep-Loss Scale measuring the interference of itch on sleep was used; both ≥2-point improvement (clinically relevant) and ≥1-point improvement were measured in patients with baseline Sleep-Loss Scale scores ≥2 and ≥1, respectively. Sleep-Loss Scale change from baseline was also assessed. Pooled ADvocate1 and ADvocate2 observed data are reported for lebrikizumab-treated patients who did not achieve the Week 16 response criteria in the escape arm (N=215).

RESULTS: At Week 16, 26.7% of patients achieved ≥2-point improvement in interference of itch on sleep, increasing to 68.2% at Week 52. A ≥1-point improvement in interference of itch on sleep was achieved by 57.5% of patients at Week 16 and 86.1% at Week 52. Mean (SD) Sleep-Loss Scale at baseline was 2.3 (0.9); mean change (SD) from baseline was -1.0 (1.0) at Week 16 and -1.7 (0.9) at Week 52.

CONCLUSIONS: Despite not achieving the Week 16 response criteria, 68% of patients in the escape arm who continued with lebrikizumab had clinically relevant improvements in interference of itch on sleep by Week 52.

ACKNOWLEDGMENTS: This study was funded by Dermira, a wholly owned subsidiary of Eli Lilly and Company. Almirall, S.A. has licensed the rights to develop and commercialize lebrikizumab for the treatment of dermatology indications, including atopic dermatitis, in Europe. Lilly has exclusive rights for development and commercialization of lebrikizumab in the United States and the rest of the world outside of Europe. Abstract previously presented at World Congress of Dermatology (WCD); Singapore; 3-8 July 2023.

DISCLOSURES: S Ständer has acted as a consultant, speaker, advisor, and/or served as an investigator for: AbbVie, Almirall, Beiersdorf, Bellus Health, BenevolentAI, Bionorica, Cara Therapeutics, Clexio Biosciences, DERMASENCE, Eli Lilly and Company, Escient Pharmaceuticals, Galderma, Grünenthal, Kiniksa, LEO Pharma, Menlo Therapeutics, Novartis, P.G. Unna Academy, Pfizer, Sanofi, Trevi Therapeutics, Vanda Pharmaceuticals, and Vifor Pharma; D Rosmarin has received honoraria as a consultant, received research support, and/or served as a speaker for: AbbVie, Abcuro, AltruBio, Amgen, Arena Pharmaceuticals, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Concert Pharmaceuticals, CSL Behring, Dermavant, Dermira, Eli Lilly and Company, Galderma, Incyte Corporation, Janssen, Kyowa Kirin, Merck, Novartis, Pfizer, Regeneron, Sanofi, Sun Pharma, UCB Pharma, and Viela Bio; PA Lio reports research grants and/or funding from: AbbVie, AOBiome, Eczema Foundation; has been on speaker's bureaus for: AbbVie, Eli Lilly and Company, Galderma, Hyphens Pharma, Incyte Corporation, La Roche-Posay/L'Oréal, MyOR Diagnostics, ParentMD, Pfizer, Pierre Fabre, Regeneron/Sanofi Genzyme; has received consulting fees from and/or been on advisory boards for: AbbVie, Almirall, Amyris, Arbonne, Arcutis, ASLAN Pharmaceuticals, Bodewell, Boston Skin Science, Bristol Myers Squibb, Burt's Bees, Castle Biosciences, Codex Labs, Concerto Biosciences, Dermavant, Dermira, Dermveda, Eli Lilly and Company, Galderma, IntraDerm, Janssen, Johnson & Johnson, Kaleido Biosciences, Kimberly-Clark, L'Oréal, LEO Pharma, Lipidor, Menlo Therapeutics, Merck, Micreos, MyOR Diagnostics, Regeneron/Sanofi Genzyme, Sibel Health, Skinfix, Sonica, Theraplex, UCB Pharma, Unilever, Verrica Pharmaceuticals, and Yobee Care; has stock options with: LearnSkin/LearnHealth, Medable, Micreos, Modernizing Medicine, and Yobee Care; has a patent pending for: Theraplex product with royalties paid; and is a board member and scientific advisory committee member of: the National Eczema Association; E Serra-Baldrich has received payment and/or honoraria for lectures, presentations, manuscript writing, or educational events or has served on the speaker's bureau for: AbbVie, Almirall, Eli Lilly and Company, LEO Pharma, Novartis, Pfizer, and Sanofi; FJ Legat has received consulting fees and/or honoraria for lectures, presentations, speaker's bureaus, manuscript writing, or education events; participated on advisory boards; and/or served as an investigator for: AbbVie, Almirall, Celgene, DS Biopharma, Eli Lilly and Company, Galderma, Janssen Cilag, LEO Pharma, Menlo Therapeutics, Novartis, Pelpharma, Pfizer, Sanofi, Trevi Therapeutics, and Vifor Pharma; L Bardolet is an employee of: Almirall; E Meskimen, M Casillas, E Pierce, C Xu, and M Silk are employees and shareholders of: Eli Lilly and Company; J Zhong is a current employee of IQVIA; G Yosipovitch has conducted clinical trials for or received research funds and/or

honoraria for serving on the scientific advisory boards of: Arcutis, Bellus Health, Eli Lilly and Company, Escient Pharmaceuticals, Galderma, Kiniksa, LEO Pharma, Novartis, Pfizer, Regeneron, Sanofi, and Trevi Pharmaceuticals.

Abstract AD-11

Efficacy and Safety of Baricitinib Treatment in Pediatric Patients With Atopic Dermatitis Aged 2 to Less Than 18 Years (Up to 3.6 Years of Exposure)

Andreas Wollenberg, MD[1,2]; Masanori Ikeda, MD, PhD[3]; Chia-Yu Chu, PhD[4]; Lawrence Eichenfield, MD[5]; Marieke Seyger, MD, PhD[6]; Apurva Prakash, BS[7]; Danting Zhu, PhD[7]; Marco Pontes, MD[7]; Amy Paller, MD[8]

[1]Augsburg University Hospital, Augsberg, Germany; [2]Ludwig-Maximilian University, Munich, Germany; [3]Okayama University School of Medicine, Fukuyama City Hospital, Fukuyama, Japan; [4]National Taiwan University Hospital, Taipei City, Taiwan; [5]University of California San Diego and Rady Children's Hospital, San Diego, USA; [6]Radboud University Medical Center, Nijmegen, Netherlands; [7]Eli Lilly and Company, Indianapolis, USA; [8]University Feinberg School of Medicine, Chicago, USA

BACKGROUND: This study describes the efficacy (through 52 weeks) and safety (up to 3.6 years) results from the Phase-3 study (BREEZE-AD-PEDS) evaluating Baricitinib (BARI) in pediatric patients (pts) (2- <18 years [yrs] of age) with moderate to severe atopic dermatitis (AD).

METHODS: Efficacy analyses were conducted on the intent-to-treat population using mLOCF (modified last observation carried forward) imputation or observed case. Efficacy results are presented by treatment groups (PBO, BARI low, BARI medium, BARI high dose) across the entire patient population, using vIGA-AD® (measures AD-severity). Response (vIGA-AD® of 0/1) at Week-52 was assessed for partial responders and responders (vIGA-AD® of 0/1/2) at Week-16 who remained on the same treatment, and for non-responders (vIGA-AD® of 3-4) at Week-16 who transitioned to BARI high dose at Week-16. Safety analyses were done on pts who received ≥1 BARI dose and are reported for: BARI extended (continuously treated from baseline with BARI low/medium/high dose [1-mg, 2-mg, or 4-mg exposure equivalents, respectively] and censored after dose change) and All-BARI (any BARI dose at any time). Incidence rates (IR)/100 patient-years at risk were calculated.

RESULTS: 467 pts received BARI for 750.7 patient-years (maximum exposure 3.6 yrs). Among Week-16 responders and partial responders (IGA 0/1/2 with no prior rescue) who remained on double-blind study drug, t the proportion achieving an IGA 0/1 at Week-52 was greater for pts receiving BARI high dose versus other groups. Among Week-16 non-responders (IGA 3/4/ having previous rescue) who transitioned to open-label BARI high dose at Week-16, all groups showed improvement at Week-52 in the proportion achieving an IGA 0/1. Most treatment-emergent adverse events (TEAEs) were mild-to-moderately severe and the discontinuation rate due to AEs was low (IR=1.7). 6.6% (n=31) of the All-BARI population reported ≥1 serious adverse event (IR=4.2), with worsening AD (n=3), asthma (n=2), herpes simplex (n=2), and ophthalmic herpes simplex (n=2) most frequently reported; 60.8% (n=284) of the All-BARI population reported ≥1 TEAE of infection (IR=64.4) with COVID-19, nasopharyngitis, and upper respiratory tract infection most frequently reported. One opportunistic infection (herpes zoster) was reported. No deaths, pulmonary embolisms, deep vein thromboses/arterial thrombotic events, major adverse cardiovascular events, malignancies, tuberculosis, or gastrointestinal perforations were reported.

CONCLUSIONS: AD symptoms continued to improve up to 52 weeks. The safety profile was consistent with that established for baricitinib in adults with moderate to severe AD. No new safety signals were identified.

ACKNOWLEDGMENTS: Funding by Eli Lilly and Company. Presented at European Academy of Dermatology and Venereology (EADV), 2023.

DISCLOSURES: A Wollenberg has served as an advisor and/or paid speaker for and/or participated in clinical trials sponsored by: AbbVie, Almirall, Amgen, Beiersdorf, Bioderma, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Chugai Pharmaceutical, Eli Lilly and Company, Galapagos NV, Galderma, Janssen Cilag, L'Oréal, LEO Pharma, Novartis, Pfizer, Pierre Fabre, Regeneron, and Sanofi; M Ikeda has received a scholarship donation from the Central Research Institute of Pias; has participated in clinical trials and/or has received honoraria as a speaker/consultant for: AbbVie, AstraZeneca, Eli Lilly and Company, GlaxoSmithKline, Hisamitsu, Janssen, Maruho, MedImmune, Novo Nordisk, Pfizer, and Sanofi; C-Y Chu is an investigator, consultant, speaker, and/or advisory board member for: AbbVie, Dermira, Eli Lilly and Company, Janssen, Mylan, Novartis, Oneness Biotech, Novartis, Pfizer, Regeneron, Roche, Sanofi, United BioPharma, and Viatris; LF Eichenfield has been an advisory board member and/or speaker and/or consultant and/or has participated in clinical studies for: AbbVie, Almirall, Amgen, ASLAN Pharmaceuticals, Bausch Health, Castle Biosciences, Dermavant, Eli Lilly and Company, Forté, Galderma, Incyte Corporation, Janssen, LEO Pharma, Novartis, Otsuka, Pfizer, Regeneron, Sanofi Genzyme, Seanergy, and UCB Pharma; MMB Seyger received grants from and/or was involved in clinical trials and/or served as a consultant for: AbbVie, Celgene, Eli Lilly and Company, Janssen, LEO Pharma, and Pfizer; fees were paid directly to the institution; A Prakash, D Zhu, M Pontes are employees and shareholders of Eli Lilly and Company; A Paller is a consultant with honorarium for: Aegerion Pharma, Azitra, BioCryst, Boehringer Ingelheim, Bristol Myers Squibb, Castle Creek Biosciences, Eli Lilly and Company, Janssen, Krystal Biotech, LEO Pharma, Novartis, Regeneron, Sanofi Genzyme, Seanergy, TWI Biotechnology, and UCB Pharma; is an investigator for: AbbVie, Dermavant, Eli Lilly and Company, Incyte Corporation, Janssen, Krystal Biotech, and UCB Pharma; is on the Data Safety Monitoring Board for: AbbVie, Abeona Therapeutics, Catawba, Galderma and InMed.

Abstract AD-12

Lebrikizumab Improved Itch Symptoms Over 52 Weeks in Patients With Moderate to Severe Atopic Dermatitis Who Did Not Achieve Protocol-Defined Criteria for Response After Initial 16 Weeks of Therapy

Gil Yosipovitch, MD[1]; Peter A Lio, MD[2,3]; David Rosmarin, MD[4]; Franz J Legat, MD[5]; Esther Serra-Baldrich, MD[6]; Laia Bardolet, MS[7]; Eric Meskimen, BA[8]; Maria Silk, PhD[8]; Marta Casillas, PhD[8]; Evangeline Pierce, PhD[8]; Jinglin Zhong, MS[9]; Zhuqing Liu, PhD[8]; Hany Elmaraghy, MD[8]; Sonja Ständer, MD[10]

[1]University of Miami Miller School of Medicine, Miami, USA; [2]Northwestern University Feinberg School of Medicine, Chicago, USA; [3]Medical Dermatology Associates of Chicago, Chicago, USA; [4]Tufts University School of Medicine, Boston, USA; [5]Medical University of Graz, Graz, Austria; [6]Hospital de la Santa Creu i Sant Pau, Barcelona, Spain; [7]Almirall S.A., Barcelona, Spain; [8]Eli Lilly and Company, Indianapolis, USA; [9]IQVIA, Durham, USA; [10]University Hospital Münster, Münster, Germany

BACKGROUND: Patients with atopic dermatitis (AD) experience itching, which impacts quality of life. Lebrikizumab, a high-affinity monoclonal antibody, significantly reduced itch in patients with moderate to severe AD at Week 16 in 2 identical randomized, double-blind, placebo-controlled Phase 3 trials (ADvocate1, NCT04146363; ADvodate2, NCT04178967).

OBJECTIVES: To investigate itch reduction over 52 weeks in lebrikizumab-treated patients who did not achieve protocol-defined response criteria at Week 16.

METHODS: At Week 16, non-responders to lebrikizumab 250 mg every 2 weeks (LEB Q2W; patients who did not achieve Investigator's Global Assessment 0,1 with ≥2-point improvement or 75% improvement from baseline in Eczema Area and Severity Index or received rescue medication) continued LEB Q2W in the escape arm to Week 52. The validated 11-point Pruritus Numeric Rating Scale (Pruritus NRS) was completed in a daily eDiary to evaluate worst itch intensity over the previous 24 hours, where a ≥3-point decrease is considered clinically relevant but a ≥4-point decrease is a more conservative threshold (in patients with baseline Pruritus NRS scores of ≥3 or ≥4, respectively). Pruritus NRS percentage change from baseline was also evaluated. Observed results of pooled ADvocate1 and ADvocate2 data are reported for lebrikizumab-treated patients who did not achieve the Week 16 response criteria in the escape arm (N=215).

RESULTS: At Week 16, 45.5% of patients achieved ≥3-point improvement in Pruritus NRS, increasing to 73.3% at Week 52, and 31.4% of patients achieved ≥4-point improvement, increasing to 66.4% at Week 52. Mean (standard deviation) Pruritus NRS score at baseline was 7.3 (1.9) and the mean percentage change (standard deviation) from baseline was -34.2% (34.6) at Week 16 and was -59.2% (41.4) at Week 52.

CONCLUSIONS: Despite not achieving the Week 16 response criteria, 73% of patients in the escape arm who continued lebrikizumab had a clinically relevant improvement in itch at Week 52.

ACKNOWLEDGMENTS: This study was funded by Dermira, a wholly owned subsidiary of Eli Lilly and Company. Almirall, S.A. has licensed the rights to develop and commercialize lebrikizumab for the treatment of dermatology indications, including atopic dermatitis, in Europe. Lilly has exclusive rights for development and commercialization of lebrikizumab in the United States and the rest of the world outside of Europe. Abstract previously presented at World Congress of Dermatology (WCD); Singapore; 3-8 July 2023.

DISCLOSURES: G Yosipovitch has conducted clinical trials for or received research funds and/or honoraria for serving on the scientific advisory boards of: Arcutis, Bellus Health, Eli Lilly and Company, Escient Pharmaceuticals, Galderma, Kiniksa, LEO Pharma, Novartis, Pfizer, Regeneron, Sanofi, and Trevi Pharmaceuticals; PA Lio reports research grants and/or funding from: AbbVie, AOBiome, Eczema Foundation; has been on speaker's bureaus for: AbbVie, Eli Lilly and Company, Galderma, Hyphens Pharma, Incyte Corporation, La Roche-Posay/L'Oréal, MyOR Diagnostics, ParentMD, Pfizer, Pierre Fabre, Regeneron/Sanofi Genzyme; has received consulting fees from and/or been on advisory boards for: AbbVie, Almirall, Amyris, Arbonne, Arcutis, ASLAN Pharmaceuticals, Bodewell, Boston Skin Science, Bristol Myers Squibb, Burt's Bees, Castle Biosciences, Codex Labs, Concerto Biosciences, Dermavant, Dermira, Dermveda, Eli Lilly and Company, Galderma, IntraDerm, Janssen, Johnson & Johnson, Kaleido Biosciences, Kimberly-Clark, L'Oréal, LEO Pharma, Lipidor, Menlo Therapeutics, Merck, Micreos, MyOR Diagnostics, Regeneron/Sanofi Genzyme, Sibel Health, Skinfix, Sonica, Theraplex, UCB Pharma, Unilever, Verrica Pharmaceuticals, and Yobee Care; has stock options with: LearnSkin/LearnHealth, Medable, Micreos, Modernizing Medicine, and Yobee Care; has a patent pending for: Theraplex product with royalties paid; and is a board member and scientific advisory committee member of: the National Eczema Association; D Rosmarin has received honoraria as a consultant, received research support, and/or served as a speaker for: AbbVie, Abcuro, AltruBio, Amgen, Arena Pharmaceuticals, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Concert Pharmaceuticals, CSL Behring, Dermavant, Dermira, Eli Lilly and Company, Galderma, Incyte Corporation, Janssen, Kyowa Kirin, Merck, Novartis, Pfizer, Regeneron, Sanofi, Sun Pharma, UCB Pharma, and Viela Bio; FJ Legat has received consulting fees and/or honoraria for lectures, presentations, speaker's bureaus, manuscript writing, or education events; participated on advisory boards; and/or served as an investigator for: AbbVie, Almirall, Celgene, DS Biopharma, Eli Lilly and Company, Galderma, Janssen Cilag, LEO Pharma, Menlo Therapeutics, Novartis, Pelpharma, Pfizer, Sanofi, Trevi Therapeutics, and Vifor Pharma; E Serra-Baldrich has received payment and/or honoraria for lectures, presentations, manuscript writing, or educational events or has served on the speaker's bureau for: AbbVie, Almirall, Eli Lilly and Company, LEO Pharma, Novartis, Pfizer, and Sanofi; L. Bardolet is an employee of: Almirall; E Meskimen, M Silk, M Casillas, E Pierce, Z Liu, and H Elmaraghy are employees and shareholders of: Eli Lilly and Company; J Zhong is a current employee of IQVIA; S Ständer has acted as a consultant, speaker, advisor, and/or served as an investigator for: AbbVie,

Almirall, Beiersdorf, Bellus Health, BenevolentAI, Bionorica, Cara Therapeutics, Clexio Biosciences, DERMASENCE, Eli Lilly and Company, Escient Pharmaceuticals, Galderma, Grünenthal, Kiniksa, LEO Pharma, Menlo Therapeutics, Novartis, P.G. Unna Academy, Pfizer, Sanofi, Trevi Therapeutics, Vanda Pharmaceuticals, and Vifor Pharma.

Acne and Rosacea

Abstract AR-01 was redacted prior to presentation at the conference.

Abstract AR-02

Benefit of Topical Combination Therapy for Acne Treatment: Analysis of Effect Size Using Number Needed to Treat

Steven R Feldman, MD, PhD[1]; George Han, MD[2]; Valerie Callender, MD[3,4]; Leon H Kircik, MD[2,5,6]; Neal Bhatia, MD[7]; Stephen K Tyring, MD, PhD[8]; Joshua A Zeichner, MD[2]; Eric Guenin, PharmD, PhD, MPH[9]; Linda Stein Gold, MD[10]

[1]Wake Forest School of Medicine, Winston-Salem, NC; [2]Icahn School of Medicine at Mount Sinai, New York, NY; [3]Callender Dermatology and Cosmetic Center, Glenn Dale, MD; [4]Howard University College of Medicine, Washington, DC; [5]Indiana University Medical Center, Indianapolis, IN; [6]Physicians Skin Care, PLLC, DermResearch, PLLC, and Skin Sciences, PLLC, Louisville, KY; [7]Therapeutics Clinical Research, San Diego, CA; [8]University of Texas Health Science Center, Houston, TX; [9]Ortho Dermatologics*, Bridgewater, NJ; [10]Henry Ford Hospital, Detroit, MI

*Ortho Dermatologics is a division of Bausch Health US, LLC

BACKGROUND: Number needed to treat (NNT) provides a potential metric for quantifying effect sizes of clinically relevant study endpoints for products that have not been studied head-to-head. NNT represents the number of patients needed to treat to achieve an additional cure (eg, NNT=3 means that for every 3 patients treated with active drug instead of vehicle, 1 additional patient will show efficacy in a given timeframe). Evaluation of NNT has been conducted in a variety of therapeutic areas, including cardiology, oncology, psychiatry/neurology, and dermatology. While a clinically relevant NNT threshold has not been established for acne, lower values indicate more favorable treatment versus vehicle.

OBJECTIVES: The objective of this analysis was to evaluate the NNT values for 8 topical combination acne treatments.

METHODS: NNT to achieve treatment success was calculated for 7 approved dual-combination treatments (using data from prescribing information/FDA medical reviews) and 1 triple-combination drug in development (using phase 3 data). Treatment (Tx) success was defined as ≥2-grade improvement in Evaluator's Global Severity Scale/Investigator's Global Assessment and clear/almost clear skin at week 12. Eleven studies enrolled patients with moderate or severe acne; 2 studies also included those with mild and/or very severe acne. NNT was calculated as 1 / [%Tx success with active treatment minus % Tx success with vehicle] * 100, rounded up to the nearest integer.

RESULTS: The lowest NNT values were achieved with a fixed-dose, triple combination clindamycin phosphate 1.2%/BPO 3.1%/adapalene 0.15% gel (IDP-126; NNT=4, 5; Tx success=49.6%, 50.5%). Other drug products with relatively low NNTs were tretinoin 0.1%/ BPO 3% cream (NNT=4, 9; Tx success=39.9%, 26.8%) and adapalene 0.3%/BPO 2.5% gel (NNT=5, Tx success=33.7%). NNTs ranged from 6–9 and Tx success from 21.0–33.2% for the remaining 5 combination gels (adapalene 0.1%/ BPO 2.5%, clindamycin phosphate 1.2%/BPO 2.5%, clindamycin phosphate 1.2%/ tretinoin 0.025% [two drugs] and clindamycin phosphate 1.2%/BPO 3.75%). NNT does not take into consideration drug safety/tolerability or trial design/population differences across studies. Further, potential benefits of a well-designed vehicle are subtracted from active treatment, potentially resulting in worse NNT scores.

CONCLUSIONS: Given the paucity of head-to-head studies in acne, NNT may be used as a simple way to compare drug effects across clinical trials. IDP-126 gel had the lowest NNT values, with treatment success rates of ~50%. Due to the multifactorial pathogenesis of acne, a triple-combination topical treatment may result in clinical success more often than seen with two-ingredient combination products.

ACKNOWLEDGMENTS: Funding support from Ortho Dermatologics.

DISCLOSURES: SRF has received research, speaking and/or consulting support from Eli Lilly, GlaxoSmithKline/Stiefel, AbbVie, Janssen, Alovtech, vTv Therapeutics, Bristol Myers Squibb, Samsung, Pfizer, Boehringer Ingelheim, Amgen, Dermavant, Arcutis, Novartis, Novan, UCB, Helsinn, Sun Pharma, Almirall, Galderma, LEO Pharma, Mylan, Celgene, Ortho Dermatologics Menlo, Merck & Co, Qurient, Forte, Arena, Biocon, Accordant, Argenx, Sanofi, Regeneron, the National Biological Corporation, Caremark, Teladoc, Eurofins, Informa, UpToDate and the National Psoriasis Foundation. He is founder and part owner of Causa Research and holds stock in Sensal Health; GH is or has been an investigator, consultant/advisor, or speaker for AbbVie, Athenex, Boehringer Ingelheim, Bond Avillion, Bristol Myers Squibb, Celgene, Eli Lilly, Novartis, Janssen, LEO Pharma, MC2, Ortho Dermatologics, PellePharm, Pfizer, Regeneron, Sanofi Genzyme, Sun Pharma, and UCB; VC has served as an investigator, consultant, or speaker for AbbVie, Galderma, L'Oréal, Ortho Dermatologics, and Vyne; LHK has acted as an investigator, advisor, speaker, and consultant for Ortho Dermatologics; NB has served as advisor, consultant, and investigator for AbbVie, Almirall, Biofrontera, Boehringer Ingelheim, Brickell, Bristol Myers Squibb, EPI Health, Ferndale, Galderma, InCyte, ISDIN, Johnson & Johnson, LaRoche-Posay, LEO Pharma, Ortho Dermatologics, Regeneron, Sanofi, SunPharma, Verrica, and Vyne; SKT has acted as an investigator for Ortho Dermatologics; JAZ has served as advisor, consultant, or speaker for AbbVie, Allergan, Dermavant, Dermira,

EPI Health, Galderma, Incyte, Johnson and Johnson, L'Oreal, Ortho Dermatologics, Pfizer, Procter and Gamble, Regeneron, Sun Pharma, UCB, Unilever, and Vyne. EG is an employee of Ortho Dermatologics and may hold stock and/or stock options in its parent company. LSG has served as investigator/consultant or speaker for Ortho Dermatologics, LEO Pharma, Dermavant, Incyte, Novartis, AbbVie, Pfizer, Sun Pharma, UCB, Arcutis and Lilly.

Abstract AR-03 was redacted prior to presentation at the conference.

Abstract AR-04 was redacted prior to presentation at the conference.

Abstract AR-05

Topical Clindamycin for Acne Vulgaris: Pharmacovigilance Safety Review and Retrospective Analysis of Gastrointestinal Events

Natalia M. Pelet del Toro, MD[1]; Andrew Strunk, MA[1]; Jashin J. Wu, MD[2]; Linda Stein Gold, MD[3]; James Q. Del Rosso, DO[4-6]; Robert Thomas Brodell, MD[7]; Eric Guenin, PharmD, PhD, MPH[8]; George Han, MD[1]

[1]Department of Dermatology, Donald and Barbara Zucker School of Medicine at Hofstra/Northwell, New Hyde Park, New York, NY; [2]Department of Dermatology, University of Miami Miller School of Medicine, Miami, FL; [3]Henry Ford Hospital, Detroit, MI; [4]JDR Dermatology Research/Thomas Dermatology, Las Vegas, NV; [5]Advanced Dermatology and Cosmetic Surgery, Maitland, FL; [6]Touro University Nevada, Henderson, NV; [7]University of Mississippi Medical Center, Jackson, MS; [8]Ortho Dermatologics*, Bridgewater, NJ

*Ortho Dermatologics is a division of Bausch Health US, LLC

BACKGROUND: Clindamycin, a lincosamide antibiotic, was the 125th most prescribed medicine in the US in 2020. Topical formulations that combine clindamycin with benzoyl peroxide or a retinoid are commonly used for acne vulgaris (AV) treatment. While oral and topical clindamycin carry warnings/contraindications regarding the development of gastrointestinal (GI) adverse events (AEs), the real-world incidence of these AEs with topical clindamycin is unknown. Objectives: To provide an overview of safety data for topical clindamycin when used for AV treatment.

METHODS: Safety data from published literature on PubMed® (case reports, clinical trials data, retrospective data), previously unpublished worldwide pharmacovigilance data (from January 1, 1900-December 31, 2022), and two unpublished retrospective cohort studies of US electronic medical records (EMR; January 1, 2011, to January 31, 2019) were reviewed, with a focus on inflammatory bowel disease (IBD) and GI AEs following topical clindamycin monotherapy or combination treatment.

RESULTS: There have been only 4 published case reports of topical clindamycin-associated GI AEs, which were all published between the years 1981-1997. In 8 published pivotal phase 3 clinical trials of topical clindamycin monotherapy or combination treatment for AV, GI-related AEs were reported in 1.4% of clindamycin-treated participants (38/2,672; safety populations). According to the pharmacovigilance data, the rate of GI-related adverse drug reactions with topical clindamycin-containing products was 0.000045% (64/141,084,533). In 1 published retrospective report, there were 0 reports of colitis from the 1,124 patients estimated to have received topical clindamycin prescriptions in the years 1977-1980. In the first retrospective EMR study, results indicate that physicians prescribe topical clindamycin for AV treatment equally to patients with a history of IBD (19.0%; 98/515) or without (20.7%; 14,495/70,151). The second retrospective EMR study showed that among patients with AV and an initial prescription for topical clindamycin (monotherapy or combination; n=18,012), there were 3 (0.02%) incident cases of pseudomembranous colitis within 30 days; none of these cases had a history of IBD.

CONCLUSIONS: A review of published case reports, clinical trials safety data, worldwide pharmacovigilance data, and retrospective US prescription data demonstrate that GI events—including colitis or pseudomembranous colitis—in patients exposed to topical clindamycin is extremely low, regardless of IBD history.

ACKNOWLEDGMENTS: Funding support from Ortho Dermatologics.

DISCLOSURES: Natalia M Pelet del Toro and Andrew Strunk have no conflicts of interest. Jashin Wu has served as an investigator, consultant, or speaker for AbbVie, Almirall, Amgen, Arcutis, Bausch Health US, Boehringer Ingelheim, Bristol Myers Squibb, Dermavant, Dr. Reddy's Laboratories, Eli Lilly, Galderma, Janssen, LEO Pharma, Novartis, Regeneron, Sanofi Genzyme, Sun Pharma, and UCB. Linda Stein Gold has served as investigator/consultant or speaker for Ortho Dermatologics, LEO Pharma, Dermavant, Incyte, Novartis, AbbVie, Pfizer, Sun Pharma, UCB, Arcutis, and Lilly. James Q Del Rosso has served as a consultant, investigator, and/or speaker for Ortho Dermatologics, AbbVie, Amgen, Arcutis, Dermavant, EPI Heath, Galderma, Incyte, LEO Pharma, Lilly, MC2 Therapeutics, Pfizer, Sun Pharma, and UCB. Robert T Brodell has served as an investigator for Novartis and Corevitas; owns stock in Verademics, Inc; and has received educational grants from Pfizer. Eric Guenin is an employee of Ortho Dermatologics and may hold stock and/or stock options in its parent company. George Han is or has been an investigator, consultant/advisor, or speaker for AbbVie, Athenex, Boehringer Ingelheim, Bond Avillion, Bristol Myers Squibb, Celgene, Eli Lilly, Novartis, Janssen, LEO Pharma, MC2, Ortho Dermatologics, PellePharm, Pfizer, Regeneron, Sanofi Genzyme, Sun Pharma, and UCB.

Abstract AR-06 now appears in the Other Medical Dermatology Topics section and is Abstract OM-16

Abstract AR-07

Impact of Age or Sex on Efficacy and Safety of a Fixed-Dose Clindamycin Phosphate 1.2%/Benzoyl Peroxide 3.1%/Adapalene 0.15% Gel in Participants With Moderate to Severe Acne

Linda Stein Gold, MD[1]; Leon H Kircik, MD[2-4]; William Philip Werschler, MD[5]; Hilary Baldwin, MD[6,7]; Valerie Callender, MD[8,9]; Lawrence Green, MD[10]; Neil Sadick, MD[11,12]; Jeffrey L Sugarman, MD[13]; Zoe D Draelos, MD[14]; Emil A Tanghetti, MD[15]; Eric Guenin, PharmD, PhD, MPH[16]; Neal Bhatia[17]

[1]Henry Ford Hospital, Detroit, MI; [2]Icahn School of Medicine at Mount Sinai, New York, NY; [3]Indiana University Medical Center, Indianapolis, IN; [4]Physicians Skin Care, PLLC, DermResearch, PLLC, and Skin Sciences, PLLC, Louisville, KY; [5]Elson S. Floyd College of Medicine, Washington State University, Spokane, WA; [6]The Acne Treatment and Research Center, Brooklyn, NY; [7]Robert Wood Johnson University Hospital, New Brunswick, NJ; [8]Callender Dermatology and Cosmetic Center, Glenn Dale, MD; [9]Howard University College of Medicine, Washington, DC; [10]George Washington University School of Medicine, Washington, DC; [11]Weill Cornell Medical College, New York, NY; [12]Sadick Dermatology, New York, NY; [13]University of California, San Francisco, CA; [14]Dermatology Consulting Services, PLLC, High Point, NC; [15]Center for Dermatology and Laser Surgery, Sacramento, CA; [16]Ortho Dermatologics*, Bridgewater, NJ; [17]Therapeutics Clinical Research, San Diego, CA

*Ortho Dermatologics is a division of Bausch Health US, LLC

BACKGROUND: IDP-126 (clindamycin phosphate 1.2%/benzoyl peroxide [BPO] 3.1%/adapalene 0.15%) polymeric mesh gel is the first triple-combination, fixed-dose topical acne treatment in development. IDP-126 demonstrated superior efficacy to vehicle and component dyads, with good safety/tolerability, in a phase 2 and two phase 3 studies of participants with moderate to severe acne.

OBJECTIVES: The objective of this analysis was to assess the impact of age or sex on efficacy and safety/tolerability of IDP-126 gel.

METHODS: This post hoc analysis evaluated effect of age or sex on efficacy/safety of IDP-126 using data pooled from two phase 3, double-blind, randomized, 12-week studies (NCT04214639, N=183; NCT04214652, N=180). Participants aged ≥9 years with moderate to severe acne were randomized 2:1 to once-daily IDP-126 gel or vehicle gel. Data were analyzed by age (pediatric [9-17 years]: n=178; adult [≥18 years]: n=185) or sex (females: n=212; males: n=151). Endpoints included ≥2-grade reduction from baseline in Evaluator's Global Severity Score and clear/almost clear skin (treatment success) and least-squares mean percent change from baseline in inflammatory and noninflammatory lesion counts. Treatment-emergent adverse events (TEAEs) were also assessed.

RESULTS: At week 12, over half of pediatric and almost half of adult IDP-126-treated participants achieved treatment success (52.7% and 45.9%, respectively) versus one-fourth with vehicle (24.0% and 23.5%; $P<0.01$, both). Results by sex were similar (IDP126 vs vehicle: females: 53.7% vs 23.0%; males: 43.1% vs 24.6%; $P<0.05$, both). IDP126 provided >70% reductions in inflammatory and noninflammatory lesions in all subgroups, versus 41%-63% with vehicle ($P\leq0.001$, all). Differences between sex or age groups were not statistically significant. Most TEAEs were of mild-moderate severity in all groups.

CONCLUSIONS: Fixed-dose, triple-combination IDP-126 gel was efficacious and well tolerated in participants with moderate to severe acne, regardless of age or sex, with approximately half of participants achieving clear/almost clear skin.

ACKNOWLEDGMENTS: Funding from Ortho Dermatologics.

DISCLOSURES: LSG has served as investigator/consultant or speaker for Ortho Dermatologics, LEO Pharma, Dermavant, Incyte, Novartis, AbbVie, Pfizer, Sun Pharma, UCB, Arcutis, and Lilly. LK has acted as an investigator, advisor, speaker, and consultant for Ortho Dermatologics. WPW has served as an investigator for Ortho Dermatologics. HB has served as advisor, investigator, and on speakers' bureaus for Almirall, Cassiopea, Foamix, Galderma, Ortho Dermatologics, Sol Gel, and Sun Pharma. VC has served as an investigator, consultant, or speaker for AbbVie, Galderma, L'Oréal, Ortho Dermatologics, and Vyne. LG has served as investigator, consultant, or speaker for Almirall, Cassiopea, Galderma, Ortho Dermatologics, Sol Gel, Sun Pharma, and Vyne. NS has served on advisory boards, as a consultant, investigator, speaker, and/or other and has received honoraria and/or grants/research funding from Almirall, Actavis, Allergan, Anacor Pharmaceuticals, Auxilium Pharmaceuticals, Bausch Health, Bayer, Biorasi, BTG, Carma Laboratories, Cassiopea, Celgene Corporation, Cutera, Cynosure, DUSA Pharmaceuticals, Eclipse Medical, Eli Lilly and Company, Endo International, EndyMed Medical, Ferndale Laboratories, Galderma, Gerson Lehrman Group, Hydropeptide, Merz Aesthetics, Neostrata, Novartis, Nutraceutical Wellness, Palomar Medical Technologies, Prescriber's Choice, Regeneron, Roche Laboratories, Samumed, Solta Medical, Storz Medical AG, Suneva Medical, Vanda Pharmaceuticals, and Venus Concept. JLS is a consultant for Ortho Dermatologics, Bausch Health, Regeneron, Sanofi, Verrica, and Pfizer. ZDD has received funding from Ortho Dermatologics. EAT has served as speaker for Novartis, Ortho Dermatologics, Sun Pharma, Lilly, Galderma, AbbVie, and Dermira; served as a consultant/clinical studies for Hologic, Ortho Dermatologics, and Galderma; and is a stockholder for Accure. EG is an employee of Ortho Dermatologics and may hold stock and/or stock options in its parent company. NB has served as advisor, consultant, and investigator for AbbVie, Almirall, Biofrontera, Boehringer Ingelheim, Brickell, Bristol Myers Squibb, EPI Health, Ferndale, Galderma, InCyte, ISDIN, Johnson & Johnson, LaRoche-Posay, LEO Pharma, Ortho Dermatologics, Regeneron, Sanofi, SunPharma, Verrica, and Vyne.

Aesthetics

Abstract AS-01

Cool Sculpting: Effective or Inflammatory? A Literature Review on Paradoxical Adipose Hyperplasia

Kritin K Verma, MBA[1]; Karan A Gidwani, BS[2]; Daniel Friedmann, MD, FAAD[3]

[1]Texas Tech University Health Sciences Center, School of Medicine, Lubbock, Texas; [2]Touro University Nevada College of Osteopathic Medicine, Henderson, Nevada; [3]Westlake Dermatology Clinical Research Center, Westlake Dermatology and Cosmetic Surgery, Austin, Texas

BACKGROUND: Cool Sculpting, also known as cryolipolysis, is a non-invasive medical technique used for body contouring by targeting and reducing stubborn fat deposits. The success rate of this procedure varies depending on the patient's body type, the area of the body being treated, and the number of treatment sessions. Studies have shown that Cool Sculpting can achieve a mean reduction in fat of about 19% (Kruger N, et al, *Clin Cosmet Investig Dermatol.* 2014) in the treated area. The procedure is generally safe and well-tolerated, with few reported complications. However, paradoxical adipose hyperplasia (PAH), a rare side effect characterized by an increase in fat in the treated area, has been reported in some patients.
OBJECTIVE: Consolidate incidence rates, pathophysiology, and current standard of treatment for PAH.
METHODS: Comprehensive review of latest peer reviewed literature regarding PAH.
CONCLUSIONS: PAH is not well understood but is considered to be caused by an inflammatory response to the non- physiologic destruction of fat cells (Manstein D, et al, *Lasers Surg Med*. 2008). Further research is needed to better understand the long-term safety and efficacy of Cool Sculpting and the pathophysiology of PAH.
DISCLOSURES: The authors have no disclosures to report.

Abstract AS-02

Venn Diagram Comparison of Liposuction and CoolSculpting for Body Contouring

Kritin K Verma, MBA[1]; Karan A Gidwani, BS[2]; Daniel Friedmann, MD, FAAD[3]

[1]Texas Tech University Health Sciences Center, School of Medicine, Lubbock, Texas; [2]Touro University Nevada College of Osteopathic Medicine, Las Vegas, Nevada; [3]Westlake Dermatology Clinical Research Center, Westlake Dermatology and Cosmetic Surgery, Austin, Texas

BACKGROUND: Liposuction, a surgical procedure involving fat removal through suction, has been shown to effectively reduce fat and improve body contouring. CoolSculpting, a non-invasive procedure that freezes and destroys fat cells, also offers fat reduction but to a lesser extent.
OBJECTIVES: Rigorously review and compare the efficacy, risks, benefits, and costs of liposuction and CoolSculpting as methods for reducing body fat.
METHODS: Comprehensive review of latest peer reviewed literature regarding liposuction and CoolSculpting
CONCLUSIONS: Liposuction carries a higher risk of complications and is more expensive than CoolSculpting, which has minimal risks and lower costs. However, depending on the location of the treatment and the number of sessions needed, the choice between the two procedures depends on patient preferences, needs, and factors such as target areas and BMI.
DISCLOSURES: The authors have no disclosures to report.

Other Medical Dermatology Topics

Abstract OM-01

Incidental Finding of Melanoma

Ndidiamaka Anaeto[1]; Elizabeth Edah[2]; Manjot Parmar[3]; Amani Johnson[4]; Frederick Tiesenga, MD, FACS[5]

[1]Department of Surgery, St George's University School of Medicine, True Blue, GRD; [2]Department of Surgery, All Saints University School of Medicine, Roseau, Dominica; [3]Department of Surgery, Washington University of Health and Science, San Pedro Town, Belize; [4]Department of Surgery, St. George's University School of Medicine, True Blue, GRD; [5]Comunity First Medical Centre, Chicago Illinois

BACKGROUND: In 1806, during a lecture, Laennec coined the term "la melanose" for the "Faculte de medicine" in Paris. Melanoma is a neural crest cell-derived malignancy, classified as a malignant transformation of melanocytes. (Roguin A. Rene Theophile Hyacinthe Laënnec [1781-1826]: the man behind the stethoscope. *Clin Med Res.* 2006). Melanoma typically manifests on the skin but can invade mucus membranes and nearby tissue. Melanoma is described as asymmetric skin lesions that have irregular borders, changes in color, diameter* greater than 6 mm, and evolve in presentation. Our patient is a 63-year-old Caucasian male who, during a routine clinical encounter, presents with a mole on his upper back. This was identified, and upon dermatologic investigations, it was deemed to be melanoma in situ.
OBJECTIVES:

- Overview of the history of melanoma and its pathogenesis.
- Discuss the recommended guidelines for cancer screenings according to the American Cancer Society.
- Discuss the risk factors for skin cancers amongst various populations and barriers to screening cancers in their premalignant state.
- Discuss the statistics and incidence of melanoma across various populations.
- Discuss safe and effective methods to diagnose and treat skin cancers.

• Discuss the complications of melanoma if left untreated.

METHODS: A 63-year-old Polish man with a past medical history of myocardial infarction and open cardiac bypass presents to the clinic. Current medications are clopidogrel and pravastatin 40mg. He was a regular tobacco smoker for 6-10 years. Patient was a mail deliverer for over 20 years, which probably predisposed him to exposure to ultraviolet rays.

On physical examination, the patient was in no obvious distress. Vitals signs were within normal range. Upon examination of the back, the patient had a mole, which was concerning for a cutaneous malignancy.

RESULTS: The patient underwent a biopsy of the mole on the back, and it was positive for melanoma in situ, thus requiring an excision. The patient had medical and cardiac clearance before surgery. Upon administration of general anesthesia and proper positioning, the lesion was excised with adequate margins on the skin of the trunk. The pathology report described a tan skin lesion with underlying soft tissue measuring 6.5 * 2.5 * 1.2 cm in dimensions. The lesion was classified as melanoma in situ. All margins were negative for melanoma in situ. The patient was followed up for five weeks post-surgery with no complications recorded and adequate wound healing.

CONCLUSION: The incidental finding of melanoma in our patient is a prime example of how quick interventions can depict good outcomes for patients. Since the survival and prognosis of melanomas depend mainly on early diagnosis, patients and primary care physicians must be educated and trained to detect any changing, atypical, or non-healing skin lesions so that patients are urgently referred to a dermatologist for early interventions.

DISCLOSURES: The authors have disclosures to report.

Abstract OM-02

A Phase 3 Trial of Fianlimab (Anti-LAG-3) Plus Cemiplimab (Anti-PD-1) Versus Pembrolizumab in Patients With Previously Untreated Unresectable Locally Advanced or Metastatic Melanoma

Ana Baramidze, MD[1]; Miranda Gogishvili, MD[2]; Tamta Makharadze, MD[3]; Mariam Zhvania, MD[4]; Khatuna Vacharadze, MD[5]; John Crown, MD[6]; Tamar Melkadze, MD[1]; Omid Hamid, MD[7]; Georgina V Long, PhD[8]; Caroline Robert, PhD[9]; Mario Sznol, MD[10]; Hector Martinez-Said, MD[11]; Jayakumar Mani, PhD[12]; Usman Chaudhry, MD[12]; Mark Salvati, PhD[12]; Israel Lowy, PhD[12]; Rosella Marullo, MD[12]; Matthew G Fury, MD[12]; Karl D. Lewis, MD[12]

[1]Todua Clinic, Tbilisi, Georgia; [2]High Technology Medical Centre, University Clinic Ltd, Tbilisi, Georgia; [3]LTD High Technology Hospital Med Center, Batumi, Georgia; [4]Consilium Medullla, Tbilisi, Georgia; [5]LTD TIM Tbilisi Institute of Medicine, Tbilisi, Georgia; [6]St Vincent's University Hospital, Dublin, Ireland; [7]The Angeles Clinical and Research Institute, a Cedars-Sinai Affiliate, Los Angeles, CA, USA; [8]Melanoma Institute Australia, The University of Sydney, and Royal North Shore and Mater Hospitals, Sydney, NSW, Australia; [9]Gustave Roussy and Paris Saclay University, Villejuif, France; [10]Yale Cancer Center, New Haven, CT, USA; [11]Melanoma Clinic, Instituto Nacional de Cancerología, Mexico City, Mexico; [12]Regeneron Pharmaceuticals, Inc., Tarrytown, NY, USA

BACKGROUND: Fianlimab (anti-LAG-3) and cemiplimab (anti-PD-1) are both high-affinity, fully human, IgG4 monoclonal antibodies. Concurrent blockade of anti-LAG-3 and anti-PD-1 has shown enhanced efficacy (increase in PFS) in advanced melanoma. We previously presented data from a Phase 1 study (NCT03005782) of fianlimab plus cemiplimab from three advanced melanoma expansion cohorts: two cohorts were anti-PD-(L)1- naïve/systemic treatment-naïve and one cohort was previously exposed to adjuvant/neoadjuvant systemic treatment, including anti-PD-1. In the combined cohorts, an objective response rate (ORR) of 61% was observed with an acceptable risk–benefit profile. These observations provide a rationale for the use of fianlimab plus cemiplimab in high-risk adjuvant melanoma (Phase 3 study, NCT05608291) and 1L metastatic melanoma (presented in this abstract).

METHODS: This is a randomized, double-blind, Phase 3 study to evaluate fianlimab plus cemiplimab compared with pembrolizumab in patients with previously untreated unresectable locally advanced or metastatic melanoma (NCT05352672). This study will be conducted globally at approximately 200 sites. Key inclusion criteria are: ≥12 years old; histologically confirmed unresectable Stage III and Stage IV (metastatic) melanoma; no prior systemic therapy for advanced unresectable disease, prior (neo)adjuvant therapies are allowed (including anti-PD-1/L1) with treatment-/disease-free interval of 6 months; measurable disease per RECIST v1.1; ECOG PS of 0/1 (for adults), Karnofsky PS ≥70 (≥16 years old) or Lansky PS ≥70 (<16 years old); anticipated life expectancy ≥3 months.

The trial is expected to enroll approximately 1,590 patients, who will be randomized to Arms A, A1, B, or C and who will receive study treatment intravenously Q3W: Arm A, fianlimab dose 1 plus cemiplimab; Arm A1, fianlimab dose 2 plus cemiplimab; Arm B, pembrolizumab plus placebo; Arm C, cemiplimab plus placebo. The primary endpoint is PFS. Key secondary endpoints are OS, ORR, and patient-reported outcomes. Additional secondary endpoints include DCR, DOR, safety, pharmacokinetics of fianlimab and cemiplimab, and immunogenicity (incidence and titer of anti-drug antibodies and neutralizing antibodies). The study is currently open for enrollment.

ACKNOWLEDGMENTS: This study is sponsored by Regeneron Pharmaceuticals, Inc. Medical writing support was provided by Mirela Panea, PhD, and Lucy Carrier PhD, of Apollo, OPEN Health Communications, and funded by Regeneron Pharmaceuticals, Inc.

DISCLOSURES: Ana Baramidze reports no conflict of interest. Miranda Gogishvili reports no conflict of interest. Tamta Makharadze reports no conflict of interest. Mariam Zhvania reports no conflict of interest. Khatuna Vacharadze reports no conflict of interest. John Crown reports speaker bureau fees from Pfizer; consulting or advisory roles with AstraZeneca and MSD Oncology; honoraria from AstraZeneca, MSD

Oncology, Pfizer, and Pierre Fabre; and institutional research funding from Bristol Myers Squibb, MSD Oncology, Novartis, Puma Biotechnology, Regeneron Pharmaceuticals, Inc., and Roche. Tamar Melkadze reports no conflict of interest. Omid Hamid reports honoraria from Bristol Myers Squibb, Novartis, Pfizer, Regeneron Pharmaceuticals, Inc., and Sanofi; and consulting or advisory roles with Aduro Biotech, Akeso Biopharma, Amgen, Arcus Biosciences, Bioatla, Bristol Myers Squibb, CytomX Therapeutics, Exelixis, Genentech, GlaxoSmithKline, Idera, Immunocore, Incyte, Iovance Biotherapeutics, Merck, Merck Serono, Moderna Therapeutics, NextCure, Novartis, Pfizer, Regeneron Pharmaceuticals, Inc., Roche, Sanofi, Seattle Genetics, Torque, and Zelluna. Georgina V Long is consultant advisor for Agenus, Amgen, Array Biopharma, AstraZeneca, Boehringer Ingelheim, Bristol Myers Squibb, Evaxion, Hexal AG (Sandoz Company), Highlight Therapeutics S.L., Innovent Biologics USA, Merck Sharpe & Dohme, Novartis, OncoSec, PHMR Ltd, Pierre Fabre, Provectus, Qbiotics, and Regeneron Pharmaceuticals, Inc. Caroline Robert is a consultant for AstraZeneca, Bristol Myers Squibb, MSD, Novartis, Pierre Fabre, Roche, Sanofi, and SunPharma; and co-founder of Ribonexus. Mario Sznol reports consulting fees from Adagene, Adaptimmune, Agenus, Alligator, Apexigen, AstraZeneca, Biond, Biontech, Boston Pharmaceuticals, Bristol Myers Squibb, Dragonfly, Evaxion, Genentech-Roche, Genocea, Gilead, Idera, Immunocore, Incyte, Innate Pharma, iTEOS, Jazz Pharmaceuticals, Kadmon – Sanofi, Kanaph, Molecular Partners, Normunity, Numab, Ocellaris-Lilly, OncoSec, Ontario Institute for Cancer Research, Pfizer, Pierre Fabre, PIO Therapeutics, Pliant, Regeneron Pharmaceuticals, Inc., Rubius, Sapience, Servier, Simcha, Stcube, Targovax, Tessa, Verastem, and Xilio. Hector Martinez-Said reports honoraria from Bristol Myers Squibb, MSD, and Novartis. Jayakumar Mani, Usman Chaudhry, Rosella Marullo Mark Salvati, Israel Lowy, and Matthew G Fury are employees and shareholders of Regeneron Pharmaceuticals, Inc. Karl D Lewis is an employee and shareholder of Regeneron Pharmaceuticals, Inc.; reports institutional research funding from Genentech, Merck, and Regeneron Pharmaceuticals, Inc; and consulting fees from Merck and Regeneron Pharmaceuticals, Inc.

Abstract OM-03

Efficacy and Safety of Roflumilast Foam 0.3% in Patients With Seborrheic Dermatitis in a Phase 3 Trial: Assessment of Pruritus

Andrew Blauvelt, MD, MBA[1]; Zoe D Draelos, MD[2]; Melinda Gooderham, MD[3]; Edward Lain, MD[4]; Angela Y Moore, MD[5]; Kim A Papp, MD[6]; Matthew Zirwas, MD[7]; David Krupa, MS[8]; Patrick Burnett, MD, PhD[8]; David R Berk, MD[8]; David H Chu, MD, PhD[8]

[1]Oregon Medical Research Center, Portland, OR, USA; [2]Dermatology Consulting Services, High Point, NC, USA; [3]SKiN Centre for Dermatology, Probity Medical Research and Queen's University, Peterborough, ON, Canada; [4]Sanova Dermatology, Austin, TX, USA; [5]Arlington Research Center, Arlington, TX, and Baylor University Medical Center, Dallas, TX, USA; [6]Probity Medical Research and K Papp Clinical Research, Waterloo, ON, Canada; [7]Dermatologists of the Central States, Probity Medical Research, and Ohio University, Bexley, OH, USA; [8]Arcutis Biotherapeutics, Inc., Westlake Village, CA, USA.

BACKGROUND: Itch is a major complaint among patients with seborrheic dermatitis (SD). Roflumilast is a selective, nonsteroidal, highly potent phosphodiesterase-4 inhibitor under investigation as a once-daily foam for treatment of SD.

METHODS: This phase 3 randomized, parallel-group, double-blind, vehicle-controlled trial (NCT04973228) was conducted in patients ≥9 years old with at least moderate SD affecting scalp and/or non-scalp areas. Patients were randomized 2:1 to apply once-daily roflumilast foam 0.3% (n=304) or vehicle (n=153) for 8 weeks. The primary efficacy endpoint was Investigator Global Assessment (IGA) success (IGA of Clear or Almost Clear plus ≥2-grade improvement from baseline) at Week 8. Secondary efficacy endpoints included Worst Itch Numeric Rating Scale (WI-NRS), which was completed daily by patients. Safety and local tolerability were also evaluated.

RESULTS: Overall, significantly more roflumilast-treated patients than vehicle-treated patients achieved IGA success (79.5% vs. 58.0%; $P<0.0001$) and IGA status of Clear (50.6% vs. 27.7%; $P<0.0001$) at Week 8. Significantly greater percentages of roflumilast- than vehicle-treated patients had ≥4-point improvement on WI-NRS at Weeks 2 (32.7% vs. 15.5%; $P=0.0016$), 4 (47.6% vs. 29.1%; $P=0.0007$), and 8 (62.8% vs. 40.6%; $P=0.0001$). Greater improvement in itch was observed among roflumilast-treated patients as early as 48 hours after the first application (mean percent change from baseline: -27.87% vs. -13.11%; nominal $P=0.0024$). Local tolerability and safety were favorable.

CONCLUSIONS: Once-daily roflumilast foam provided improvement across multiple efficacy endpoints including rapid itch improvement, while demonstrating favorable safety and tolerability.

ACKNOWLEDGMENTS: Sponsored by Arcutis Biotherapeutics, Inc.

DISCLOSURES: AB, ZDD, MG, EL, AYM, KAP, and MZ are investigators and/or consultants for Arcutis Biotherapeutics, Inc. and received grants/research funding and/or honoraria; DK, PB, DRB, and DHC are employees of Arcutis Biotherapeutics, Inc. Additional disclosures provided on request.

Abstract OM-04

Significant Durable Response With Fianlimab (Anti-LAG-3) And Cemiplimab (Anti-PD-1) In Advanced Melanoma: Post-Adjuvant PD-1 Analysis

Inderjit Mehmi[1]; Omid Hamid, MD[1]; Amy Weise, DO[2]; Meredith McKean, MD[3]; Kyriakos P Papadopoulos, MD[4]; John Crown, MD[5]; Sajeve S Thomas, MD[6]; Janice Mehnert, MD[7]; John Kaczmar, MD[8]; Kevin B Kim, MD[9]; Nehal J Lakhani, PhD[10]; Melinda Yushak, MD[11]; Tae Min Kim, PhD[12]; Guilherme Rabinowits, MD[13]; Alexander Spira, PhD[14]; Jayakumar Mani, PhD[15]; Fang Fang, PhD[15]; Shuquan Chen, PhD[15]; JuAn Wang, PhD[15]; Laura Brennan, DrPH[15]; Vladimir Jankovic, PhD[15]; Anne Paccaly, PhD[15]; Sheila Masinde, PhD[15]; Israel Lowy, PhD[15]; Mark Salvati, PhD[15]; Matthew G Fury, MD[15]; Karl D Lewis, MD[15]

[1]The Angeles Clinical and Research Institute, a Cedars-Sinai Affiliate, Los Angeles, CA, USA; [2]Henry Ford Hospital, Detroit, MI, USA; [3]Sarah Cannon Research Institute/Tennessee Oncology PLLC, Nashville, TN, USA; [4]START Center, San Antonio, TX, USA; [5]St Vincent's University Hospital, Dublin, Ireland; [6]University of Florida Health Cancer Center at Orlando Health, Orlando, FL, USA; [7]Rutgers Cancer Institute of New Jersey, New Brunswick, NJ, USA; [8]MUSC Hollings Cancer Center, North Charleston, SC, USA; [9]Center for Melanoma Research and Treatment, California Pacific Medical Center Research Institute, San Francisco, CA, USA; [10]START Midwest, Grand Rapids, MI, USA; [11]Department of Hematology and Medical Oncology at Emory University School of Medicine, Atlanta, GA, USA; [12]Seoul National University Hospital, Seoul, South Korea; [13]Department of Hematology and Oncology, Miami Cancer Institute/Baptist Health South Florida, Miami, FL, USA; [14]Virginia Cancer Specialists and US Oncology Research, Fairfax, VA, USA; [15]Regeneron Pharmaceuticals, Inc., Tarrytown, NY, USA

BACKGROUND: In two cohorts with advanced PD-(L)1-naïve metastatic melanoma, an objective response rate (ORR) of 63.8% was previously reported with fianlimab (anti-LAG-3) + cemiplimab (anti-PD-1) treatment (NCT03005782). The benefit of the fianlimab + cemiplimab combination in patients exposed to prior anti-PD-1 adjuvant treatment is unknown.

OBJECTIVES: Here we present Phase 1 safety and clinical activity data from patients with advanced melanoma, including those who received prior adjuvant systemic treatment.

METHODS: The analysis population included three expansion cohorts with unresectable or metastatic melanoma (excluding uveal melanoma) who were antiPD-(L)1 treatment-naïve for advanced disease. Patients received fianlimab 1,600 mg + cemiplimab 350 mg intravenously every 3 weeks for 12 months, plus a further 12 months if clinically indicated. Study enrollment closed in June 2022. Tumor measurements were performed every 6 weeks for 24 weeks, then every 9 weeks.

RESULTS: 98 patients were enrolled and treated (Nov 1, 2022 data cut-off); 2% received prior metastatic treatment (not anti-PD-[L]1) and 24% received prior adjuvant/neoadjuvant treatment (anti-PD-1 [nivolumab or pembrolizumab], 13%), with 6 months' disease-free interval. Median age was 68.0 years, 60.2% were male, and 89.8% were White. Median follow-up was 12.6 months and median treatment duration was 33 weeks. Grade ≥3 treatment-emergent adverse events (TEAEs), serious TEAEs, and immune-related AEs (irAEs) occurred in 44%, 33%, and 65% of patients, respectively; 16% of patients discontinued treatment due to a TEAE. Rates of irAEs were similar to anticipated rates for anti-PD-1 monotherapy, except for adrenal insufficiency (all grades, 11%; Grade ≥3, 4%). RECIST 1.1based investigator-assessed overall ORR was 61% (12 complete responses; 48 partial responses), with median DOR (mDOR) not reached (NR; 95% CI 23, not estimated [NE]). KM estimation of median PFS (mPFS) was 15 (95% CI 9, NE) months. In patients with any prior adjuvant treatment, ORR, mDOR, and mPFS were 61% (14/23), NR, and 13 months, respectively. In patients with prior anti-PD-1 adjuvant treatment, ORR, mDOR, and mPFS were 62% (8/13), NR, and 12 months, respectively. Data from subgroup, correlative biomarker, PK, and immunogenicity analyses will be included in the presentation.

CONCLUSIONS: In patients with advanced melanoma, fianlimab + cemiplimab showed high clinical activity that compares favorably with other approved combinations of immune checkpoint inhibitors in the same clinical setting. This is the first indication that dual blockade can produce high levels of activity following adjuvant antiPD-1 treatment. The safety profile of fianlimab + cemiplimab is similar to antiPD-1 monotherapy, with the exception of adrenal insufficiency. Phase 3 trials of fianlimab plus cemiplimab as adjuvant therapy in high-risk melanoma (NCT05608291) and in locally advanced, unresectable or metastatic melanoma (NCT05352672) are ongoing.

ACKNOWLEDGMENTS: This study is sponsored by Regeneron Pharmaceuticals, Inc. Medical writing support was provided by Ashvanti Valji, PhD, and Lucy Carrier, PhD, of Apollo, OPEN Health Communications, and funded by Regeneron Pharmaceuticals, Inc.

DISCLOSURES: Omid Hamid reports honoraria from Bristol Myers Squibb, Novartis, Pfizer, Regeneron Pharmaceuticals, Inc., and Sanofi; and consulting or advisory roles with Aduro Biotech, Akeso Biopharma, Amgen, Arcus Biosciences, Bioatla, Bristol Myers Squibb, CytomX Therapeutics, Exelixis, Genentech, GlaxoSmithKline, Idera, Immunocore, Incyte, Iovance Biotherapeutics, Merck, Merck Serono, Moderna, NextCure, Novartis, Pfizer, Regeneron Pharmaceuticals, Inc., Roche, Sanofi, Seattle Genetics, Torque, and Zelluna. Amy Weise reports no conflict of interest. Meredith McKean reports institutional research funding from Alpine Immune Sciences, Arcus Biosciences, Arvinas, Ascentage Pharma, Bayer, Bicycle Therapeutics, BioMed Valley Discoveries, BioNTech, Dragonfly Therapeutics, EMD Serono, Epizyme, Erasca, Exelixis, Foghorn Therapeutics, Genentech, Gilead, GlaxoSmithKline, Ideaya Biosciences, Ikena Oncology, ImmVira Pharma, Infinity Pharmaceuticals, Jacobio Pharmaceuticals, Kechow Pharma, Kezar Life Sciences, Kinnate BioPharma, MedImmune, Mereo BioPharma, Metabomed, Moderna, NBE Therapeutics, Nektar, Novartis, Oncorus, PACT Pharma, Pfizer, Plexxikon, Prelude Therapeutics, Pyramid Biosciences, Regeneron Pharmaceuticals, Inc., Sapience Therapeutics, Scholar Rock, Seattle Genetics, Synthrox, Takeda, Tempest Therapeutics, Teneobio, Tizona, TMUNITY Therapeutics, TopAlliance Biosciences, and Xilio; and consulting/advisory roles (payments to institution) with Astellas Pharma, AstraZeneca, Bicycle Therapeutics, Castle

Biosciences, Eisai, Ideaya Biosciences, iTeos, Moderna, Pfizer, and Regeneron Pharmaceuticals, Inc. Kyriakos P Papadopoulos reports consulting or advisory roles with Basilea and Turning Point Therapeutics; and research funding from 3D Medicines, AbbVie, ADC Therapeutics, Amgen, Anheart Therapeutics, Bayer, Calithera Biosciences, Daiichi Sankyo, EMD Serono, F-star, Incyte, Jounce Therapeutics, Lilly, Linnaeus Therapeutics, MabSpace Biosciences, MedImmune, Merck, Mersana, Mirati Therapeutics, Peloton Therapeutics, Pfizer, Regeneron Pharmaceuticals, Inc., Syros Pharmaceuticals, Tempest Therapeutics, and Treadwell Therapeutics. John Crown reports speaker bureau fees from Pfizer; consulting or advisory roles with AstraZeneca and MSD Oncology; honoraria from AstraZeneca, MSD Oncology, Pfizer, and Pierre Fabre; and institutional research funding from Bristol Myers Squibb, MSD Oncology, Novartis, Puma Biotechnology, Regeneron Pharmaceuticals, Inc., and Roche. Sajeve S Thomas reports speaker bureau fees from Amgen, Bristol Myers Squibb, Genentech, Ipsen, Merck, Novartis, and Pfizer. Janice Mehnert reports no conflict of interest. John Kaczmar reports consulting or advisory roles with Bicara Therapeutics, Rakuten Medical, and Regeneron Pharmaceuticals, Inc. Kevin B Kim reports honoraria from Bristol Myers Squibb, Genentech, Novartis, Regeneron Pharmaceuticals, Inc., and Sanofi for serving as a member of advisory board meetings; and honoraria from Bristol Myers Squibb, Novartis, Merck, Regeneron Pharmaceuticals, Inc., and Sanofi for serving as a member of speaker's bureaus. Nehal J. Lakhani reports consulting or advisory roles with Ikena, Innovent Biologics, and S.K. Life Sciences; and research funding from Alexion Pharmaceuticals, Alexo Therapeutics, Alkermes, Alpine Biosciences, Alpine Immune Sciences, Apexian Pharmaceuticals, Asana Biosciences, Ascentage Pharma, Astellas Pharma, BeiGene, Celgene, Cerulean Pharma, Constellation Pharmaceuticals, Coordination Therapeutics, CytomX Therapeutics, Epizyme, Formation Biologics, Forty Seven, Genmab, Gilead, GlaxoSmithKline, Helsinn Therapeutics, Ikena, Ikena Oncology, Incyte, InhibRx, Innovent Biologics, Jounce Therapeutics, LAM Therapeutics, Lilly, Livzon, Loxo, Macrogenics, Merck, Mersana, Northern Biologics, Odonate, Pfizer, Regeneron Pharmaceuticals, Inc., Sapience Therapeutics, Seagen, Servier, Shattuck Labs, Symphogen, Tesaro, and Tizona. Melinda Yushak reports institutional research funding from Bristol Myers Squibb, GlaxoSmithKline, Immunocore, Merck, and Regeneron Pharmaceuticals, Inc. Tae Min Kim reports consulting or advisory roles with AstraZeneca/MedImmune, Janssen Oncology, Novartis, Regeneron Pharmaceuticals, Inc., Samsung Bioepis, Takeda, and Yuhan; speaker bureau fees from IMBDx, Inc., Janssen Research & Development, and Takeda; and research funding from AstraZeneca. Guilherme Rabinowits reports consulting or advisory roles with BostonGene, Castle Biosciences, Regeneron Pharmaceuticals, Inc., Replimune, and Sanofi. Alexander Spira reports stock and other ownership interests from Lilly; honoraria from Amgen, AstraZeneca/MedImmune, Bayer, Bristol Myers Squibb, CytomX Therapeutics, Janssen Oncology, Merck, Novartis, and Takeda; consulting or advisory roles from Amgen, Array BioPharma, AstraZeneca/MedImmune, Black Diamond Therapeutics, Blueprint Medicines, Bristol Myers Squibb, Daiichi Sankyo/AstraZeneca, Gritstone Bio, Gritstone Oncology, Incyte, Janssen Research & Development, Jazz Pharmaceuticals, Lilly, Merck, Mersana, Mirati Therapeutics, Novartis, Regeneron Pharmaceuticals, Inc., Sanofi, and Takeda; research funding from AbbVie, ADC Therapeutics, Alkermes, Amgen, Arch Therapeutics, Astellas Pharma, Astex Pharmaceuticals, AstraZeneca, Black Diamond Therapeutics, Blueprint Medicines, BluPrint Oncology, Boehringer Ingelheim, Bristol Myers Squibb, CytomX Therapeutics, Daiichi Sankyo, Gritstone, Ignyta, Trovagene, Incyte, Janssen Oncology, LAM Therapeutics, Loxo, Macrogenics, Medikine, MedImmune, Mersana, Mirati Therapeutics, Nalo Therapeutics, Newlink Genetics, Novartis, Plexxikon, Regeneron Pharmaceuticals, Inc., Revolution Medicines, Roche, Rubius, Synthekine, and Takeda. Jayakumar Mani, Fang Fang, Shuquan Chen, JuAn Wang, Laura Brennan, Vladimir Jankovic, Anne Paccaly, Sheila Masinde, Israel Lowy, Mark Salvati, and Matthew G Fury are employees and shareholders of Regeneron Pharmaceuticals, Inc. Karl D Lewis is an employee and shareholder of Regeneron Pharmaceuticals, Inc.; reports institutional research funding from Genentech, Merck, and Regeneron Pharmaceuticals, Inc; and consulting fees from Merck and Regeneron Pharmaceuticals, Inc.

Abstract OM-05

Safety Assessments in the Multinational Phase 3 THRIVE-AA1 Trial With CTP-543 (Deuruxolitinib) in Adult Patients With Alopecia Areata

Brett King, MD, PhD[1]; Natasha A. Mesinkovska, MD, PhD[2]; Maryanne Makredes Senna, MD[3]; Arash Mostaghimi, MD[4]; Colleen Hamilton, MS[5]; James Cassella, PhD[5]

[1]Department of Dermatology, Yale School of Medicine, New Haven, CT, USA; [2]Department of Dermatology, University of California, Irvine, CA, USA; [3]Lahey Hair Loss Center of Excellence/Research Unit, Beth Israel Deaconess Medical Center, Burlington, MA, USA; [4]Department of Dermatology, Brigham and Women's Hospital, Boston, MA, USA; [5]Sun Pharmaceutical Industries, Inc., Lexington, MA, USA

BACKGROUND: JAK inhibitors are emerging therapies for alopecia areata (AA). CTP-543, a selective JAK1/JAK2 inhibitor, produced significant hair regrowth in THRIVE-AA1 (NCT04518995).

OBJECTIVE: To report the safety of CTP-543 for the treatment of AA through Week 24.

METHODS: Eligible patients—adults (18–65 years) diagnosed with AA with ≥50% scalp hair loss and the current AA episode >6 months and <10 years in duration—were treated with placebo, CTP-543 8 mg BID, or 12 mg BID for 24 weeks. Safety assessments included adverse events (AEs), vital signs, electrocardiogram (ECG) results, and clinical laboratory tests.

RESULTS: Of the 706 randomized patients, 140 patients received placebo, 351 received CTP-543 8 mg BID, and 215 received CTP-543 12 mg BID. The most common (≥5%) AEs were headache, nasopharyngitis, upper respiratory tract infection, increased creatine phosphokinase, COVID-19, and acne. Serious AEs (SAEs) occurred in 9 patients; one patient had 2 SAEs considered possibly related to CTP-543

while 8 patients reported 1 SAE each, all of which were considered not related to CTP-543. Of the 60 patients who did not complete the study, 14 (23%) patients discontinued due to AEs: 2 (18.2%), 8 (24.2%) and 4 (25%) from the placebo, 8 mg BID and 12 mg BID groups, respectively. Incidence and severity of AEs were similar for the 8 mg BID and 12 mg BID groups. There were no clinically meaningful treatment group trends for vital signs or ECG results. No deaths or thromboembolic events, including deep vein thrombosis or pulmonary embolism, were observed during the trial.

CONCLUSIONS: Both doses of CTP-543 were generally well tolerated. The overall safety profile of CTP-543 in patients with AA is encouraging.

ACKNOWLEDGMENTS: The study and medical writing support were funded by Sun Pharma.

DISCLOSURES: BK has been a consultant and/or scientific adviser and/or has served as a principal investigator for AbbVie, AltruBio Inc, Almirall, AnaptysBio, Arena Pharmaceuticals, Bioniz Therapeutics, Bristol Myers Squibb, CoNCERT Pharmaceuticals (acquired by Sun Pharma in March 2023), Eli Lilly, Equillium, Horizon Therapeutics plc, Incyte, Janssen, LEO Pharma, Otsuka/Visterra Inc, Pfizer, Regeneron, Sanofi Genzyme, Sun Pharma, TWi Biotechnology Inc, and Viela Bio; and has served as a speaker for AbbVie, Eli Lilly, Incyte, Pfizer, Regeneron, and Sanofi Genzyme; and as a scientific adviser for BiologicsMD. NAM has served as an adviser for CoNCERT Pharmaceuticals (acquired by Sun Pharma in March 2023), Eli Lilly, and Pfizer; as a principal investigator for AbbVie, Arcutis Biotherapeutics, Bristol Myers Squibb, CoNCERT Pharmaceuticals (acquired by Sun Pharma in March 2023), Eli Lilly, and Pfizer; and as a speaker for Eli Lilly. MS has served as a speaker for Eli Lilly and Pfizer; has been a principal investigator and has received research funding from CoNCERT Pharmaceuticals (acquired by Sun Pharma in March 2023), Eli Lilly, Follica, LEO Pharma, and Santiste Medical; and has been a consultant and/or scientific/medical adviser for American Hair Research Society, Eli Lilly, Follica, Kintor, L'Oreal, National Alopecia Areata Foundation, Pfizer, and Scarring Alopecia Foundation. AM has been a consultant for AbbVie, Boehringer Ingelheim, CoNCERT Pharmaceuticals (acquired by Sun Pharma in March 2023), Digital Diagnostics, Eli Lilly, Equillium, Hims, LEO Pharma, and Pfizer. CH and JC are employees of Sun Pharmaceutical Industries, Inc.

Abstract OM-06

Onychomycosis Dermatophytoma Treatment: A Systematic Review of the Literature

Shari R Lipner, MD, PhD[1]; Tracey C Vlahovic, DPM[2]; Boni Elewski, MD[3]; Mahmoud Ghannoum, PhD[4]; Eric Guenin, PharmD, PhD, MPH[5]; Warren S Joseph, DPM[6]

[1]Department of Dermatology, Weill Cornell Medicine, New York, NY; [2]Temple University School of Podiatric Medicine, Philadelphia, PA; [3]University of Alabama at Birmingham School of Medicine, Birmingham, AL; [4]Case Western Reserve University and University Hospitals Cleveland Medical Center, Cleveland, OH; [5]Ortho Dermatologics*, Bridgewater, NJ; [6]Arizona College of Podiatric Medicine, Midwestern University, Glendale, AZ

*Ortho Dermatologics is a division of Bausch Health US, LLC

BACKGROUND: Dermatophytomas/longitudinal spikes are a poorly understood form of onychomycosis presenting as dense yellow/white streaks/patches in the subungual space with fungal masses encased in biofilm. Historically, dermatophytomas have been considered hard-to-treat, and treatment response data are limited as these patients are frequently excluded from onychomycosis clinical trials. Newer topical antifungals, however, can penetrate the nail plate and spread in the subungual space, which may make them effective in the treatment of onychomycosis complicated by dermatophytoma.

OBJECTIVES: The purpose of this systematic review was to assess efficacy of oral/topical drugs for dermatophytoma treatment.

METHODS: Pubmed and Embase were searched for keywords "dermatophytoma" or "longitudinal spike" in December 2021. Included studies comprised English-language publications, with ≥5 participants with dermatophytoma, and use of an oral or topical drug (US-approved for onychomycosis) without surgical removal.

RESULTS: Of 44 unique publications, 6 were included (4 post hoc/retrospective, 2 open label): 3 topical efinaconazole 10% (N=106 with dermatophytoma; 2 studies: 48-72 weeks treatment; 1 study: ~64 weeks mean treatment), 1 topical tavaborole 5% (N=39; 24-52 weeks), and 2 oral terbinafine 125 mg or 250 mg (N=23; 12 weeks treatment, follow-up at weeks 24 or 48). Efficacy outcome definitions, when provided, varied across studies. In studies where outcomes were defined using both clinical and mycological results (ie, more stringent definitions), cure rates were 41.5% and 63% for topical efinaconazole 10% and 42% for oral terbinafine. When outcomes were defined using clinical results or not defined at all, topical efinaconazole 10% showed higher rates in 3 studies (60%-100%) versus 1 study each of oral terbinafine (45%) and topical tavaborole 5% (28.2%). In studies where outcomes were defined via mycological results, 2 studies of efinaconazole demonstrated higher rates of negative KOH and/or negative culture (72.0%-100%) than a study of oral terbinafine (67%).

CONCLUSIONS: In this systematic review of dermatophytoma/longitudinal spike treatments, topical efinaconazole generally led to higher rates of improvement/cure than topical tavaborole or oral terbinafine, though endpoints differed

across studies and there were no head-to-head comparisons. While dermatophytomas have historically been considered a poor prognostic factor, results demonstrate successful treatment is possible, particularly with effective topical treatments such as efinaconazole 10%.

ACKNOWLEDGMENTS: Funding from Ortho Dermatologics.

DISCLOSURES: Shari R Lipner has served a consultant for Ortho Dermatologics, Hoth Therapeutics, and Verrica. Tracey C Vlahovic has served as investigator and speaker for Ortho Dermatologics. Boni Elewski has recieved clinical research support (research funding to university) for AbbVie, AnaptysBio, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Incyte, LEO Pharma, Lilly, Merck, Menlo, Novartis, Pfizer, Regeneron, Sun Pharma, Ortho Dermatologics, and Vanda; and as consultant (received honorarium) from Boehringer Ingelheim, Bristol Meyers Squibb, Celgene, LEO Pharma, Lilly, Menlo, Novartis, Pfizer, Sun Pharma, Ortho Dermatologics, and Verrica. Mahmoud Ghannoum has acted as a consultant or received contracts from Scynexis Inc, Bausch & Lomb, Pfizer, and Mycovia. Eric Guenin is an employee of Ortho Dermatologics and may hold stock and/or stock options in its parent company. Warren S Joseph has served as consultant and speaker for Ortho Dermatologics.

Abstract OM-07

Efficacy of the Oral JAK1/JAK2 Inhibitor CTP-543 (Deuruxolitinib) in Adult Patients With Alopecia Areata: Results From the Multinational Double-Blind, Placebo-Controlled THRIVE-AA1 Phase 3 Trial

Maryanne Makredes Senna, MD[1]; Brett King, MD, PhD[2]; Natasha A Mesinkovska, MD, PhD[3]; Arash Mostaghimi, MD[4]; Colleen Hamilton, MS[5]; James Cassella, PhD[5]

[1]Lahey Hair Loss Center of Excellence/Research Unit, Beth Israel Deaconess Medical Center, Burlington, MA, USA; [2]Department of Dermatology, Yale School of Medicine, New Haven, CT, USA; [3]Department of Dermatology, University of California, Irvine, CA, USA; [4]Department of Dermatology, Brigham and Women's Hospital, Boston, MA, USA; [5]Sun Pharmaceutical Industries, Inc., Lexington, MA, USA

BACKGROUND: Alopecia areata (AA) is a common autoimmune hair loss disorder.

OBJECTIVES: To report efficacy results from the first Phase 3 clinical trial of CTP-543 in adult patients with AA through Week 24 (NCT04518995).

METHODS: Eligible patients—adults (18–65 years) diagnosed with AA with ≥50% scalp hair loss—were treated with placebo, CTP-543 8 mg BID, or 12 mg BID for 24 weeks. Hair loss was measured by Severity of Alopecia Tool (SALT).

RESULTS: Of the 706 randomized patients, 140 received placebo, 351 received CTP-543 8 mg BID, and 215 received CTP-543 12 mg BID. Both doses of CTP-543 met the primary efficacy endpoint (SALT score ≤20 at Week 24). For CTP-543 8 mg BID and 12 mg BID, 29.6% and 41.9% of patients, respectively, achieved a SALT score ≤20 at Week 24 compared with 0.8% of placebo-treated patients (P <0.0001). Significant differences from placebo were seen as early as 8 weeks for both doses of CTP-543 (P <0.001). In addition, 21% and 35% of patients in the 8 mg BID and 12 mg BID groups, respectively, achieved a SALT score ≤10 at Week 24 compared with 0% of placebo-treated patients (P <0.0001). For relative change from baseline and achievement of 75% and 90% improvement from baseline in SALT, all differences for both dose groups vs placebo were significant (P <0.001).

CONCLUSIONS: Both doses of CTP-543 resulted in significant regrowth of scalp hair, starting as early as 8 weeks and continuing throughout the 24-week study period. The efficacy of CTP-543 in the treatment of AA is encouraging.

ACKNOWLEDGMENTS: The study and medical writing support were funded by Sun Pharma.

DISCLOSURES: MS has served as a speaker for Eli Lilly and Pfizer; has been a principal investigator and has received research funding from CoNCERT Pharmaceuticals (acquired by Sun Pharma in March 2023), Eli Lilly, Follica, LEO Pharma, and Santiste Medical; and has been a consultant and/or scientific/medical adviser for American Hair Research Society, Eli Lilly, Follica, Kintor, L'Oreal, National Alopecia Areata Foundation, Pfizer, and Scarring Alopecia Foundation. BK has been a consultant and/or scientific adviser and/or has served as a principal investigator for AbbVie, AltruBio Inc, Almirall, AnaptysBio, Arena Pharmaceuticals, Bioniz Therapeutics, Bristol Myers Squibb, CoNCERT Pharmaceuticals (acquired by Sun Pharma in March 2023), Eli Lilly, Equillium, Horizon Therapeutics plc, Incyte, Janssen, LEO Pharma, Otsuka/Visterra Inc, Pfizer, Regeneron, Sanofi Genzyme, Sun Pharma, TWi Biotechnology Inc, and Viela Bio; and has served as a speaker for AbbVie, Eli Lilly, Incyte, Pfizer, Regeneron, and Sanofi Genzyme; and as a scientific adviser for BiologicsMD. NAM has served as an adviser for CoNCERT Pharmaceuticals (acquired by Sun Pharma in March 2023), Eli Lilly, and Pfizer; as a principal investigator for AbbVie, Arcutis Biotherapeutics, Bristol Myers Squibb, CoNCERT Pharmaceuticals (acquired by Sun Pharma in March 2023), Eli Lilly, and Pfizer; and as a speaker for Eli Lilly. AM has been a consultant for AbbVie, Boehringer Ingelheim, CoNCERT Pharmaceuticals (acquired by Sun Pharma in March 2023), Digital Diagnostics, Eli Lilly, Equillium, Hims, LEO Pharma, and Pfizer. CH and JC are employees of Sun Pharmaceutical Industries, Inc.

Abstract OM-08

A Phase 1 Study of Fianlimab (Anti-LAG-3) in Combination With Cemiplimab (Anti-PD-1) in Patients With Advanced Melanoma: Poor Prognosis Subgroup Analysis

Inderjit Mehmi, MD[1]; Amy Weise, DO[2]; Meredith McKean, MD[3]; Kyriakos P Papadopoulos, MD[4]; John Crown, MD[5]; Sajeve S Thomas, MD[6]; Janice Mehnert, MD[7]; John Kaczmar, MD[8]; Kevin B Kim, MD[9]; Nehal J Lakhani, PhD[10]; Melinda Yushak, MD[11]; Omid Hamid, MD[1]; Tae Min Kim, PhD[12]; Guilherme Rabinowits, MD[13]; Alexander Spira, PhD[14]; Jayakumar Mani, PhD[15]; Fang Fang, PhD[15]; Shuquan Chen, PhD[15]; JuAn Wang, PhD[15]; Israel Lowy, PhD[15]; Mark Salvati, PhD[15]; Matthew G Fury, MD[15]; Karl D Lewis, MD[15]

[1]The Angeles Clinical and Research Institute, a Cedars-Sinai Affiliate, Los Angeles, CA, USA; [2]Henry Ford Hospital, Detroit, MI, USA; [3]Sarah Cannon Research Institute/Tennessee Oncology PLLC, Nashville, TN, USA; [4]START Center, San Antonio, TX, USA; [5]St Vincent's University Hospital, Dublin, Ireland; [6]University of Florida Health Cancer Center at Orlando Health, Orlando, FL, USA; [7]Rutgers Cancer Institute of New Jersey, New Brunswick, NJ, USA; [8]MUSC Hollings Cancer Center, North Charleston, SC, USA; [9]Center for Melanoma Research and Treatment, California Pacific Medical Center Research Institute, San Francisco, CA, USA; [10]START Midwest, Grand Rapids, MI, USA; [11]Department of Hematology and Medical Oncology at Emory University School of Medicine, Atlanta, GA, USA; [12]Seoul National University Hospital, Seoul, South Korea; [13]Department of Hematology and Oncology, Miami Cancer Institute/Baptist Health South Florida, Miami, FL, USA; [14]Virginia Cancer Specialists and US Oncology Research, Fairfax, VA, USA; [15]Regeneron Pharmaceuticals, Inc., Tarrytown, NY, USA

BACKGROUND: Co-blockade of LAG-3 improves the effectiveness of anti-PD-1 treatment in patients with advanced melanoma. In two Phase 1 expansion cohorts (N=80) with anti-PD-(L)1-naïve advanced melanoma, we previously reported high clinical activity with the combination immunotherapy of anti-LAG-3 (fianlimab) and anti-PD-1 (cemiplimab). The objective response rate (ORR) was 63.8% and disease control rate (DCR) was 80.0%, with median duration of response (mDOR) not reached (NR). Factors associated with poor prognosis include elevated lactate dehydrogenase (LDH) levels and sites of metastases, including liver or other visceral organs (M1c).

OBJECTIVES: Here we present updated efficacy data for poor prognosis patients from three Phase 1 advanced melanoma expansion cohorts: anti-PD-(L)1/systemic treatment-naïve (cohorts 6 and 15); previously exposed to adjuvant/neoadjuvant systemic treatment, including anti-PD-1 (cohort 16).

METHODS: Patients with advanced melanoma were treated with fianlimab 1,600 mg plus cemiplimab 350 mg intravenously every 3 weeks for 12 months, with a further 12 months if clinically indicated (NCT03005782). Tumor measurements were assessed by RECIST 1.1 every 6 weeks for 24 weeks, then every 9 weeks.

RESULTS: 40 patients each in cohorts 6 and 15, and 18 patients in cohort 16, were enrolled and treated (N=98; Nov 1, 2022, data cut-off). In the adjuvant/neoadjuvant setting (cohorts 6 and 16), 24% of patients had received prior systemic treatment for melanoma, including 15% with prior exposure to immune checkpoint inhibitors (ICIs). Median follow-up: 12.6 months; median treatment duration: 33 weeks. Overall, ORR (N=98) was 61% and among patients with prior ICI (n=15) it was 60%. In patients with LDH> upper limit of normal (ULN) (n=32), ORR, DCR, and mDOR were 53%, 72%, and NR (95% CI 7, not estimated [NE]), respectively, and median progression-free survival (mPFS) was 12 (95% CI 4, NE) months. In patients with liver metastases at baseline (n=21), ORR, DCR, and mDOR were 43%, 57%, and 9 (95% CI 3, NE) months, respectively, and mPFS was 4 (95% CI 1, NE) months. In patients with any M1c disease and LDH>ULN at baseline (n=17), ORR, DCR, and mDOR were 35%, 59%, and NR (95% CI 6, NE), respectively, and mPFS was 7 (95% CI 1, NE) months. Overall, 44% and 33% of patients reported Grade ≥3 treatment-emergent adverse events (TEAEs) and serious TEAEs, respectively. Correlative biomarker analyses are in progress and will be included in the presentation.

CONCLUSIONS: Fianlimab plus cemiplimab showed high activity in patients with advanced melanoma and poor prognosis features at baseline; ORR and DCR observed compare positively with available data for approved ICI combinations in the same clinical setting. Phase 3 trials of fianlimab plus cemiplimab as adjuvant therapy in high-risk melanoma (NCT05608291) and in locally advanced, unresectable or metastatic melanoma (NCT05352672) are ongoing.

ACKNOWLEDGMENTS: This study is sponsored by Regeneron Pharmaceuticals, Inc. Medical writing support was provided by Ashvanti Valji, PhD, and Lucy Carrier, PhD, of Apollo, OPEN Health Communications, and funded by Regeneron Pharmaceuticals, Inc.

DISCLOSURES: Inderjit Mehmi reports no conflict of interest. Amy Weise reports no conflict of interest. Meredith McKean reports institutional research funding from Alpine Immune Sciences, Arcus Biosciences, Arvinas, Ascentage Pharma, Bayer, Bicycle Therapeutics, BioMed Valley Discoveries, BioNTech, Dragonfly Therapeutics, EMD Serono, Epizyme, Erasca, Exelixis, Foghorn Therapeutics, Genentech, Gilead, GlaxoSmithKline, Ideaya Biosciences, Ikena Oncology, ImmVira Pharma, Infinity Pharmaceuticals, Jacobio Pharmaceuticals, Kechow Pharma, Kezar Life Sciences, Kinnate BioPharma, MedImmune, Mereo BioPharma, Metabomed, Moderna, NBE Therapeutics, Nektar, Novartis, Oncorus, PACT Pharma, Pfizer, Plexxikon, Prelude Therapeutics, Pyramid Biosciences, Regeneron Pharmaceuticals, Inc., Sapience Therapeutics, Scholar Rock, Seattle Genetics, Synthrox, Takeda, Tempest Therapeutics, Teneobio, Tizona, TMUNITY Therapeutics, TopAlliance Biosciences, and Xilio; and consulting/advisory roles (payments to institution) with Astellas Pharma, AstraZeneca, Bicycle Therapeutics, Castle Biosciences, Eisai, Ideaya Biosciences, iTeos, Moderna, Pfizer, and Regeneron Pharmaceuticals, Inc. Kyriakos P Papadopoulos reports consulting or advisory roles with Basilea and Turning Point Therapeutics; and research funding from 3D Medicines, AbbVie, ADC Therapeutics, Amgen, Anheart Therapeutics, Bayer, Calithera Biosciences, Daiichi Sankyo, EMD Serono, F-star, Incyte, Jounce Therapeutics, Lilly, Linnaeus Therapeutics, MabSpace Biosciences, MedImmune, Merck, Mersana, Mirati Therapeutics,

Peloton Therapeutics, Pfizer, Regeneron Pharmaceuticals, Inc., Syros Pharmaceuticals, Tempest Therapeutics, and Treadwell Therapeutics. John Crown reports speaker bureau fees from Pfizer; consulting or advisory roles with AstraZeneca and MSD Oncology; honoraria from AstraZeneca, MSD Oncology, Pfizer, and Pierre Fabre; and institutional research funding from Bristol Myers Squibb, MSD Oncology, Novartis, Puma Biotechnology, Regeneron Pharmaceuticals, Inc., and Roche. Sajeve S Thomas reports speaker bureau fees from Amgen, Bristol Myers Squibb, Genentech, Ipsen, Merck, Novartis, and Pfizer. Janice Mehnert reports no conflict of interest. John Kaczmar reports consulting or advisory roles with Bicara Therapeutics, Rakuten Medical, and Regeneron Pharmaceuticals, Inc. Kevin B Kim reports honoraria from Bristol Myers Squibb, Genentech, Novartis, Regeneron Pharmaceuticals, Inc., and Sanofi for serving as a member of advisory board meetings; and honoraria from Bristol Myers Squibb, Novartis, Merck, Regeneron Pharmaceuticals, Inc., and Sanofi for serving as a member of speaker's bureaus. Nehal J Lakhani reports consulting or advisory roles with Ikena, Innovent Biologics, and S.K. Life Sciences; and research funding from Alexion Pharmaceuticals, Alexo Therapeutics, Alkermes, Alpine Biosciences, Alpine Immune Sciences, Apexian Pharmaceuticals, Asana Biosciences, Ascentage Pharma, Astellas Pharma, BeiGene, Celgene, Cerulean Pharma, Constellation Pharmaceuticals, Coordination Therapeutics, CytomX Therapeutics, Epizyme, Formation Biologics, Forty Seven, Genmab, Gilead, GlaxoSmithKline, Helsinn Therapeutics, Ikena, Ikena Oncology, Incyte, InhibRx, Innovent Biologics, Jounce Therapeutics, LAM Therapeutics, Lilly, Livzon, Loxo, Macrogenics, Merck, Mersana, Northern Biologics, Odonate, Pfizer, Regeneron Pharmaceuticals, Inc., Sapience Therapeutics, Seagen, Servier, Shattuck Labs, Symphogen, Tesaro, and Tizona. Melinda Yushak reports institutional research funding from Bristol Myers Squibb, GlaxoSmithKline, Immunocore, Merck, and Regeneron Pharmaceuticals, Inc. Omid Hamid reports honoraria from Bristol Myers Squibb, Novartis, Pfizer, Regeneron Pharmaceuticals, Inc., and Sanofi; and consulting or advisory roles with Aduro Biotech, Akeso Biopharma, Amgen, Arcus Biosciences, Bioatla, Bristol Myers Squibb, CytomX Therapeutics, Exelixis, Genentech, GlaxoSmithKline, Idera, Immunocore, Incyte, Iovance Biotherapeutics, Merck, Merck Serono, Moderna, NextCure, Novartis, Pfizer, Regeneron Pharmaceuticals, Inc., Roche, Sanofi, Seattle Genetics, Torque, and Zelluna. Tae Min Kim reports consulting or advisory roles with AstraZeneca/MedImmune, Janssen Oncology, Novartis, Regeneron Pharmaceuticals, Inc., Samsung Bioepis, Takeda, and Yuhan; speaker bureau fees from IMBDx, Inc., Janssen Research & Development, and Takeda; and research funding from AstraZeneca. Guilherme Rabinowits reports consulting or advisory roles with BostonGene, Castle Biosciences, Regeneron Pharmaceuticals, Inc., Replimune, and Sanofi. Alexander Spira reports stock and other ownership interests from Lilly; honoraria from Amgen, AstraZeneca/MedImmune, Bayer, Bristol Myers Squibb, CytomX Therapeutics, Janssen Oncology, Merck, Novartis, and Takeda; consulting or advisory roles from Amgen, Array BioPharma, AstraZeneca/MedImmune, Black Diamond Therapeutics, Blueprint Medicines, Bristol Myers Squibb, Daiichi Sankyo/AstraZeneca, Gritstone Bio, Gritstone Oncology, Incyte, Janssen Research & Development, Jazz Pharmaceuticals, Lilly, Merck, Mersana, Mirati Therapeutics, Novartis, Regeneron Pharmaceuticals, Inc., Sanofi, and Takeda; research funding from AbbVie, ADC Therapeutics, Alkermes, Amgen, Arch Therapeutics, Astellas Pharma, Astex Pharmaceuticals, AstraZeneca, Black Diamond Therapeutics, Blueprint Medicines, BluPrint Oncology, Boehringer Ingelheim, Bristol Myers Squibb, CytomX Therapeutics, Daiichi Sankyo, Gritstone, Ignyta, Trovagene, Incyte, Janssen Oncology, LAM Therapeutics, Loxo, Macrogenics, Medikine, MedImmune, Mersana, Mirati Therapeutics, Nalo Therapeutics, Newlink Genetics, Novartis, Plexxikon, Regeneron Pharmaceuticals, Inc., Revolution Medicines, Roche, Rubius, Synthekine, and Takeda. Jayakumar Mani, Fang Fang, Shuquan Chen, JuAn Wang, Israel Lowy, Mark Salvati, and Matthew G Fury are employees and shareholders of Regeneron Pharmaceuticals, Inc. Karl D Lewis is an employee and shareholder of Regeneron Pharmaceuticals, Inc.; reports institutional research funding from Genentech, Merck, and Regeneron Pharmaceuticals, Inc; and consulting fees from Merck and Regeneron Pharmaceuticals, Inc.

Abstract OM-09

Chronic Spontaneous Urticaria: An Assessment of Current Clinical Practices and Practice Gaps

Nimish Mehta, PhD, MBA; Shari Dermer, PhD

Medscape Education, Newark, NJ, USA

BACKGROUND: This study's objective was to assess current clinical practices and practice gaps of dermatologists and allergists related to the management of chronic spontaneous urticarial (CSU).

METHODS: A continuing medical education (CME)-certified clinical practice assessment survey consisting of 24 multiple choice questions was designed to measure knowledge, skills, attitudes, barriers, and competence of dermatologists and allergists regarding CSU pathophysiology, diagnosis, and treatment. Respondent confidentiality was maintained, and responses were de-identified and aggregated prior to analyses. The survey launched on 6/1/2022, and responses were collected through 6/6/2023.

RESULTS: In total, 153 dermatologists and 90 allergists completed the full assessment within the data collection period. Physicians demonstrated gaps in the following areas (responses to questions grouped by topic):

Key findings include:

- Dermatologists have lower baseline knowledge about pathology, emerging therapies and treatment of CSU than allergists.
- Dermatologists have relatively low confidence in their ability to diagnose, assess, and treat CSU and they lag behind allergists.

CONCLUSIONS: This educational research current practices in the management of patients with CSU identified gaps in knowledge, competence, and confidence amongst

Physician Gaps in Knowledge, Responses to Questions Grouped by Topic

Topic	Correct Responses to Questions (%) (Dermatologists)	Correct Responses to Questions (%) (Allergists)
Knowledge of the pathophysiology of CSU	75%	82%
Knowledge of the burden of disease	41%	45%
Competence in assessment and diagnosis of CSU	50%	51%
Knowledge of emerging therapies for treatment of CSU	37%	51%
Knowledge and competence related to current treatment modalities for CSU	58%	69%
Those who are confident in diagnosing and assessing patients with CSU	35%	61%
Those who are confident in treating and managing patients with CSU	33%	54%

dermatologists and underscore the need for more medical education activities on this topic.

ACKNOWLEDGMENTS: Developed through independent educational grants from Sanofi and Regeneron Pharmaceuticals.

DISCLOSURES: The authors have no disclosures to report.

Abstract OM-10

Evaluation of Eyebrow and Eyelash Regrowth and Patient Satisfaction in the Phase 3 THRIVE-AA1 Trial With CTP-543 (Deuruxolitinib) in Adult Patients With Alopecia Areata

Arash Mostaghimi, MD[1]; Natasha A. Mesinkovska, MD, PhD[2]; Maryanne Makredes Senna, MD[3]; Brett King, MD, PhD[4]; Colleen Hamilton, MS[5]; James Cassella, PhD[5]

[1]Department of Dermatology, Brigham and Women's Hospital, Boston, MA, USA; [2]Department of Dermatology, University of California, Irvine, CA, USA; [3]Lahey Hair Loss Center of Excellence/Research Unit, Beth Israel Deaconess Medical Center, Burlington, MA, USA; [4]Department of Dermatology, Yale School of Medicine, New Haven, CT, USA; [5]Sun Pharmaceutical Industries, Inc., Lexington, MA, USA

BACKGROUND: Alopecia areata (AA) is a common autoimmune hair loss disorder. THRIVE-AA1 was a multinational double-blind, placebo-controlled Phase 3 trial of CTP-543, an oral JAK1/JAK2 inhibitor (NCT04518995).

OBJECTIVES: To describe clinician- and patient-reported assessments of eyebrows and eyelashes during 24 weeks of treatment with CTP-543 in patients with AA.

METHODS: Eligible patients—adults (18–65 years) diagnosed with AA with ≥50% scalp hair loss—received placebo, CTP-543 8 mg BID, or 12 mg BID for 24 weeks in a 2:5:3 ratio. The Brigham Eyebrow Tool for Alopecia (BETA) and Brigham Eyelash Tool for Alopecia (BELA) quantitative assessments were performed centrally by trained, board-certified dermatologists at baseline, Week 12, and Week 24 in patients with eyebrow/eyelash loss at baseline. A patient-reported outcome scale (Hair Quality Patient Reported Outcome [QPRO]) assessing satisfaction with eyebrows and eyelashes was also employed.

RESULTS: Of the 706 randomized patients, 140 patients received placebo, 351 received CTP-543 8 mg BID, and 215 received CTP-543 12 mg BID. For the BELA and BETA assessments, significant differences from placebo were found with both doses of CTP-543 starting at 12 weeks (P <0.001) and increasing through 24 weeks of treatment (P <0.001). Similarly, the QPRO demonstrated improvements in patient-reported satisfaction for eyebrows and eyelashes with both doses of CTP-543 when compared with placebo starting at 12 weeks (P <0.01) and continuing through 24 weeks (P <0.01).

CONCLUSIONS: Patient satisfaction and clinician-rated assessment of eyebrow and eyelash hair were significantly higher for both the 8 mg BID and 12 mg BID doses of CTP-543 compared with placebo, starting at 12 weeks and extending through 24 weeks of treatment.

ACKNOWLEDGMENTS: The study and medical writing support were funded by Sun Pharma.

DISCLOSURES: AM has been a consultant for AbbVie, Boehringer Ingelheim, CoNCERT Pharmaceuticals (acquired by Sun Pharma in March 2023), Digital Diagnostics, Eli Lilly, Equillium, Hims, LEO Pharma, and Pfizer. NAM has served as an adviser for CoNCERT Pharmaceuticals (acquired by Sun Pharma in March 2023), Eli Lilly, and Pfizer; as a principal investigator for AbbVie, Arcutis Biotherapeutics, Bristol Myers

Squibb, CoNCERT Pharmaceuticals (acquired by Sun Pharma in March 2023), Eli Lilly, and Pfizer; and as a speaker for Eli Lilly. MS has served as a speaker for Eli Lilly and Pfizer; has been a principal investigator and has received research funding from CoNCERT Pharmaceuticals (acquired by Sun Pharma in March 2023), Eli Lilly, Follica, LEO Pharma, and Santiste Medical; and has been a consultant and/or scientific/medical adviser for American Hair Research Society, Eli Lilly, Follica, Kintor, L'Oreal, National Alopecia Areata Foundation, Pfizer, and Scarring Alopecia Foundation. BK has been a consultant and/or scientific adviser and/or has served as a principal investigator for AbbVie, AltruBio Inc, Almirall, AnaptysBio, Arena Pharmaceuticals, Bioniz Therapeutics, Bristol Myers Squibb, CoNCERT Pharmaceuticals (acquired by Sun Pharma in March 2023), Eli Lilly, Equillium, Horizon Therapeutics plc, Incyte, Janssen, LEO Pharma, Otsuka/Visterra Inc, Pfizer, Regeneron, Sanofi Genzyme, Sun Pharma, TWi Biotechnology Inc, and Viela Bio; and has served as a speaker for AbbVie, Eli Lilly, Incyte, Pfizer, Regeneron, and Sanofi Genzyme; and as a scientific adviser for BiologicsMD. CH and JC are employees of Sun Pharmaceutical Industries, Inc.

Abstract OM-11

A Phase 3 Trial Comparing Fianlimab (Anti-LAG-3) Plus Cemiplimab (Anti-PD-1) to Pembrolizumab in Patients With Completely Resected High-Risk Melanoma

Timothy J Panella, MD[1]; Sajeve S Thomas, MD[2]; Meredith McKean, MD[3]; Kim Margolin, MD[4]; Ryan Weight, DO[5]; Jayakumar Mani, PhD[6]; Shraddha Patel, PharmaD[6]; Priya Desai, MS[6]; Mark Salvati, PhD[6]; Israel Lowy, PhD[6]; Rossella Marullo, MD[6]; Matthew G Fury, MD[6]; Karl D Lewis, MD[6]

[1]University of Tennessee Medical Center, Knoxville, TN, USA; [2]Orlando Health Cancer Institute, Lake Mary, FL, USA; [3]Sarah Cannon Research Institute/Tennessee Oncology PLLC, Nashville, TN, USA; [4]Saint John's Cancer Institute, Santa Monica, CA, USA; [5]The Melanoma and Skin Cancer Institute, Denver, CO, USA; [6]Regeneron Pharmaceuticals, Inc., Tarrytown, NY, USA

BACKGROUND: Most patients with newly diagnosed melanoma have resectable disease and are potentially cured by surgery. However, regional nodal and/or distant relapses can occur after curative-intent resection. Postoperative adjuvant therapy with immune checkpoint inhibitors improves RFS and DMFS in patients at high risk of melanoma. Fianlimab (anti-LAG-3) and cemiplimab (anti-PD-1) are high-affinity, fully human monoclonal antibodies that, combined, have shown high clinical activity in patients with advanced melanoma. We previously presented data from a Phase 1 study (NCT03005782) of fianlimab plus cemiplimab from three advanced melanoma expansion cohorts: two cohorts were anti-PD-(L)1- naïve/systemic treatment-naïve and one cohort was previously exposed to adjuvant/neoadjuvant systemic treatment, including anti-PD-1. In the combined cohorts, an objective response rate (ORR) of 61% was observed with an acceptable risk–benefit profile. These observations provide a rationale for the use of fianlimab plus cemiplimab for 1L metastatic melanoma (Phase 3 study, NCT05352672) and high-risk adjuvant melanoma (presented in this abstract).

METHODS: This three-way, double-blind, Phase 3 international trial (NCT05608291) will compare fianlimab plus cemiplimab with pembrolizumab as adjuvant therapy in high-risk resected melanoma. Key eligibility criteria: aged ≥12 years old; Stage IIC, III, or IV (all M-stages) histologically confirmed melanoma resected ≤12 weeks before randomization; no systemic anticancer or radiation adjuvant therapy for melanoma within 5 years; no evidence of metastatic disease; ECOG PS 0/1 (adults), Karnofsky PS >70 (≥16 years old), or Lansky PS >70 (<16 years old).

Approximately 1,530 patients will be randomized 1:1:1 to Arms A, B, or C and receive study treatment Q3W intravenously for 1 year: Arm A, fianlimab dose 1 plus cemiplimab; Arm B, fianlimab dose 2 plus cemiplimab; Arm C, pembrolizumab plus placebo. The trial will be stratified by disease stage (IIIA vs. IIC-IIIB-IIIC vs. IIID-IV [M1a/b] vs. IV [M1c/d]) and geographical location (North America vs. Europe vs. Rest of World). The primary endpoint is investigator-assessed RFS. Secondary endpoints include efficacy (OS, DMFS, melanoma-specific survival), safety (TEAEs, interruption or discontinuation of drugs due to TEAEs), pharmacokinetics, immunogenicity, and patient-reported outcomes. First analysis will be performed when 242 RFS events have been observed.

ACKNOWLEDGMENTS: This study is sponsored by Regeneron Pharmaceuticals, Inc. Medical writing support was provided by Mirela Panea, PhD, and Lucy Carrier PhD, of Apollo, OPEN Health Communications, and funded by Regeneron Pharmaceuticals, Inc.

DISCLOSURES: Timothy J Panella reports no conflict of interest. Sajeve S Thomas reports speaker bureau fees from Amgen, Bristol Myers Squibb, Genentech, Ipsen, Merck, Novartis, and Pfizer. Meredith McKean reports institutional research funding from Alpine Immune Sciences, Arcus Biosciences, Arvinas, Ascentage Pharma Group, Bayer, Bicycle Therapeutics, BioMed Valley Discoveries, BioNTech, Dragonfly Therapeutics, EMD Serono, Epizyme, Erasca, Exelixis, Foghorn Therapeutics, Genentech, Gilead Sciences, GlaxoSmithKline, IDEAYA Biosciences, Ikena Oncology, ImmVira Pharma, Infinity Pharmaceuticals, Jacobio Pharmaceuticals, Kechow Pharma, Kezar Life Sciences, Kinnate BioPharma, MedImmune, Mereo BioPharma, Metabomed, Moderna, NBE Therapeutics, Nektar, Novartis, Oncorus, PACT Pharma, Pfizer, Plexxikon, Prelude Therapeutics, Pyramid Biosciences, Regeneron Pharmaceuticals, Inc., Sapience Therapeutics, Scholar Rock, Seattle Genetics, Synthrox, Takeda Pharmaceuticals, Tempest Therapeutics, Teneobio, Tizona Therapeutics, TMUNITY Therapeutics, TopAlliance Biosciences, and Xilio; and consulting/advisory roles (payments to institution) with Astellas Pharma, AstraZeneca, Bicycle Therapeutics, Castle Biosciences, Eisai, IDEAYA Biosciences, iTeos, Moderna, Pfizer, and Regeneron Pharmaceuticals, Inc. Kim Margolin reports consulting fees from ImaginAb, InsTIL, IOvance, Pfizer, Werewolf, and Xilio; and institutional research funding from Agenus, Bristol Myers Squibb, IO Biotech, Merck, Moderna, Pfizer-Biontech, and Roche-Genentech. Ryan Weight reports consulting fees

from Castle Biosciences, Immunocore, Novartis, Pfizer, and Regeneron Pharmaceuticals, Inc.; speaker bureau fees from Castle Biosciences and Immunocore; and royalties from a patent with Regents of The University of Missouri. Jayakumar Mani, Shraddha Patel, Priya Desai, Rossella Marullo, Mark Salvati, Israel Lowy, and Matthew G Fury are employees and shareholders of Regeneron Pharmaceuticals, Inc. Karl D Lewis is an employee and shareholder of Regeneron Pharmaceuticals, Inc.; reports institutional research funding from Genentech, Merck, and Regeneron Pharmaceuticals, Inc; and consulting fees from Merck and Regeneron Pharmaceuticals, Inc.

Abstract OM-12

Guanfacine Treatment for Delusions of Parasitosis and Dermatillomania

Jay Truitt, MD[1]; Kritin K Verma, MBA[2]; Bo Kitrell, BS[3]; Karan A Gidwani, BS[4]; Michelle B Tarbox, MD[1]

[1]Texas Tech University Health Sciences Center, School of Medicine — Lubbock, Texas; [2]Department of Dermatology, Texas Tech University Health Sciences Center — Lubbock, Texas; [3]University of Nebraska Medical Center, College of Medicine, Omaha, NE; [4]Touro University, School of Medicine, Las Vegas, NV

BACKGROUND: Delusions of parasitosis (DOP), a belief in a recurring parasite infestation, and dermatillomania, which is characterized by compulsive skin picking, frequently coexist and can cause functional impairment. Guanfacine, an alpha-2 adrenergic agonist used in treatment of ADHD, has emerged as a potential but unproven treatment for DOP.
OBJECTIVES: This review of the literature focuses on how skin-picking disorders and DOP are currently understood and treated with a focused lens on Guanfacine.
METHODS: Comprehensive review of latest peer reviewed literature regarding current standard of care for DOP and efficacy of Guanfacine treatment in particular.
RESULTS: Although guanfacine's effectiveness in treating DOP or dermatillomania is not supported by any hard data, its psychological profile suggests that it might have some advantages. Future studies are required to determine whether guanfacine has the ability to treat patients who exhibit severe excoriation and lesions linked to psychiatric illnesses such ADHD and/or DOP.
DISCLOSURES: The authors have no disclosures to report.

Abstract OM-13

What Are the Treatments for Frontal Fibrosing Alopecia?

Kritin K Verma, MBA[1]; Karan A Gidwani, BS[2]; Michelle B Tarbox, MD[3]

[1]Texas Tech University Health Sciences Center, School of Medicine, Lubbock, Texas; [2]Touro University Nevada, College of Osteopathic Medicine, Henderson, NV; [3]Texas Tech University Health Sciences Center, Department of Dermatology, Lubbock, TX

BACKGROUND: Predominantly affecting post-menopausal women, but also affecting men and pre-menopausal women, Frontal Fibrosing Alopecia (FFA) is a form of primary cicatricial alopecia characterized by gradual loss of the frontal hairline and eyebrows (Kossard S. et al, *Arch Dermatol.* 1994).
OBJECTIVES: With an emphasis on genetic, hormonal, and autoimmune variables, this comprehensive review seeks to describe the current knowledge of the clinical characteristics, etiology, and therapeutic approaches of FFA Perifollicular erythema, hyperkeratosis, marginal hair loss in the frontal and occasionally temporal regions, and madarosis are all clinical consequences.
METHODS: Comprehensive review of latest peer reviewed literature regarding FFA
CONCLUSIONS: With data pointing to a T-cell-mediated immune response, pathogenesis may involve hormonal, genetic, and autoimmune variables. Current management and therapy approaches use corticosteroids (Owen CM, et al, *Int J Dermatol.* 2014), hydroxychloroquine, doxycycline, retinoids, finasteride, and Janus kinase (JAK) inhibitors (Yip L, et al, *Australas J Dermatol.* 2011) to reduce inflammation, halt disease progression, and promote hair regrowth. For a small group of patients, another potential solution is hair transplantation (Mirmirani P, et al, *J Am Acad Dermatol.* 2004). To create more efficient therapy options for this complicated condition, greater investigation into the underlying mechanisms of FFA is required.
DISCLOSURES: The authors have no disclosures to report.

Abstract OM-14

Unmasking Disseminated *Staphylococcus aureus*: A Case Study of Vesiculopustular Eruption in an Immunocompromised Patient

Kritin K Verma, MBA[1]; Karan A Gidwani, BS[2]; Shakira Meltan, BS[1]; Michelle B Tarbox, MD, FAAD[3]

[1]Texas Tech University Health Sciences Center, School of Medicine, Lubbock, Texas; [2]Touro University Nevada College of Osteopathic Medicine, Henderson, Nevada; [3]Texas Tech University Health Sciences Center, Department of Dermatology, Lubbock, TX

BACKGROUND: Disseminated *Staphylococcus aureus* infection is caused by the common bacterium *Staphylococcus aureus*, which also causes other clinical illnesses. The subject of this case report is a 63-year-old patient with stage III large

B-cell non-Hodgkin lymphoma and prior kidney transplant who presented to the emergency department complaining of fever and worsening vesiculopustular eruption. The patient described this eruption as painful and purulent and upon further examination, this eruption was noticed to be disseminated.

OBJECTIVES: To investigate a unique presentation of a dermatological infection in a comorbid patient.

METHODS: Comprehensive chart investigation.

CONCLUSIONS: Methicillin-sensitive *Staphylococcus aureus* (MSSA) was grown in a bacterial culture from the patient's left arm after antibiotic treatment. Further investigation discovered that the patient's venous access port was the likely source of the infection and was consequently removed. After the port was removed and antibiotics were given, the patient made a full recovery. In addition to highlighting the value of clinicopathologic correlation in the treatment of complex hospitalized patients, this case also depicts a unique cutaneous manifestation of disseminated staphylococcal infection.

DISCLOSURES: The authors have no disclosures to report.

Abstract OM-15

Dupilumab Is Efficacious in Patients With Prurigo Nodularis Regardless of Baseline Lesion Severity: Pooled Results From Two Phase 3 Trials (LIBERTY-PN PRIME and PRIME2)

Sonja Ständer, MD[1]; Laurent Misery, MD[2]; Gil Yosipovitch, MD[3]; Chang Ook Park, MD, PhD[4]; Lin-Feng Li, MD[5]; Amy Praestgaard, MD[6]; Joseph Zahn, MD[7]; Simmi Wiggins[8]

[1]University Hospital Münster, Münster, Germany; [2]University Hospital of Brest, Brest, France; [3]University of Miami, Miami, FL, USA; [4]Severance Hospital, Yonsei University College of Medicine, Seoul, Republic of Korea; [5]Beijing Friendship Hospital, Capital Medical University, Beijing, China; [6]Sanofi, Cambridge, MA, USA; [7]Regeneron Pharmaceuticals Inc., Tarrytown, NY, USA; [8]Sanofi, Reading, UK

BACKGROUND: Prurigo nodularis (PN), a chronic inflammatory skin condition with severely itchy skin nodules, substantially affects quality of life. These lesions can range in severity from a few nodules to several hundred.

OBJECTIVES: To report the effect of dupilumab on pruritus and skin lesions in patients (pts) with PN according to the severity of their lesions at baseline (BL).

METHODS: In the two randomized, double-blind, placebo (PBO)-controlled, 24-week studies LIBERTY-PN PRIME/PRIME2 (NCT04183335/NCT04202679), adults with PN inadequately controlled by topical prescription therapies, or for whom those therapies are inadvisable, were randomized 1:1 to dupilumab 300mg every 2 weeks or matched PBO. Efficacy was assessed from BL to Week 24 through the Worst Itch Numerical Rating Scale (WI-NRS; scored 0–10; high scores indicated greater itch), and Investigator's Global Assessment for PN-Stage score (IGA PNS; scored 0–4; high scores indicate more severe nodular disease). PRIME/PRIME2 enrolled only pts with an IGA PN-S of 3 (moderate; 20–100 nodules) or 4 (severe; >100 nodules) at BL.

RESULTS: 311 pts were randomized (dupilumab/PBO n=153/158), including 205 pts with moderate PN (IGA PN-S=3; dupilumab/PBO N=103/102) and 104 pts with severe PN (IGA PN-S=4; dupilumab/PBO N=50/54) at BL. BL demographics and disease characteristics were balanced in both subgroups. At Week 24, significantly more dupilumab-treated pts vs PBO achieved an IGA PN-S of 0 (no nodules) or 1 (almost clear; 1–5 nodules), whether they had moderate (52.4% vs 24.5%; nominal P=0.0008) or severe (40.0% vs 7.4%; nominal P=0.0014) PN at BL, with a similar treatment effect (TE) vs PBO in both the moderate (27.9%) and severe (32.6%) subgroups. The proportion of pts with ≥3- and ≥4-point improvement in WI-NRS, was also significantly greater in the dupilumab than in the PBO group, whether their PN was moderate (68.9%/62.1% vs 34.3%/22.6%; nominal P=0.0002/P<0.0001, respectively) or severe (72.0%/66.0% vs 31.5%/25.9%; nominal P=0.0064/P=0.0046, resp.) at BL. Treatment-emergent adverse events (TEAEs) occurred with higher rates in dupilumab-treated pts with moderate PN at BL (71.6%) vs PBO (57.8%). Pts with severe PN at BL had similar rates of TEAEs in the dupilumab (48.0%) and PBO (55.6%) groups. Nevertheless, dupilumab-treated pts with moderate PN at BL, and those with severe PN at BL, had overall similar or lower rates vs PBO of serious TEAEs (3.9%/6.0% vs 8.8%/5.6%, resp.), severe TEAEs (4.9%/0.0% vs 5.9%/5.6%, resp.), and frequent TEAEs such as headache (6.9%/2.0% vs 5.9%/5.6%, resp.) and neurodermatitis (2.9%/2.0% vs 2.9%/14.8%, resp.). The incidence of conjunctivitis in dupilumab-treated pts was consistent with the known safety profile vs PBO in both moderate and severe groups (4.9%/2.0% vs 2.0%/0.0%, resp.).

CONCLUSIONS: Dupilumab treatment for 24 weeks improves itch and skin lesions in pts with PN regardless of lesion severity at BL, with an acceptable safety profile.

ACKNOWLEDGMENTS: Data first presented at the 32nd European Academy of Dermatology and Venereology (EADV 2023); October 11–14; Berlin, Germany. Research sponsored by Sanofi and Regeneron Pharmaceuticals Inc. ClinicalTrials.gov Identifiers: NCT04183335 and NCT04202679. Medical writing/editorial assistance was provided by Benjamin Danet, PhD, and Maria Coimbra, PhD, of Excerpta Medica, and was funded by Sanofi and Regeneron Pharmaceuticals Inc., according to the Good Publication Practice guideline.

DISCLOSURES: S Ständer: Celldex Therapeutics, Clexio Biosciences, Dermasence, Galderma, GSK, Kiniksa Pharmaceuticals, Menlo Therapeutics, Novartis, Sanofi, Trevi Therapeutics – investigator; AbbVie, Almirall, Beiersdorf, Bellus Health, BenevolentAI, Bionorica, Bristol Myers Squibb, Cara Therapeutics, Cello Health, Clexio Biosciences, DS Biopharma, Eli Lilly, Escient Pharmaceuticals, Galderma, Grünenthal, Kiniksa Pharmaceuticals, Klinge Pharma, Menlo Therapeutics, Perrigo, Pfizer, Professor Paul Gerson Unna Academy, Sanofi, Siena Biopharmaceuticals, Trevi Therapeutics, Vanda Pharmaceuticals, Vifor Pharma, WebMD – consultancy/advisory board member; Almirall, Beiersdorf, Eli Lilly, Galderma, LEO Pharma, Menlo Therapeutics, Novartis, Omnicuris, Pfizer, Pierre Fabre, Professor Paul Gerson Unna Academy, Sanofi – speaker.

L Misery: Galderma, GSK, Kiniksa Pharmaceuticals, Menlo Therapeutics, Novartis, Sanofi, Trevi Therapeutics – investigator; AbbVie, Almirall, Beiersdorf, Bristol Myers Squibb, Cara Therapeutics, Clexio Biosciences, Eli Lilly, Galderma, Kiniksa Pharmaceuticals, Menlo Therapeutics, Pfizer, Sanofi, Siena Biopharmaceuticals, Trevi Therapeutics, Vifor Pharma – consultancy/advisory board member; Almirall, Beiersdorf, Eli Lilly, Galderma, LEO Pharma, Menlo Therapeutics, Novartis, Pfizer, Sanofi – speaker. G Yosipovitch: AbbVie, Arcutis Biotherapeutics, Bellus Health, Eli Lilly, Escient Pharmaceuticals, Galderma, Kiniksa Pharmaceuticals, LEO Pharma, Novartis, Pfizer, Regeneron Pharmaceuticals Inc., Sanofi, Trevi Therapeutics – advisory board member; Eli Lilly, Kiniksa Pharmaceuticals, LEO Pharma, Novartis, Pfizer – grants/research funding; Regeneron Pharmaceuticals Inc., Sanofi – investigator. CO Park: Amgen, AstraZeneca, Eli Lilly, Galderma, Kiniksa Pharmaceuticals, LEO Pharma, Pfizer, Sanofi, Teva Pharmaceuticals – investigator. LF Li: No conflicts of interest to declare. A Praestgaard, S Wiggins: Sanofi – employees, may hold stock and/or stock options in the company. J Zahn: Regeneron Pharmaceuticals Inc. – employee and shareholder.

Abstract OM-16 (formerly Abstract AR-06)

Dupilumab Improves Urticaria Signs and Symptoms and Quality of Life in Patients With Chronic Spontaneous Urticaria (CSU)

Marcus Maurer, MD[1,2]; Thomas B Casale, MD[3]; Sarbjit S Saini, MD[4]; Moshe Ben-Shoshan, MD[5]; Allen Radin, MD[6]; Deborah Bauer, MS[7]; Ryan B Thomas, PharmD[6]

[1]Institute of Allergology, Charité – Universitätsmedizin Berlin, corporate member of Free University, Berlin and Humboldt-University of Berlin, Berlin, Germany; [2]Fraunhofer Institute for Translational Medicine and Pharmacology ITMP, Allergology and Immunology, Berlin, Germany; [3]Division of Allergy and Immunology, University of South Florida, Tampa, FL, USA; [4]Johns Hopkins Asthma and Allergy Center, Baltimore, MD, USA; [5]Department of Pediatrics, Division of Allergy/Immunology/Dermatology, McGill University Health Centre, Montreal, QC, Canada; [6]Regeneron Pharmaceuticals Inc., Tarrytown, NY, USA; [7]Sanofi, Bridgewater, NJ, USA;

BACKGROUND: Chronic spontaneous urticaria (CSU) is a chronic inflammatory disease characterized by wheals and/or angioedema recurring for >6 weeks that impacts quality of life (QoL) through itch and disruption in emotional well-being, daily activities, and work/school performance. Many patients continue to experience disease burden despite treatment with H1-antihistamines.

OBJECTIVES: To report the efficacy of dupilumab treatment in patients with chronic spontaneous urticaria who remain symptomatic despite the use of antihistamines in the LIBERTY-CSU CUPID Study A trial.

To report health-related quality of life improvements, measured by the Chronic Urticaria Quality of Life Questionnaire (CU-Q2oL), in patients from the LIBERTY-CSU CUPID Study A trial.

METHODS: LIBERTY-CSU CUPID Study A (NCT04180488) is a randomized, placebo-controlled, phase 3 trial of dupilumab treatment for 24 weeks in adults, adolescents, and children (≥6 years) with CSU who remain symptomatic despite use of standard-of-care H1-antihistamines. Patients receiving H1-antihistamine (up to fourfold approved dose) were randomized to receive add-on dupilumab 300 mg (adults/adolescents ≥60 kg) or 200 mg (adolescents <60 kg, children ≥30 kg) (n=70) or matching placebo (n=68) subcutaneously every 2 weeks. Efficacy endpoints included the Urticaria Activity Score over 7 days (UAS7; range 0–42). Health-related QoL outcomes included the Chronic Urticaria Quality of Life Questionnaire (CU-Q2oL; range 0–100 [higher scores indicate greater QoL impairment]).

RESULTS: Mean UAS7 and CU-Q2oL scores at baseline were 31.9/30.8 (dupilumab [n=70]/placebo [n=68]) and 41.0/46.7, respectively. UAS7 improved significantly in dupilumab-treated patients; at Week 24, least squares (LS) mean change from baseline was –20.5/–12.0 for dupilumab/placebo, respectively (difference –8.5, P=0.0003). Similar results were seen in CU-Q2oL scores at Week 24; LS mean change from baseline was –29.6/–21.0 for dupilumab/placebo, respectively (difference –8.6; nominal P=0.0049).

CONCLUSIONS: Patients with CSU treated with dupilumab experienced reduction in urticaria activity, as measured by UAS7, and improvement in quality of life, as measured by CU-Q2oL.

ACKNOWLEDGMENTS: Data first presented at the 81st Annual Meeting of the American Academy of Dermatology (AAD); hybrid meeting, virtual and New Orleans, LA, USA; March 17-21, 2023. Research sponsored by Sanofi and Regeneron Pharmaceuticals Inc. ClinicalTrials.gov Identifier: NCT04180488. Medical writing/editorial assistance was provided by Corinne Wilson, PhD, of Excerpta Medica, and was funded by Sanofi and Regeneron Pharmaceuticals Inc., according to the Good Publication Practice guideline.

DISCLOSURES: Maurer M: Allakos, Almirall, Amgen, AstraZeneca, Blueprint Medicines, Celldex Therapeutics, Faes Farma, Genentech, GI Innovation, Kyowa Kirin, LEO Pharma, Lilly, Merckle Recordati, Moxie Pharmaceutical, MSD, Novartis, Riemser, Sanofi, Third Harmonic, Tribute Pharmaceuticals, UCB, Uriach – speaker and/or consultant and/or institutional research support. Casale TB: American Lung Association, Genentech, NIH, Novartis, PCORI, Sanofi – research support; AstraZeneca, Boehringer Ingelheim, Genentech, Novartis, Regeneron Pharmaceuticals Inc. – consultant; Genentech – speakers bureau. Saini S: NIH, Novartis, Regeneron Pharmaceuticals Inc. – research grants; Allakos, Aquestive, Celltrion, Escient Pharmaceuticals, GBIO, Genentech, GI Innovation, Granular Therapeutics, Innate Therapies, MedImmune, Novartis, Ono Pharmaceutical, Regeneron Pharmaceuticals Inc., Sanofi – consultant. Ben-Shoshan M: Novartis, Sanofi – consultant. Radin A, Thomas RB: Regeneron Pharmaceuticals Inc. – employees and shareholders. Bauer D: Sanofi – employees, may hold stock and/or stock options in the company.

Psoriasis

Abstract PS-01

Rapid Improvements in Itch With Tapinarof Cream 1% Once Daily in Two Phase 3 Trials in Adults With Mild to Severe Plaque Psoriasis

Leon Kircik, MD[1]; Matthew Zirwas, MD[2]; Shawn G Kwatra, MD[3]; G Michael Lewitt, MD[4]; Holly Glover, MSEd, MPAS, MBA, PA-C[5]; Tomas Chao, MPAS, PA-C[6]; Philip M Brown, MD, JD[7]; David S Rubenstein, MD, PhD[7]; Anna M Tallman, PharmD[7]

[1]Icahn School of Medicine at Mount Sinai, New York, NY; [2]DOCS Dermatology, Bexley, OH; [3]Johns Hopkins University School of Medicine, Baltimore, MD; [4]Illinois Dermatology Institute, Chicago, IL; [5]Metroplex Dermatology, Arlington, TX; [6]Atlanta North Dermatology, Woodstock, GA; [7]Dermavant Sciences, Inc., Morrisville, NC,

BACKGROUND: Itch has a significant impact on health-related quality of life (HRQoL) for many patients with psoriasis and is reported to be the most bothersome psoriasis symptom. Tapinarof cream 1% once daily (QD), a non-steroidal, topical, aryl hydrocarbon receptor agonist, demonstrated statistically significant efficacy versus vehicle and was well tolerated in adults with mild to severe plaque psoriasis in two 12-week, phase 3 trials, PSOARING 1 and 2.

OBJECTIVES: To present patient-reported itch outcomes from PSOARING 1 and 2.

METHODS: Itch was assessed by the proportion of patients achieving a Peak Pruritus Numerical Rating Scale (PP-NRS) score of 0 or 1, indicating an itch-free state, at Week 12 on an 11-point scale (0=no itch; 10=worst imaginable itch). Mean change in itch from baseline at Week 12 was also assessed using the PP-NRS score; the Dermatology Life Quality Index (DLQI) itch item, a 4-point scale rating impact of itch on HRQoL (0=not at all; 3=very much); and the Psoriasis Symptom Diary (PSD) items 1 (itching severity) and 2 (bothered by itching), each rating itch on an 11-point scale (0=absent; 10=worst imaginable).

RESULTS: The analysis included 683 tapinarof- and 342 vehicle-treated patients from PSOARING 1 and 2. Mean baseline itch scores were similar in the tapinarof and vehicle groups in both trials: PP-NRS=5.7–6.1; DLQI itch item=1.8–1.9; PSD item 1=5.6–6.0; PSD item 2=5.5–5.7. Improvements in itch were apparent as early as Week 2, the first clinical assessment, and were significantly greater at Week 12 across all measures with tapinarof versus vehicle. A higher proportion of tapinarof-treated patients achieved a PP-NRS score of 0 or 1 (itch-free state) at Week 12 than vehicle in PSOARING 1 and 2, respectively: 49.6% (136/274) vs 32.1% (42/131; P=0.0007), and 50.3% (144/286) vs 27.3% (39/143; P<0.0001). Mean itch scores improved significantly more with tapinarof compared with vehicle at Week 12 in PSOARING 1 and 2, respectively (least squares mean difference): DLQI itch item= –0.3 (P=0.0026) and –0.5 (P<0.0001); PSD item 1= –1.0 and –1.8 (both P<0.0001); PSD item 2= –1.1 and –1.9 (both P<0.0001); and PP-NRS= –1.0 (P=0.0002) and –1.7 (P<0.0001).

CONCLUSIONS: Tapinarof cream 1% QD was superior to vehicle in improving itch across multiple patient-reported outcome measures, with rapid, statistically significant, and clinically meaningful reductions in itch and achievement of an itch-free state. Tapinarof cream is an effective, well tolerated treatment option for patients with mild to severe plaque psoriasis.

ACKNOWLEDGMENTS: Dermavant Sciences, Inc.

DISCLOSURES: Leon Kircik has served as a consultant/speaker/investigator/advisory board member for Abbott Laboratories, AbbVie, Ablynx, Aclaris, Acambis, Allergan, Inc., Almirall, Amgen, Inc., Anacor Pharmaceuticals, Anaptys, Arcutis, Arena, Assos Pharma, Astellas Pharma US, Inc., Asubio, Bausch Health, Berlex Laboratories (Bayer HealthCare Pharmaceuticals), Biogen Idec, Biolife, Biopelle, Bristol Myers Squibb, Boehringer Ingelheim, Breckinridge Pharma, Cassiopea, Centocor, Inc., Cellceutix, Cipher, Coherus, Colbar, Combinatrix, Connetics Corporation, Coria, Dermavant Sciences, Inc., Dermira, Dermik Laboratories, Dow Pharmaceutical Sciences, Inc., Dr. Reddy's Lab, Dusa, Embil Pharmaceuticals, Eli Lilly, EOS, Exeltis, Ferndale Laboratories, Inc., Foamix, Ferrer, Galderma, Genentech, Inc., GlaxoSmithKline, Glenmark, Health Point, Ltd, Idera, Incyte, Intendis, Innocutis, Innovail, Isdin, Johnson & Johnson, Kyowa Kirin, Laboratory Skin Care Inc., LEO Pharma, L'Oreal, 3M, Maruho, Medical International Technologies, Merck, Medicis Pharmaceutical Corp., Merz, Nano Bio, Novartis AG, Nven Pharmaceuticals, Nucryst Pharmaceuticals Corp., Obagi, Onset, OrthoNeutrogena, PediaPharma, Pfizer, Promius, PuraCap, PharmaDerm, QLT, Inc., Quinnova, Quatrix, Regeneron, Sanofi, Serono (Merck Serono International SA), SkinMedica, Inc., Stiefel Laboratories, Inc., Sun Pharma, Taro, TolerRx, Triax, UCB Pharma, Valeant Pharmaceuticals Intl., Warner-Chilcott, XenoPort, and ZAGE. Matthew Zirwas has served as an advisor/consultant/investigator/owner/speaker for AbbVie, All Free Clear, Amgen, Inc., Anaptys Bio, Arcutis, AsepticMD, Biocon, Cara, Concert, Dermavant Sciences, Inc., Edessa Biotech, Eli Lilly, EPI Health, Evelo Biosciences, Fitbit, Galderma, Genentech, Inc., Incyte, L'Oreal, LEO Pharma, Level-Ex, LUUM, Novartis, Oculus, Peloton, Pfizer, Regeneron, Sanofi, Sun, Trevi, UCB Pharma, and Vial. Shawn G. Kwatra has served as an investigator/advisory board member/consultant for AbbVie, Aslan Pharmaceuticals, Arcutis Biotherapeutics, Castle Biosciences, Celldex Therapeutics, Galderma, Genzada Pharmaceuticals, Incyte, Johnson & Johnson, LEO Pharma, Novartis Pharmaceuticals Corporation, Pfizer, Regeneron Pharmaceuticals, and Sanofi. G Michael Lewitt has served as a consultant/speaker/investigator/advisory board member for and/or has received grants from AbbVie, Amgen, Inc., Bristol Myers Squibb, Dermavant Sciences, Inc., DermTech, Eli Lilly, Galderma, LEO Phama, Janssen, Novan, Inc., Pfizer, Orthodermatologics, and UCB Biopharma. Holly Glover has served as a consultant/speaker/investigator/advisory board member of AbbVie, Almirall, Bristol Myers Squibb, Cassiopea, Dermavant Sciences, Inc., Eli Lilly, Galderma, Incyte, Isdin, LEO Pharma, Pfizer, and Sun Pharma. Tomas Chao has served as an advisor and speaker for Dermavant Sciences, Inc. Philip M Brown, David S Rubenstein, and Anna M Tallman, are employees of Dermavant Sciences, Inc., with stock options.

Abstract PS-02

Deucravacitinib in Plaque Psoriasis: 2-Year Laboratory Results From the Phase 3 POETYK PSO Program

Neil J Korman, MD, PhD[1]; Thierry Passeron, MD[2]; Kenneth B Gordon, MD[3]; Yukari Okubo, MD, PhD[4]; Jerry Bagel, MD[5]; Howard Sofen, MD[6]; Richard B Warren, BS, MBChB, MRCP, PhD[7]; Neal Bhatia, MD[8]; Lynda Spelman, MD[9]; Kevin Winthrop, MD, MPH[10]; Lauren Hippeli, MS[11]; Renata M Kisa, MD[11]; Subhashis Banerjee, MD[11]; Diamant Thaçi, MD, PhD[12]

[1]Case Western Reserve University, University Hospitals of Cleveland, Cleveland, OH, USA; [2]Côte d'Azur University, University Hospital of Nice, Nice, France; [3]Medical College of Wisconsin, Milwaukee, WI, USA; [4]Tokyo Medical University, Tokyo, Japan; [5]East Windsor, NJ, USA; [6]UCLA School of Medicine and Dermatology Research Associates, Los Angeles, CA, USA; [7]Dermatology Centre, Northern Care Alliance NHS Foundation Trust, NIHR Manchester Biomedical Research Centre, Manchester University NHS Foundation Trust, Manchester Academic Health Science Centre, Manchester, UK; [8]Therapeutics Clinical Research, San Diego, CA, USA; [9]Veracity Clinical Research, Brisbane, QLD, Australia; [10]Oregon Health & Science University, Portland, OR, USA; [11]Bristol Myers Squibb, Princeton, NJ, USA; [12]Institute and Comprehensive Center for Inflammation Medicine, University of Lübeck, Lübeck, Germany

BACKGROUND: Deucravacitinib, an oral, selective, TYK2 inhibitor, is approved in the US, EU, and other countries for the treatment of adults with moderate to severe plaque psoriasis who are candidates for systemic therapy. Deucravacitinib was significantly more efficacious than placebo or apremilast and well tolerated in patients with moderate to severe plaque psoriasis in the phase 3 POETYK PSO-1 and PSO-2 trials. Patients completing PSO-1 and PSO-2 could enroll in the ongoing open-label, POETYK long-term extension (LTE) trial.

OBJECTIVES: To examine whether the signature changes in blood laboratory parameters seen with Janus kinase (JAK) 1,2,3 inhibitors were also seen with deucravacitinib treatment.

METHODS: POETYK PSO-1 (NCT03624127) and PSO-2 (NCT03611751) were 52-week, double-blind trials that randomized patients with moderate to severe plaque psoriasis 1:2:1 to oral placebo, deucravacitinib 6 mg once daily (QD), or apremilast 30 mg twice daily. Patients receiving placebo switched to deucravacitinib at Week 16, and patients receiving apremilast who failed to achieve PASI 50 (PSO-1) or PASI 75 (PSO-2) at Week 24 switched to deucravacitinib. At Week 52, all eligible patients enrolled in the LTE and received open-label deucravacitinib 6 mg QD. Changes from baseline in hematologic parameters (lymphocytes,

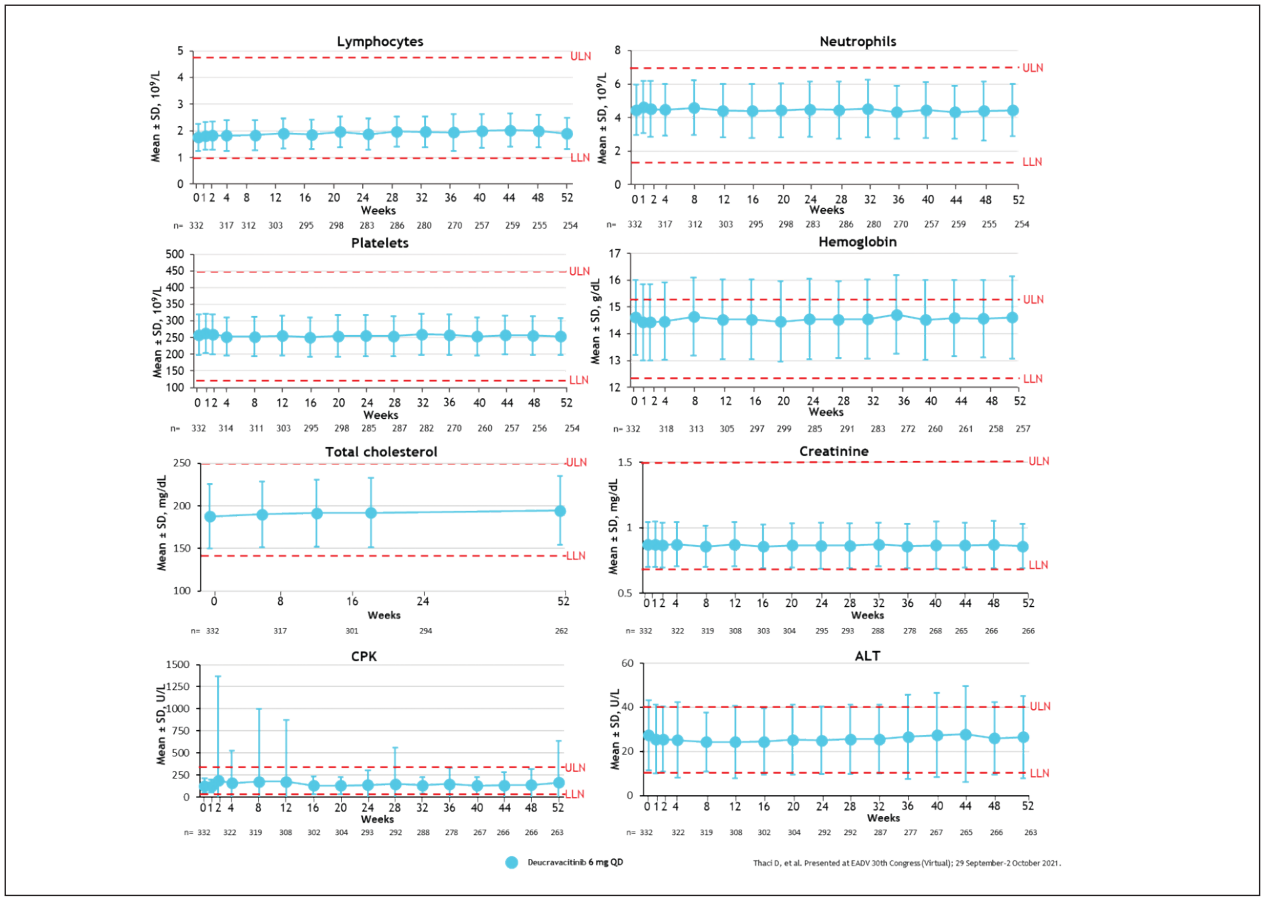

FIGURE. Hematologic, lipid, and chemistry parameters in patients receiving deucravaitinib in POETYK PSO-1 (Week 0-52)

neutrophils, platelets, hemoglobin) and lipid and chemistry parameters (cholesterol, creatinine, CPK, ALT) impacted by JAK1,2,3 inhibitors were assessed through Week 100. CTCAE grade ≥3 laboratory abnormalities and treatment discontinuations due to laboratory abnormalities were also evaluated.

RESULTS: 1519 patients received ≥1 deucravacitinib dose in PSO-1, PSO-2, and/or the LTE through the cutoff date (10/1/2021). In total, 1179 (77.6%) and 584 (38.4%) patients had ≥52 and ≥104 weeks, respectively, of continuous deucravacitinib exposure at the cutoff date; median duration of exposure was 682.0 days (97 weeks). Consistent with 52-week observations from PSO-1 (Figure; Thaçi D, et al. EADV 2021), no trends for clinically meaningful changes from baseline were observed from Weeks 0-52 or in the LTE. Grade 3 or 4 abnormalities over 100 weeks of deucravacitinib treatment were rare; incidence rates were comparable with placebo and apremilast through Week 52, and no increases were seen in the LTE. Two patients discontinued deucravacitinib due to laboratory abnormalities (1 lymphopenia and 1 abnormal hepatic function).

CONCLUSIONS: No trends for clinically meaningful changes from baseline were observed with deucravacitinib treatment in hematologic, lipid, or chemistry parameters, including signature laboratory changes associated with JAK1,2,3 inhibitors, for up to 100 weeks. Treatment discontinuations and grade 3 or 4 laboratory abnormalities were rare and consistent with those in the parent studies and the incidence rates seen with placebo and apremilast. These results suggest that laboratory monitoring is not warranted with deucravacitinib treatment.

ACKNOWLEDGMENTS: These clinical trials were sponsored by Bristol Myers Squibb. Writing and editorial assistance was provided by Jieming Fang, of Peloton Advantage, LLC, an OPEN Health company, funded by Bristol Myers Squibb.

DISCLOSURES: NJK: Advisory board, consulting fees: AbbVie, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Eli Lilly, Janssen, Leo Pharma, Novartis, Principia, Regeneron, Sanofi Genzyme, Sun Pharma, and UCB; Grant support/principal investigator: AbbVie, Amgen, Argenx, Bristol Myers Squibb, Celgene, Chemocentryx, Eli Lilly, Galderma, Kyowa Hakko Kirin, Leo Pharma, Menlo, Principia, Prothena, Rhizen, Syntimmune, Trevi, and XBiotech; Speaker: AbbVie, Eli Lilly, Janssen, Novartis, Regeneron, and Sanofi Genzyme.TP: Advisory board and consulting fees: AbbVie, Almirall, Amgen, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Eli Lilly, Galderma, Incyte, Janssen, Leo Pharma, Novartis, Pfizer, Sanofi Genzyme, Sun Pharma, and UCB. KBG: Grant support and consulting fees: AbbVie, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Eli Lilly, Janssen, Novartis, and UCB; Consulting fees: Almirall, Amgen, Dermira, Leo Pharma, Pfizer, and Sun Pharma. YO: Research grants: Eisai, Maruho, Shiseido, and Torii; Current consulting/advisory board agreements: AbbVie, Amgen, Boehringer Ingelheim, Bristol Myers Squibb, Eli Lilly, Janssen, and Sun Pharma; Speakers bureau: AbbVie, Amgen, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Eisai, Eli Lilly, Janssen Pharma, Jimro, Kyowa Kirin, Leo Pharma, Maruho, Novartis, Pfizer, Sanofi, Sun Pharma, Taiho, Tanabe-Mitsubishi, Torii, and UCB; Clinical trials: AbbVie, Amgen, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Eli Lilly, Janssen, Leo Pharma, Maruho, Pfizer, Sun Pharma, and UCB. JB: Research funds payable to the Psoriasis Treatment Centre of New Jersey: AbbVie, Amgen, Arcutis, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, CorEvitas' (Corrona) Psoriasis Registry, Dermavant, Dermira/UCB, Eli Lilly, Glenmark, Janssen Biotech, Kadmon, Leo Pharma, Lycera, Menlo Therapeutics, Novartis, Pfizer, Regeneron, Sun Pharma, Taro, and Valeant; Consultant: AbbVie, Amgen, Celgene, Eli Lilly, Janssen Biotech, Novartis, Sun Pharma, and Valeant; Speaker: AbbVie, Celgene, Eli Lilly, Janssen Biotech, and Novartis. HS: Clinical Investigator: AbbVie, Amgen, Boehringer Ingelheim, Bristol Myers Squibb, Eli Lilly, Janssen, Leo Pharma, Novartis, and Sun Pharma. RBW: Research grants: AbbVie, Almirall, Amgen, Celgene, Eli Lilly, Janssen, Leo Pharma, Novartis, Pfizer, and UCB; Consulting fees: AbbVie, Almirall, Amgen, Biogen, Boehringer Ingelheim, Celgene, DiCE Eli Lilly, Janssen, Leo Pharma, Novartis, Pfizer, Sanofi, UCB, and UNION. NB: Advisor and consultant investigator: AbbVie, Almirall, Arcutis, Arena, Boehringer Ingelheim, Bristol Myers Squibb, Dermavant, InCyte, ISDIN, Johnson & Johnson, Leo Pharma, Lilly, Ortho, Pfizer, Regeneron, Sanofi, Stemline, and Sun Pharma; Investigator: Arcutis, Biofrontera, Boehringer Ingelheim, Bristol Myers Squibb, Dermavant, Galderma, Leo Pharma, Lilly, and Ortho. LS: Consultant, paid investigator, and/or speaker: AbbVie, Amgen, Anacor, Ascend, Astellas, AstraZeneca, Blaze Bioscience, Bristol Myers Squibb, Boehringer Ingelheim, Botanix, Celgene, Dermira, Eli Lilly, Galderma, Genentech, GlaxoSmithKline, Hexima, Janssen, Leo Pharma, Mayne, Medimmune, Merck, Merck-Serono, Novartis, Otsuka, Pfizer, Phosphagenics, Photon MD, Regeneron, Roche, Samumed, Sanofi Genzyme, SHR, Sun Pharma ANZ, Trius, UCB, and Zai Lab. KW: Consulting: AbbVie, AstraZeneca, Bristol Myers Squibb, Eli Lilly, Galapagos, Gilead, GlaxoSmithKline, Novartis, Pfizer, Regeneron, Roche, Sanofi, and Union Chimique Belge (UCB); Research: Bristol Myers Squibb and Pfizer. LH, RMK, and SB: Employee and shareholder: Bristol Myers Squibb. DT: Grant/research support, consultant, scientific advisory board speakers bureau: AbbVie, Almirall, Amgen, Biogen Idec, Boehringer Ingelheim, Bristol Myers Squibb, Eli Lilly, Galapagos, Galderma, Janssen-Cilag, Leo Pharma, Novartis, Pfizer, Regeneron, Roche, Sandoz-Hexal, Sanofi, Target-Solution, and UCB.

Abstract PS-03

Deucravacitinib in Plaque Psoriasis: 3-Year Safety and Efficacy Results From the Phase 3 POETYK PSO-1 and PSO-2 Trials

April W Armstrong, MD, MPH[1]; Mark Lebwohl, MD[2]; Richard B Warren, BS, MBChB, MRCP, PhD[3]; Howard Sofen, MD[4]; Shinichi Imafuku[5]; Mamitaro Ohtsuki, MD, PhD[6]; Lynda Spelman, MD[7]; Thierry Passeron, MD[8]; Kim A Papp, MD, PhD[9]; Renata M Kisa, MD[10]; Victoria Berger, PharmD, RPh[10]; Eleni Vritzali, MD[10]; Kim Hoyt, MS[10]; Matthew J Colombo, PhD[10]; Subhashis Banerjee, MD[10]; Bruce Strober, MD, PhD[11]; Diamant Thaçi, MD, PhD[12]; Andrew Blauvelt, MD, MBA[13]

[1]Keck School of Medicine at University of Southern California, Los Angeles, CA, USA; [2]Icahn School of Medicine at Mount Sinai, New York, NY, USA; [3]Dermatology Centre, Northern Care Alliance NHS Foundation Trust, NIHR Manchester Biomedical Research Centre, Manchester University NHS Foundation Trust, Manchester Academic Health Science Centre, Manchester, UK; [4]University of California Los Angeles School of Medicine and Dermatology Research Associates, Los Angeles, CA, USA; [5]Fukuoka University Faculty of Medicine, Fukuoka, Japan; [6]Jichi Medical University, Tochigi, Japan; [7]Veracity Clinical Research, Brisbane, QLD, Australia; [8]Université Côte d'Azur, University Hospital of Nice, Nice, France; [9]K Papp Clinical Research and Probity Medical Research, Waterloo, and the University of Toronto, Toronto, ON, Canada; [10]Bristol Myers Squibb, Princeton, NJ, USA; [11]Yale University School of Medicine, New Haven, and Central Connecticut Dermatology Research, Cromwell, CT, USA; [12]Institute and Comprehensive Center for Inflammation Medicine, University of Lübeck, Lübeck, Germany; [13]Oregon Medical Research Center, Portland, OR, USA

BACKGROUND: Deucravacitinib, an oral, selective, allosteric TYK2 inhibitor, is approved in the US, EU, and other countries for treatment of adults with moderate to severe plaque psoriasis who are candidates for systemic therapy. Deucravacitinib was superior to placebo and apremilast in the global, 52-week, phase 3 POETYK PSO-1 (NCT03624127) and PSO-2 (NCT03611751) trials in moderate to severe plaque psoriasis. Upon completing the parent trials, patients could enroll in the ongoing POETYK long-term extension (LTE) (NCT04036435) trial. Deucravacitinib-treated patients maintained long-term efficacy through 2 years with no new safety signals vs Year 1.

OBJECTIVES: To report safety and efficacy of deucravacitinib up to 3 years (Week 148) through the cutoff date (6/15/2022).

METHODS: PSO-1 and PSO-2 randomized patients 1:2:1 to oral placebo, deucravacitinib 6 mg once daily (QD), or apremilast twice daily. At Week 52, patients in the LTE received open-label deucravacitinib 6 mg QD. Safety was evaluated in patients receiving ≥1 deucravacitinib dose. Exposure-adjusted incidence rate (EAIR) per 100 person-years (PY) is calculated as 100*(# of patients with an adverse event [AE])/(total exposure time for all patients at risk [time to initial AE occurrence for patients with AE + total exposure time for patients without AE]). Efficacy outcomes included PASI 75, PASI 90, and sPGA 0/1. Efficacy was reported using modified nonresponder imputation (mNRI) in those who received continuous deucravacitinib from Day 1 of the parent trial and enrolled/treated in the LTE. As-observed data and results by treatment failure rule imputation were also analyzed.

RESULTS: 1519 patients received ≥1 deucravacitinib dose; 513 patients received continuous deucravacitinib from Day 1 in PSO-1/PSO-2 and were enrolled/treated in the LTE. Cumulative exposure from parent trial randomization was 3294.3 PY for this analysis. EAIRs/100 PY were similar, or decreased, from the 2- to 3-year cumulative period, respectively, for AEs (154.4, 144.8), serious AEs (SAEs; 6.1, 5.5), discontinuation due to AEs (2.8, 2.4), herpes zoster (0.7, 0.6), malignancies (0.9, 0.9), major adverse cardiovascular events (0.4, 0.3), venous thromboembolism (0.1, 0.1), and deaths (0.4, 0.3). Clinical response rates were maintained at Week 148 by mNRI (PASI 75, 73.2% [95% CI, 68.7%, 77.8%]; PASI 90, 48.1% [95% CI, 43.2%, 53.1%]; sPGA 0/1, 54.1% [95% CI, 49.1%, 59.1%]), with similar results regardless of data imputation method.

CONCLUSIONS: Deucravacitinib demonstrated a consistent safety profile through 3 years with no increases in AE or SAE rates over time and no emergence of new or long-term safety signals. Efficacy was sustained through 3 years in patients treated continuously with deucravacitinib. Since it is important to provide long-term safety for this new class of drugs, these findings provide additional support for deucravacitinib having a consistent safety profile and durable efficacy for up to 3 years of use.

ACKNOWLEDGMENTS: This study was sponsored by Bristol Myers Squibb. Writing and editorial assistance was provided by Julianne Hatfield, PhD, of Peloton Advantage, LLC, an OPEN Health company, funded by Bristol Myers Squibb.

DISCLOSURES: AWA: Research investigator, scientific advisor, and/or speaker: AbbVie, Almirall, Arcutis, ASLAN, Beiersdorf, Boehringer Ingelheim, Bristol Myers Squibb, Dermavant, Dermira, EPI Health, Incyte, Janssen, Leo Pharma, Lilly, Mindera Health, Nimbus, Novartis, Ortho Dermatologics, Pfizer, Regeneron, Sanofi, Sun Pharma, and UCB. ML: Research funds on behalf of Mount Sinai: AbbVie, Amgen, Arcutis, Avotres, Boehringer Ingelheim, Cara Therapeutics, Dermavant, Eli Lilly, Incyte, Janssen, Ortho Dermatologics, Regeneron, and UCB; Consultant: Almirall, AltruBio, AnaptysBio, Arcutis, Avotres, Boehringer Ingelheim, Brickell Biotech, Bristol Myers Squibb, Castle Biosciences, Celltrion, CorEvitas Psoriasis Registry, Dermavant, EPI Health, Evommune, Forte Biosciences, Galderma, Genentech, Incyte, Leo Pharma, Meiji Seika Pharma, Mindera Health, Pfizer, Seanergy, Strata, Trevi, and Verrica. RBW: Research grants: AbbVie, Almirall, Amgen, Celgene, Eli Lilly, Janssen, Leo Pharma, Novartis, Pfizer, and UCB; Consulting fees: AbbVie, Almirall, Amgen, Astellas, Boehringer Ingelheim, Celgene, DICE Therapeutics, Eli Lilly, GlaxoSmithKline, Janssen, Leo Pharma, Novartis, Pfizer, Sanofi, UCB, and UNION Therapeutics. HS: Clinical investigator: AbbVie, Amgen, Boehringer Ingelheim, Bristol Myers Squibb, Eli Lilly, Janssen, Leo Pharma, Novartis, and Sun Pharma. SI: Grants and personal fees: AbbVie, Eisai, Janssen, Kyowa Kirin, Leo Pharma, Maruho, Sun Pharma, Taiho Yakuhin, Tanabe Mitsubishi, and Torii Yakuhin; Personal fees: Amgen (Celgene), Boehringer Ingelheim, Bristol Myers Squibb, Daiichi Sankyo, Eli Lilly, GlaxoSmithKline, Novartis, and UCB. MO: Honoraria and/or research grants: AbbVie, Amgen, Boehringer Ingelheim, Bristol Myers Squibb,

Celgene, Eisai, Eli Lilly, Janssen, Kyowa Kirin, Leo Pharma, Maruho, Mitsubishi Tanabe Pharma, Nichi-Iko, Nippon Kayaku, Novartis, Pfizer, Sanofi, Sun Pharma, Taiho Pharmaceutical, Torii Pharmaceutical, and UCB. LS: Consultant, paid investigator, and/or speaker: AbbVie, Amgen, Anacor, Ascend, Astellas, AstraZeneca, Blaze Bioscience, Boehringer Ingelheim, Botanix, Bristol Myers Squibb, Celgene, Dermira, Eli Lilly, Galderma, Genentech, GlaxoSmithKline, Hexima, Janssen, Leo Pharma, Mayne Pharma, MedImmune, Merck, Merck-Serono, Novartis, Otsuka, Pfizer, Phosphagenics, Photon MD, Regeneron, Roche, Samumed, Sanofi Genzyme, SHR Pharmacy, Sun Pharma ANZ, Trius, UCB, and Zai Lab. TP: Advisory board and consulting fees: AbbVie, Almirall, Amgen, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Eli Lilly, Galderma, Incyte, Janssen, Leo Pharma, Novartis, Pfizer, Sanofi Genzyme, Sun Pharma, and UCB. KAP: Consultant: AbbVie, Acelyrin, Akros, Amgen, Aralez, Arcutis, Avillion, Bausch Health/Valeant, Boehringer Ingelheim, Bristol Myers Squibb, Can-Fite Biopharma, Celgene, Celltrion, Coherus, Dermavant, Dermira, DICE Therapeutics, Dow Pharma, Eli Lilly, Evelo Biosciences, Forbion, Galderma, Incyte, Janssen, Kyowa Kirin, Leo Pharma, Meiji Seika Pharma, Merck, Mitsubishi Pharma, Novartis, Pfizer, Regeneron, Reistone, Roche, Sanofi Aventis/Genzyme, Sandoz, Sun Pharma, Takeda, UCB, vTv Therapeutics, and Xencor; Speakers bureau: AbbVie, Amgen, Bausch Health/Valeant, Celgene, Eli Lilly, Galderma, Incyte, Janssen, Kyowa Kirin, Leo Pharma, Merck, Novartis, Pfizer, and Sanofi Genzyme; Clinical research grants: AbbVie, Akros, Amgen, Anacor, Arcutis, Avillion, Bausch Health/Valeant, Boehringer Ingelheim, Bristol Myers Squibb, Can-Fite Biopharma, Celgene, Coherus BioSciences, Dermavant, Dermira, DICE Therapeutics, Dow Pharma, Eli Lilly, Evelo Biosciences, Galderma, Gilead, GlaxoSmithKline, Incyte, Janssen, Kyowa Kirin, Leo Pharma, Merck, Novartis, Pfizer, Regeneron, Roche, Sanofi Genzyme, Sun Pharma, Takeda, and UCB; Honoraria: AbbVie, Acelyrin, Akros, Amgen, Aralez, Bausch Health/Valeant, Boehringer Ingelheim, Celgene, Celltrion, Coherus BioSciences, Dermavant, DICE Therapeutics, Eli Lilly, Forbion, Galderma, Janssen, Kyowa Kirin, Leo Pharma, Meiji Seika Pharma, Merck, Mitsubishi Pharma, Novartis, Pfizer, Reistone, Sanofi Genzyme, Sandoz, Sun Pharma, Takeda, UCB, vTv Therapeutics, and Xencor; Scientific officer: Akros, Anacor, Arcutis, DICE Therapeutics, and Kyowa Kirin; Steering committees: AbbVie, Amgen, Bausch Health/Valeant, Boehringer Ingelheim, Celgene, Eli Lilly, Janssen, Kyowa Kirin, Merck, Novartis, Pfizer, Regeneron, Reistone, and Sanofi Genzyme; Advisory boards: AbbVie, Amgen, Bausch Health/Valeant, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, DICE Therapeutics, Dow Pharma, Eli Lilly, Galderma, Janssen, Merck, Novartis, Pfizer, Regeneron, Sanofi Genzyme, Sun Pharma, and UCB. RMK, VB, EV, MJC, and SB: Employees and shareholders: Bristol Myers Squibb. KH: Consultant: Bristol Myers Squibb. BS: Consultant (honoraria): AbbVie, Almirall, Amgen, Arcutis, Arena, Aristea, Asana, Boehringer Ingelheim, Bristol Myers Squibb, Connect Biopharma, Dermavant, Eli Lilly, Equillium, GlaxoSmithKline, Immunic Therapeutics, Janssen, Leo Pharma, Maruho, Meiji Seika Pharma, Mindera Health, Novartis, Ortho Dermatologics, Pfizer, Regeneron, Sanofi Genzyme, Sun Pharma, UCB, Ventyx Biosciences, and vTv Therapeutics; Speaker: AbbVie, Eli Lilly, Janssen, and Sanofi Genzyme; Co-scientific director (consulting fee): CorEvitas' (Corrona) Psoriasis Registry; Investigator: AbbVie, Cara Therapeutics, CorEvitas' (Corrona) Psoriasis Registry, Dermavant, Dermira, and Novartis. DT: Research support and principal investigator (clinical trials funds to intitution): AbbVie, Almirall, Amgen, Biogen Idec, Bristol Myers Squibb , Boehringer Ingelheim, Eli Lilly, Galderma, GlaxoSmithKline, Janssen-Cilag, Leo Pharma, Merck Sharp & Dohme, Novartis, Pfizer, Regeneron, Roche, Sandoz-Hexal, Sanofi, and UCB; Consultant: AbbVie, Almirall, Boehringer Ingelheim, Bristol Myers Squibb, Galapagos, Leo Pharma, Novartis, Pfizer, and UCB; Lecturer: AbbVie, Almirall, Amgen, Boehringer Ingelheim, Bristol Myers Squibb, Janssen, Eli Lilly, Leo Pharma, Merck Sharp & Dohme, Novartis, Pfizer, Roche-Posay, Sandoz-Hexal, Sanofi, Target RWE, and UCB; Scientific advisory board: AbbVie, Amgen, Bristol Myers Squibb, Boehringer Ingelheim, Eli Lilly, Janssen-Cilag, Leo Pharma, Morphosis, Merck Sharp & Dohme, Novartis, Pfizer, Sanofi, and UCB. AB: Speaker (with honoraria): AbbVie, Bristol Myers Squibb, Eli Lilly, Pfizer, Regeneron, and Sanofi; Scientific adviser (with honoraria): AbbVie, Abcentra, Aclaris, Affibody, Aligos, Almirall, Alumis, Amgen, AnaptysBio, Apogee, Arcutis, Arena, Aslan, Athenex, Bluefin Biomedicine, Boehringer Ingelheim, Bristol Myers Squibb, Cara Therapeutics, CTI BioPharma, Dermavant, EcoR1, Eli Lilly, Escient, Evelo Biosciences, Evommune, Forte Biosciences, Galderma, HighlightII Pharma, Incyte, InnoventBio, Janssen, Landos, Leo Pharma, Lipidio, Merck, Nektar, Novartis, Pfizer, Rani, Rapt, Regeneron, Sanofi Genzyme, Spherix Global Insights, Sun Pharma, Takeda, TLL Pharmaceutical, TrialSpark, UCB, UNION Therapeutics, Ventyx Biosciences, Vibliome, and Xencor; Clinical study investigator (clinical study funds received by institution): AbbVie, Acelyrin, Allakos, Almirall, Alumis, Amgen, Arcutis, Athenex, Boehringer Ingelheim, Bristol Myers Squibb, Concert, Dermavant, Eli Lilly, Evelo Biosciences, Evommune, Galderma, Incyte, Janssen, Leo Pharma, Merck, Novartis, Pfizer, Regeneron, Sanofi, Sun Pharma, UCB, and Ventyx Biosciences.

Abstract PS-04

The Psoriasis Study of Health Outcomes (PSoHO) in Biologic-Naïve and -Experienced Patients: A *Post Hoc* Analysis of Patients Receiving Treatment According to US Labels

Saakshi Khattri, MD[1]; Melinda Gooderham, MD[2]; Adam Reich, PhD[3]; Charles Lynde, MD[4]; William Malatestinic, PharmD, MBA[5]; Catherine Reed, PhD[5]; Alan Brnabic, MSc[5]; Meghan Feely, MD[1,5]; Gaia Gallo, MD[5]; Andreas Pinter, MD[6]; Wenda R Zick, MD[5] (non-author presenter)

[1]Mount Sinai Hospital, New York, USA; [2]SKiN Centre for Dermatology, Peterborough, Canada; [3]University of Rzeszów, Rzeszów, Poland; [4]University of Toronto, Toronto, Canada; [5]Eli Lilly and Company, Indianapolis, USA; [6]University Hospital Frankfurt, Frankfurt am Main, Germany

BACKGROUND: In the international, non-US, observational Psoriasis Study of Health Outcomes (PSoHO), 71.4% of patients with moderate to severe psoriasis (PsO) receiving anti-IL-17A biologics vs. 58.6% of patients treated with other

biologics achieved ≥90% improvement in Psoriasis Area and Severity Index score (PASI90) and/or static Physician Global Assessment (sPGA) score 0/1 at week (Wk) 12.

OBJECTIVES: This *post hoc* analysis evaluates the percentage of bio-naïve and bio-experienced patients with ≥PASI90 and/or sPGA(0/1) at Wk12 who received FDA-approved dosing by treatment cohort (IL-17A cohort [ixekizumab and secukinumab] and other biologics cohort [treatments, including biosimilars, with ≥50 patients; ustekinumab, brodalumab, adalimumab, guselkumab, risankizumab, tildrakizumab]).

METHODS: Patients ≥18 years with PsO for ≥6 months initiating (bio-naïve, N=1127)/switching (bio-experienced, N=645) biologics were eligible. All analyses are descriptive with non-responder imputation.

RESULTS: In this study 60% of patients were men. Mean age (years) was 44.2 and 47.3, and a psoriatic arthritis diagnosis was observed in 16.3% and 35.3% for bio-naïve and bio-experienced patients, respectively. Responses ≥PASI90 and/or sPGA0/1 were reported in 77% of patients treated with an anti-IL-17A (ixekizumab 79%, secukinumab 70%) and 61% with other biologics (ustekinumab 51%, brodalumab 71%, adalimumab 57%, guselkumab 70%, risankizumab 67%, tildrakizumab 63%) among bio-naïve patients, and 65% of patients treated with an anti-IL-17A (ixekizumab 68%, secukinumab 59%) and 56% with other biologics (ustekinumab 58%, brodalumab 64%, adalimumab 61%, guselkumab 50%, risankizumab 64%, tildrakizumab 50%) among bio-experienced patients.

CONCLUSIONS: Patients treated with FDA-approved dosing of anti-IL-17A biologics reported improvements at Wk12 in a real-world setting, with bio-experienced patients differing in responsiveness to bio-naïve patients across treatment cohorts.

ACKNOWLEDGMENTS: Previously presented at the American Academy of Dermatology - 81st Annual Meeting. Funded by Eli Lilly and Company.

DISCLOSURES: S Khattri has worked as a consultant and/or been an investigator and/or served on the speaker's bureau for: AbbVie, Bristol Myers Squibb, Eli Lilly and Company, LEO Pharma, Pfizer, Regeneron, Sanofi, and UCB Pharma; M Gooderham has been an investigator, speaker, and/or advisor for: AbbVie, Akros Pharma, Amgen, Arcutis, Aristea Therapeutics, Bausch Health, Bristol Myers Squibb, Boehringer Ingelheim, Celgene, Dermavant, Dermira, Eli Lilly and Company, Galderma, GlaxoSmithKline, Incyte Corporation, Janssen, Kyowa Kirin, LEO Pharma, MedImmune, Merck, MoonLake, Nimbus Therapeutics, Novartis, Pfizer, Regeneron, Reistone Biopharma, Roche, Sanofi Genzyme, Sun Pharma, and UCB Pharma; A Reich has worked as a consultant or speaker for: AbbVie, Bioderma, Celgene, Chema-Elektromet, Eli Lilly and Company, Galderma, Janssen, LEO Pharma, Medac, Menlo Therapeutics, Novartis, Pierre Fabre, Sandoz, and Trevi Therapeutics; and has participated as principal investigator or subinvestigator in clinical trials sponsored by: AbbVie, Drug Delivery Solutions, Galderma, Genentech, Janssen, Kymab, LEO Pharma, Menlo Therapeutics, Merck Sharp & Dohme, MetrioPharm, Novartis, Pfizer, and Trevi Therapeutics; C Lynde has been a speaker and/or consultant for: AbbVie, Altius Pharmaceuticals, Amgen, Aralez Bio, Arcutis, Bausch Health, Bayer Pharmaceuticals, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Cipher Pharmaceuticals, Dermavant, Eli Lilly and Company, Fresenius Kabi, GlaxoSmithKline, Innovaderm Research, Intega Skin Sciences, Janssen, Kyowa Kirin, La Roche-Posay, LEO Pharma, L'Oréal, Medexus Pharmaceuticals, Merck, Pediapharm, Procter & Gamble, Regeneron, Roche, Sanofi Genzyme, Sentrex Health Solutions, Teva, Tribute Pharmaceuticals, UCB Pharma, Valeant Pharmaceuticals, Viatris, and Volo Healthcare; and principal investigator for: AbbVie, Amgen, Aralez Bio, Arcutis, Bausch Health, Bayer Pharmaceuticals, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Cipher, Dermavant, Eli Lilly and Company, GlaxoSmithKline, Innovaderm Research, Janssen, Kyowa Kirin, LEO Pharma, L'Oréal, Merck, Pediapharm, Regeneron, Roche, Sanofi Genzyme, Tribute Pharmaceuticals, UCB Pharma, and Valeant Pharmaceuticals; W Malatestinic, C Reed, A Brnabic, G Gallo and WR Zick are employees and/or shareholders of: Eli Lilly and Company; M Feely is an associate staff member at: Mount Sinai Hospital; is a current employee and shareholder of: Eli Lilly and Company; has received consulting, travel, or speaker fees from: American Academy of Dermatology, Aerolase, Castle Biosciences, CeraVe - L'Oréal, DREAM USA, Galderma Aesthetics, Glow Recipe, La Roche-Posay - L'Oréal, Revian, Sonoma Pharmaceuticals, Sun Pharma, and Suneva Medical; A Pinter has served as an investigator and/or speaker and/or advisor for: AbbVie, Almirall Hermal, Amgen, Biogen, BioNTec, Boehringer Ingelheim, Celgene, Eli Lilly and Company, Galderma, GlaxoSmithKline, Hexal, Janssen, LEO Pharma, MC2 Therapeutics, Medac, Merck Serono, Merck Sharp & Dohme, Mitsubishi Tanabe Pharma, Novartis, Pascoe Natural Healthcare, Pfizer, Regeneron, Roche, Sandoz, Sanofi Genzyme, Schering-Plough, Tigercat Pharma, and UCB Pharma

Abstract PS-05

Ixekizumab Reduces IL-17 and IL-23 Pathway Genes More Rapidly Than Guselkumab: 4-Week Results from IXORA-R

Sandra Garcet, PhD[1]; Lam C Tsoi, PhD[2]; Andrew Blauvelt, MD, MBA[3]; Kim A Papp, MD, PhD[4]; Venkatesh Krishnan, MSc, PhD[5]; Bruce Konicek, MS[5]; Ernst R Dow, PhD[5]; David C Gemperline, PhD[5]; Hany Elmaraghy, MD[5]; James Krueger, MD, PhD[1]; Johann E Gudjonsson, MD, PhD[2]; Robert J Mourey, MD, PhD[5] (non-author presenter)

[1]Rockefeller University Hospital, New York, NY, USA; [2]Department of Dermatology, University of Michigan Medical School, Ann Arbor, MI, USA; [3]Oregon Medical Research Center, Portland, Oregon, USA; [4]Probity Medical Research, Waterloo, Ontario, Canada; [5]Eli Lilly and Company, Indianapolis, IN, USA

BACKGROUND: Blockade of interleukin (IL)-17 and IL-23 inflammatory pathways by ixekizumab (IXE) and guselkumab (GUS) are highly effective treatments for plaque psoriasis.

OBJECTIVES: We compared the early effects of IXE and GUS on psoriasis pathway genes in lesions between baseline and weeks 1, 2, and 4.

METHODS: In IXORA-R (NCT03573323), adults with moderate to severe psoriasis received approved dosing of IXE or

GUS. A total of 54 patients (32 IXE, 22 GUS) were included in the RNA sequencing (RNAseq) analysis. Gene expression was analyzed for patients treated with IXE versus GUS and a separate cohort of healthy controls (N=26).

RESULTS: Treatment effect, from baseline transcriptome genes, was observed for IXE at weeks 1 (14%), 2 (31%), and 4 (48%), but was only observed for GUS at week 4 (8%). Expression of several highly up-regulated genes were modulated with both treatments at week 4 (S100A7, S100A8, S100A9, S100A12, IL36A, IL36G, IL19, PI3, and KRT16), with a fold-change decrease with IXE at least 5-times greater than with GUS. Average percent improvement for transcriptome genes was ~50% with IXE versus ~25% with GUS at week 4, which was also reflected in the IL-17-centric pathway analyses. GUS results at week 4 were similar to IXE week 1 outcomes.

CONCLUSIONS: When measured with RNAseq, transcriptomic changes were earlier and more robustly dampened with IXE compared with GUS, primarily in psoriasis-centric pathways including the IL-17/IL-23 signaling pathway. These results within the first 4 weeks support the clinical observation of faster psoriasis resolution in IXE-treated patients compared to GUS.

ACKNOWLEDGMENTS: Previously presented at the American Academy of Dermatology - 81st Annual Meeting. Funded by Eli Lilly and Company.

DISCLOSURES: S Garcet, LC Tsoi, and J Krueger have no interests to declare; A Blauvelt has served as a speaker (received honoraria) for: AbbVie, Bristol Myers Squibb, Eli Lilly and Company, Pfizer, Regeneron, and Sanofi; has served as a scientific adviser (received honoraria) for: AbbVie, Abcentra, Affibody, Aligos Therapeutics, Almirall, Alumis, Amgen, AnaptysBio, Arcutis, Arena Pharmaceuticals, ASLAN Pharmaceuticals, Athenex, Bluefin, Boehringer Ingelheim, Bristol Myers Squibb, Cara Therapeutics, Dermavant, EcoR1 Capital, Eli Lilly and Company, Escient Pharmaceuticals, Evelo Biosciences, Evommune, Forte Biosciences, Galderma, HighlightII Pharma, Incyte Corporation, Innovent Bio, Janssen, Landos Biopharma, LEO Pharma, Merck, Novartis, Pfizer, Rani Therapeutics, RAPT Therapeutics, Regeneron, Sanofi Genzyme, Spherix Global Insights, Sun Pharma, TLL Pharmaceutical, TrialSpark, UCB Pharma, Vibliome Therapeutics, and Xencor; and has acted as a clinical study investigator (institution has received clinical study funds) for: AbbVie, ACELYRIN, Almirall, Alumis, Amgen, Arcutis, Athenex, Boehringer Ingelheim, Bristol Myers Squibb, Concert Pharmaceuticals, Dermavant, Eli Lilly and Company, Evelo Biosciences, Evommune, Galderma, Incyte Corporation, Janssen, LEO Pharma, Merck, Novartis, Pfizer, Regeneron, Sun Pharma, and UCB Pharma; KA Papp has served as a speaker and/or advisor for and/or has received grant and/or research support from: AbbVie, Akros Pharma, Amgen, Anacor Pharmaceuticals, Arcutis, Astellas, AstraZeneca, Baxalta, Baxter International, Boehringer Ingelheim, Bristol Myers Squibb, Can-Fite BioPharma, Coherus BioSciences, Dermira, Dow Pharmaceutical Sciences, Eli Lilly and Company, Forward Pharma, Galderma, Genentech, Gilead Sciences, GlaxoSmithKline, InflaRx, Janssen, Kyowa Hakko Kirin, LEO Pharma, MedImmune, Meiji Seika Pharma, Merck Serono, Merck Sharp & Dohme, Mitsubishi Tanabe Pharma, Novartis, Pfizer, PRCL Research, Regeneron, Roche, Sanofi-Aventis/Genzyme, Takeda, UCB Pharma, and Valeant Pharmaceuticals/Bausch Health; V Krishnan, B Konicek, ER Dow, DC Gemperline, H Elmaraghy and RJ Mourey are employees and shareholders of: Eli Lilly and Company; JE Gudjonsson has served as a consultant to: AbbVie, Almirall, Bristol Myers Squibb, Eli Lilly and Company, Galderma, Novartis, Pfizer, and Sanofi; and has received research support from: Almirall, Bristol Myers Squibb/Celgene, Galderma, Janssen, Novartis, Pfizer, Prometheus Biosciences, and Timber Pharmaceuticals.

Abstract PS-06

Real-World Effectiveness and Safety in a Phase 4 Study of Tildrakizumab in Patients With Moderate to Severe Plaque Psoriasis

Neal Bhatia, MD[1]; J Gabriel Vasquez, MD[2]; Brad Schenkel, MS[3]; Ranga Gogineni, PhD[3]; Jayme Heim, MSN, FNP-BC[2]

[1]Therapeutics Clinical Research, San Diego, CA, USA; [2]West Michigan Dermatology, Grandville, MI, USA; [3]Sun Pharmaceutical Industries, Inc., Princeton, NJ, USA

BACKGROUND: Tildrakizumab is an anti–interleukin-23p19 monoclonal antibody approved for the treatment of adults with moderate to severe plaque psoriasis.

OBJECTIVES: This analysis assesses the effectiveness and safety of tildrakizumab from a real-world study of patients with moderate to severe plaque psoriasis.

METHODS: In this real-world Phase 4 study (NCT03718299), adults with moderate to severe plaque psoriasis received tildrakizumab 100 mg at Week 0 (baseline), Week 4, and every 12 weeks thereafter through Week 52. Effectiveness was assessed from Psoriasis Area and Severity Index (PASI) score through Week 52 and from the percentage of body surface area (BSA) affected and static Physician Global Assessment (sPGA) through Week 64. Safety was assessed from adverse events (AEs) through Week 64. Missing data were not imputed.

RESULTS: Of 55 patients enrolled, 45 completed the study. The mean (standard deviation [SD]) PASI score was 11.6 (7.1) at baseline and decreased significantly (P <0.001) to 6.5 (5.1; mean percentage improvement, 45.3%) at Week 4 and 1.6 (2.6; mean percentage improvement, 84.7%) at Week 52; Week 52 PASI 75, PASI 90, and PASI 100 response rates were 87.0%, 56.5%, and 32.6%, respectively. Mean (SD) BSA decreased significantly from 14.5% (11.5%) at baseline to 11.6% (10.6%) at Week 4 and 2.1% (3.6%) at Week 64, mean (SD) sPGA from 3.2 (0.6) at baseline to 2.1 (0.7) at Week 4 and 1.0 (1.0) at Week 64, and mean (SD) BSA x sPGA from 47.0 (41.5) at baseline to 26.0 (26.2) at Week 4 and 4.6 (9.4) at Week 64 (all P <0.001 at Week 4 and Week 64). Serious AEs were infrequent. No treatment-emergent AEs were considered related to tildrakizumab.

CONCLUSIONS: These real-world data demonstrated the significant effectiveness of tildrakizumab beginning as early as Week 4 and showed a favorable safety profile in patients with moderate to severe plaque psoriasis.

ACKNOWLEDGMENTS: The study and medical writing support for the abstract were funded by Sun Pharma.

DISCLOSURES: NB is an advisor, consultant, and investigator for AbbVie, Almirall, Arcutis, Beiersdorf, Biofrontera, Boehringer Ingelheim, Bristol Myers Squibb, Cara, Dermavant, Eli Lilly, EPI Health, Ferndale, Galderma, InCyte, ISDIN, Johnson & Johnson, La Roche-Posay, LEO Pharma, Ortho Dermatologics, Pfizer, Regeneron, Sanofi, Sun Pharma, and Verrica Pharmaceuticals, Inc. JGV reports nothing to disclose. BS and RG are employees of Sun Pharmaceutical Industries, Inc. JH has been a speaker, advisor, and consultant for AbbVie, Amgen, Boehringer Ingelheim, Celgene, Eli Lilly, Janssen, and Novartis; an advisor for Galderma, Mayne, Regeneron, and Sanofi; an advisor and consultant for Ortho Dermatologics; and a speaker and advisor for Beiersdorf, Incyte, LEO Pharma, and Sun Pharma.

Abstract PS-07

Psoriasis-Related Work Productivity Improvement From a Phase 4 Real-World Study of Tildrakizumab in Patients With Moderate to Severe Plaque Psoriasis

Neal Bhatia, MD[1]; Jayme Heim, MSN, FNP-BC[2]; Brad Schenkel, MS[3]; Ranga Gogineni, PhD[3]; J Gabriel Vasquez, MD[2]

[1]Therapeutics Clinical Research, San Diego, CA, USA; [2]West Michigan Dermatology, Grandville, MI, USA; [3]Sun Pharmaceutical Industries, Inc., Princeton, NJ, USA

BACKGROUND: Tildrakizumab is an anti–interleukin-23 p19 monoclonal antibody approved for the treatment of adults with moderate to severe plaque psoriasis.
Objectives: This analysis assesses improvement in work productivity from a real-world study of patients with moderate to severe plaque psoriasis treated with tildrakizumab.
METHODS: This real-world Phase 4 study (NCT03718299) enrolled adult patients with moderate to severe plaque psoriasis. Patients received tildrakizumab 100 mg at Week 0 (baseline), Week 4, and every 12 weeks thereafter through Week 52. Change in work productivity was measured using the Work Productivity and Activity Impairment Questionnaire-Psoriasis (WPAI-PSO) administered at baseline and Weeks 16, 28, 40, 52, and 64, including the absenteeism, presenteeism, total activity impairment (TAI), and total work productivity impairment (TWPI) domains. Lower scores indicate improved productivity and reduced impairment. Missing data were not imputed.
RESULTS: Of 55 patients enrolled, 31 completed the WPAI-PSO for presenteeism, absenteeism, and TWPI, and 45 completed it for TAI at Week 64. From baseline to Week 64, mean ± standard deviation (SD) domain scores decreased from 20.5 ± 21.7 to 2.6 ± 5.8 (P <0.001) for presenteeism, 29.5 ± 26.6 to 4.4 ± 9.4 (P <0.001) for TAI, and 20.9 ± 22.2 to 2.6 ± 5.8 (P <0.001) for TWPI. The absenteeism domain score (mean ± SD) was 1.1 ± 5.7 at baseline and decreased non-significantly to 0.0 ± 0.0 at Week 64.
CONCLUSIONS: Tildrakizumab treatment significantly improved work productivity in real-world patients with moderate to severe plaque psoriasis. Although the reduction in absenteeism from baseline was not statistically significant, this was likely due to the near-zero baseline value for absenteeism.

ACKNOWLEDGMENTS: The study and medical writing support for this abstract were funded by Sun Pharma.

DISCLOSURES: NB is an advisor, consultant, and investigator for AbbVie, Almirall, Arcutis, Beiersdorf, Biofrontera, Boehringer Ingelheim, Bristol Myers Squibb, Cara, Dermavant, Eli Lilly, EPI Health, Ferndale, Galderma, InCyte, ISDIN, Johnson & Johnson, La Roche-Posay, LEO Pharma, Ortho Dermatologics, Pfizer, Regeneron, Sanofi, Sun Pharma, and Verrica Pharmaceuticals, Inc. JH has been a speaker, advisor, and consultant for AbbVie, Amgen, Boehringer Ingelheim, Celgene, Eli Lilly, Janssen, and Novartis; an advisor for Galderma, Mayne, Regeneron, and Sanofi; an advisor and consultant for Ortho Dermatologics; and a speaker and advisor for Beiersdorf, Incyte, LEO Pharma, and Sun Pharma. BS and RG are employees of Sun Pharmaceutical Industries, Inc. JGV reports nothing to disclose.

Abstract PS-08

Effect of Spesolimab on Achieving Sustained Disease Remission in Patients With Generalized Pustular Psoriasis: Results From the Effisayil 2 Study

Kenneth B Gordon, MD[1]; Mark G Lebwohl, MD[2]; Jonathan Barker, MD, FRCP, FRCPath[3]; Tsen-Fang Tsai, MD[4]; Joseph F Merola, MD, MMSc, FAAD[5]; Curdin Conrad, MD, PhD[6]; Min Zheng, MD, PhD[7]; Na Hu, PhD[8]; Patrick Hofmann, PhD[9]; Christian Thoma, MD, PhD[9]; Kilian Eyerich, MD, PhD[10]

[1]Medical College of Wisconsin, Milwaukee, WI, USA; [2]Icahn School of Medicine at Mount Sinai, New York, NY, USA; [3]Guy's and St Thomas' NHS Foundation Trust, London, UK; [4]National Taiwan University Hospital and National Taiwan University College of Medicine, Taipei, Taiwan; [5]Harvard Medical School, Brigham and Women's Hospital, Boston, MA, USA; [6]Lausanne University Hospital CHUV and University of Lausanne, Lausanne, Switzerland; [7]Zhejiang University School of Medicine, Zhejiang, China; [8]Boehringer Ingelheim (China) Investment Co. Ltd, Shanghai, China; [9]Boehringer Ingelheim International GmbH, Ingelheim am Rhein, Germany; [10]Medical Center, University of Freiburg, Freiburg im Breisgau, Germany

BACKGROUND: Generalized pustular psoriasis (GPP) is a chronic, rare and potentially life-threatening disease characterized by flares of widespread skin pustulation. Sustained skin clearance is a key treatment objective. Intravenous (IV) spesolimab, an anti-interleukin-36 receptor monoclonal antibody, is approved for GPP flare treatment; however, the optimal dosing and long-term efficacy of subcutaneous (SC) spesolimab treatment in patients with GPP has not yet been reported.
OBJECTIVE: To report the effect of SC spesolimab on achieving sustained disease remission over 48 weeks in Effisayil 2 (NCT04399837), a trial that evaluated the efficacy and safety of SC spesolimab in preventing GPP flares.

METHODS: Patients with a history of GPP were randomized (1:1:1:1) to receive placebo (n=31), low- (n=31, 300 mg loading dose [LD]; 150 mg every 12 weeks [q12w]), medium- (n=31, 600 mg LD; 300 mg q12w) or high-dose (n=30, 600 mg LD; 300 mg every 4 weeks [q4w]) SC spesolimab over 48 weeks. Sustained remission was defined as GPP Physician Global Assessment (GPPGA) total score of 0 or 1 at all visits up to Week 48, or GPPGA total score of 0 or 1 and all GPPGA subscores ≤2 at all visits up to Week 48. Sustained pustular clearance was defined as GPPGA pustulation subscore of 0 at all visits from Week 4 to Week 48. Any use of IV spesolimab or another standard of care for GPP worsening was considered a failure of remission. Missing data were imputed by a sequential logistic regression multiple imputation method. Adjusted risk differences (RD) were calculated by the Mantel–Haenszel type-weighted average of differences.

RESULTS: 31 patients received placebo, and 30 patients received high-dose spesolimab. Compared to placebo, more patients had sustained remission in the high-dose arm using both GPPGA total score 0 or 1 (63.3% vs 29.0%; RD [95% CI] 0.35 [0.10–0.59]), and GPPGA total score 0 or 1 and all GPPGA subscores ≤2 (60.4% vs 29.0%; RD [95% CI] 0.32 [0.07–0.56]). Compared to placebo, more patients in the high-dose arm had sustained pustular clearance over 48 weeks (63.6% vs 25.8%; RD [95% CI] 0.38 [0.14–0.62]).

CONCLUSIONS: Overall, high-dose SC spesolimab q4w is effective for the long-term management of GPP skin symptoms.

ACKNOWLEDGMENTS: The study was supported and funded by Boehringer Ingelheim. The authors meet criteria for authorship as recommended by the International Committee of Medical Journal Editors (ICMJE). The authors did not receive payment related to the development of this abstract. Boehringer Ingelheim was given the opportunity to review the abstract for medical and scientific accuracy, as well as intellectual property considerations. Isabella Goldsbrough, PhD, of Apollo, OPEN Health Communications provided writing, editorial and formatting support, which was contracted and funded by Boehringer Ingelheim. To ensure independent interpretation of clinical study results and enable authors to fulfill their role and obligations under the ICMJE criteria, Boehringer Ingelheim grants all external authors access to clinical study data pertinent to the development of the publication. In adherence with the Boehringer Ingelheim Policy on Transparency and Publication of Clinical Study Data, scientific and medical researchers can request access to clinical study data when it becomes available on Vivli - Center for Global Clinical Research Data, and earliest after publication of the primary manuscript in a peer-reviewed journal, regulatory activities are complete, and other criteria are met. Please visit Medical & Clinical Trials | Clinical Research | MyStudyWindow (https://www.mystudywindow.com/msw/datasharing) for further information.

(Encore: Originally presented at EADV 2023, October 11–14.)

DISCLOSURES: KBG reports grant support and consulting fees from AbbVie, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Eli Lilly, Janssen, Novartis and UCB, and has received consulting fees from Amgen, Almirall, Dermira, LEO Pharma, Pfizer and Sun Pharmaceutical Industries. MGL is an employee of Mount Sinai and has received research funds from AbbVie, Amgen, Arcutis, Avotres, Boehringer Ingelheim, Cara Therapeutics, Dermavant Sciences, Eli Lilly, Incyte, Janssen Research & Development, Ortho Dermatologics, Regeneron and UCB, and is a consultant for Aditum Bio, Almirall, AltruBio, AnaptysBio, Arcutis, Aristea Therapeutics, Avotres, Brickell Biotech, Boehringer Ingelheim, Bristol Myers Squibb, Cara Therapeutics, Castle Biosciences, Celltrion, CorEvitas, Dermavant Sciences, Dr. Reddy, EPI, Evommune, Facilitation of International Dermatology Education, Forte Biosciences, Foundation for Research and Education in Dermatology, Helsinn, Hexima, Incyte, LEO Pharma, Meiji Seika Pharma, Mindera, Pfizer, Seanergy, Strata, Trevi and Verrica. JB declares having attended advisory boards and/or received consulting fees and/or spoken at sponsored symposia and/or received grant funding from AbbVie, Almirall, Amgen, AnaptysBio, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Eli Lilly, Janssen, LEO Pharma, Novartis, Pfizer, Samsung, Sienna, Sun Pharmaceutical Industries and UCB. TFT reports consulting fees from AbbVie, Boehringer Ingelheim, Celgene, Eli Lilly, GSK, Janssen-Cilag, Merck Sharp & Dohme, Novartis International and Pfizer, and honoraria from Sanofi. JFM is a consultant and/or investigator for AbbVie, Amgen, Biogen, Boehringer Ingelheim, Bristol Myers Squibb, Dermavant Sciences, Eli Lilly, Incyte, Janssen, LEO Pharma, Novartis, Pfizer, Sanofi-Regeneron, Sun Pharmaceutical Industries and UCB. CC reports grant support and consulting fees from AbbVie, Actelion, Almirall, Amgen, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Eli Lilly, Incyte, Janssen, LEO Pharma, Merck Sharp & Dohme, Novartis, Pfizer, Samsung, Sanofi and UCB. MZ reports consulting fees from AbbVie, Boehringer Ingelheim, Janssen-Cilag, LEO Pharma China, Novartis, Pfizer, Sun Pharmaceutical Industries and Xian-Janssen. NH, PH and CT are employees of Boehringer Ingelheim. KE declares having attended advisory boards and/or received speaker fees from AbbVie, Almirall, Boehringer Ingelheim, Bristol Myers Squibb, Eli Lilly, Janssen, LEO Pharma, Novartis, Pfizer, Sanofi and UCB.

Abstract PS-09

Effect of Subcutaneous Spesolimab on the Prevention of Generalized Pustular Psoriasis Flares Over 48 Weeks: Subgroup Analyses From the Effisayil 2 Trial

Richard B Warren, MBChB, MRCP, PhD[1,2]; A David Burden, MD, FRCP[3]; Siew Eng Choon, FRCP[4]; Kenneth B Gordon MD[5]; Lluis Puig, MD, PhD[6]; Arash Mostaghimi, MD, MPH, FAAD[7]; Georgios Kokolakis, MD, PhD[8]; Na Hu, PhD[9]; Patrick Hofmann, PhD[10]; Christian Thoma, MD, PhD[10]; Milan Anadkat, MD[11]

[1]Northern Care Alliance NHS Foundation Trust, Manchester, UK; [2]NIHR Manchester Biomedical Research Centre, Manchester, UK; [3]University of Glasgow, Glasgow, UK; [4]Hospital Sultanah Aminah, and Clinical School Johor Bahru, Monash University Malaysia, Malaysia; [5]Medical College of Wisconsin, Milwaukee, WI, USA; [6]Hospital de la Santa Creu i Sant Pau, Barcelona, Spain; [7]Harvard Medical School, Boston, MA, USA; [8]Psoriasis Research and Treatment Center, Charité - Universitätsmedizin Berlin, Berlin, Germany; [9]Boehringer Ingelheim (China) Investment Co. Ltd, Shanghai, China; [10]Boehringer Ingelheim International GmbH, Ingelheim am Rhein, Germany; [11]Washington University School of Medicine, St Louis, MO, USA.

BACKGROUND: Generalized pustular psoriasis (GPP) is characterized by flares of widespread pustulation and erythema that may be fatal. Spesolimab, an anti-interleukin-36 receptor monoclonal antibody, is approved to treat GPP flares. Effisayil 2 trial (NCT04399837) assessed efficacy and safety of spesolimab for prevention of GPP flares over 48 weeks.

OBJECTIVE: To show the efficacy of high-dose subcutaneous (SC) spesolimab for GPP flare prevention in prespecified subgroups in Effisayil 2.

METHODS: Eligible patients were randomized 1:1:1:1 to receive placebo, or low- (300 mg loading dose [LD]; 150 mg every 12 weeks [q12w]), medium- (600 mg LD; 300 mg q12w) or high-dose (600 mg LD; 300 mg every 4 weeks) SC spesolimab over 48 weeks. We assessed the efficacy of high-dose spesolimab versus placebo across prespecified subgroups (including IL36RN mutation, comorbid plaque psoriasis [PsV], and body mass index [BMI] status) for the primary endpoint, time to first GPP flare by Week 48 (defined as a ≥2 GPPGA total score increase from baseline and ≥2 GPPGA pustulation score increase from baseline; subsequent use of rescue SC spesolimab also indicated a GPP flare), using a Cox regression analysis stratified by systemic use of GPP medications at randomization. Key secondary endpoint was proportion of patients with ≥1 GPP flare by Week 48.

RESULTS: 123 patients were randomized (placebo, N=31; high-dose spesolimab, N=30). Hazard ratios (95% CI) for the primary endpoint favored high-dose spesolimab vs placebo in most prespecified subgroups, including: with IL36RN mutation, 0.04 (0.002, 1.152); without IL36RN mutation, 0.41 (0.109, 1.537); PsV absent at baseline, 0.14 (0.031, 0.629); PsV present at baseline, 0.22 (0.025, 1.883); and BMI <25 kg/m2, 0.22 (0.057, 0.816); 25 to <30 kg/m2, 0.12 (0.005, 2.817); and ≥30 kg/m2, 0.23 (0.008, 6.033). For the key secondary endpoint, adjusted risk differences (95% CI) by Week 48 were lower in those receiving high-dose spesolimab vs placebo in these prespecified subgroups: with IL36RN mutation, -0.75 (-1.000, -0.326); without IL36RN mutation, -0.22 (-0.504, 0.074); PsV absent at baseline, -0.41 (-0.672, -0.154); PsV present at baseline, -0.32 (-0.830, 0.191); and across all BMI subgroups.

CONCLUSIONS: Over 48 weeks, high-dose spesolimab was effective at preventing GPP flares irrespective of IL36RN mutation, comorbid PsV and BMI status at baseline.

ACKNOWLEDGMENTS: The study was supported and funded by Boehringer Ingelheim. The authors meet criteria for authorship as recommended by the International Committee of Medical Journal Editors (ICMJE). The authors did not receive payment related to the development of this abstract. Boehringer Ingelheim was given the opportunity to review the abstract for medical and scientific accuracy, as well as intellectual property considerations. Alexander Morrison, MSc, of Apollo, OPEN Health Communications (London, UK), provided writing, editorial and formatting support, which was contracted and funded by Boehringer Ingelheim.

To ensure independent interpretation of clinical study results and enable authors to fulfill their role and obligations under the ICMJE criteria, Boehringer Ingelheim grants all external authors access to clinical study data pertinent to the development of the publication. In adherence with the Boehringer Ingelheim Policy on Transparency and Publication of Clinical Study Data, scientific and medical researchers can request access to clinical study data when it becomes available on Vivli - Center for Global Clinical Research Data, and earliest after publication of the primary manuscript in a peer-reviewed journal, regulatory activities are complete, and other criteria are met. Please visit Medical & Clinical Trials | Clinical Research | MyStudyWindow (https://www.mystudywindow.com/msw/datasharing) for further information.

(Encore: Originally presented at EADV 2023, October 11–14.)

DISCLOSURES: RBW declares receiving research grants from AbbVie, Almirall, Amgen, Celgene, Janssen, Lilly, LEO Pharma, Medac, Novartis, Pfizer, and UCB and consulting fees from AbbVie, Almirall, Amgen, Arena, Astellas, Avillion, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, DiCE, GSK, Janssen, Lilly, LEO Pharma, Medac, Novartis, Pfizer, Sanofi, Sun Pharma, UCB, and UNION. ADB reports consulting fees from AbbVie, Almirall, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Eli Lilly, Janssen, LEO Pharma, Novartis, and UCB; and honoraria from Almirall, Boehringer Ingelheim, Eli Lilly, and Janssen. SEC declares paid activities as an advisor, speaker, or consultant for AbbVie, Boehringer Ingelheim, Eli Lilly, Janssen, LEO Pharma, MSD, Novartis, Pfizer, Sanofi, and UCB. KBG reports grant support and consulting fees from AbbVie, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Eli Lilly, Janssen, Novartis, and UCB; and has received consulting fees from Amgen, Almirall, Dermira, LEO Pharma, Pfizer, and Sun Pharmaceutical Industries. LP has received consultancy/speaker's honoraria from and/or participated in clinical trials sponsored by AbbVie, Almirall, Amgen, Biogen, Boehringer Ingelheim, Bristol Myers Squibb, Eli Lilly, Janssen, LEO Pharma, Novartis, Pfizer, Sandoz, Sanofi, and UCB. AM has received grant support and consulting fees from AbbVie, Boehringer Ingelheim, Eli Lilly, LEO Pharma, Pfizer, Digital Diagnostics, hims, and ACOM. GK Received travel grants or honoraria, or has been a consultant member of advisory boards and speaker bureaus or has served as investigator for AbbVie,

Actelion, Almirall, Amgen, Basilea, Biogen, Boehringer Ingelheim, Bristol-Myers Squibb, Celgene, Hexal-Sandoz, Janssen-Cilag, LEO Pharma, Eli Lilly, MSD, Novartis, Pfizer, Sanofi-Aventis and UCB Pharma. NH, PH and CT are employees of Boehringer Ingelheim. MJA has served as a Consultant and/or Advisor for ImClone, Bristol Myers Squibb, AstraZeneca, Therakos, Aspire Bariatrics, Biogen, Amgen, Veloce, Adgero, Eli Lilly, Abbvie, UCB Biopharma, Innovaderm, Boehringer-Ingelheim, OnQuality, Novocure, Springworks, BioLinq, and Protagonist; has served as a Principal Investigator for Novartis, Boehringer-Ingelheim, Lutris, OnQuality, UCB Biopharma, InflamRx, Eli Lilly, InCyte, Abbvie, Moonlake, AnaptysBio, Hana Biosciences, Xoma, Veloce, Biogen, Xbiotech, Chemocentryx, Moberg, Regeneron, and Phoenecis. NH, PH and CT are employees of Boehringer Ingelheim.

Abstract PS-10

VISIBLE: Guselkumab Demonstrated Skin Clearance at Week 16 in Participants With Moderate to Severe Plaque Psoriasis Across All Skin Tones

Andrew Alexis, MD, MPH[1]; Amy McMichael, MD[2]; Olivia Choi, MD, PhD[3]; Theodore Alkousakis, MD[3]; Tina Bhutani, MD[4]; Adrian Rodriguez, MD[5]; Daphne Chan, PhD, MHEcon[3]; Katelyn Rowland, MS, ARNP[3]; Geeta Yadav, MD[6,7]; Jensen Yeung, MD[7-9]; Laura Park-Wyllie, PhD[10]; Jenny Jeyarajah, PhD[11]; Long-Long Gao, PhD[11]; Chesahna Kindred, MD, MBA, FAAD[12,13]; Pearl Grimes, MD, FAAD[14]; Seemal Desai, MD FAAD[15,16]

[1]Weill Cornell Medicine, New York, NY, USA; [2]Wake Forest School of Medicine, Winston-Salem, NC, USA; [3]Janssen Scientific Affairs, LLC, Horsham, PA, USA; [4]University of California San Francisco Medical Center, San Francisco, CA, USA; [5]Nashville Skin Comprehensive Dermatology Center, Nashville, TN, USA; [6]FACET Dermatology, Toronto, ON, Canada; [7]Women's College Hospital, Toronto, ON, Canada; [8]Sunnybrook Health Sciences Centre, Toronto, ON, Canada; [9]Probity Medical Research, Waterloo, ON, Canada; [10]Janssen Inc., Toronto, ON, Canada; [11]Janssen Research & Development, LLC, Spring House, PA, USA; [12]Kindred Hair & Skin Center, Columbia, MD, USA; [13]Howard University, Washington, DC, USA; [14]The Grimes Center for Medical and Aesthetic Dermatology; Vitiligo and Pigmentation Institute of Southern California, Los Angeles, CA, USA; [15]Innovative Dermatology, Plano, TX, USA; [16]University of Texas Southwestern Medical Center, Dallas, TX, USA

BACKGROUND: VISIBLE is the first-of-its-kind, large-scale, prospective, phase 3b, randomized, double-blind, placebo-controlled study dedicated to participants with moderate to severe plaque psoriasis across all skin tones. Inclusive innovations in VISIBLE intentionally address historical disparities in clinical trials and capture relevant data to enable healthcare professionals to make evidence-based medical decisions for people across all skin tones.

OBJECTIVES: To evaluate the efficacy and safety of guselkumab in the VISIBLE Cohort A study in participants with moderate to severe plaque psoriasis across all skin tones.

METHODS: Participants were randomized (3:1) to receive guselkumab 100 mg or placebo. Investigator Global Assessment (IGA), Psoriasis Area and Severity Index (PASI), and body surface area (BSA) were assessed at Week 16, along with time to PASI 90 (90% or greater improvement in PASI from baseline) response.

RESULTS: Co-primary endpoints of IGA 0/1 and PASI 90 were achieved by significantly greater proportions of participants treated with guselkumab versus placebo (IGA 0/1: 74.0% versus 0%; PASI 90: 57.1% versus 3.8%; both $p<0.001$), as were complete skin clearance endpoints of IGA 0 (32.5% versus 0%; $p<0.001$) and PASI 100 (29.9% versus 0%; $p<0.01$). The median time to achieve PASI 90 response was 13.2 weeks for the guselkumab group (versus not achieved for the placebo group). In the guselkumab versus placebo groups, mean percent improvements from baseline were: BSA, 77.9% versus 0.9% and PASI, 84.5% versus 8.3% (both $p<0.001$), respectively. Overall safety was consistent with the established guselkumab safety profile, no new safety signals were identified.

CONCLUSIONS: After just 3 doses of guselkumab, the majority of participants in VISIBLE, which exclusively enrolled a population across skin tones with moderate to severe plaque psoriasis, achieved significantly clearer skin as assessed by IGA, PASI, and BSA measures.

DISCLOSURES: Andrew Alexis: Investigator and consultant: Almirall, Celgene, Galderma, Leo, Novartis, and Rxl; Investigator: Bristol Myers Squibb, Menlo, and SkinMedica; consultant: Beiersdorf, BioPharmX, Cipla, Dermavent, Unilever, L'Oreal, P&G. Pfizer, Sanofi-Regeneron, Trevi, and Valeant. Amy McMichael: Research, speaking and/or consulting support: Aclaris, Allergan, Bioniz, Cassiopea, Concert Pharmaceuticals, Covance, eResearch Technology, Inc., Galderma, Incyte, Informa Healthcare, Johnson & Johnson, Keranetics, Merck & Co., Inc., Pfizer, Proctor & Gamble, Samumed, and UpToDate. Olivia Choi, Theodore Alkousakis, Daphne Chan, Katelyn Rowland: Employees of Janssen Scientific Affairs, LLC (a subsidiary of Johnson & Johnson), and own Johnson & Johnson stock/stock options. Tina Bhutani: Principal investigator for sponsored trials: AbbVie, Castle, CorEvitas, Dermavant, Galderma, Mindera, and Pfizer; research grant funding: Novartis and Regeneron; advisor: AbbVie, Arcutis, Boehringer Ingelheim, Bristol Myers Squibb, Janssen, Leo, Lilly, Novartis, Pfizer, Sun, and UCB. Adrian O. Rodriguez: Advisor and/or speaker: Arcutis, Dermavent, EPI Health, Janssen, Leo Pharma, Lilly, Novartis, Sciton, Sun, and UCB; owns stock: Strathspey Crown. Geeta Yadav: Speaker, consultant, and/or trialist for and received honoraria: AbbVie, Amgen, Bausch, BMS, Celgene, Galderma, Janssen, Leo, Novartis, Pfizer, Sanofi Genzyme, Sun Pharma, and UCB. Jensen Yeung: Speaker, consultant, and/or trialist for and received honoraria: AbbVie, Amgen, Anacor, Arcutis, Astella, Bausch, Baxalta, Boehringer Ingelheim, BMS, Celgene, Centocor, Coherus, Dermira, Eli Lilly, Forward, Galderma, Janssen, Leo, Medimmune, Novartis, Pfizer, Regeneron, Roche, Sanofi Genzyme, Sun Pharma, Takeda, UCB, and Xenon. Laura Park-Wyllie: Employee of Janssen Inc. and owns stock or stock options in Johnson & Johnson. Jenny Jeyarajah, and Long-Long Gao: Employees of Janssen Research & Development, LLC, (a subsidiary of Johnson & Johnson) and owns Johnson & Johnson and own stock or stock options in Johnson & Johnson. Chesahna Kindred: Honoraria and/or fees: Eli Lilly and Company outside the submitted work; advisory boards for Eli Lilly and Company and UCB; speaker for Selphyl and Aerolase, and the Chair of the

National Medical Association, Dermatology Section. Pearl Grimes: Consultant and/or investigator: AbbVie/Allergan, Clinuvel, Galderma 44 Laboratories, Incyte, LaserOptek, L'Oreal, Procter & Gamble, Pfizer, and SkinBetterScience, Versicolor Technologies. Seemal R. Desai: No conflicts of interest.

Abstract PS-11

Consistent Skin Clearance With Guselkumab Treatment for Up to 5 Years in Patients With Moderate to Severe Psoriasis Irrespective of Baseline Disease Extent or Severity in the VOYAGE 1 and 2 Studies

Linda Stein Gold, MD[1]; Bruce Strober, MD/PhD, FAAD[2,3]; Joseph Merola, MD, MMSc[4]; Alice Gottlieb, MD, PhD[5]; Olivia Choi, MD, PhD[6]; Katelyn Rowland, PhD[6]; Daphne Chan, PhD[6]; Yin You, PhD[7]; Laura Park-Wyllie, PhD[8]; Kim Papp, MD, PhD[9]; Richard Langley, MD, FRCPC[10]; Robert Bissonnette, MD, FRCPC[11]; Kenneth Gordon, MD[12]; April Armstrong, MD, MPH[13]; James Krueger, MD, PhD,[14] Mark Lebwohl, MD[5]

[1]Henry Ford Health System, West Bloomfield, MI, USA; [2]Yale University, New Haven, CT, USA; [3]Central Connecticut Dermatology Research, Cromwell, CT, USA; [4]Brigham and Women's Hospital, Harvard Medical School, Boston, MA, USA; [5]Icahn School of Medicine at Mount Sinai, New York, NY, USA; [6]Janssen Scientific Affairs, LLC, Horsham, PA, USA; [7]Janssen Research & Development, LLC, Spring House, PA, USA; [8]Janssen Inc., Toronto, ON, Canada; [9]Alliance Clinical Trials and Probity Medical Research, Waterloo, ON, Canada and University of Toronto, Toronto, ON, Canada; [10]Dalhousie University, Halifax, Nova Scotia, Canada; [11]Innovaderm Research, Montreal, Quebec, Canada; [12]Medical College of Wisconsin, Milwaukee, WI, USA; [13]Department of Dermatology, University of California, Los Angeles, CA, USA; [14]Laboratory for Investigative Dermatology, The Rockefeller University, New York, NY, USA

BACKGROUND: Guselkumab (GUS) is an interleukin-23p19 subunit inhibitor approved for the treatment of moderate to severe plaque psoriasis (PsO) and active psoriatic arthritis.

OBJECTIVES: This *post hoc* analysis assessed the mean percentage and absolute improvement in Psoriasis Area and Severity Index (PASI) through 5 years of GUS treatment in patients with lower body surface area (BSA) in comparison to extensive BSA involvement, using pooled data from the phase 3 VOYAGE 1&2 studies [Blauvelt A, et al. *J Am Acad Dermatol.* 2017; Reich K, et al. *J Am Acad Dermatol* 2017].

METHODS: In VOYAGE 1&2, patients with moderate to severe PsO were randomized to GUS; placebo (PBO) with crossover to GUS at Week 16; or adalimumab. In VOYAGE 1, patients entered open-label GUS treatment from Weeks 52-252. VOYAGE 2 utilized a randomized withdrawal study design (Weeks 28-72), followed by open-label GUS treatment from Weeks 76-252. Mean percentage improvement from baseline in PASI and absolute PASI thresholds of 0, ≤1, and ≤3 were evaluated in PsO patients with lower BSA involvement (Investigator's Global Assessment [IGA] 3, BSA 10%-15%, and PASI 12-15) and extensive BSA involvement (IGA 3 or 4, BSA >15%, and PASI >15) at baseline. Data are summarized for patients randomized at baseline to GUS or PBO, and for the combined GUS group (GUS and PBO→GUS); treatment failure rules were applied.

RESULTS: At baseline, 13.9% (173/1245) of patients evaluable for efficacy had lower BSA involvement (GUS [n=110]: IGA 3, mean BSA 12.6%, mean PASI 13.5; PBO [n=63] : IGA 3, mean BSA 12.7%, mean PASI 13.6) and 86.1% (1072/1245) had extensive BSA involvement (GUS [n=713]: IGA 3 73.1%, IGA 4 26.9%, mean BSA 30.9%, mean PASI 23.3; PBO [n=359]: IGA 3 72.1%, IGA 4 27.9%, mean BSA 29.6%, mean PASI 22.4). As early as Week 4 in the GUS groups, mean percentage improvement from baseline in PASI was >50%, and at Week 16 was approximately 90%; these results were comparable by disease extent (lower vs. extensive BSA) and across disease severities (IGA 3 vs. 4). At Week 100, mean percentage improvement from baseline in PASI was approximately 93% and maintained through Week 252. Similarly, absolute PASI responses were comparable for patients in the GUS groups at Weeks 16 and 24, regardless of baseline disease extent or severity (Table 1). Comparable absolute PASI

TABLE 1. Proportions of Patients Achieving Absolute PASI Thresholds at Weeks 16 and 24 by Psoriasis Extent and Severity at Baseline

	Lower BSA Involvement Moderate			Extensive BSA Involvement Moderate-Severe		
	Week 16		Week 24	Week 16		Week 24
	PBO (n = 63)	GUS (n = 110)	GUS (n = 110)	PBO (n = 359)	GUS (n = 713)	GUS (n = 713)
PASI 0	3.2%	37.3%	44.5%	0.3%	35.1%	44.2%
PASI ≤ 1	6.3%	53.6%	63.6%	0.6%	55.0%	63.1%
PASI ≤ 3	7.9%	86.4%	91.8%	3.3%	79.1%	83.7%

Moderate: IGA = 3, BSA 10% to 15%, and PASI 12-15; Moderate-Severe: IGA 3 or 4, BSA > 15%, and PASI > 15.

BSA, body surface area; GUS, guselkumab; IGA, investigator's global assessment; PASI, psoriatic arthritis severity index; PBO, placebo.

TABLE 2. Proportions of Patients Achieving Absolute PASI Thresholds at Weeks 100, 156, 204, 252 in the Combined GUS Group* by Psoriasis Extent and Severity at Baseline

	Lower BSA Involvement Moderate				Extensive BSA Involvement Moderate-Severe			
	Week 100 (n = 157)	Week 156 (n = 148)	Week 204 (n = 142)	Week 252 (n = 135)	Week 100 (n = 947)	Week 156 (n = 896)	Week 204 (n = 865)	Week 252 (n = 815)
PASI 0	51.0%	58.8%	60.6%	63.0%	49.3%	48.2%	51.7%	51.2%
PASI ≤ 1	72.6%	74.3%	74.6%	72.6%	66.0%	64.4%	66.7%	66.3%
PASI ≤ 3	95.5%	95.9%	92.3%	93.3%	87.8%	85.5%	86.5%	88.2%

Moderate: IGA = 3, BSA 10% to 15%, and PASI 12-15; Moderate-Severe: IGA 3 or 4, BSA > 15%, and PASI > 15.

*Includes patients randomized to GUS at baseline and those randomized to PBO at baseline who crossed over to GUS at Week 16.

BSA, body surface area; GUS, guselkumab; IGA, investigator's global assessment; PASI, psoriatic arthritis severity index.

responses were achieved at Week 100 and were maintained through Week 252 (Table 2).

CONCLUSIONS: Regardless of baseline disease extent or severity, robust and durable skin responses were observed as early as Week 4. Long-term responses were sustained over time with GUS treatment through 5 years.

DISCLOSURES: Linda Stein Gold: reported receiving investigator fees, speaker fees, and/or honoraria from AbbVie, Amgen, Arcutis Biotherapeutics Inc, Bristol Myers Squibb, Dermavant, Dermira, Eli Lilly, Galderma Incyte, Novartis, Pfizer, Sanofi, Regeneron, UCB, and Valeant/Bausch Health. Bruce Strober: served as a consultant (honoraria) for AbbVie, Almirall, Amgen, Arcutis, Arena, Aristea, Asana, Boehringer Ingelheim, Bristol Myers Squibb, Connect Biopharma, Dermavant, Equillium, GlaxoSmithKline, Immunic Therapeutics, Janssen, Leo Pharma, Eli Lilly, Maruho, Meiji Seika Pharma, Mindera, Novartis, Ortho Dermatologics, Pfizer, Regeneron, Sanofi Genzyme, Sun Pharma, UCB, Ventyxbio, and vTv Therapeutics; has served as a speaker for AbbVie, Eli Lilly, Janssen, and Sanofi Genzyme; has served as coscientific director for, and received consulting fees from, CorEvitas' (Corrona) Psoriasis Registry; and has served as an investigator for AbbVie, Cara, CorEvitas' (Corrona) Psoriasis Registry, Dermavant, Dermira, and Novartis. Joseph Merola: reported consultant or investigator work for AbbVie, Amgen, Biogen, Bristol Myers Squibb, Dermavant, Eli Lilly, Janssen, LEO Pharma, Novartis, Pfizer, Regeneron, Sanofi, Sun Pharma, and UCB Pharma. Alice Gottlieb: reported research and educational grants from AnaptysBio, Janssen, Novartis, Ortho Dermatologics, Sun Pharma, Bristol Myers Squibb, and UCB Pharma, paid to their institution; consulting fees from Amgen, AnaptysBio, Avotres Therapeutics, Boehringer-Ingelheim, Bristol Myers Squibb, Dermavant, Eli Lilly, Janssen, Novartis, Pfizer, Sanofi, Sun Pharma, UCB Pharma, and DiCE Therapeutics; honoraria as an advisory board member, or non-promotional speaker from Amgen, AnaptysBio, Avotres Therapeutics, Boehringer-Ingelheim, Bristol Myers Squibb, Dermavant, Eli Lilly, Janssen, Novartis, Pfizer, Sanofi, Sun Pharma, and UCB Pharma; is a president of International Dermatology Outcome Measures; and holds stock options in XBiotech, for work on a rheumatoid arthritis project. Olivia Choi, Katelyn Rowland, Daphne Chan, Yin You, Laura Park-Wyllie: employees of Janssen Scientific Affairs, LLC (a subsidiary of Johnson & Johnson), and own Johnson & Johnson stock/stock options. Kim Papp: served on a speakers bureau for AbbVie, Amgen, Astellas, Celgene, Eli Lilly, Galderma, Janssen, Kyowa Hakko Kirin, Leo Pharma, Merck Sharp & Dohme, Novartis, Pfizer, and Valeant; has received grant/research support from AbbVie, Akros, Allergan, Amgen, Anacor, Arcutis, AstraZeneca, Baxalta, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Coherus, Dermira, Dow Pharma, Eli Lilly, Galderma, Genentech, GlaxoSmithKline, Janssen, Kyowa Hakko Kirin, Leo Pharma, MedImmune, Meiji Seika Pharma, Merck Serono, Novartis, Pfizer, Regeneron, Roche, Sanofi Genzyme, Takeda, UCB, and Valeant; has served as a consultant for AbbVie, Akros, Amgen, Arcutis, Astellas, AstraZeneca, Baxalta, Baxter, Boehringer Ingelheim, Bristol Myers Squibb, CanFite, Celgene, Coherus, Dermira, Dow Pharma, Eli Lilly, Forward Pharma, Galderma, Genentech, Janssen, Kyowa Hakko Kirin, Leo Pharma, Meiji Seika Pharma, Merck Serono, Merck Sharp & Dohme, Mitsubishi Pharma, Novartis, Pfizer, Regeneron, Roche, Sanofi Genzyme, Takeda, UCB, and Valeant; has received honoraria from AbbVie, Akros, Amgen, Baxter, Boehringer Ingelheim, Celgene, Coherus, Eli Lilly, Forward Pharma, Galderma, GlaxoSmithKline, Janssen, Kyowa Hakko Kirin, Merck Serono, Merck Sharp & Dohme, Novartis, Pfizer, Takeda, UCB, and Valeant; and has served as a scientific officer, on a steering committee, and on an advisory board for AbbVie, Akros, Amgen, Anacor, Astellas, Baxter, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Dow Pharma, Eli Lilly, Galderma, Janssen, Kyowa Hakko Kirin, Merck Serono, Merck Sharp & Dohme, Novartis, Pfizer, Regeneron, Sanofi Genzyme, and Valeant. Richard Langley: served and received compensation in the form of grants and/or honoraria as principal investigator for, is on the scientific advisory board of, or has served as a speaker for AbbVie, Amgen, Boehringer Ingelheim, Celgene, Eli Lilly, Janssen, LEO Pharma, Merck, Novartis, Pfizer and

UCB. Robert Bissonnette: Advisory Board Member, Consultant, Speaker and/or Investigator for and receives honoraria and/or grant from AbbVie, Amgen, Arcutis, Asana BioSciences, Bellus Health, BioMimetix, Bluefin Biomedicine, Boehringer Ingelheim, Boston, CARA Therapeutic, Clexio, Dermavant, Eli Lilly, Escient, Evidera, Fresh Track s (Brickell), Galderma, GlaxoSmithKline, Incyte, Inmagene Bio, Janssen, LEO Pharma, Novartis, Pfizer, RAPT Therapeutic, Regeneron, Sanofi, Target RWE and Vyne Therapeutics. An employee and shareholder of Innovaderm Research. J.J. is serving as an advisor and/or consultant to Concerto Biosciences, DeepSense, Kamari Pharma, Quantificare, Raistone, and RAPT Therapeutics. Kenneth Gordon: received grant support and consulting fees from AbbVie, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Eli Lilly, Janssen, Novartis, and UCB, and has received consulting fees from Amgen, Almirall, Dermira, Leo Pharma, Pfizer, and Sun Pharma. April Armstrong: received research grants and personal fees from Bristol Myers Squibb, Eli Lilly, Janssen, Leo Pharma, and Novartis; has received personal fees from Boehringer Ingelheim/Parexel, Celgene, Dermavant, Genentech, GlaxoSmithKline, Menlo Therapeutics, Merck, Modernizing Medicine, Ortho Dermatologics, Pfizer, Regeneron, Sanofi Genzyme, Science 37, Sun Pharma, and Valeant; and has received grants from Dermira, Kyowa Hakko Kirin, and UCB, outside the submitted work. James Krueger: received research support (grants paid to his institution) and/or personal fees from Pfizer, Amgen, Janssen, Lilly, Merck, Novartis, Kadmon, Dermira, Boehringer Ingelheim, Innovaderm, Kyowa, BMS, Serono, BiogenIdec, Delenex, AbbVie, Sanofi, Baxter, Paraxel, Xenoport, and Kineta. Mark Lebwohl: received grants and/or is a consultant for AbbVie, Amgen, Aditum Bio, Almirall, AltruBio Inc, AnaptysBio, Arcutis, Aristea Therapeutics, Arrive Technologies, Avotres, BiomX, Boehringer Ingelheim, Bristol Myers Squibb, Cara Therapeutics, Castle Biosciences, Corrona, Dermavant Sciences, Inc, Dr Reddy's Laboratories, Eli Lilly, Evelo Biosciences, Evommune, Inc, Facilitation of International Dermatology Education, Forte Biosciences, Foundation for Research and Education in Dermatology, Helsinn Therapeutics, Hexima Ltd, Incyte, Janssen Research & Development, LEO Pharma, LLC, Meiji Seika Pharma, Mindera, Ortho Dermatologics, Pfizer, Regeneron, Seanergy, UCB, Inc, and Verrica.

Abstract PS-12

VISIBLE: Guselkumab Demonstrated Rapid and Significant Scalp Psoriasis Clearance in Participants With Moderate to Severe Plaque Psoriasis Across All Skin Tones

Amy McMichael, MD[1]; Linda Stein Gold, MD[2]; Katelyn Rowland, PhD[3]; Jennifer Soung, MD[4]; Chesahna Kindred, MD, MBA, FAAD[5,6]; Olivia Choi, MD, PhD[3]; Daphne Chan, PhD[3]; Jenny Jeyarajah, PhD[7]; Candrice Heath, MD[8]; Tina Bhutani, MD, MAS[9]; Maxwell Sauder, MD, FRCPC[10]; Andrew Alexis, MD, MPH[11]

[1]Wake Forest School of Medicine, Winston-Salem, NC, USA; [2]Henry Ford Health System, West Bloomfield, MI, USA; [3]Janssen Scientific Affairs, LLC, Horsham, PA, USA [4]Southern California Dermatology, Inc, Santa Ana, CA, USA; [5]Kindred Hair & Skin Center, Columbia, MD, USA; [6]Howard University, Washington, DC, USA; [7]Janssen Research & Development, LLC, Spring House, PA, USA; [8]Lewis Katz School of Medicine at Temple University, Philadelphia, PA, USA; [9]University of California San Francisco Medical Center, San Francisco, CA, USA; [10]University of Toronto, Toronto, ON, Canada; [11]Weill Cornell Medicine, New York, NY, USA

BACKGROUND: Scalp is the most commonly involved special site among patients with moderate to severe plaque psoriasis, and may be challenging to treat in patients with diverse skin tones due to greater visibility of scaling, styling practices, and hair types. VISIBLE is the first-of-its-kind, large-scale, prospective, Phase 3b, randomized, double-blind, placebo-controlled study dedicated to participants with moderate to severe plaque psoriasis across all skin tones.

OBJECTIVES: To report the efficacy of guselkumab on scalp psoriasis in the Phase 3b VISIBLE study.

METHODS: VISIBLE Cohort A (N=103) participants were randomized 3:1 to receive guselkumab 100 mg or placebo. Scalp psoriasis efficacy outcomes including Psoriasis Scalp Severity Index (PSSI) and scalp-specific Investigator Global Assessment (ss-IGA) score were evaluated among participants with at least mild scalp psoriasis (ss-IGA score ≥2) at baseline.

RESULTS: At baseline, 77 participants had at least mild scalp psoriasis (ss-IGA: 2-mild [22.1%], 3-moderate [63.6%], 4-severe [14.3%]). At Week 4, after only 1 dose of guselkumab, the mean percent improvement from baseline in PSSI was 53.8% for the guselkumab group versus 12.3% for the placebo group ($p<0.01$). Furthermore, at Week 4, 26.3% of participants in the guselkumab group achieved absence of disease (ss-IGA 0) versus 0% of participants in the placebo group ($p<0.01$). At Week 12, the mean percent improvement from baseline in PSSI was 71.6% and 20.7% for the guselkumab versus placebo groups, respectively ($p<0.01$) and 61.4% of participants in the guselkumab group achieved ss-IGA 0 vs 10.0% of participants in the placebo group ($p<0.001$). At Week 16, the mean percent improvement from baseline in PSSI was significantly greater for the guselkumab versus placebo groups (81.0% vs 12.1%, respectively; $p<0.001$); and a significantly greater proportion of participants in the guselkumab versus placebo groups achieved ss-IGA 0 (71.9% versus 10.0%, respectively; $p<0.001$).

CONCLUSIONS: Guselkumab-treatment resulted in significant and rapid improvements in scalp psoriasis among participants with diverse skin tones who had at least mild scalp psoriasis at baseline. After only 1 dose, mean percent PSSI improvement was >50% and after just 2 doses, the majority of participants achieved complete (100%) scalp clearance.

DISCLOSURES: Amy McMichael, Candrice Heath, Tina Bhutani, Maxwell Sauder: No conflict of interest. Linda Stein Gold: reported receiving investigator fees, speaker fees, and/or honoraria from AbbVie, Amgen, Arcutis Biotherapeutics Inc, Bristol Myers Squibb, Dermavant, Dermira, Eli Lilly, Galderma Incyte, Novartis, Pfizer, Sanofi, Regeneron, UCB, and Valeant/Bausch Health. Jennifer Soung: reported nonfinancial support from Eli Lilly (manuscuript preparation during the conduct of the study); grants from AbbVie, Pfizer, personal fees from Pfizer, AbbVie, Regneron, Sanofi, LEO, and grants from LEO, Sanofi, Kyowa Kirin, and Dermavant outside the submitted work. Chesahna Kindred: served as an advisory board and speaker's bureau member for Lilly and Sun Pharmaceutical, as a speaker and advisory board member for UCB and Regeneron, as a board member for Aerolase, as a speaker for Novartis, as a speaker's bureau member for Nutrafol, as an editor for Cutis and JNMA, as a web content reviewer for AAD, as a steering committee and Skin of Color advisory board for Janssen, and as a consultant for AbbVie and Pfizer. Katelyn Rowland, Olivia Choi, Daphne Chan, Jenny Jayarajah: employees of Janssen Scientific Affairs, LLC (a subsidiary of Johnson & Johnson), and own Johnson & Johnson stock/stock options. Andrew Alexis: received grants (funds to institution) from Leo, Novartis, Almirall, Bristol Myers Squibb, Amgen, Menlo, Galderma, Valeant (Bausch Health), Cara, Arcutis, Dermavant; Advisory board/Consulting: Leo, Galderma, Pfizer, Sanofi-Regeneron, Dermavant, Beiersdorf, Valeant, L'Oreal, Bristol Myers Squibb, Bausch Health, UCB, Vyne, Arcutis, Janssen, Allergan, Almirall, AbbVie, Sol-Gel , Amgen, VisualDx, Eli Lilly, Swiss American; Speaker: Regeneron, Sanofi-Genzyme, Pfizer, and Bristol Myers Squibb.

A SUPPLEMENT TO
cutis®
CUTANEOUS MEDICINE FOR THE PRACTITIONER