

Efficacy and Safety of Apremilast in Patients With Genital Psoriasis: Results From the Phase 3, Randomized, Placebo-Controlled, Double-blind DISCREET Study

For additional findings, scan the QR code



Joseph F. Merola, MD, MMSc¹; Lawrence Charles Parish, MD, MD (Hons)²; Lyn Guenther, MD³; Charles Lynde, MD^{4,5}; Jean-Philippe Lacour, MD⁶; Petra Staubach, MD⁷; Sue Cheng, MD, PhD⁸; Shauna Jardon, PharmD⁸; Maria Paris, MD⁸; Mindy Chen, MS⁸; Kim Papp, MD, PhD^{9,10}

¹Brigham and Women's Hospital, Harvard Medical School, Boston, MA, USA; ²Parish Dermatology, Philadelphia, PA, USA; ³Guenther Research Inc., London, ON, Canada; ⁴Lynde Institute for Dermatology, Markham, ON, Canada; ⁵Probit Medical Research, Markham, ON, Canada; ⁶CHU de Nice - Hôpital l'Archet, Nice, France; ⁷Department of Dermatology, University Medical Center, Mainz, Germany; ⁸Amgen Inc., Thousand Oaks, CA, USA; ⁹Probit Medical Research, Waterloo, ON, Canada; ¹⁰K Papp Clinical Research, Waterloo, ON, Canada

Key takeaways

Apremilast, the first oral treatment to be studied for genital psoriasis, significantly improved disease symptoms, including skin, itch, and QoL and was well-tolerated in patients who were inadequately controlled by or intolerant to medications applied to the skin

What do we know?



Up to 63% of patients with psoriasis report **genital psoriasis**,^{1,2} which can lead to:

- Itching
- Discomfort
- Impaired QoL
- Negative impact on sexual health



Limited treatment options are available for patients with moderate to severe genital psoriasis



Apremilast, an oral immunomodulator, is approved in adults with psoriasis, psoriatic arthritis, and oral ulcers associated with Behçet's disease

What was our aim?

To evaluate the benefit, safety, tolerability, and effect on health-related QoL of apremilast in patients with moderate to severe genital psoriasis after 16 weeks of treatment in the DISCREET study (NCT03777436)

References:

1. Ryan C, et al. *J Am Acad Dermatol.* 2015;72:978-983. 2. Meeuwis KAP, et al. *J Dermatol Treat.* 2018;29:754-760.

Abbreviations:

BSA, body surface area; DLQI, Dermatology Life Quality Index; GPI-NRS, Genital Psoriasis Itch Numeric Rating Scale; QoL, quality of life; sPGA, static Physician Global Assessment; sPGA-G, static Physician Global Assessment of Genitalia.

Disclosures and Funding Statement:

JFM: AbbVie, Amgen, Biogen, Bristol Myers Squibb, Dermavant, Eli Lilly, Janssen, LEO Pharma, Novartis, Pfizer, Regeneron, Sanofi, Sun Pharmaceuticals, and UCB – consultant and/or investigator. LCP: AbbVie, Alfasigma, Amgen, Amytrix, Eli Lilly, Bristol Myers Squibb, Fibrocell, Galderma, GlaxoSmithKline, Kiniksa, Olix, Oneness, Pfizer, Trevi, and UCB – investigator. LG: AbbVie, Amgen, Bausch Health, Bristol Myers Squibb, Celgene, Eli Lilly, Galderma, Janssen, LEO Pharma, Merck Frosst, Pfizer, Sun Pharmaceuticals, and UCB – consultant, investigator, and/or speaker. Amgen, Bausch, Eli Lilly, Janssen, LEO Pharma, Pfizer, and Sun Pharmaceuticals – speaker, consultant, and grant/research support. AbbVie, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Galderma, Merck Frosst, and UCB Pharma – grant/research support. CL: AbbVie, Boehringer Ingelheim, Celgene, Eli Lilly, Janssen, Merck, Novartis, Pfizer, Sun Pharma, and Valeant – principal investigator/consultant. J-PL: AbbVie, Amgen, Boehringer Ingelheim, Dermira, Janssen, LEO Pharma, and Pfizer – grants and personal fees. Celgene, Galderma, Eli Lilly, Novartis and Sanofi – grant/research support. PS: AbbVie, ALLERGIKA, Almirall Hermal, Amgen, Beiersdorf, BioCryst, Bristol Myers Squibb, Boehringer Ingelheim, Celgene, CSL Behring, Eli Lilly, Galderma, Hexal, Janssen, Klinge, LEO Pharma, LETI Pharma, L'Oreal, Neubourg, Novartis, Octapharma, Pfizer, Pflüger, Pharming, Regeneron, Shire, Takeda, Regeneron, Sanofi Genzyme, and UCB Pharma – grants. SC, SJ, MP, and MC: Amgen Inc. – employees and stockholders. KP: AbbVie, Actelion, Amgen, Astellas Pharma US, Boehringer Ingelheim, Bausch Health, Celgene Corporation, Dermira, Dow Pharmaceuticals, Eli Lilly, Frontier, Galderma, Janssen, Kyowa Hakkō Kirin Pharma, LEO Pharma, MedImmune, Merck & Co., Inc., Novartis, Pfizer, Regeneron, Roche Laboratories, Sanofi Genzyme, Takeda Pharmaceuticals, UCB, and Valeant – honoraria, grants, and/or research funding as a speaker, investigator, advisory board member, data safety monitoring board member, and/or consultant; PSLOAR, PURE – steering committee member.

This study was funded by Amgen Inc. Writing support was funded by Amgen Inc. and provided by Archana Patkar, PhD, of Cactus Life Sciences (part of Cactus Communications) and Dawn Nicewarner, PhD, CMPP, employee of and stockholder in Amgen Inc..

What did we do?

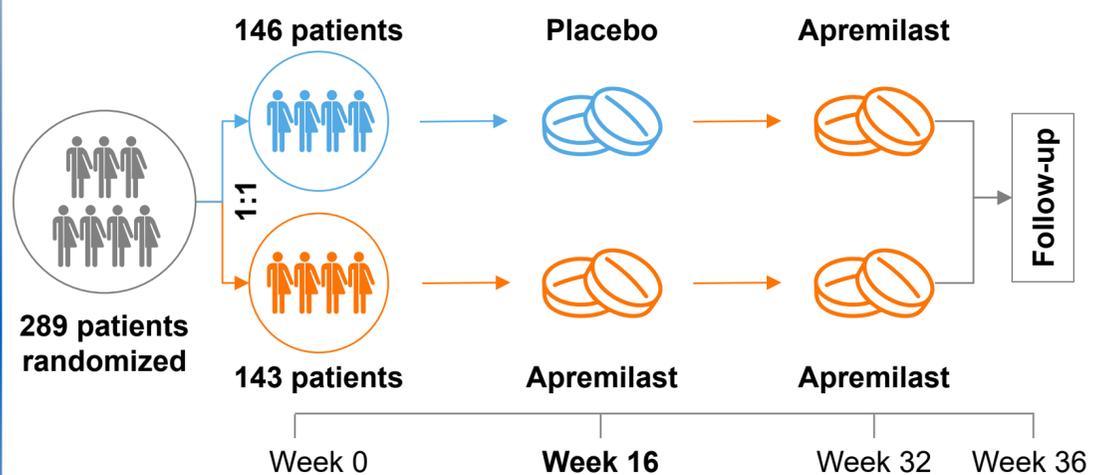


Phase 3, multicenter study



Patient population:

- Genital psoriasis severity (modified sPGA-G) score ≥ 3
- Overall psoriasis severity (sPGA) score ≥ 3
- Nongenital plaque psoriasis on $\geq 1\%$ of BSA
- Intolerant to/or not controlled by medications applied to the skin for genital psoriasis



Primary outcome: Modified sPGA-G response (score 0 [clear] or 1 [almost clear] with a ≥ 2 -point reduction from baseline) to assess genital psoriasis severity at week 16

Key secondary outcomes:

- **sPGA response** to assess overall psoriasis severity
- **GPI-NRS response** to assess genital itch severity
- **Change from baseline in DLQI score** to assess the impact of psoriasis on QoL at week 16

What were our findings at week 16?

Baseline characteristics were similar between treatment groups



Apremilast, n = 143

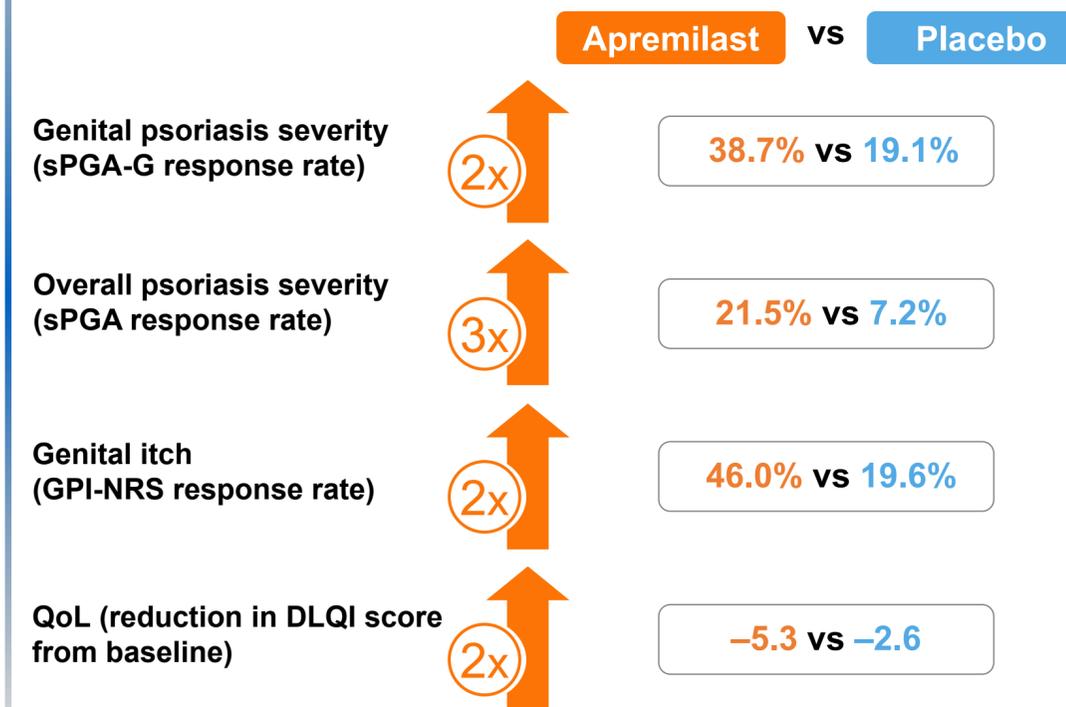
70% male; mean age: 44 years
Genital psoriasis duration: 11 years
DLQI: 13.3
sPGA-G: 86% moderate; 14% severe



Placebo, n = 146

70% male; mean age: 46 years
Genital psoriasis duration: 12 years
DLQI: 12.8
sPGA-G: 88% moderate; 12% severe

All outcomes at week 16 improved with apremilast vs placebo



No new safety signals were identified, and adverse events were consistent with the known apremilast safety profile