CO152

Inefficiencies of off-label therapy in the prevention of generalized pustular psoriasis (GPP) flares: Real-world evidence from Europe

Laurent Misery,[1] Denis Jullien,[2] Manuelle Viguier,[3] Richard B Warren,[4] Christopher EM Griffiths,[4] Michael Sticherling,[5] Bhargav Lakshminarasimhan,[6] Nichiren Pillai,[6] Shah Alam Khan,[6] Elke MGJ de Jong,[7] Anna Balato,[8] Stefano Piaserico[9]

[1]Department of Dermatology, Venereology and Allergology and French Expert Centre on Pruritus, University Hospital of Brest, Brest, France; [2]Department of Dermatology, Faculty of Medicine Lyon-Est, Hôpital Edouard Herriot, University of Lyon, Lyon, France; [3]Université de Reims Champagne-Ardenne, Service de Dermatologie, Hôpital Robert Debré, Reims, France; [4]Dermatology Centre, Northern Care Alliance NHS Foundation Trust & Division of Musculoskeletal and Dermatological Sciences Manchester Academic Health Science Centre, University of Manchester, Manchester, UK; [5]Hautklinik, Friedrich-Alexander-University of Erlangen-Nürnberg (FAU) Department of Dermatology, Deutsches Zentrum Immuntherapie (DZI), University Hospital Erlangen, Erlangen, Germany; [6]Boehringer Ingelheim International GmbH, Ingelheim, Germany; [7]Department of Dermatology, Radboud University Medical Center (Radboudumc), Nijmegen, The Netherlands; [8]Unit of Dermatology, University of Campania "Luigi Vanvitelli", Naples, Italy; [9]Unit of Dermatology, Department of Medicine, University of Padua, Padua, Italy

Conclusions

- Long-term management of GPP with off-label treatments involves frequent dose adjustment and discontinuations due to lack of efficacy and adverse events, which may negatively impact patient outcomes
- These findings highlight the need for targeted treatments for GPP that are more well tolerated and effective at preventing GPP flares than the current off-label treatment options

Aim

- To describe real-world, off-label treatment patterns in the prevention of GPP flares in Europe

Introduction

- GPP is a chronic, systemic, neutrophilic inflammatory disease that is associated with significant morbidity and mortality[1,2]
- Patients experience a heterogenous and unpredictable clinical course, with periods of flaring that often result in hospitalization[1–3]
- GPP is largely managed off-label using therapies for plaque psoriasis, despite being a distinct disease and the availability of a targeted treatment since 2022 (IL-36 receptor monoclonal antibody spesolimab)[1,4–6]

Methods

- SCRIPTOR was an international, retrospective, non-interventional chart review of patients diagnosed with GPP from 2011 in Europe, conducted between September 2021 and August 2024
  - Participating dermatologists from recognized GPP treatment centers identified eligible patients within their clinical practice
  - Medical chart data were evaluated retrospectively between the dates of GPP diagnosis and enrollment in the study
  - During the follow-up period, investigators documented changes to GPP treatments and classified them as for GPP flare or GPP maintenance
  - This analysis evaluated the reasons for terminating GPP maintenance treatment prescriptions (i.e., those for flare prevention)

Results

Study Population

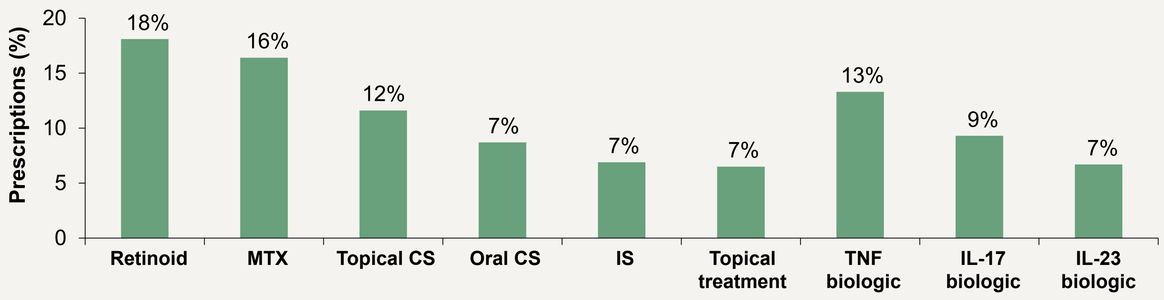
- 199 patients were screened in France (53%), Germany (22%), the UK (14%), Italy (10%), and the Netherlands (1%)
- 183 patients met the eligibility criteria and were enrolled in the study
- The majority of patients were female (65%) and White, Caucasian or of European descent (84%), with a mean age of 57 years at GPP diagnosis
- The mean (SD) follow-up duration was 2.5 (2.8) years*

	Study population (N=183)
Sex, n (%)	
Female	118 (64.5)
Male	65 (35.5)
Age (years), mean (SD)	
At diagnosis	57.1 (18.0)
At study inclusion	61.8 (18.1)
Ethnicity, n (%)†	
White, Caucasian, and/or European descent	67 (83.8)
Central, South, and/or East Asian descent	4 (5.0)
Mixed ethnicity	1 (1.3)
Unknown/not reported	8 (10.0)

*Data available for 177 patients. †Data available for 80 patients.

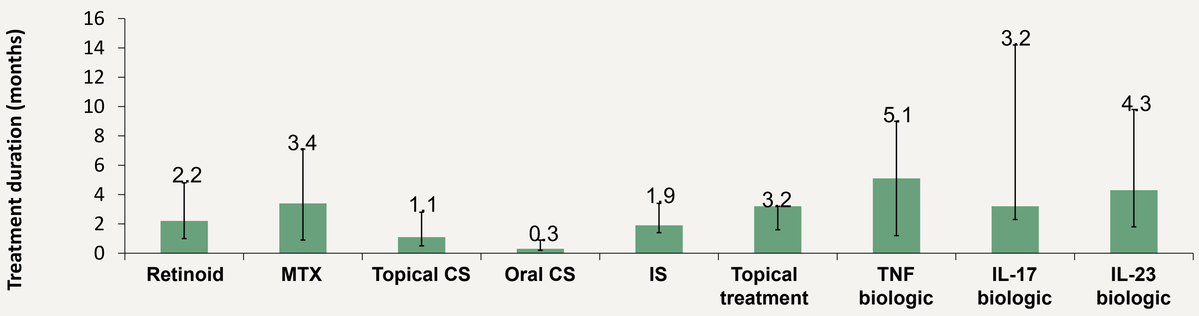
Prescriptions for off-label preventative therapy

- Of 183 patients, 103 (56%) received a total of **475 prescriptions** for GPP maintenance treatment



Topical vitamin D derivatives (0.8%), PDE4 inhibitors (0.6%), and other therapeutic classes (2.9%) also prescribed.

- 321 (68%) **prescriptions were terminated** during the follow-up period
- The median **treatment duration** ranged from 9 days for oral corticosteroids to 5.1 months for TNF biologics

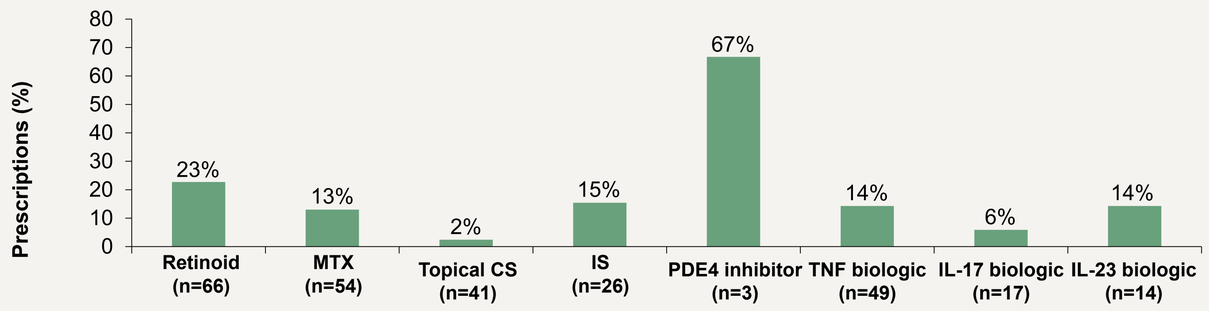


Median, minimum and maximum shown.

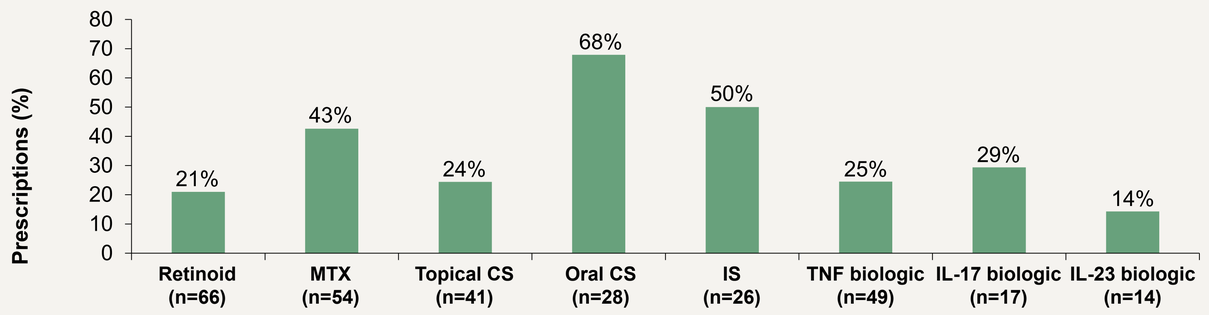
Reasons for terminating prescriptions

- **Lack of efficacy:** most common reason for terminating prescriptions for topical treatments (10/12 prescriptions), methotrexate (16/54), retinoids (16/66), and biologics (TNF: 15/49; IL-17: 7/17; IL-23: 6/14)

- **Adverse events**: occurred most often with PDE4 inhibitors (2/3), retinoids (15/66), an immunosuppressants (4/26)



- **Dose adjustment:** dose increase was a common reason for terminating prescriptions of immunosuppressants (6/26) and methotrexate (14/54), and dose reduction was often reported for oral corticosteroids (18/28)



Percentages are for dose adjustment (increase, decrease, or non-specified change)

Abbreviations CS, corticosteroid; GPP, generalized pustular psoriasis; IL, interleukin; IS, immunosuppressant; MTX, methotrexate; PDE4, phosphodiesterase-4; SD, standard deviation; TNF, tumor necrosis factor.

Acknowledgements The authors meet criteria for authorship as recommended by the ICMJE. The authors did not receive payment related to the development of the poster. Michael Riley, PhD, of Bioscript Group, provided writing, editorial support and formatting assistance, which was contracted and funded by Boehringer Ingelheim and LEO Pharma A/S. Boehringer Ingelheim and LEO Pharma A/S were given the opportunity to review the poster for medical and scientific accuracy as well as intellectual property considerations. The study was supported and funded by Boehringer Ingelheim and LEO Pharma A/S.

References 1. Armstrong AW, et al. *J Am Acad Dermatol* 2024;90(4):727–730; **2.** Puig L, et al. *J Eur Acad Dermatol Venereol* 2023;37(4):737–752; **3.** Strober B, et al. *Dermatol Ther (Heidelb)* 2021;11(2):529–541; **4.** Krueger J, et al. *Am J Clin Dermatol* 2022;23(Suppl. 1):51–64; **5.** Strober B, et al. *J Am Acad Dermatol* 2025; S0190-9622(25)02725-2; **6.** European Medicines Agency. Spevigo. Available at: https://www.ema.europa.eu/en/medicines/human/EPAR/spevigo. Accessed August 2025.

Disclosures **LM** reports honoraria from AbbVie, Almirall, Amgen, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Fresenius-Kabi, Janssen-Cilag, LEO Pharma, Lilly, Novartis, Pfizer, and UCB for consultant, speaker, investigator, scientific officer, steering committee member, and/or advisory board member activities. **DJ** reports honoraria from AbbVie, Almirall, Amgen, Biogen, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Fresenius-Kabi, Janssen-Cilag, LEO Pharma, Lilly, Medac, MSD, Novartis, Pfizer, Sandoz, Sanofi, and UCB for consultant, speaker, investigator, scientific officer, steering committee member, and/or advisory board member activities. **MV** reports receiving research grants from Janssen Cilag, consulting fees from Nordic Pharma, Janssen, Bristol Myers Squibb, AbbVie, Galderma, Leo Pharma, Medac, Boehringer Ingelheim, Almirall, and Lilly, and honoraria and/or travel support from Nordic Pharma, Janssen Cilag, AbbVie, Medac, Boehringer Ingelheim, and UCB. **RBW** reported receiving research grants from AbbVie, Almirall, Amgen, Celgene, Janssen, Lilly, Leo, Novartis, Pfizer and UCB; and consulting fees from AbbVie, Almirall, Amgen, Arena, Astellas, Avillion, Biogen, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, DiCE, Galderma, GSK, Immunocore, Janssen, Lilly, Leo, Meiji Pharma, Nektar Therapeutics, Novartis, Pfizer, RAPT Pharmaceuticals, Sanofi, Sun Pharma, Takeda, UCB and UNION. **CEMG** has received honoraria and/or travel or research grants from AbbVie, Almirall, Amryt, Anaptysbio, Artax, Boehringer Ingelheim, Boots UK, Bristol Meyers Squibb, Evelo Bioscience, GSK, Inmagene, Johnson & Johnson, Eli-Lilly, Novartis, Nxera, Sun Pharma, and UCB. **MS** discloses the following relationships: research support, lecture and consulting activities, participation in clinical studies with AbbVie, Almirall, Amgen, Bristol Myers Squibb, Boehringer Ingelheim, Janssen, Leo, Lilly, MSD, Novartis, Pfizer, Sandoz, Sanofi. **BL**, **NP**, and **SAK** are employees of Boehringer Ingelheim. **EDJ** received research grants for the department of dermatology of the Radboud University Medical Center Nijmegen, the Netherlands from AbbVie, Almirall, BMS, Janssen Pharmaceutica, LEO Pharma, Lilly, Novartis, and UCB; has acted as consultant and/or paid speaker for and/or participated in research sponsored by companies that manufacture drugs used for the treatment of psoriasis or atopic dermatitis including AbbVie, Almirall, Amgen, Boehringer-Ingelheim, Bristol Myers Squibb, Celgene, Galapagos, Janssen Pharmaceutica, LEO Pharma, Lilly, Novartis, Sanofi, and UCB. All funding is not personal but goes to the Institution Radboud University Medical Center Nijmegen, the Netherlands. **AB** has served as consultant and/or has received fees from AbbVie, Almirall, Amgen, Boehringer Ingelheim, Bristol Myers Squibb, Eli-Lilly, Janssen, Incyte, LeoPharma, Pfizer, Novartis, Sanofi, UCB. **SP** has been a consultant and/or speaker for AbbVie, Almirall, Amgen, Biogen, Boehringer Ingelheim, Celgene, Janssen, Leo-Pharma, Lilly, Merck-Serono, MSD, Novartis, Pfizer, Sandoz, Sanofi, UCB.

Presented at ISPOR Europe 2025, November 9–12, 2025, Glasgow, Scotland, UK