Comparative Durability of Biologics for Patients With Moderate-to-Severe Psoriasis Adjusted for Drug Switching Over Time: 24-Month Outcomes From the International Observational Psoriasis Study of Health Outcomes (PSoHO)

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OBJECTIVE

- To compare the durability of anti–IL-17A biologics vs. other biologics for patients with moderate-to-severe PsO, adjusted for treatment switching over time, using 24-month follow-up data from PSoHO

CONCLUSIONS

- The incidence of comorbid PsA varied between biologic treatment groups, and between individual treatments (12.4% in the risankizumab group to 30.3% in the ixekizumab group)[1]
- Different classes of biological therapies demonstrated the ability to achieve durability of high levels of skin clearance for patients with psoriasis (PsO)
- Within these biological therapies, ixekizumab as a therapeutic option showed equivalent or better durability relative to other agents
- The ability to achieve durable skin clearance has been associated in other studies with enhanced quality of life and patient outcomes[2]

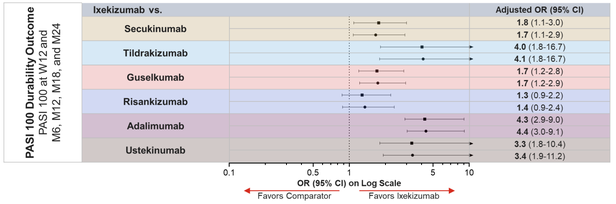
Fall Clinical Dermatology Conference (Fall CDC); Las Vegas, NV, USA; 23-26 October 2025

BACKGROUND

- Numerous biological therapies have become available in recent years for the treatment of moderate-to-severe PsO
- Studies providing real-world data that directly compare the effectiveness of these biologics are relatively scarce or limited by short observation periods
- The PSoHO was a 36-month, non-interventional, international cohort study of patients with moderate-to-severe PsO, which enrolled 1981 patients ≥18 years of age from 23 countries, and is providing long-term data from a real-world setting needed for evidence-based care[3]

KEY RESULT

In Overall Population, Odds of Achieving PASI 100 Durability With Ixekizumab Similar to Risankizumab and Greater Than Other Comparators



Notes: Result is statistically significant if 95% CI of OR does not cross 1. Top lines (squares) show adjusted ORs calculated for patients with missing outcomes and were imputed as NRI. Bottom lines (circles) show "as observed" results. Adjusted analyses were performed using a variant of the MSM approach, accounting for both baseline and time-varying confounders.

METHODS

PSoHO Definitions of Durability Outcomes

Rapid Achievement of Response That Lasts in the Long Term for the Individual Patient

Outcome	Definition	
PASI 100 durability	Patients who achieved PASI 100 at W12 and then maintained PASI 100 at M6, M12, M18, and M24	W12 + 6M + 12M + 18M + 24M
PASI 90 durability	Patients who achieved PASI 90 at W12 and then maintained at least PASI 90 at M6, M12, M18, and M24	W12 + 6M + 12M + 18M + 24M

Key Eligibility Criteria: PSoHO

Inclusion

- Patients (age ≥18 years) with moderate-to-severe plaque PsO for ≥6 months before baseline
- Initiating or switching biologic (or biosimilar) treatment during routine medical care

Exclusion

- Treatment initiation contraindicated due to country-specific approved indication
- Modifications to the dosing regimen of an existing biologic treatment
- Restart of biologic treatment previously received at any point
- Completion of/withdrawal from PSoHO
- Ongoing participation in another PsO study with any investigational product

Statistical Analysis

- Adjusted ORs with 95% CIs were generated using a variant of the MSM[a] approach, which accounted for both baseline and time-varying confounders
- ORs were calculated from binary outcomes using imputed (NRI) and as observed (non-imputed) data for ixekizumab vs. secukinumab, tildrakizumab, guselkumab, risankizumab, adalimumab, and ustekinumab for:
  - Overall population
  - EMA on-label subset population
- As a result of the instability and non-convergence of models within the machine learning comparative framework for treatment groups with fewer than 50 patients, pairwise comparisons are only shown for ixekizumab vs. secukinumab, tildrakizumab, guselkumab, risankizumab, adalimumab, and ustekinumab

[a]The estimand targeted by the MSM compares the durability outcomes for patients with mcompared with outcomes if the same patients were continuously treated with other biologics: TNF-α inhibitors (adalimumab); IL-23p19 inhibitors (guselkumab, risankizumab, tildrakizumab); IL-12/23p40 inhibitors (ustekinumaboderate-to-severe PsO who would initiate and remain treated by IL-17A inhibitors up to 24 months of follow-up).

Drug Classes Investigated

- IL-17A inhibitors (ixekizumab, secukinumab); TNF-α inhibitors (adalimumab); IL-23p19 inhibitors (guselkumab, risankizumab, tildrakizumab); IL-12/23p40 inhibitors (ustekinumab)[4]

Limitations

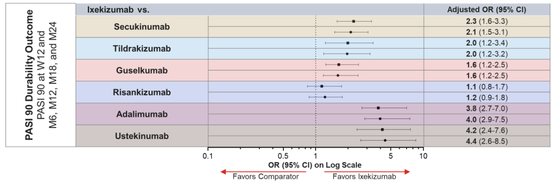
- A limitation of long-term observational studies is the potential bias caused by treatment switching and discontinuation, which can be impacted by study length, higher skin involvement, treatment costs, and access; also impacted by comorbid PsA, which can affect approximately one-third of patients with PsO.[5] The MSM analysis was used to attempt to account for these biases
- Unmeasured confounding was assessed and did not impact the conclusions drawn[3]

RESULTS

Baseline Demographics and Disease Characteristics

- In the overall population (n=1981)[3]
  - mean (SD) age and BMI were 45.3 (13.6) years and 29.0 (6.7) kg/m^2, respectively
  - 1,143 (57.7%) of patients were male, 461 (23.3%) had PsA, and 706 (35.7%) had received treatment with prior biologics
- PsA incidence varied between groups (15.0% [anti–IL-12/23] to 29.0% [anti–IL-17A]) and between individual treatments (12.4% [risankizumab] to 30.3% [ixekizumab])[1]

In Overall Population, Odds of Achieving PASI 90 Durability With Ixekizumab Similar to Risankizumab and Greater Than Other Comparators



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1. Pinter A, et al. *Dermatol Ther (Heidelb).* 2025; https://doi.org/10.1007/s13555-025-01494-z.
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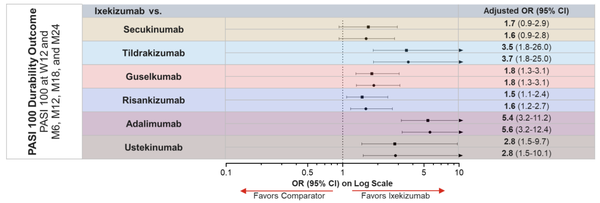
In EMA Subset Population, Odds of Achieving PASI 100 Durability With Ixekizumab Similar to Secukinumab and Greater Than Other Comparators



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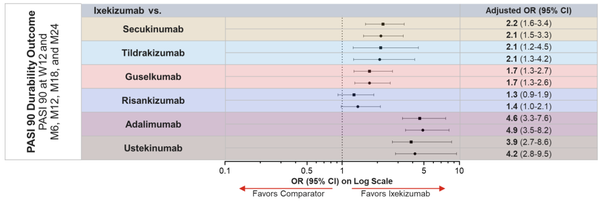
In EMA Subset Population, Odds of Achieving PASI 90 Durability With Ixekizumab Similar to Risankizumab and Greater Than Other Comparators



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Acknowledgments

The authors would like to acknowledge Ilya Lipkovich and Zbigniew Kadziola, who developed the modified MSM approach used for this analysis

Abbreviations

BMI=body mass index; CI=confidence interval; EMA=European Medicines Agency; IL=interleukin; M=Month; MSM=marginal structural model; NRI=non-responder imputation; OR=odds ratio; PASI=Psoriasis Area and Severity Index; PASI 90/100=≥90/100% improvement from baseline in PASI; PsA=psoriatic arthritis; PsO=psoriasis; PSoHO=Psoriasis Study of Health Outcomes; SD, standard deviation; TNF=tumor necrosis factor; W=Week

Disclaimer: This ePoster is an encore and has previously been published as Pinter A, et al. *Dermatol Ther (Heidelb).* 2025; https://doi.org/10.1007/s13555-025-01494-z

Disclosures

A. Pinter has served as an investigator, speaker, and/or consultant for: AbbVie, Almirall Hermal, Amgen, Biogen, BioNTec, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Celltrion, Eli Lilly and Company, EVA Pharma, Galderma, GlaxoSmithKline, Hexal, Incyte Corporation, Janssen Cilag, Klinge Pharma, Kyowa Kirin, LEO Pharma, MC2 Therapeutics, Medac, Merck Serono, Mitsubishi Tanabe Pharma, Merck Sharp & Dohme, MoonLake Immunotherapeutics, Novartis, Pascoe Natural Healthcare, Pfizer, Regeneron, Roche, Sandoz, Sanofi Genzyme, Schering-Plough, Tigercat Pharma, UCB Pharma, and Ziilig Pharma; **E. Trovato** has served as speaker for: AbbVie, Almirall, Eli Lilly and Company, Janssen, LEO Pharma, Novartis, and UCB Pharma; **L. Puig** reports grants to institution from: AbbVie, Almirall, Amgen, Boehringer Ingelheim, Celgene, Eli Lilly and Company, Janssen, LEO Pharma, Novartis, Pfizer, Regeneron, Roche, Sanofi, and UCB Pharma; consulting fees or honoraria from: AbbVie, Almirall, Amgen, Baxalta, Biogen, Boehringer Ingelheim, Celgene, Eli Lilly and Company, Gebro Pharma, Janssen, LEO Pharma, Merck Serono, Merck Sharp & Dohme, Mylan, Novartis, Pfizer, Regeneron, Roche, Samsung Bioepis, Sandoz, Sanofi, and UCB Pharma; and participation in company-sponsored speaker's bureau for: Celgene, Eli Lilly and Company, Janssen, Merck Sharp & Dohme, Novartis, and Pfizer;

J.-M. Carrascosa reports grants, personal fees, participation on advisory boards, and/or non-financial support from: AbbVie, Almirall, Amgen, Boehringer Ingelheim, Bristol Myers Squibb, Eli Lilly and Company, Janssen, Novartis, Sandoz, and LEO Pharma; **T. Boyé** reports personal fees and grants (clinical research) from: AbbVie, Amgen, Eli Lilly and Company, Janssen, LEO Pharma, Novartis, and UCB Pharma; M. Megna has served as a speaker and/or consultant for: AbbVie, Almirall, Amgen, Eli Lilly and Company, Janssen Cilag, LEO Pharma, Novartis, and UCB Pharma; **A. Brnabic, S. Sabatino,** and **I. De La Torre** are employees and minor shareholders of: Eli Lilly and Company; **J.-T. Maul** has served as advisor and/or received speaking fees and/or participated in clinical trials sponsored by: AbbVie, Almirall, Amgen, Bristol Myers Squibb, Celgene, Eli Lilly and Company, LEO Pharma, Janssen Cilag, Merck Sharp & Dohme, Novartis, Pfizer, Pierre Fabre, Roche, Sanofi, and UCB Pharma

Medical writing assistance was provided by Charlie Bellinger, BSc, of Envision Catalyst, an Envision Medical Communications agency, a part of Envision Pharma Group, and was funded by Eli Lilly and Company.

Previously presented at European Academy of Dematology and Venerology (EADV); Paris, France; 17-20 September 2025.