PERSISTENCE OF IL-17A INHIBITORS SECUKINUMAB AND IXEKIZUMAB IN REAL-WORLD PRACTICE

Retrospective dual-centre real-world cohort study (Spain)

M. CORREAS SANAHUJA, M.C. GOMEZ BLASCO, I. MARTINEZ MARTINEZ, B. RODRIGUEZ CARBALLO, M.D. BORRELL GARCIA, A. RIERA MAGALLON,P. JOLONCH SANTASUSAGNA
Hospital Santa Tecla, Tarragona.
Hospital del Vendrell, Tarragona

XARXA SANTA TECLA
Sanitària, Social i Docent
a Tarragona des de 1171

Abstract: 4CPS-196
Contact: mcorreas@xarxatecla.cat
Extraction date: 03/10/2025

Background & rationale

- IL-17A inhibitors are established treatment options for psoriasis, psoriatic arthritis (PsA), and axial spondyloarthritis/ankylosing spondylitis (axSpA/AS).
- In real-world practice, treatment persistence is a pragmatic outcome integrating effectiveness, tolerability, and treatment positioning.
- Comparisons between secukinumab and ixekizumab may be influenced by indication mix, treatment line, and calendar-time effects.
- Differences in reimbursement timing and local biologic positioning pathways may introduce temporal bias in comparative persistence analyses.
- Understanding persistence patterns may help optimise biologic sequencing and contextualise treatment changes in routine practice.

Objective

- To compare real-world persistence of secukinumab versus ixekizumab, overall and by indication (psoriasis, PsA, and axSpA/AS).
- To evaluate factors associated with persistence, including treatment line, sex, and calendar time.
- To describe and compare reasons for treatment discontinuation between drugs.

Study design & data source

- Retrospective dual-centre cohort study (Hospital Santa Tecla and Hospital del Vendrell, Spain).
- Data source: CatSalut RPT registry, using routinely recorded treatment data.
- Extraction date: 03 Oct 2025. Ongoing treatments at extraction were censored at this date.
- Reasons for discontinuation were analysed as documented in the registry at the time of treatment stop.

Patients, outcomes & definitions

- Included treatments: secukinumab or ixekizumab prescribed for psoriasis, PsA, or axSpA/AS.
- Unit of analysis: treatment episode (both completed and ongoing treatments were included).
- Primary outcome: treatment persistence (time from treatment start to discontinuation).
- Event definition: treatment discontinuation.
- Censoring: treatments ongoing at extraction date were censored on 03 Oct 2025.
- Treatment line was analysed as 1–2 vs ≥3.
- Sex was coded as male/female according to registry records.
- Discontinuation reasons were grouped for descriptive comparison (overall cohort).
- A patient could contribute more than one treatment episode over time.

Statistical analysis & sensitivity analyses

- Kaplan–Meier curves and log-rank tests were used for unadjusted persistence comparisons (overall and by indication).
- Multivariable Cox proportional hazards models were fitted to estimate discontinuation risk (HR, 95% CI).
- Adjusted models included drug, indication, treatment line, age, sex, start year, and hospital.
- Effect modification was explored through drug×indication and drug×line interaction terms.
- Sensitivity analyses assessed temporal confounding using calendar-time stratification (including post-2022 analyses/year-bin analyses).
- Reasons for discontinuation were compared descriptively by drug (percentages among discontinued treatments).

Abbreviations

***SEC**, secukinumab; **IXE**, ixekizumab; **PsA**, psoriatic arthritis; **axSpA/AS**, axial spondyloarthritis/ankylosing spondylitis; **HR**, hazard ratio; **CI**, confidence interval; **KM**, Kaplan–Meier; **RPT**, Registre de Pacients i Tractaments.*

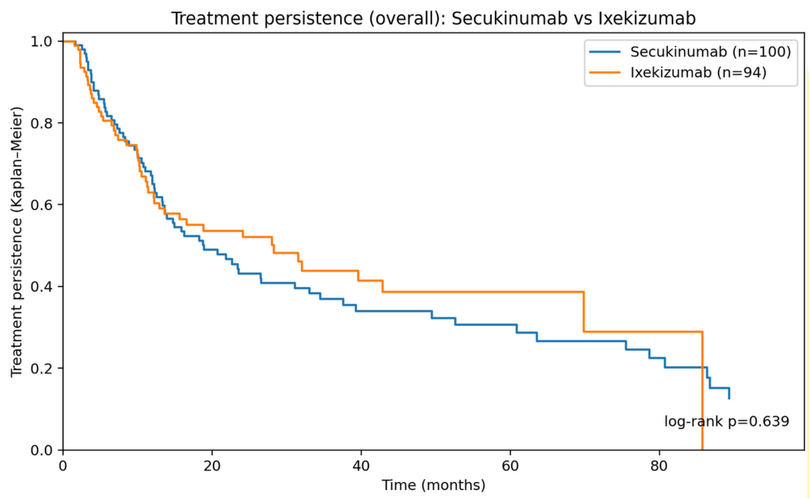

Figure 1. Figure 1. Overall treatment persistence: secukinumab (n=100) vs ixekizumab (n=94) (Kaplan–Meier analysis; log-rank p=0.639; follow-up censored at 03 Oct 2025).

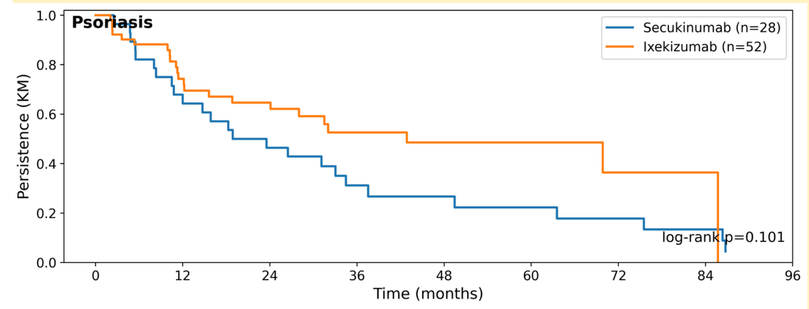

Figure 2A. Treatment persistence in psoriasis: secukinumab vs ixekizumab (Kaplan–Meier analysis; log-rank p=0.101).

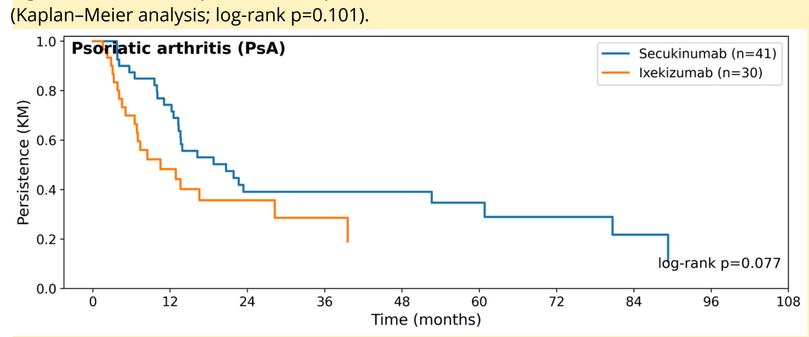

Figure 2B. Treatment persistence in psoriatic arthritis (PsA): secukinumab vs ixekizumab (Kaplan–Meier analysis; log-rank p=0.077).

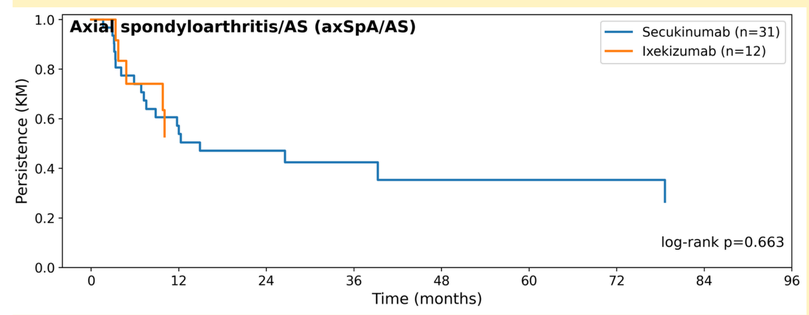

Figure 2C. Treatment persistence in axial spondyloarthritis/ankylosing spondylitis (axSpA/AS): secukinumab vs ixekizumab (Kaplan–Meier analysis; log-rank p=0.663).

Stratum	Drug	N	Events	Median (m)	12m	24m	36m
Overall	SEC	100	71	18.9	65.1%	43.2%	37.0%
	IXE	94	48	28.3	63.1%	53.6%	43.9%
Psoriasis	SEC	28	25	23.6	64.3%	46.4%	31.2%
	IXE	52	23	42.9	74.3%	64.6%	52.6%
PsA	SEC	41	27	20.7	74.2%	39.1%	39.1%
	IXE	30	20	10.5	48.2%	35.7%	28.6%
axSpA/AS	SEC	31	19	14.9	53.9%	47.1%	42.4%
	IXE	12	5	NR	52.9%	52.9%	52.9%

Table 1. Kaplan–Meier persistence estimates at 12, 24, and 36 months and median time to discontinuation (months), by indication and drug (SEC vs IXE); follow-up censored at 03 Oct 2025.

***Note**: The axSpA/AS ixekizumab subgroup is small (n=12; 5 events); estimates are descriptive and the median was not reached (NR).*

Adjusted analyses & sensitivity (key findings)

- Overall persistence was similar between drugs in unadjusted analyses (log-rank p=0.639).
- After adjustment, persistence differed by indication (drug×indication p=0.035).
- In psoriasis, ixekizumab showed a persistence signal vs secukinumab: HR 0.47 (95% CI 0.23–0.98), p=0.043.
- Treatment line modified the drug effect (drug×line p=0.0056); later-line ixekizumab (≥3rd) was associated with poorer persistence vs 1–2nd line: HR 1.87 (95% CI 1.03–3.38), p=0.040.
- Temporal confounding: curves visually converged in recent years, but the drug×time-bin interaction was not significant (p=0.702), so this trend is descriptive.

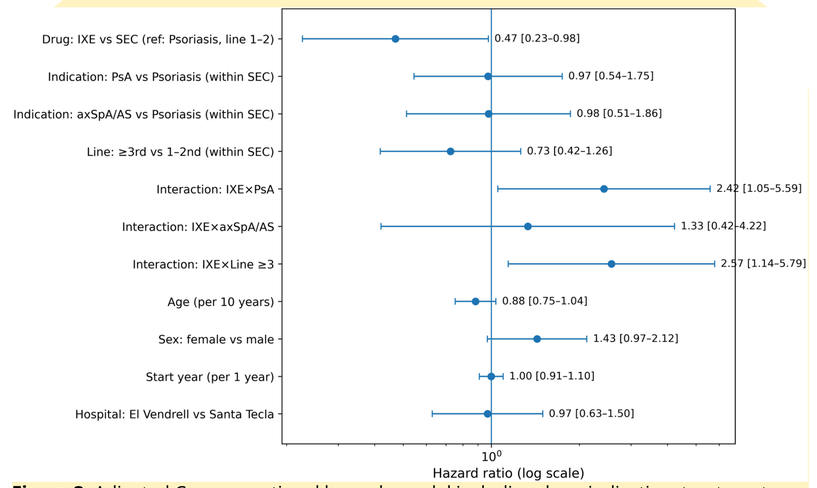

Figure 3. Adjusted Cox proportional hazards model including drug, indication, treatment line, and drug×indication/drug×line interactions (HR, 95% CI; log scale), adjusted for age, sex, start year, and hospital.

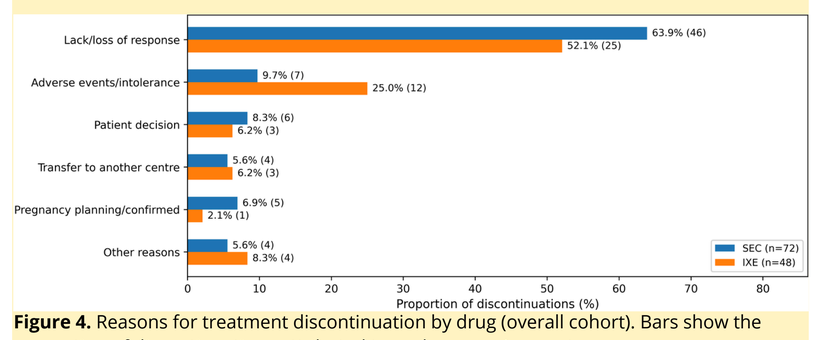

Figure 4. Reasons for treatment discontinuation by drug (overall cohort). Bars show the proportion of discontinuations attributed to each reason (percentages among discontinuations; counts in brackets). Reasons were extracted from the CatSalut RPT registry and analysed as recorded at the time of discontinuation.

Key observation: Adverse events accounted for a higher share of discontinuations with ixekizumab vs secukinumab (25.0% [12/48] vs 9.7% [7/72]); interpret descriptively.

Interpretation (adjusted model)

- The drug effect on persistence was modified by indication and treatment line (drug×indication p=0.035; drug×line p=0.0056).
- In psoriasis, ixekizumab was associated with a lower risk of discontinuation than secukinumab (HR 0.47, 95% CI 0.23–0.98).
- Treatment line modified persistence: later-line ixekizumab (≥3rd) showed poorer persistence vs 1–2nd line (HR 1.87, 95% CI 1.03–3.38), while secukinumab did not show a similar pattern.
- In our setting, IL-17A inhibitors for psoriasis are frequently positioned as ≥3rd-line (after anti-TNF agents and ustekinumab), which may influence persistence estimates.

Sensitivity (temporal confounding)

- Early years included less standardised prescribing and more frequent switching; secukinumab predominated.
- Secukinumab entered routine use earlier than ixekizumab in our setting (earlier reimbursement), which may contribute to calendar-time confounding in persistence comparisons.
- In recent years, persistence curves visually converged; however, the drug×time-bin interaction was not significant (p=0.702), so this trend is descriptive.
- Therefore, calendar time may confound unadjusted comparisons and should be considered when interpreting real-world persistence.

Conclusions

- Overall persistence was broadly comparable between secukinumab and ixekizumab in unadjusted analyses.
- In adjusted analyses, the drug effect on persistence was indication-dependent, with a persistence signal favouring ixekizumab in psoriasis.
- Treatment line influenced persistence, supporting the importance of biologic sequencing in real-world practice.
- Calendar time may influence persistence estimates; recent-year analyses suggested convergence between drugs, although this trend was not statistically significant.

Implications

- Persistence benchmarking should account for indication, treatment line, and calendar time; local positioning pathways may meaningfully shape real-world outcomes.

Limitations

- Retrospective design; potential residual confounding (e.g., disease activity, comorbidities).
- Reasons for discontinuation were extracted from the CatSalut RPT registry and analysed as recorded; misclassification cannot be excluded.
- Some strata were small (notably axSpA/AS with ixekizumab), limiting precision and power.

View & share this poster