

Cross-Country Harmonization of *Psoriatic Arthritis* Cohorts: A Real-World Data Study

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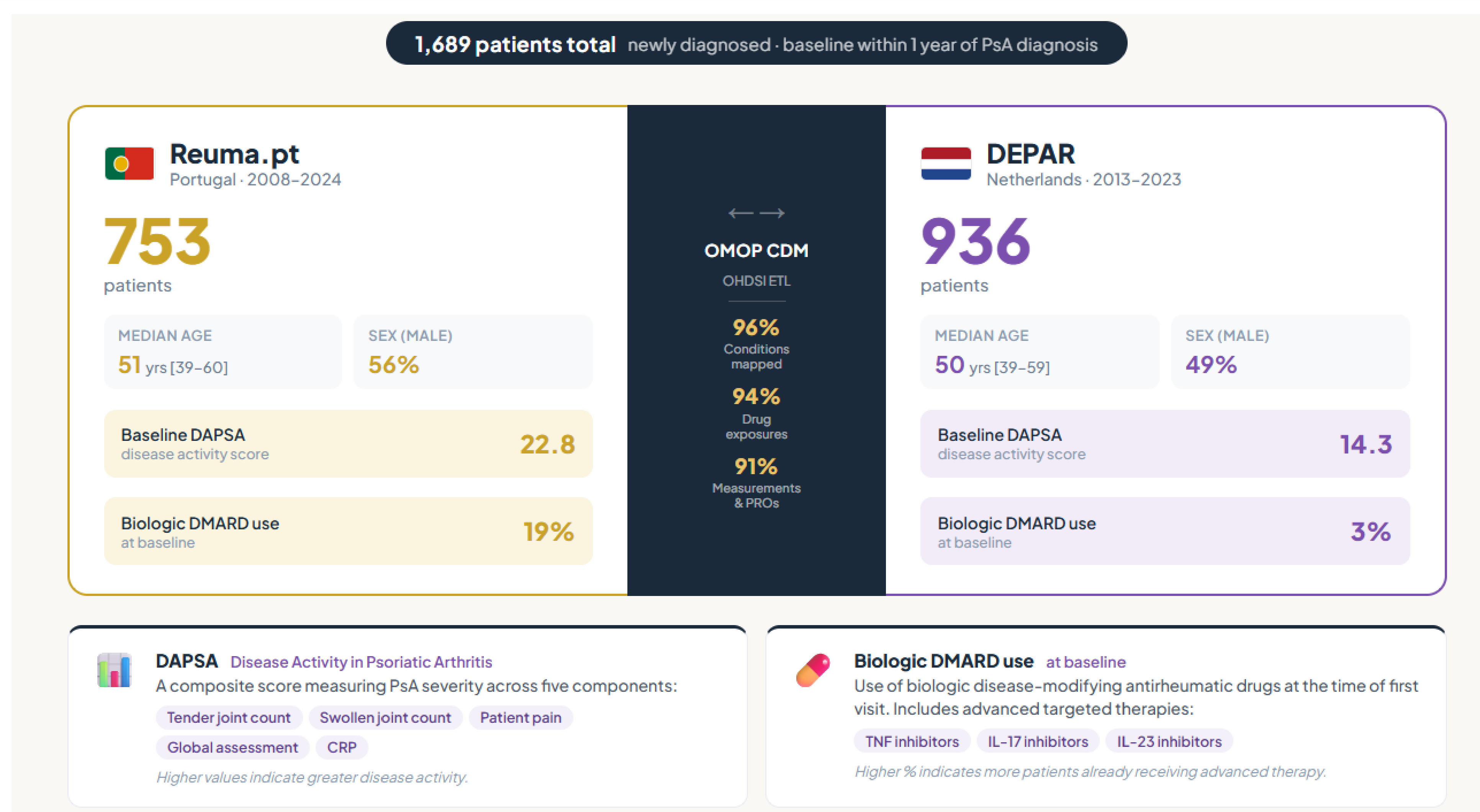


Background

Psoriatic arthritis (PsA) affects 1–2% of the population and shows substantial heterogeneity in symptoms, progression, and treatment response. Real-world evidence is essential to understand long-term outcomes, sex differences, and disease trajectories that are difficult to capture in clinical trials.

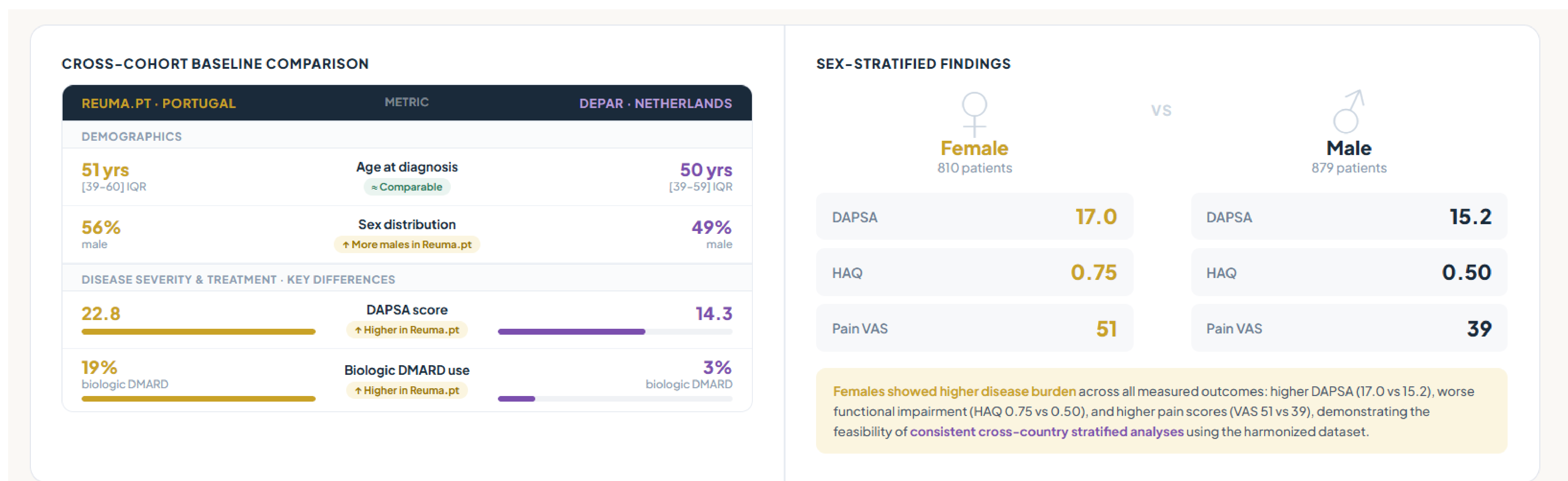
The iPROLEPSIS project aims to support personalized PsA care through real-world data and explainable AI across multiple European healthcare systems.

To identify key inflammation drivers, we harmonized two national PsA cohorts, the Portuguese Reuma.pt registry and the Dutch DEPAR cohort, into the OMOP Common Data Model, enabling standardized cross-country and sex-stratified analyses.



DATA QUALITY & RESULTS

Check	Pass	Fail	Total	% Pass
Plausibility	2483	17	2500	99%
Conformance	939	132	1071	88%
Completeness	417	48	465	90%
Total	3839	197	4036	95%



Conclusion

This work shows the value of harmonizing data from different national PsA registries into the OMOP CDM to make standardized real-world analyses across European healthcare systems possible. This integration opens up new possibilities for advanced analytics, such as federated studies and AI-driven prediction models, beyond this proof-of-concept analysis, advancing iPROLEPSIS's goal of personalized, data-driven care.

References

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