Real-World insights from the LOGEX IMID Observatory: a multi-country, multi-year analysis of treatment pathways and healthcare resource utilisation in immune-mediated inflammatory diseases

#RWD145

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Introduction & Knowledge gap

The treatment of immune-mediated inflammatory diseases (**IMIDs**) is increasingly shifting from broad immunosuppression to targeted therapeutic agents. However, there is an **unmet need to capture and manage coexisting IMIDs, and to address the long-term safety and (cost-)effectiveness of available treatments.** To address this, we present the structure, data capabilities, and clinical relevance of the LOGEX **IMID Observatory—a pan-European** initiative harnessing real-world data (RWD) to analyze treatment patterns, healthcare resource utilization (HCRU), and patient outcomes in IMIDs across **dermatology, rheumatology, and gastroenterology.**
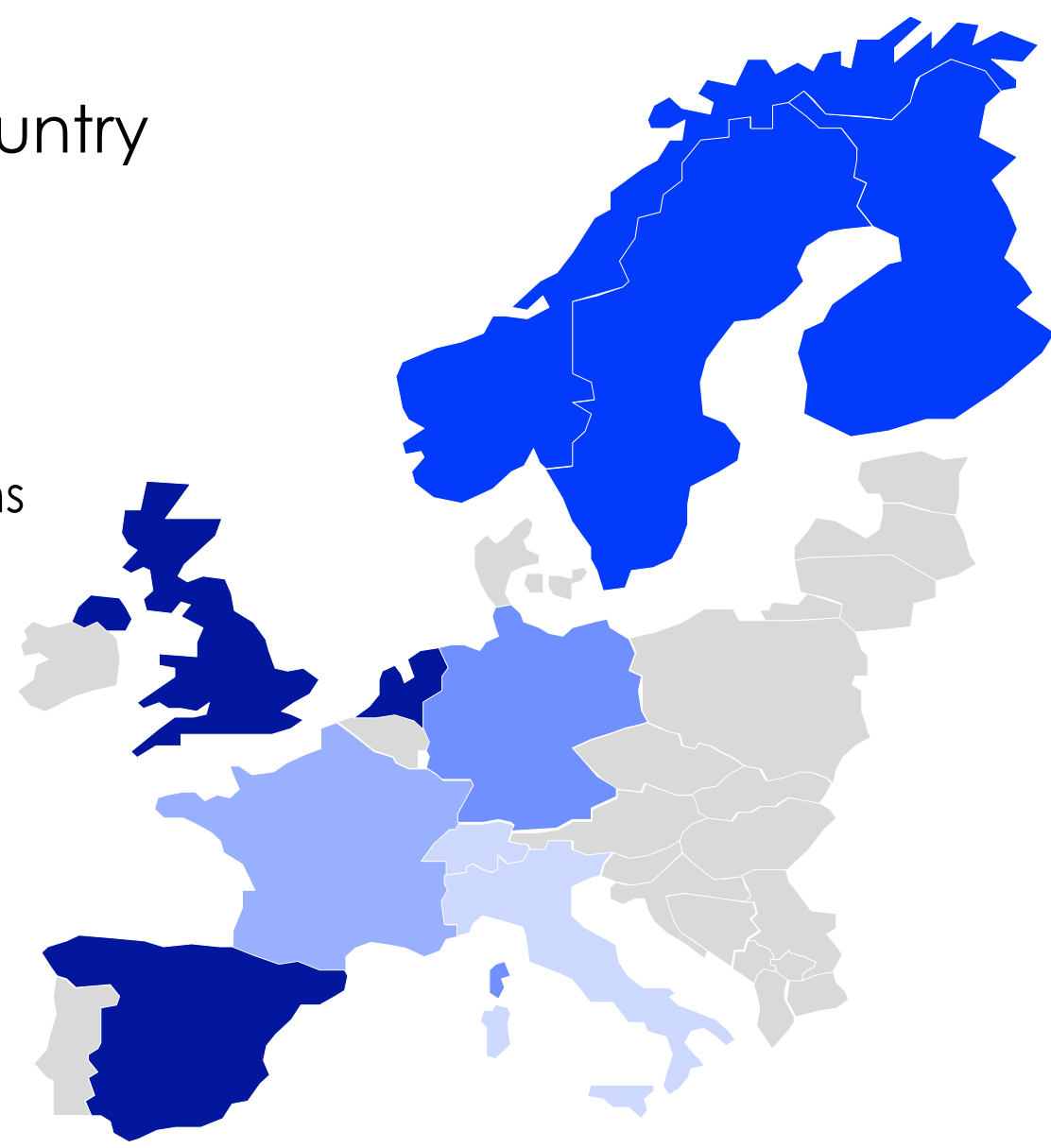
Conclusions

The LOGEX **IMID Observatory** provides a **scalable and scientifically robust platform** to advance the understanding and management of IMIDs across Europe. By integrating multi-country real-world data with advanced analytics and clinician collaboration, it **enables evidence-based decision-making, promotes cross-border learning, and drives improvements in care quality and efficiency.**

Methods

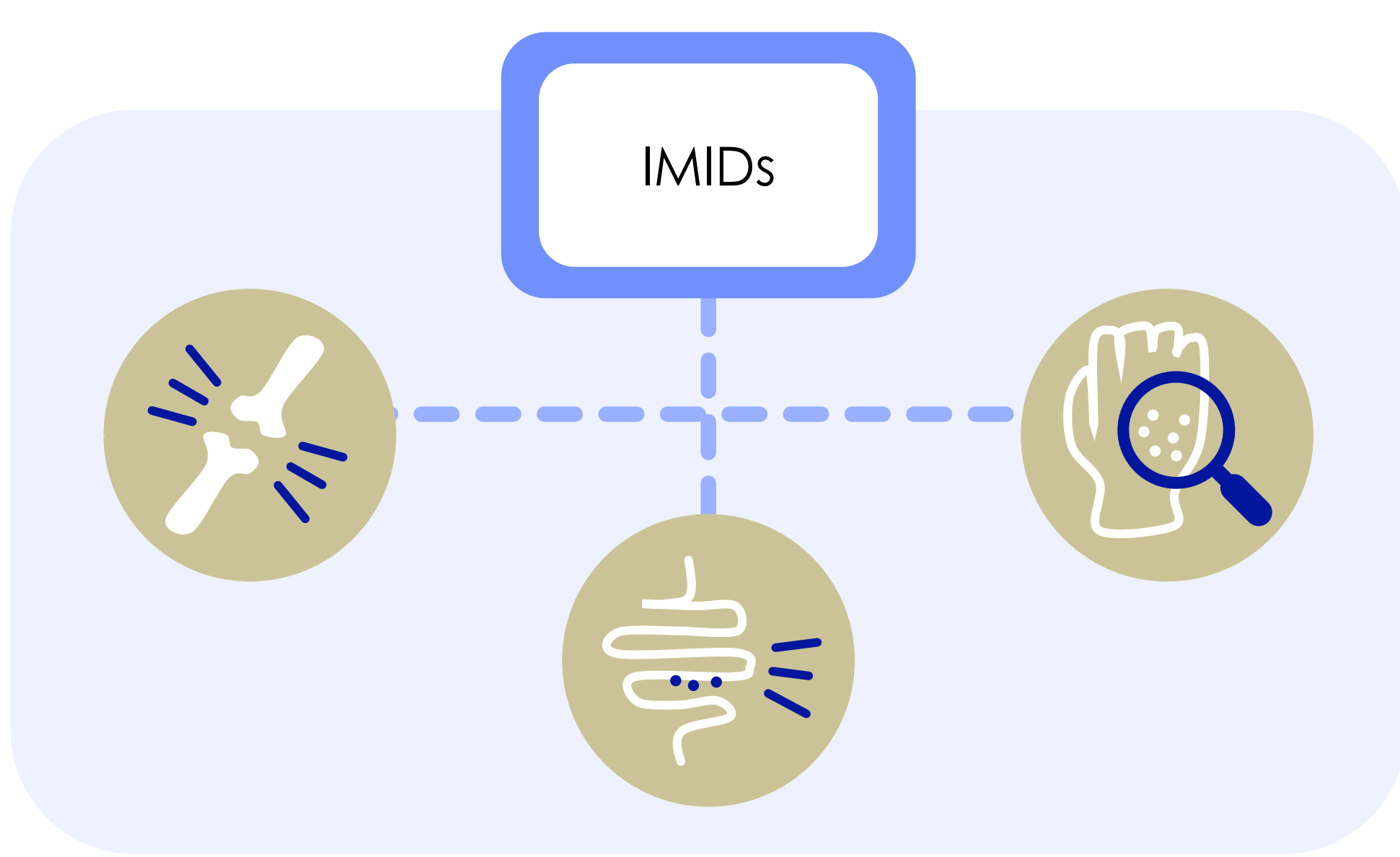### Partner hospitals: European coverage

5-10 hospitals per country

- Full presence
- Full data, with limitations
- Under development
- In collaboration
- Long term plan

Data capabilities

- Started in 2019, updated monthly
- Retrospective hospital data, no extra burden

- Treatment lines and duration
- Patient demographics and coexisting IMIDs
- HCRU metrics per patient & treatment line

- Secure data access
- Reusable for multiple research questions
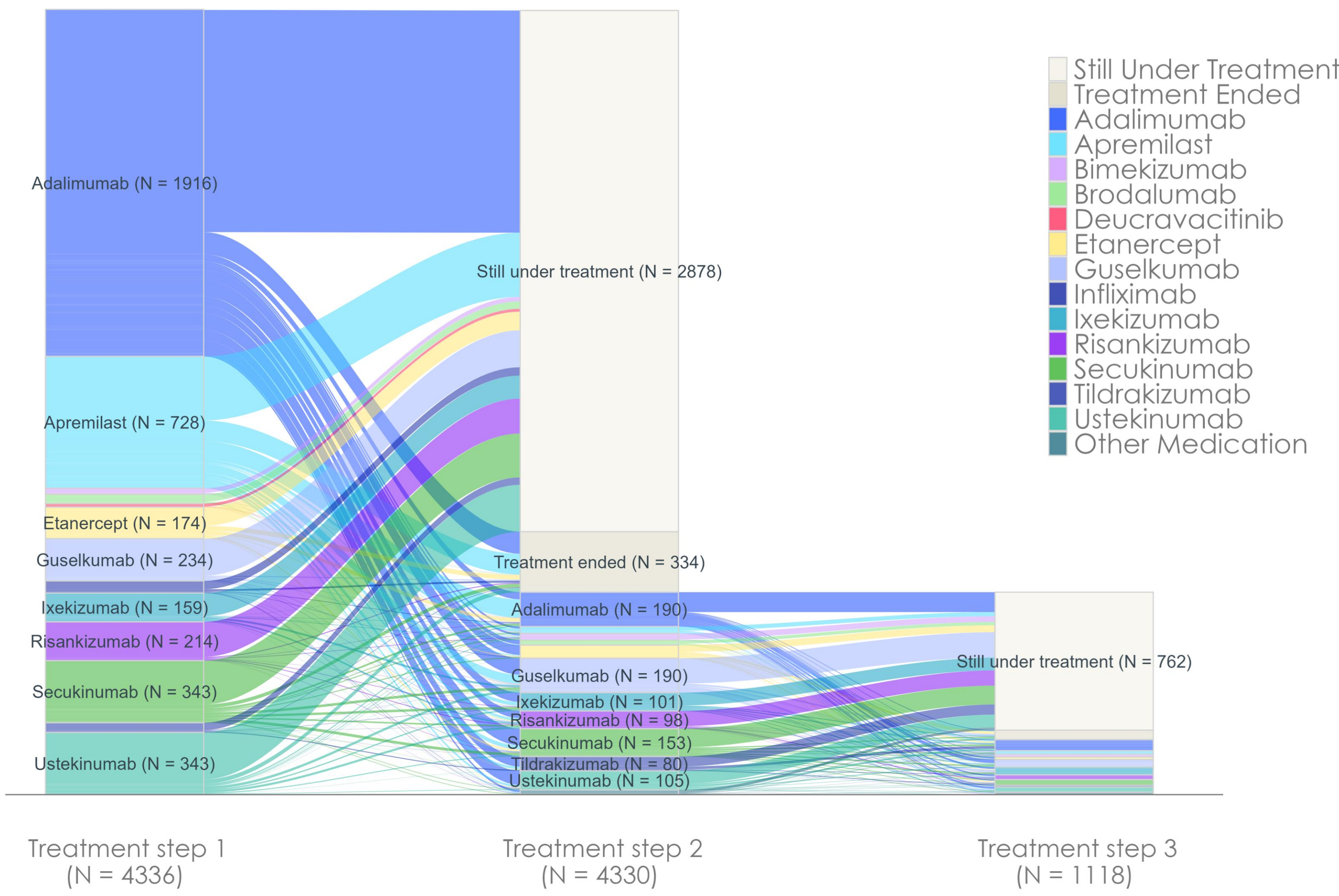- Benchmarking across institutions
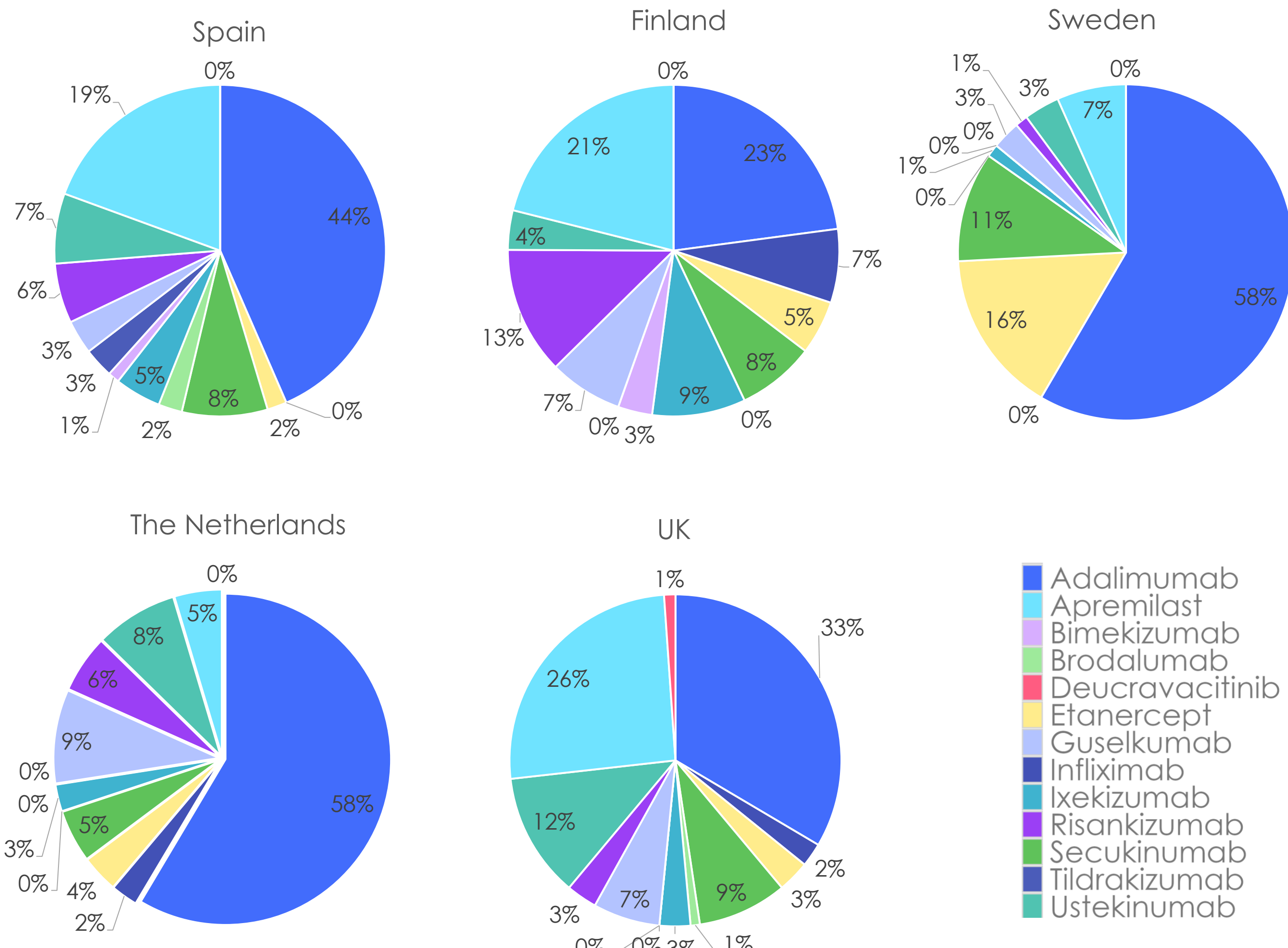
3 core IMID focus areas

IMIDs

Valuable insights to advance real-world IMID healthcare

Partner hospitals and collaborating institutions participating benefit from data-driven insights that inform and enhance clinical decision-making. Examples include:
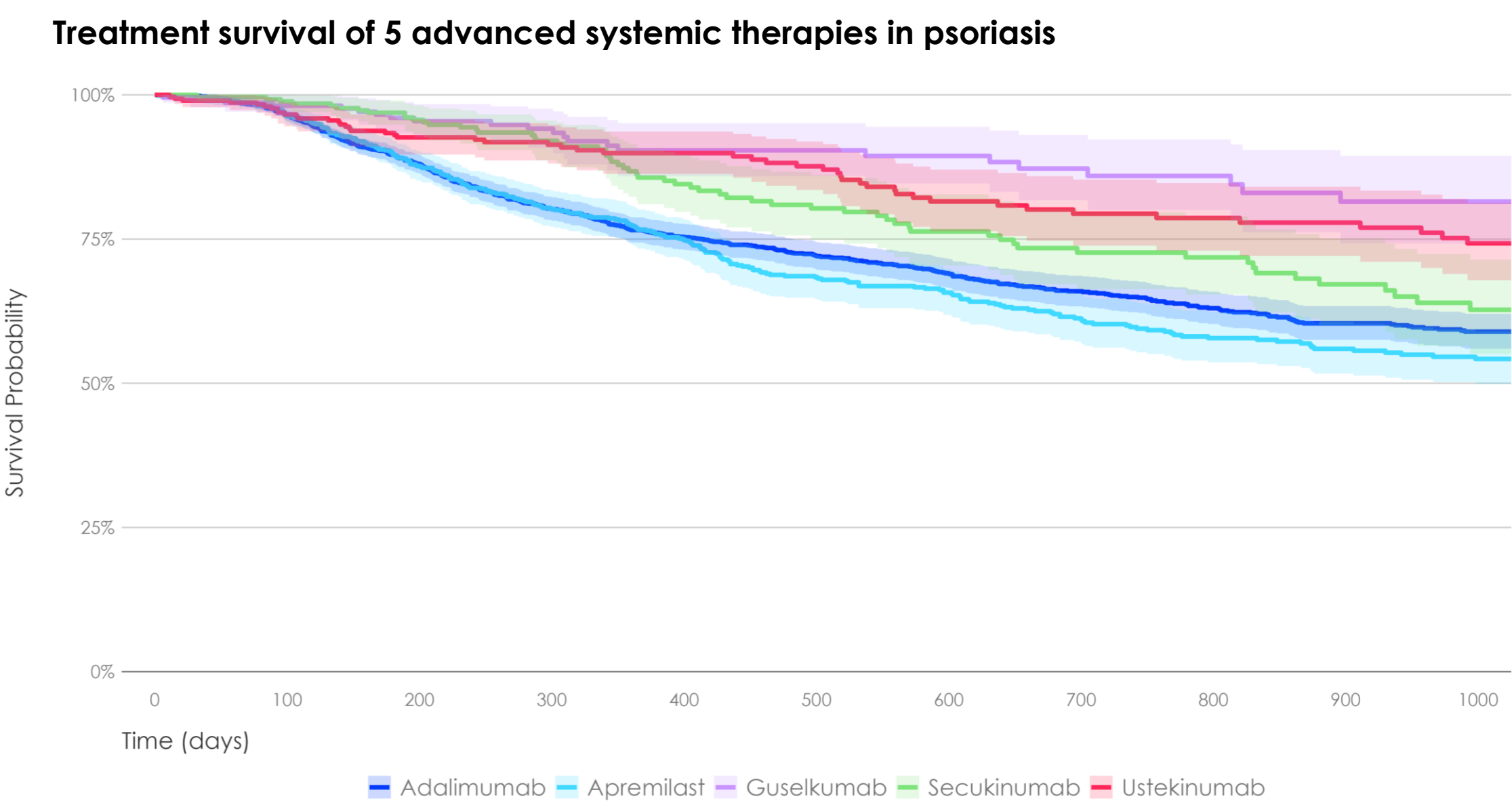
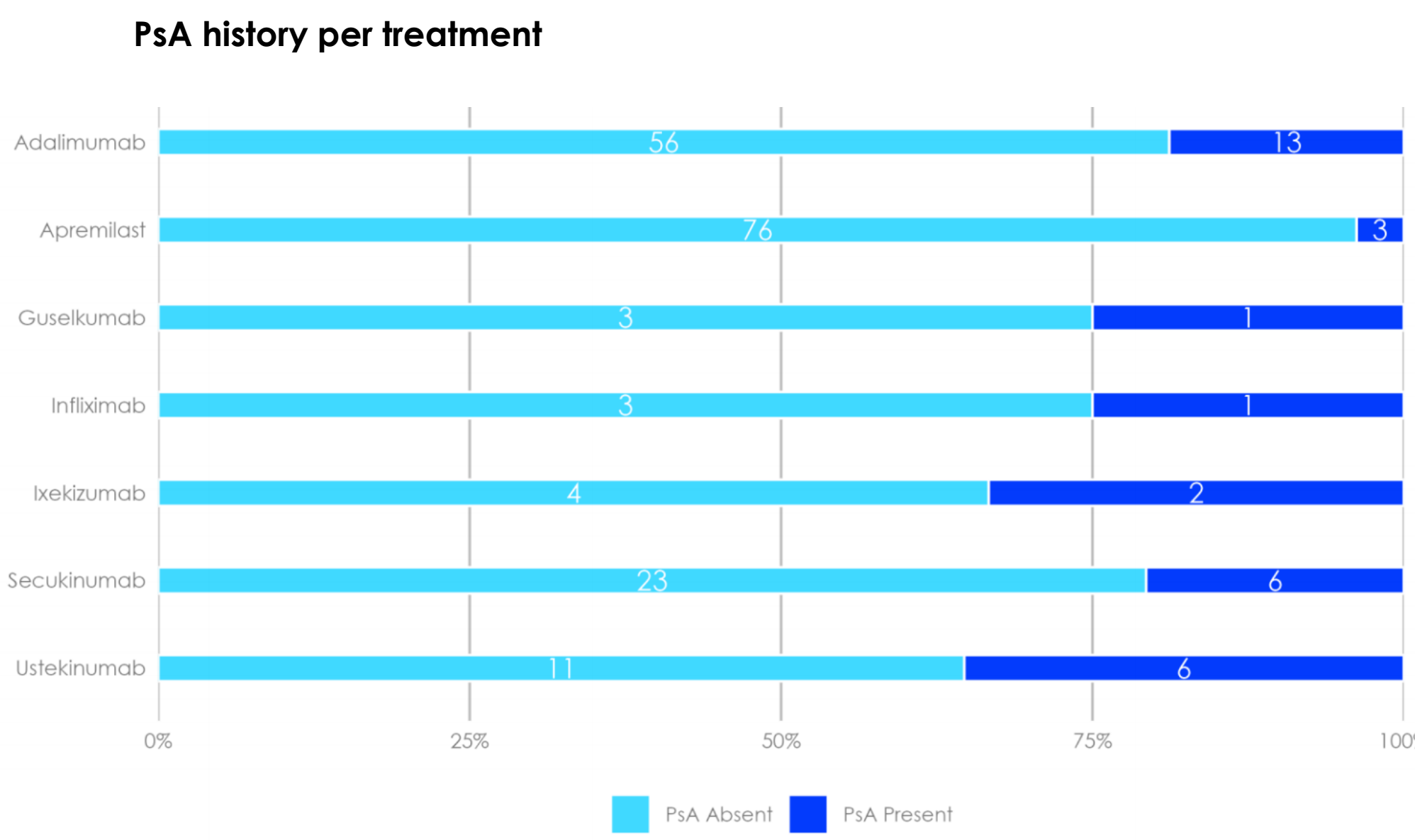### A) Therapy use across treatment lines (sequencing in psoriasis)

Treatment step 1 (N = 4336)
- Adalimumab (N = 1916)
- Apremilast (N = 728)
- Etanercept (N = 174)
- Guselkumab (N = 234)
- Ixekizumab (N = 159)
- Risankizumab (N = 214)
- Secukinumab (N = 343)
- Ustekinumab (N = 343)

Treatment step 2 (N = 4330)
- Still under treatment (N = 2878)
- Treatment ended (N = 334)
- Adalimumab (N = 190)
- Guselkumab (N = 190)
- Ixekizumab (N = 101)
- Risankizumab (N = 98)
- Secukinumab (N = 153)
- Tildrakizumab (N = 80)
- Ustekinumab (N = 105)

Treatment step 3 (N = 1118)
- Still under treatment (N = 762)

Legend:
- Still Under Treatment
- Treatment Ended
- Adalimumab
- Apremilast
- Bimekizumab
- Brodalumab
- Deucravacitinib
- Etanercept
- Guselkumab
- Infliximab
- Ixekizumab
- Risankizumab
- Secukinumab
- Tildrakizumab
- Ustekinumab
- Other Medication

B) Proportion of therapy use per country (naïve psoriasis patients)

Spain: 44%, 0%, 19%, 7%, 6%, 3%, 3%, 1%, 2%, 8%, 2%, 0%, 5%

Finland: 23%, 0%, 21%, 4%, 13%, 7%, 0%, 3%, 0%, 9%, 8%, 5%, 7%

Sweden: 58%, 0%, 1%, 3%, 3%, 0%, 0%, 1%, 0%, 11%, 16%, 0%, 7%

The Netherlands: 58%, 0%, 0%, 0%, 3%, 0%, 0%, 2%, 4%, 5%, 9%, 6%, 8%, 5%

UK: 33%, 1%, 26%, 12%, 3%, 0%, 0%, 3%, 1%, 7%, 9%, 3%, 2%

Legend:
- Adalimumab
- Apremilast
- Bimekizumab
- Brodalumab
- Deucravacitinib
- Etanercept
- Guselkumab
- Infliximab
- Ixekizumab
- Risankizumab
- Secukinumab
- Tildrakizumab
- Ustekinumab

C) Treatment survival top 5 frequently used

Treatment survival of 5 advanced systemic therapies in psoriasis

Survival Probability vs Time (days)
- Adalimumab
- Apremilast
- Guselkumab
- Secukinumab
- Ustekinumab

D) Coexisting IMIDs

PsA history per treatment

- Adalimumab
- Apremilast
- Guselkumab
- Infliximab
- Ixekizumab
- Secukinumab
- Ustekinumab

PsA Absent / PsA Present

E) Resource utilisation

Mean cost per patient per month (€)

- Adalimumab — N = 177
- Apremilast — N = 200
- Etanercept — N = 11
- Guselkumab — N = 45
- Infliximab — N = 5
- Ixekizumab — N = 9
- Risankizumab — N = 26
- Secukinumab — N = 66
- Ustekinumab — N = 61

Legend:
- Outpatient
- Emergency
- Drugs: other therapies
- Inpatient
- Drugs: selected Pso treatment
- Outpatient: light therapy

Figures show example insights from real-world cohorts in the IMID Observatory. A) Sankey diagram illustrating treatment trajectories of psoriasis patients across different lines of therapy, including transitions between treatments and points of discontinuation. **B)** Pie charts present the distribution of initial advanced systemic therapy (AST) prescriptions among treatment-naive psoriasis patients across five European countries. **C)** Kaplan-Meier survival curve illustrates treatment persistence over time (in days) for five different therapies used in psoriasis management. **D)** Bar chart shows medication use in psoriasis patients with a psoriatic arthritis (PsA) history, defined as the diagnosis of PsA in a patient with established psoriasis recorded within 1 year before initiation of advanced systemic therapy. **E)** Bar plot shows the mean cost per patient per month for each AST in psoriasis patients.

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