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The New Registry

In August 2023, the new EBMT Registry went live. The EBMT Registry team designed an all-inclusive replacement, with a focus on enhancing the functionalities of the old system. The EBMT Registry team, together with two vendors, developed the new web application and migrated the legacy data from the old databases (ProMISe and Castor) to the new EBMT Registry (figure 1). To ease collaborations, a new data structure (OMOP) was introduced as well. This update from the previous data collection systems, ensures that EBMT remains at the forefront of medical data collection in the European landscape.

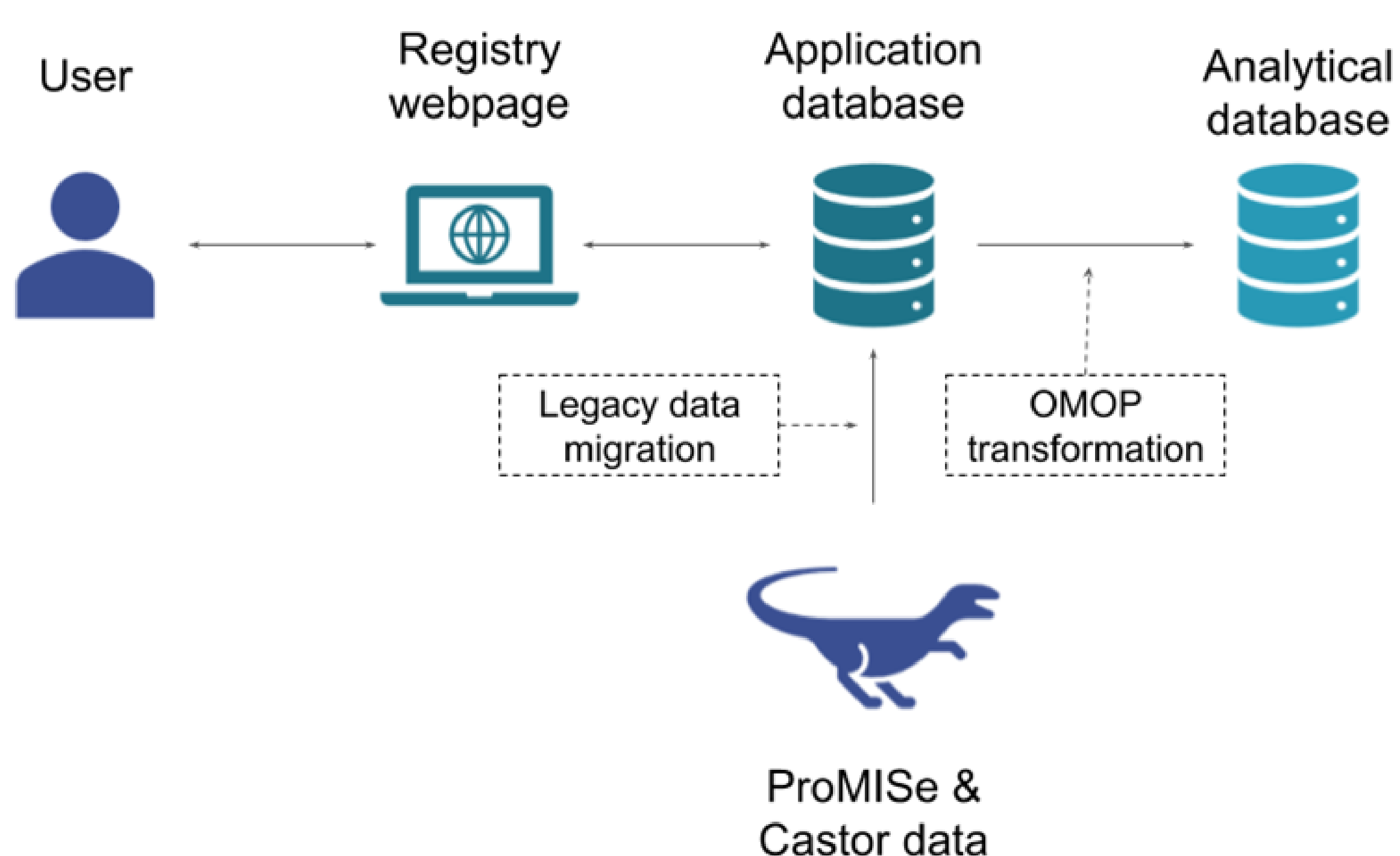


Figure 1. EBMT Registry Architecture

During the migration process, EBMT has migrated successfully over 696.388 patient records and more than 5 million patient events that EBMT collected over the last years (figures 2&3).

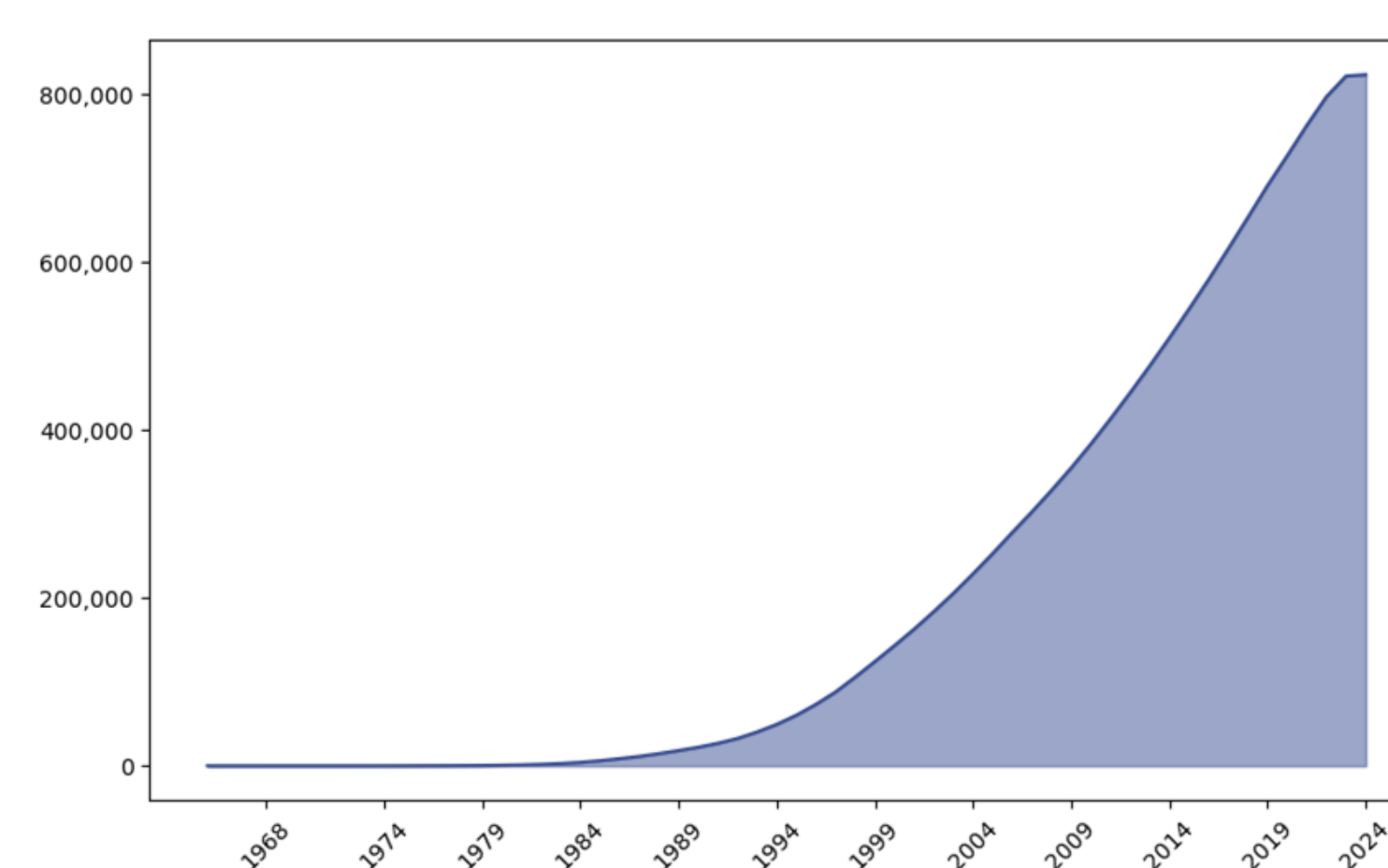


Figure 2. Count of transplants per year

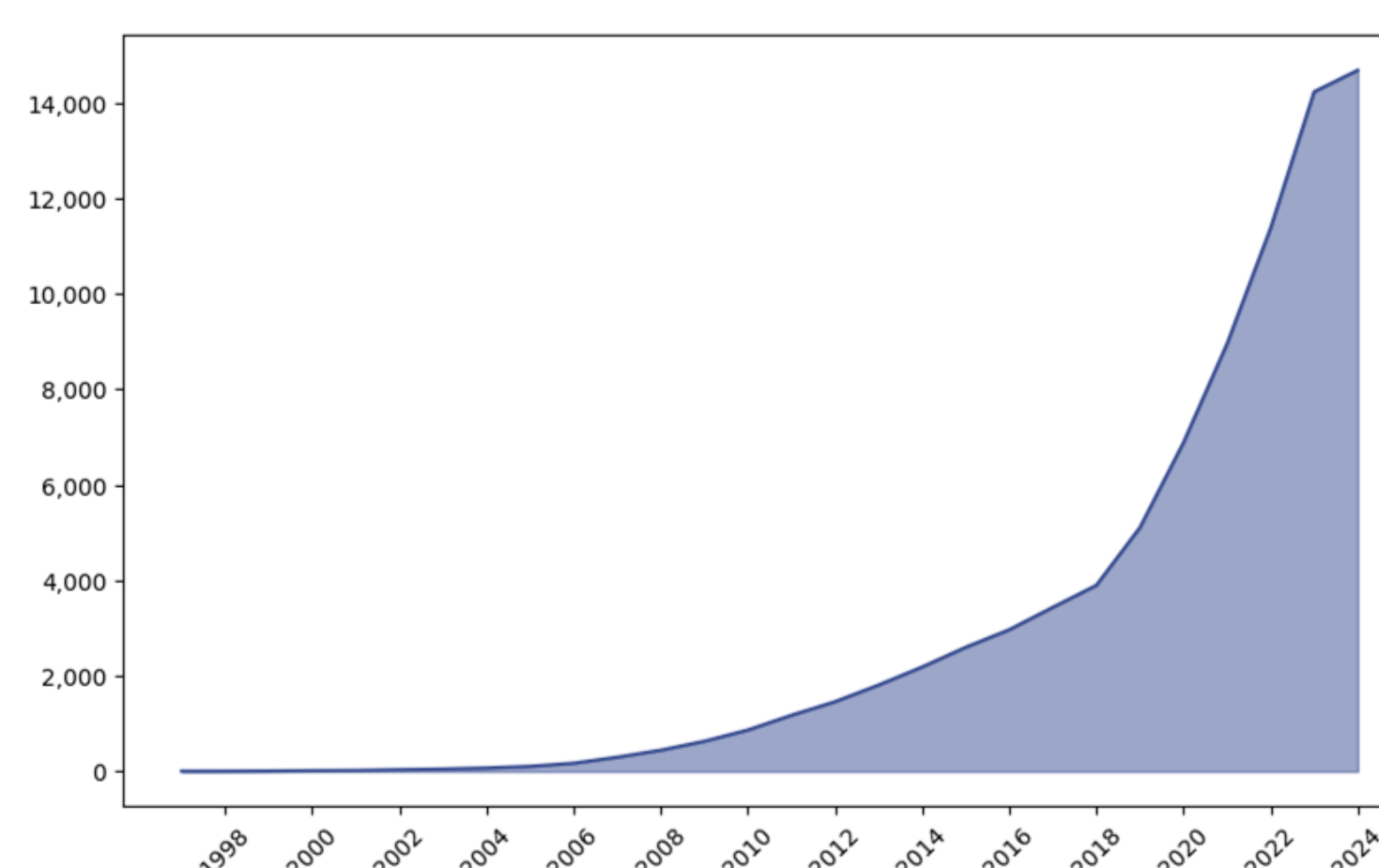


Figure 3. Cellular Therapies registered per year

After go live, the rest of the legacy data from the core dataset is being migrated to the EBMT Registry in different cycles (figure 4).

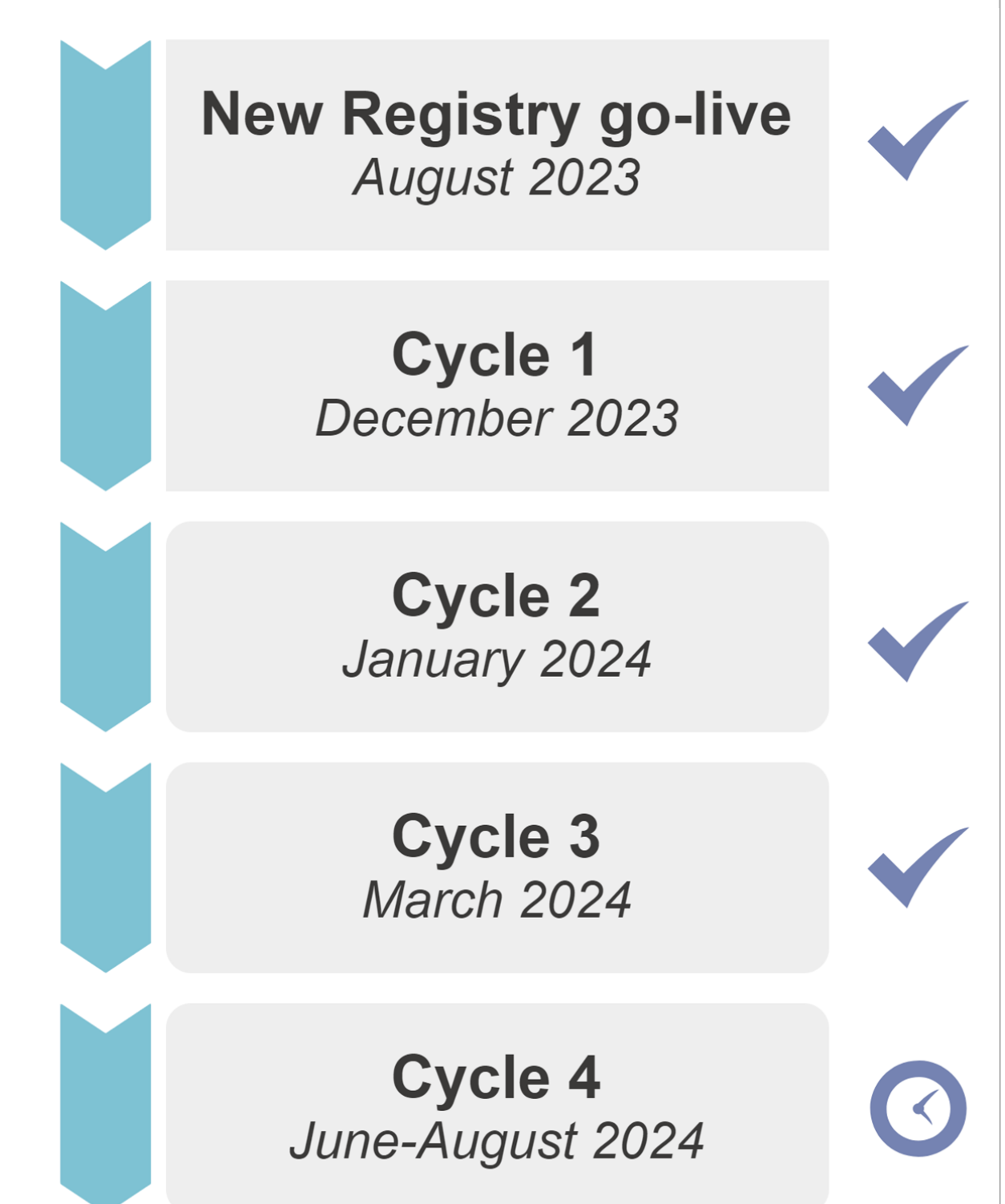


Figure 4. Migration Cycles

After the core dataset migration, it is planned to migrate the extended dataset in two separate cycles.

Data Model & Visualization

EBMT has adopted a new data model called **OMOP-CDM**, which is a patient-centric international standard model (figure 5). This model offers the following advantages:

- Facilitates the use of EBMT data for scientific collaboration, research, and healthcare decision-making.
- Enables EBMT members to leverage datasets from a multitude of federated networks, such as the OHDSI (Observational Health Data Sciences and Informatics) community.
- Allows for quick and efficient performance of large-scale analytics.

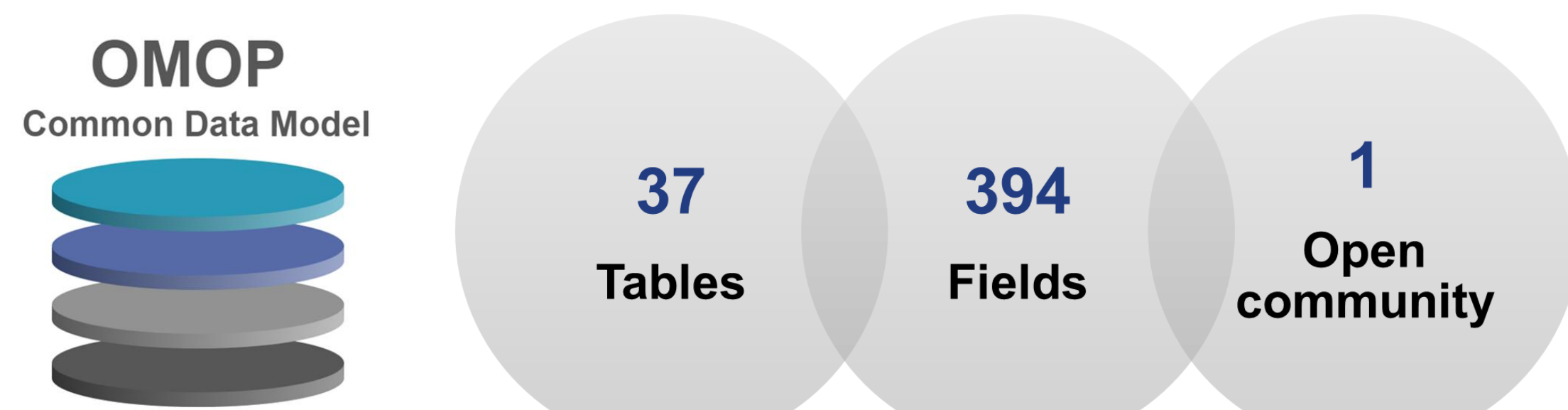


Figure 5. OMOP CDM

To ensure EBMT meets its reporting needs for both internal users and centre/NR members, **MicroStrategy** has recently been chosen as the analytical tool. It will be integrated into EBMT Registry's existing data capture tool, enabling all EBMT members and internal personnel to utilize its capabilities. These capabilities include:

- Reporting
- Visualization
- Analysis
- Security

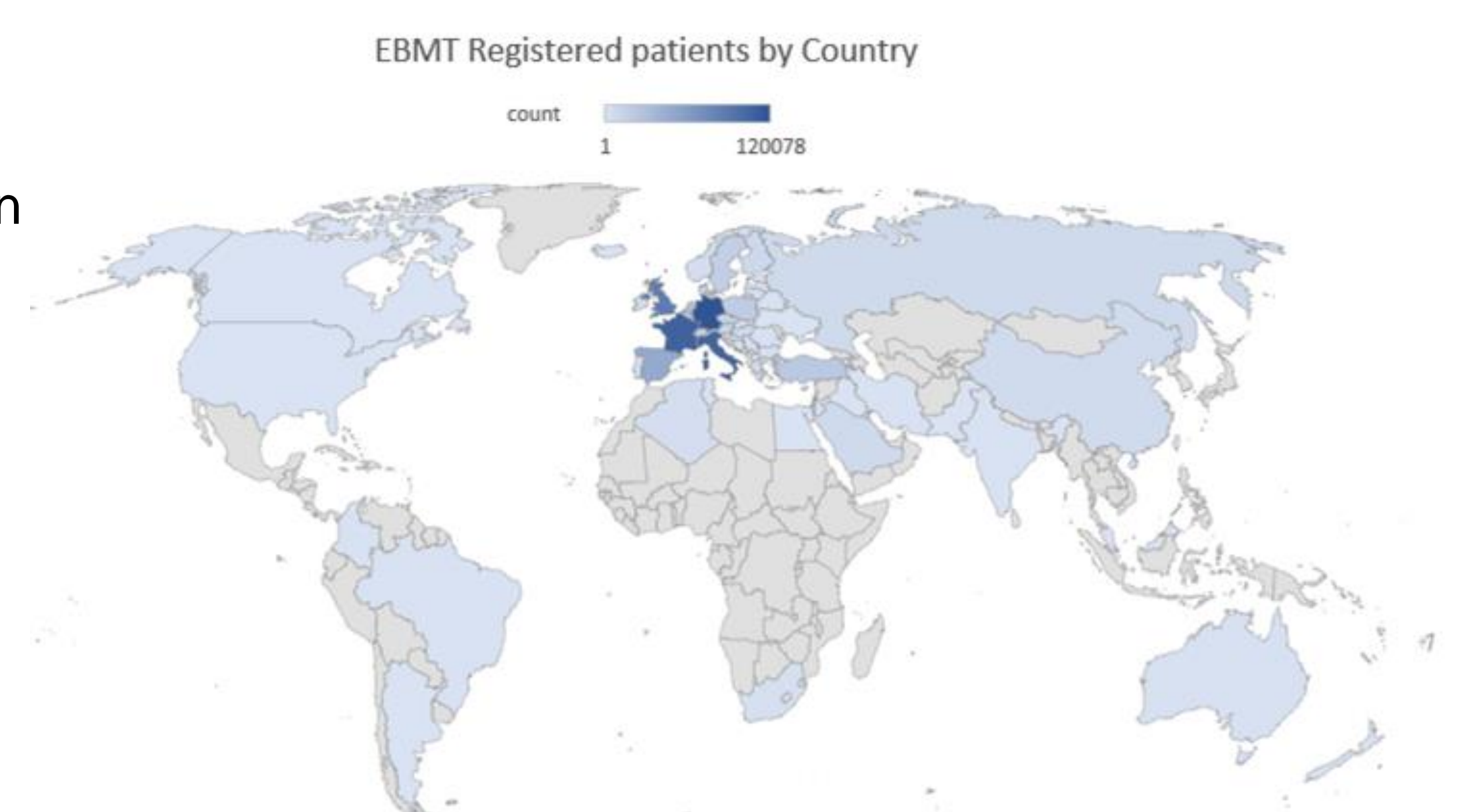


Figure 6. Example of visualisation: CIC Patient Count per country

Going Forward

Since go-live, the EBMT Registry was upgraded with 7 new releases to improve user experience and add new functionalities.

To ensure the EBMT Registry stays up to date, more releases with new functionalities are planned for the next years. The first big release will include the analytical tool to help centres access their data easily. After this, improvements on collecting data for studies will be implemented, including functionalities for data monitoring and adding queries to fields. The EBMT Registry team's goal is to establish new standards in the field of (H)CT data collection, enabling researchers to advance in patient care.