



## Background, Objectives and Methods

### BACKGROUND

- Real-World Data (RWD) are increasingly being integrated into post-marketing surveillance (PMS) to support the monitoring of product safety and effectiveness.
- However, the extent and characteristics of RWD use in PMS across the Asia-Pacific (APAC) region remain poorly understood.

### OBJECTIVE

- To evaluate the extent of RWD integration into PMS across APAC from 2020 to 2025.
- To describe publication trends, methodological approaches, data sources, and outcomes assessed in RWD-based PMS studies.
- To identify opportunities and gaps in the application of RWD for PMS in APAC.

### METHODS

- APAC PMS studies utilizing RWD were identified through a literature review.
- Eligible studies were screened using predefined inclusion and exclusion criteria.
- Descriptive analyses were conducted to summarize study characteristics and temporal trends.

## 1 | Literature Review

- Of 1,318 publications screened, 604 (45.8%) met eligibility criteria, including 452 (74.8%) studies evaluating regulatory-mandated or voluntary PMS using RWD in APAC.

Table 1. Search strategy and eligibility criteria for literature search

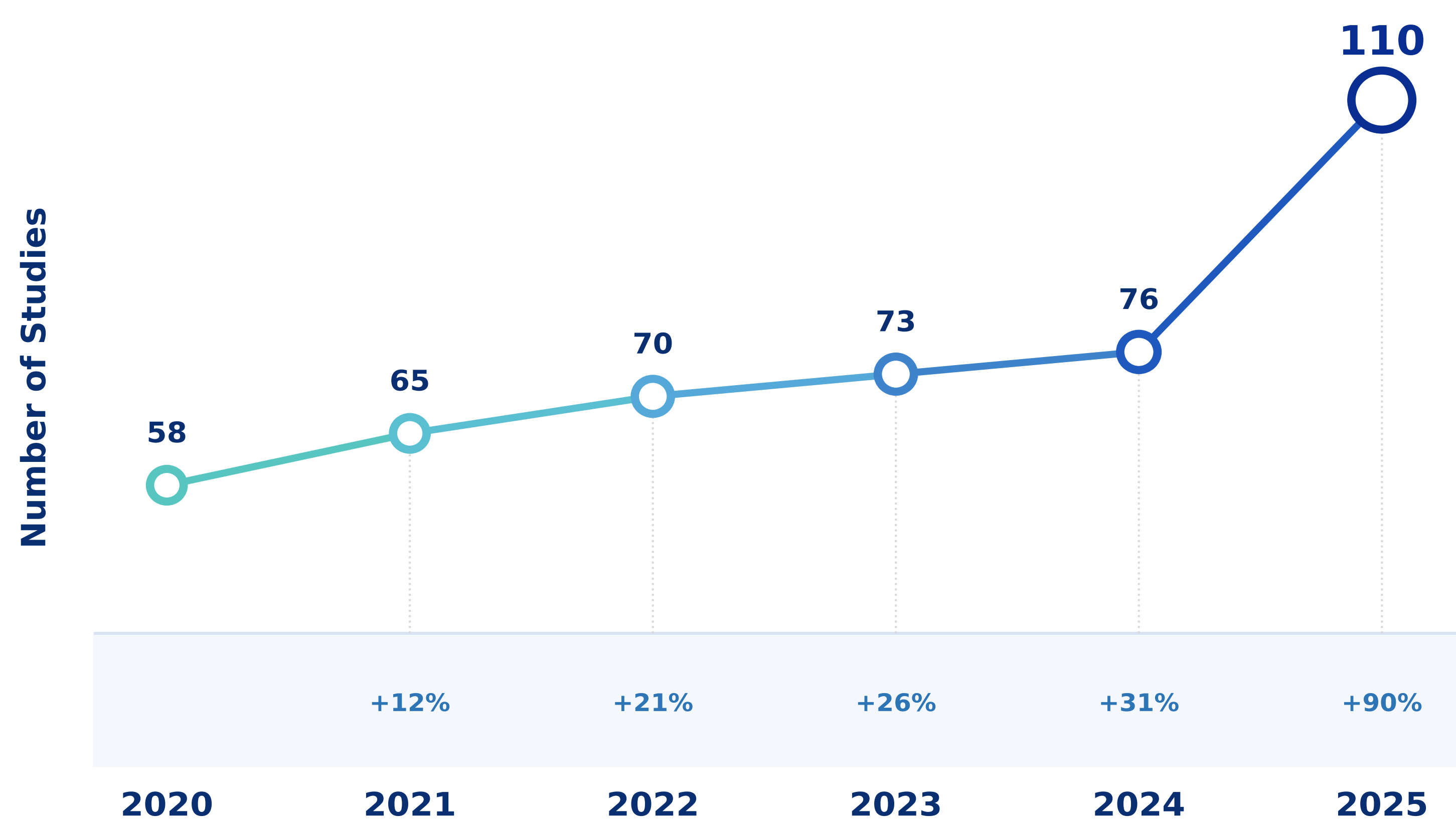
| Items              | Definitions                                                                                                                                                                                                                                                                                                 |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Data sources       | <ul style="list-style-type: none"> <li>PubMed</li> </ul>                                                                                                                                                                                                                                                    |
| Search terms       | <ul style="list-style-type: none"> <li>((((post-marketing surveillance) OR (post marketing surveillance) OR (postmarketing surveillance)) AND ((Taiwan) OR (Korea) OR (Japan) OR (China) OR (Australia) OR (Singapore))) NOT ((FDA Adverse Event Reporting System) OR FAERS))</li> </ul>                    |
| Publication period | <ul style="list-style-type: none"> <li>2020 – 2025</li> </ul>                                                                                                                                                                                                                                               |
| Inclusion criteria | <ul style="list-style-type: none"> <li>Studies reporting PMS conducted in APAC countries. : Taiwan, Korea, Japan, China, Australia, Singapore</li> <li>Original research or observational studies providing real-world safety or effectiveness.</li> <li>Full-text articles available in English</li> </ul> |
| Exclusion criteria | <ul style="list-style-type: none"> <li>Studies derived exclusively from FAERS.</li> <li>Research conducted outside the APAC region or reporting only global-level analyses.</li> <li>Publications not containing primary study data, such as reviews, editorials, and commentaries.</li> </ul>              |

## 2 | Publication Trend

- Publications nearly doubled, increasing from 58 in 2020 to 110 in 2025 (+90%).

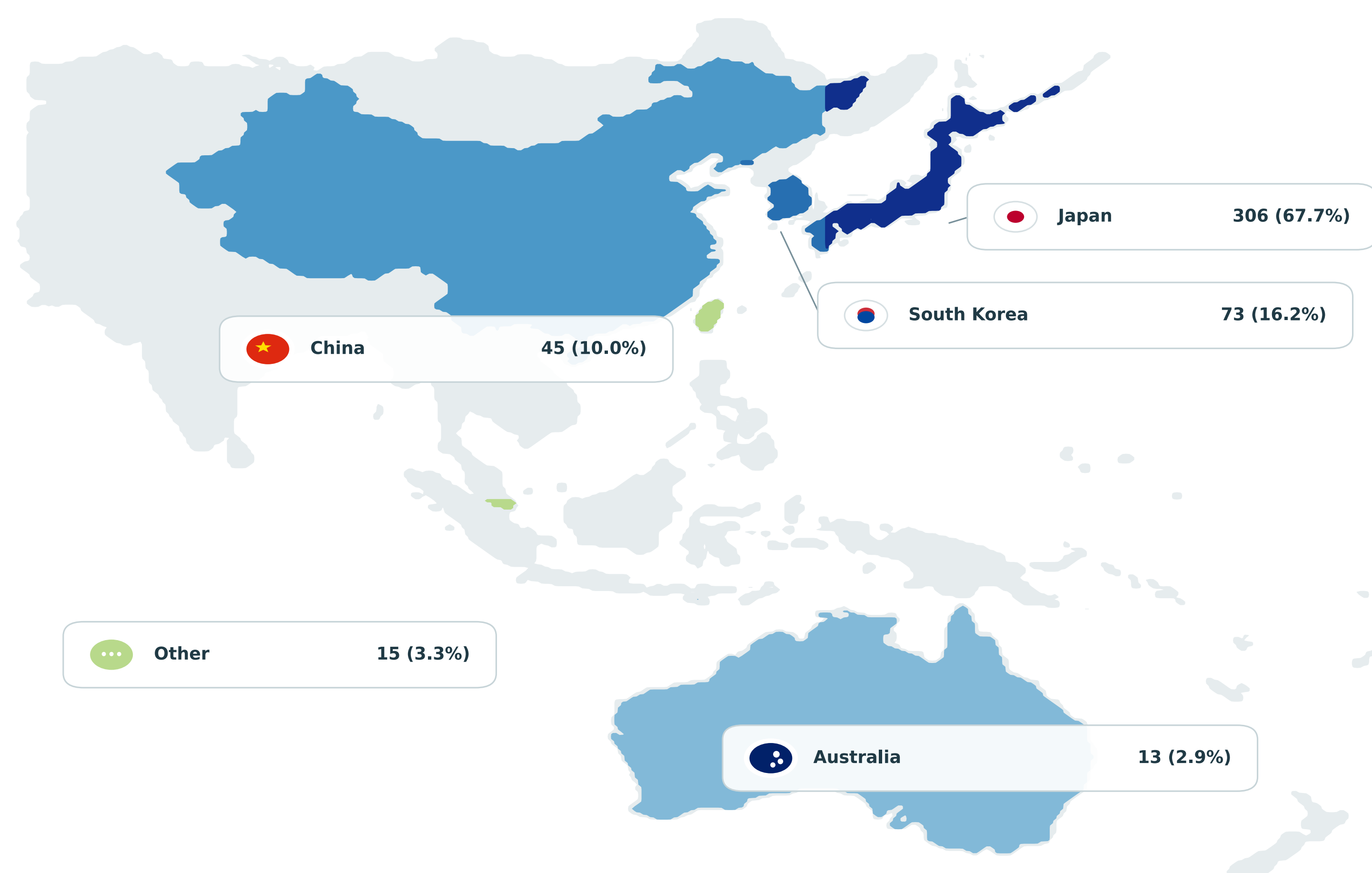
\*Counts shown in the figures reflect the final curated dataset after full-text review and data validation

Figure 1. Publication trends over time



## 3 | Geographic Distribution

Figure 2. Geographic distribution

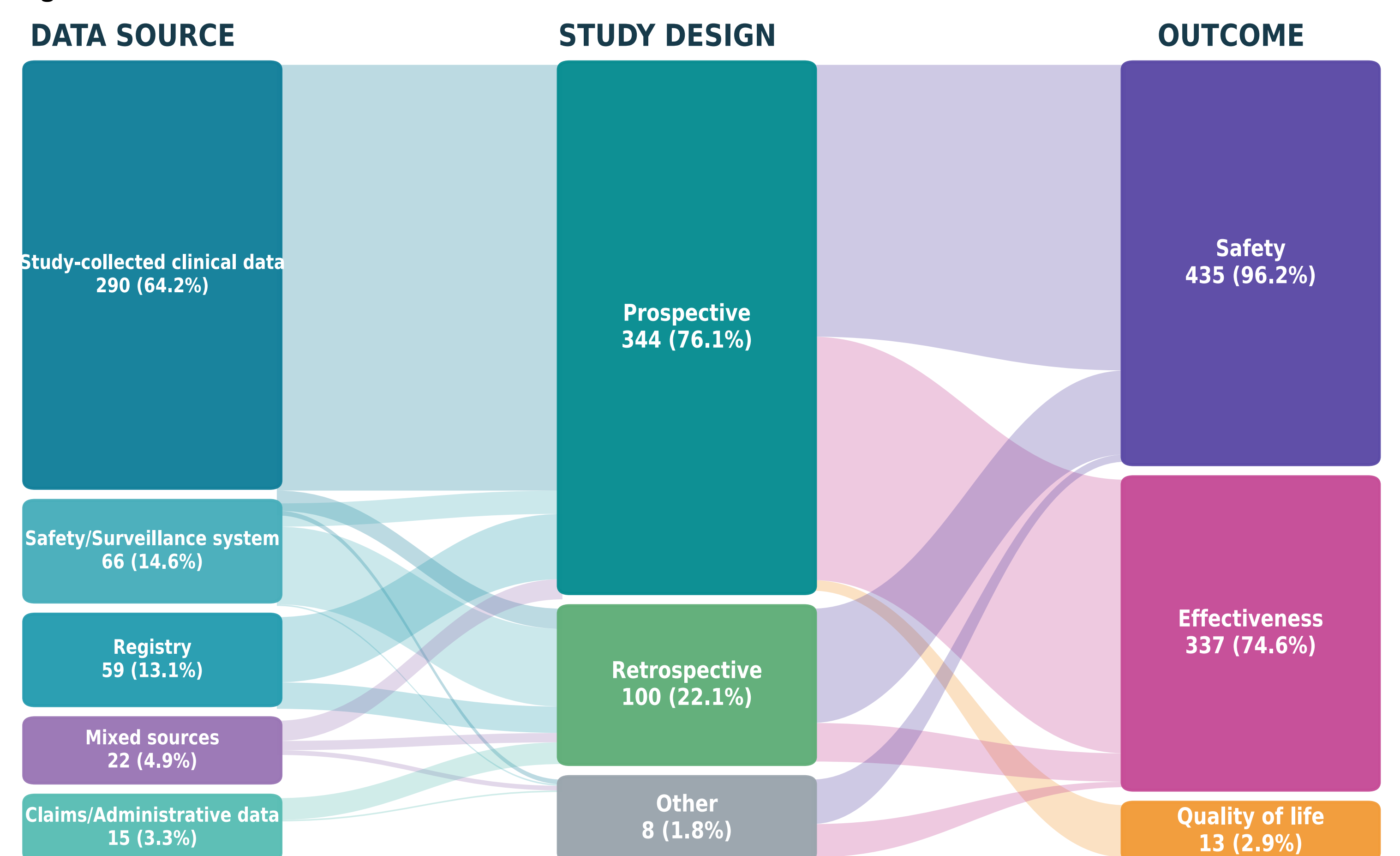


\*Other\* included Taiwan, Singapore, multinational studies, and other APAC studies.

- Japan accounted for over two-thirds of all included studies (67.7%), followed by Korea (16.2%) and China (10.0%).
- Most studies were prospective (76.1%) and relied on study-collected clinical data (64.2%), indicating a predominance of actively collected post-marketing evidence.
- Safety outcomes were assessed in 96.2% of studies, whereas effectiveness outcomes were reported in 74.6%, highlighting the primary role of RWD in post-marketing safety evaluation.

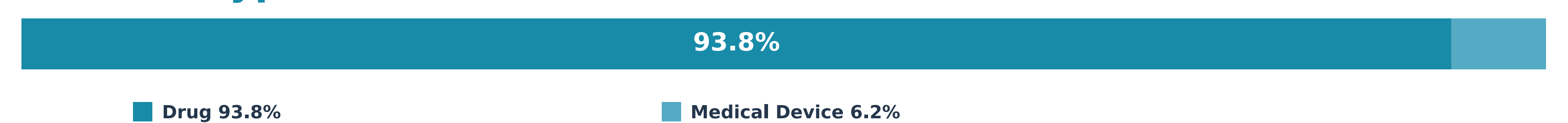
## 4 | Data Sources, Study Design, and Outcomes

Figure 3. Characteristics of APAC RWD-Based PMS Studies

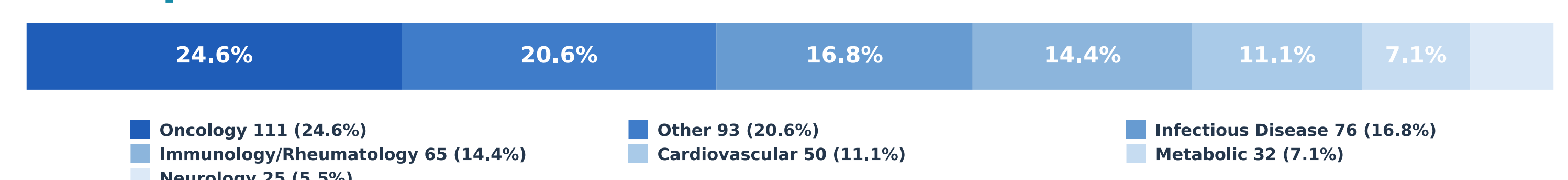


<sup>1</sup>Study-collected clinical data included EDC/eCRF, CRFs, PMS datasets, and cohort-based clinical data. Studies using multiple data sources were classified as Mixed sources.  
<sup>2</sup> Study design: 'Other' included hybrid and mixed-design studies.

### Product Type



### Therapeutic Area



\*Other\* included urology, respiratory diseases, rare diseases, and other less frequently represented therapeutic areas.

## 5 | Conclusion

- Evidence remained concentrated in Japan; most studies used prospective designs and evaluated pharmaceuticals, with safety assessed in nearly all studies.
- Effectiveness was assessed in approximately three-quarters of studies, whereas QoL outcomes and non-pharmaceutical technologies remained underrepresented.
- Broader geographic coverage and greater diversity in data sources, study designs, patient-centered outcomes, and non-pharmaceutical technologies may strengthen the regulatory value of post-marketing evidence as RWD/RWE frameworks continue to evolve across APAC.