

Peer-reviewed HEOR publications across Inflammatory Diseases have increased

As seen in publication patterns of health economic outcome data over two decades

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Background and objective

With the rising interest in the use of real-world evidence to properly assess effectiveness and safety, and cost in daily practice, health economic outcomes (HEO) and real-world data (RWD) studies are of increasing importance to the health care decision makers^{1,2} Our previous work has demonstrated an increase in the overall proportion of HEO/RWD publications over the last 2 decades³⁻⁵.

We quantified the publication of HEO/RWD studies between 2000 and 2019 in 2 common (PsO, PsA), and 1 rare inflammatory disease (BS).

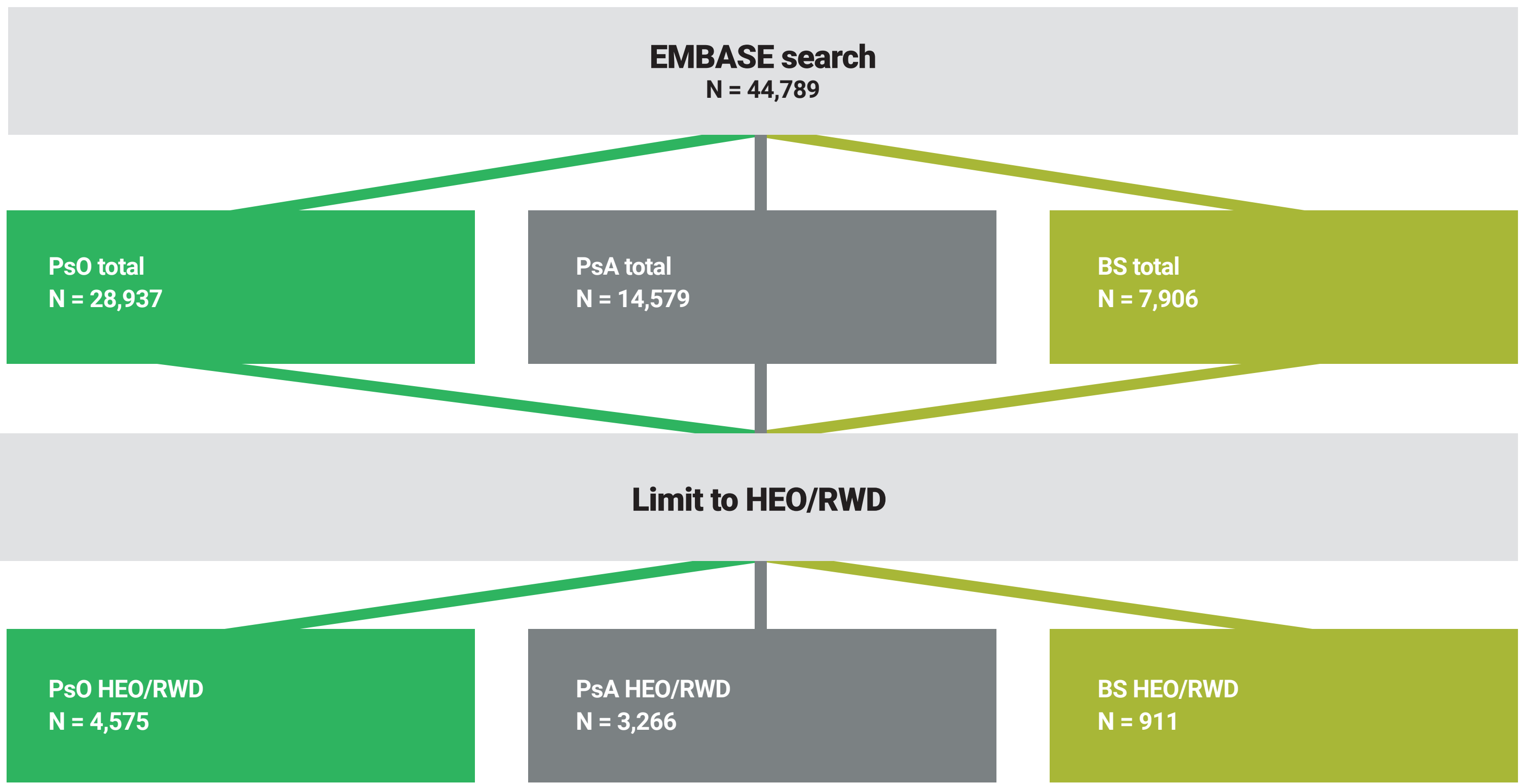
Conclusion

During the past 2 decades, the proportion of HEO/ RWD publications in inflammatory diseases increased substantially, following trends previously observed for other therapeutic areas. These trends likely reflect the increasing interest and transparency benefits associated with publication of peer-reviewed data of real-world therapeutic and cost evidence for health-care decision-making purposes.

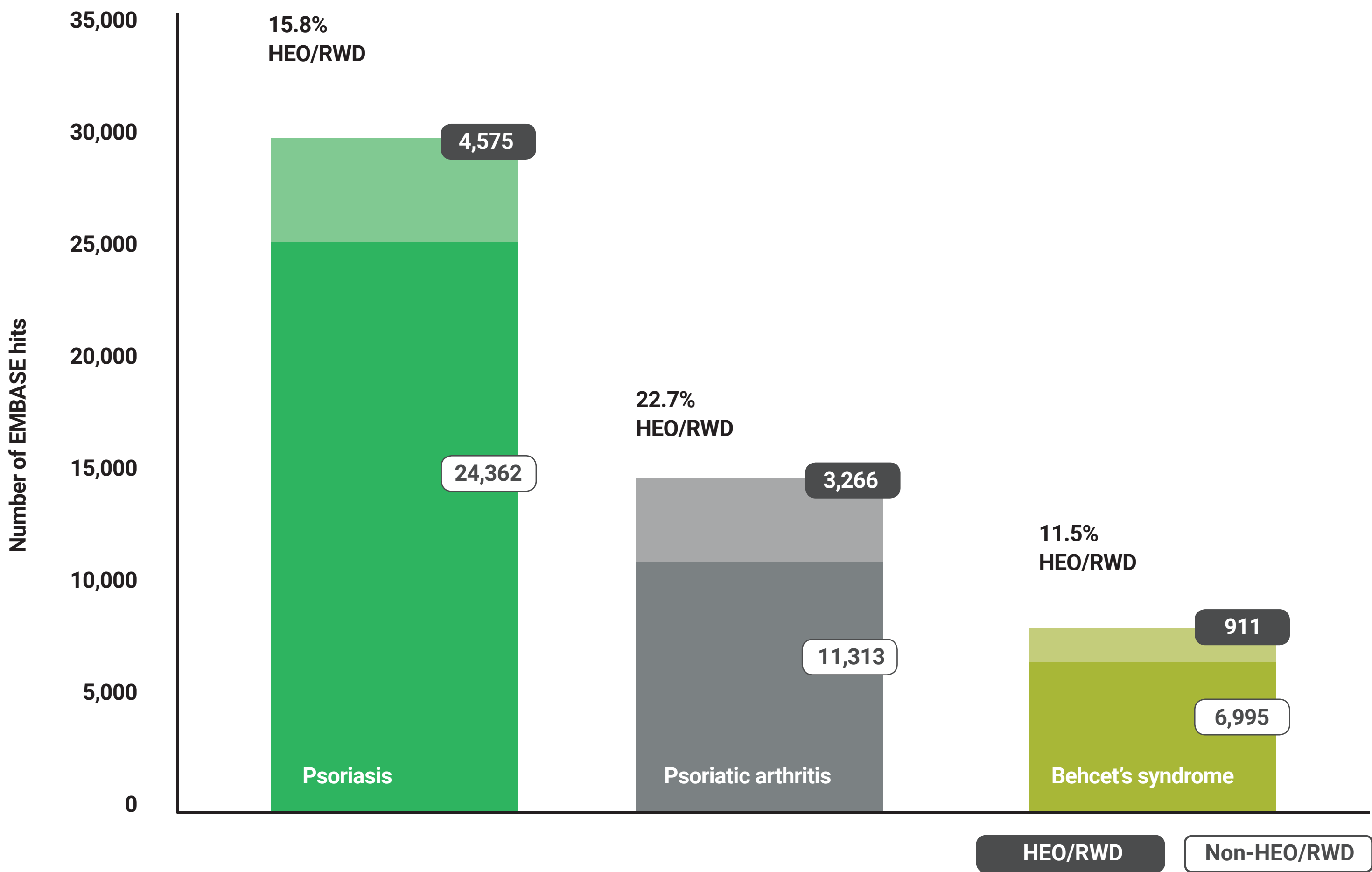
Results

Study Flow Diagram / Summary of Publications Identified

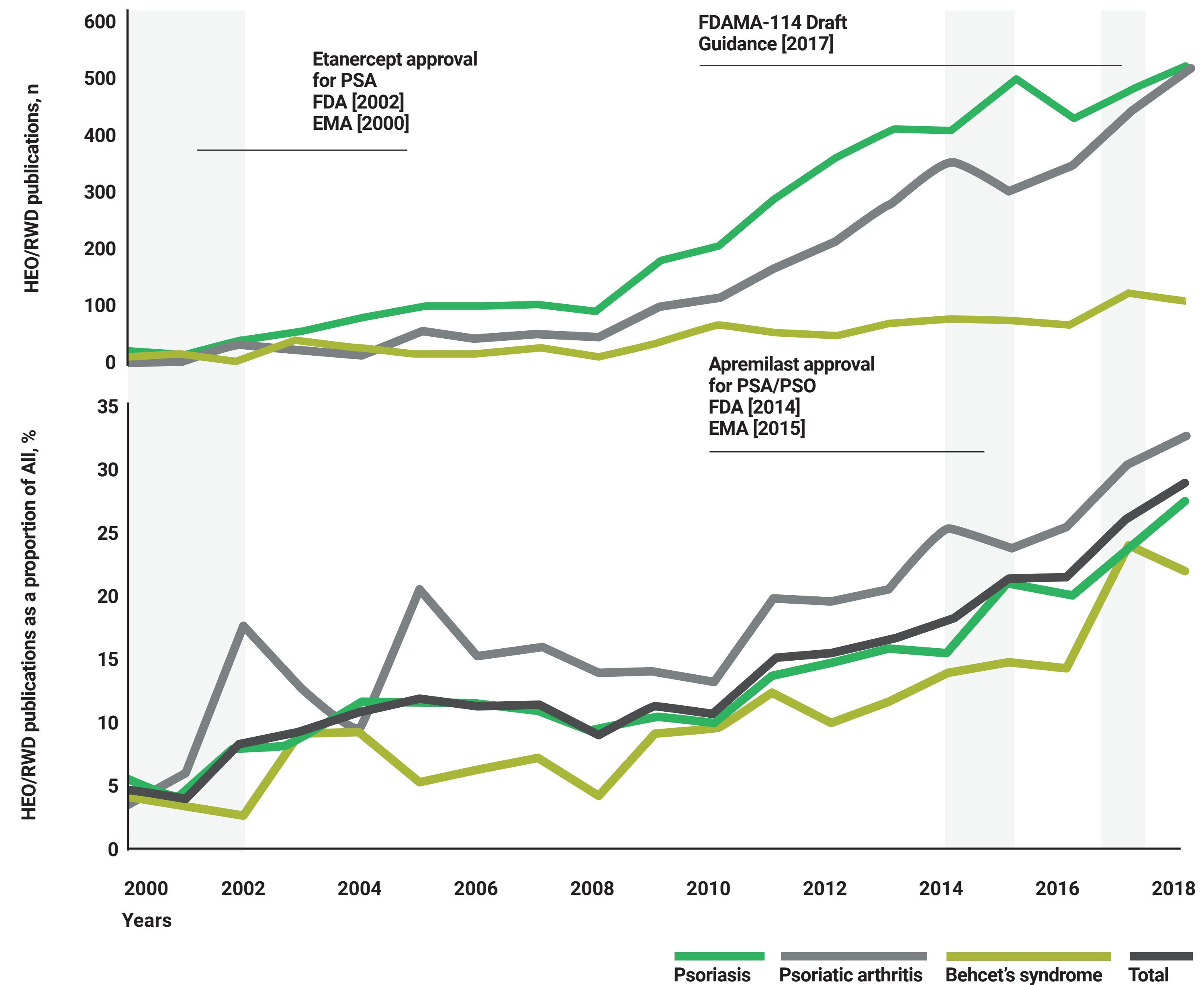
15.0% of all publications looked at > 1 disease
22.8% of HEO/RWD publications looked at > 1 disease



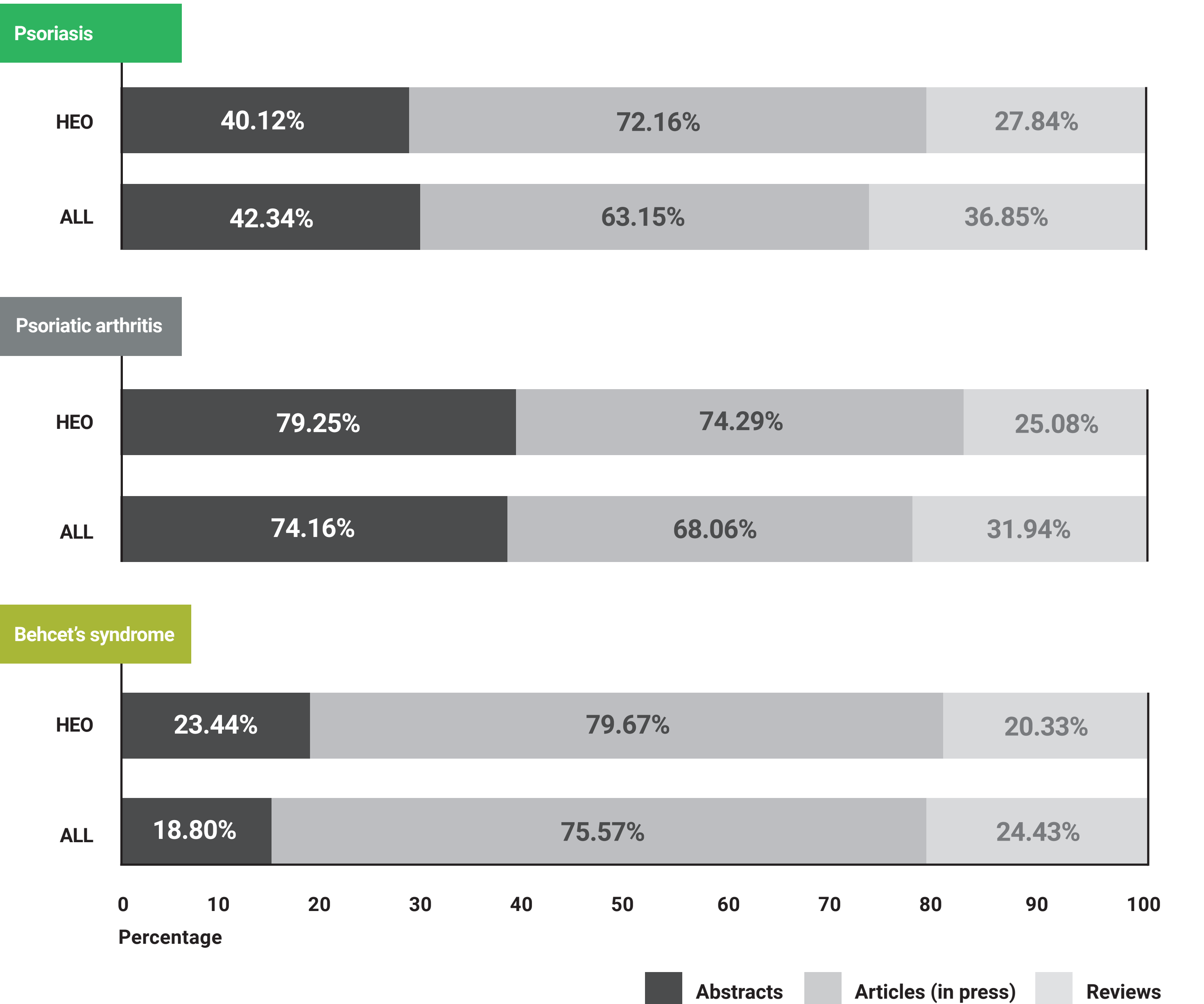
Total number of EMBASE hits across the three disease areas of interest during 2000-2019



Absolute and Relative number of HEO/RWD publications increases over time



Proportion of Type of HEO/RWD publication by disease area



Methods

On May 28, 2019 EMBASE was searched for original articles, reviews, and congress abstracts describing PSO, PSA and BS that were published between 1 January, 2000 and 28 May, 2019. Previously defined search terms were used to identify HEOR/RWD studies⁶⁻⁸ Additional parameters: Publication type was limited to Article & Article in Press, Review, or Conference abstract; Publications describing animal or in vitro studies were excluded; No language limitations The proportion of HEO/RWD publications was determined using search strategies derived from recommendations by ISPOR³⁻⁵ As this was an exploratory study, only descriptive statistical analyses were performed.

Limitations

We selected 3 diseases, which may not be representative of all inflammatory conditions. Although we employed a rigorous search and screening method, as demonstrated by a low number of false positives in previous publications³⁻⁵, the search string used to identify HEO/RWD publications may have led to false negatives, and so the absolute rates of HEO/RWD publications may be under-reported. Limitations of coding: Article type was determined by EMBASE classification, Review articles that mention HEO-specific terms may not have HEO-specific focus. Abstracts were not screened for those with a linked journal publication: the proportion of abstracts that are developed into full manuscripts may vary.

Discussion

In this study we looked at 3 diseases – PSA, PSO, and the rare disease BS. Previous studies have shown HEO/RWD publications have increased over time, and have indicated this increase may be more pronounced in rare diseases⁵. Our study found that, there were proportionally fewer HEO/RWD publications looking at the rare disease BS, compared with PSA or PSO. Exploratory investigations indicate the volume and proportion of HEO/RWD publications may increase following regulatory approval and release of FDAMA-114.

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Disclosures: RvdB, RHM, JW, and TEH are employees of Excerpta Medica, who are contracted by pharmaceutical companies, including Celgene Corporation, for publication support. MC is employed by Celgene Corporation.

Top 10 HEO/RWD Study Types by EMBASE Tag

