

Amit Dang, Vallish B N

MarksMan Healthcare Communications, Hyderabad, India

Background

- ISPOR 2022 was the annual conference of the Professional Society for Health Economics and Outcomes Research (ISPOR), held in Washington DC during May 15-18 2022¹
- Stakeholders in HEOR across the world, especially the USA, presented their research in ISPOR 2022 in the form of posters, both virtually and in-person
- Research posters were categorized under 12 different subject headings, such as Clinical Outcomes, Economic Evaluations, Epidemiology, public health, Real-world data and information systems (RWD &IS), and 8 more headings. The headings were assigned by the researchers at the time of abstract submission
- We were interested to understand the current research trends in RWE that were presented in ISPOR 2022

Objective

- To descriptively analyze all posters about real-world evidence (RWE) studies presented in ISPOR 2022, categorized by the researchers under the heading Real world data and information systems (RWD & IS)

Methodology

- We accessed the virtual platform of ISPOR 2022 and printed out the posters that were categorized under “RWD & IS”.
- Extracted data included first author affiliation, setting (academia/ industry), SDC/ STA details, nature and source of RWD, presence of information about study limitations, and disclosures in the poster.
- We also compared the contents of the poster and the abstract.

Results

Poster Details

- 133/1,453 (9.15%) posters were categorized by the study authors under “RWD and IS”
- 2/133 posters were not available in the ISPOR portal: ignored from analysis
- Only one poster under RWD & IS was allotted the ‘Top 5% poster’ tag
 - Title: A Cluster Analytical Approach to Identify Insomnia Subtypes and Their Relationship with Healthcare Resource Utilization Outcomes
- Mode of presentation
 - In-person: 86 (65.6%)
 - Virtual: 45 (34.4%)
- A total of 7 groups of posters were the same or related studies split up into multiple posters, totaling 22 posters
 - 4 studies: split up into 2 posters
 - 1 study each: split up into 3, 4, and 7 posters

Author Details

- Number of authors
 - Range: 1-14
 - 1 author: 2 studies
 - 2 authors: 13 studies
 - 3 authors: 21 studies
 - 4 and 5 authors: 20 studies each
 - 6 authors and above: 55 studies
 - 3 studies had 13 authors
- The 131 posters had 106 unique first authors
 - 92 authors: first authors of 1 study
 - 11 authors: first authors of 2 studies
 - 2 authors: first authors of 3 studies
 - 1 author: first author of 11 studies
- First author was also the presenting author in 104 studies
- First authors represented 90 different affiliated centers

First Author Affiliation Details

2/3rd of all the first authors had industry affiliation

Academia

- 43 posters from 37 different academic centers
- Number of posters:
 - 1 poster: 31 centres
 - 2 posters: 6 centres

Industry

- 88 posters from 53 different corporate centers
- Number of posters:
 - 1 poster: 41 centres
 - 2 posters: 6 centres
 - > 2 posters: 6 centres (maximum: 13 posters by Syapse, USA)

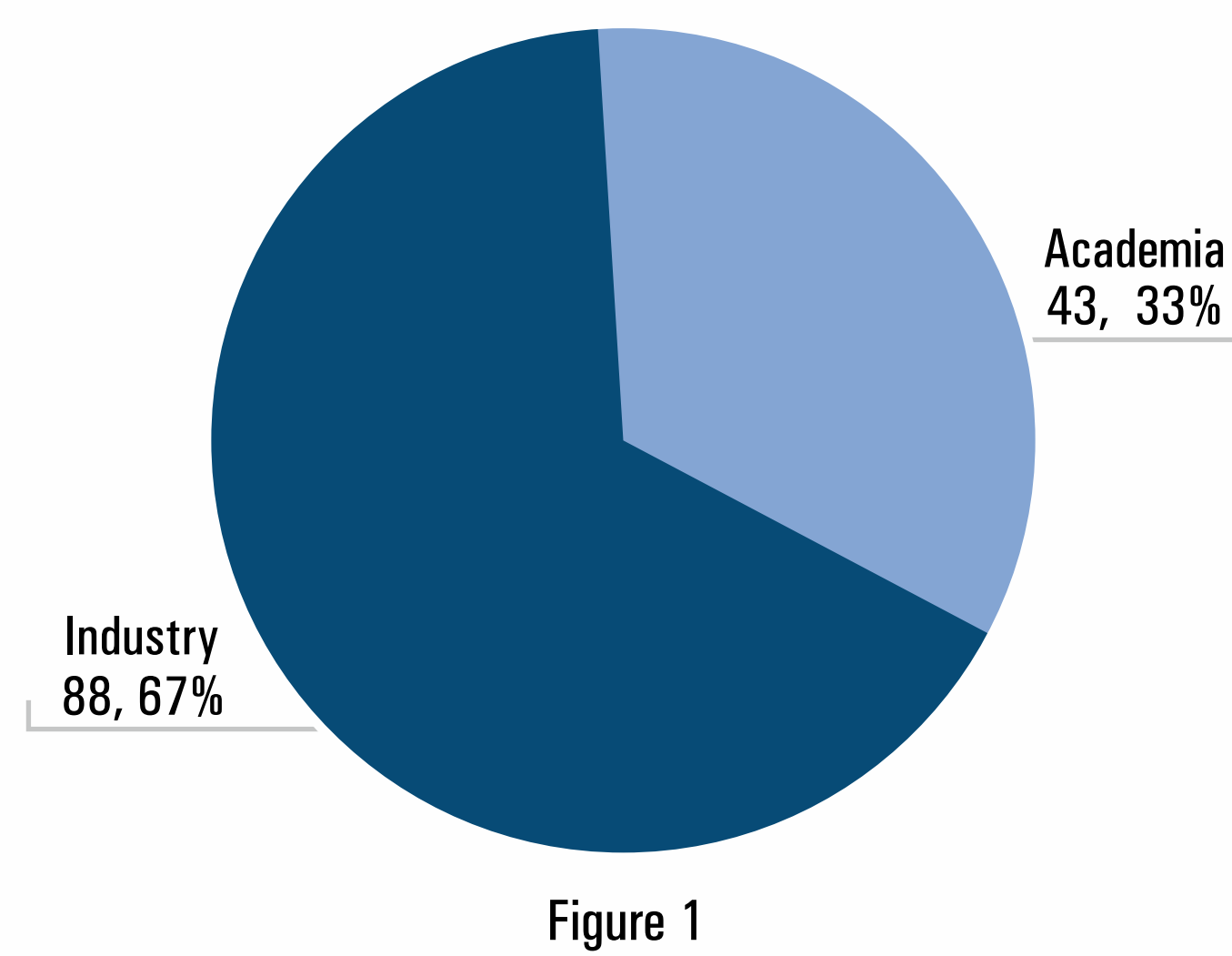


Figure 1

Disease Area Details

SDC details as per poster

- No SDC: 57
- Oncology: 22 posters, followed by Diabetes/metabolic/endocrine, and Neurological (6 posters each)

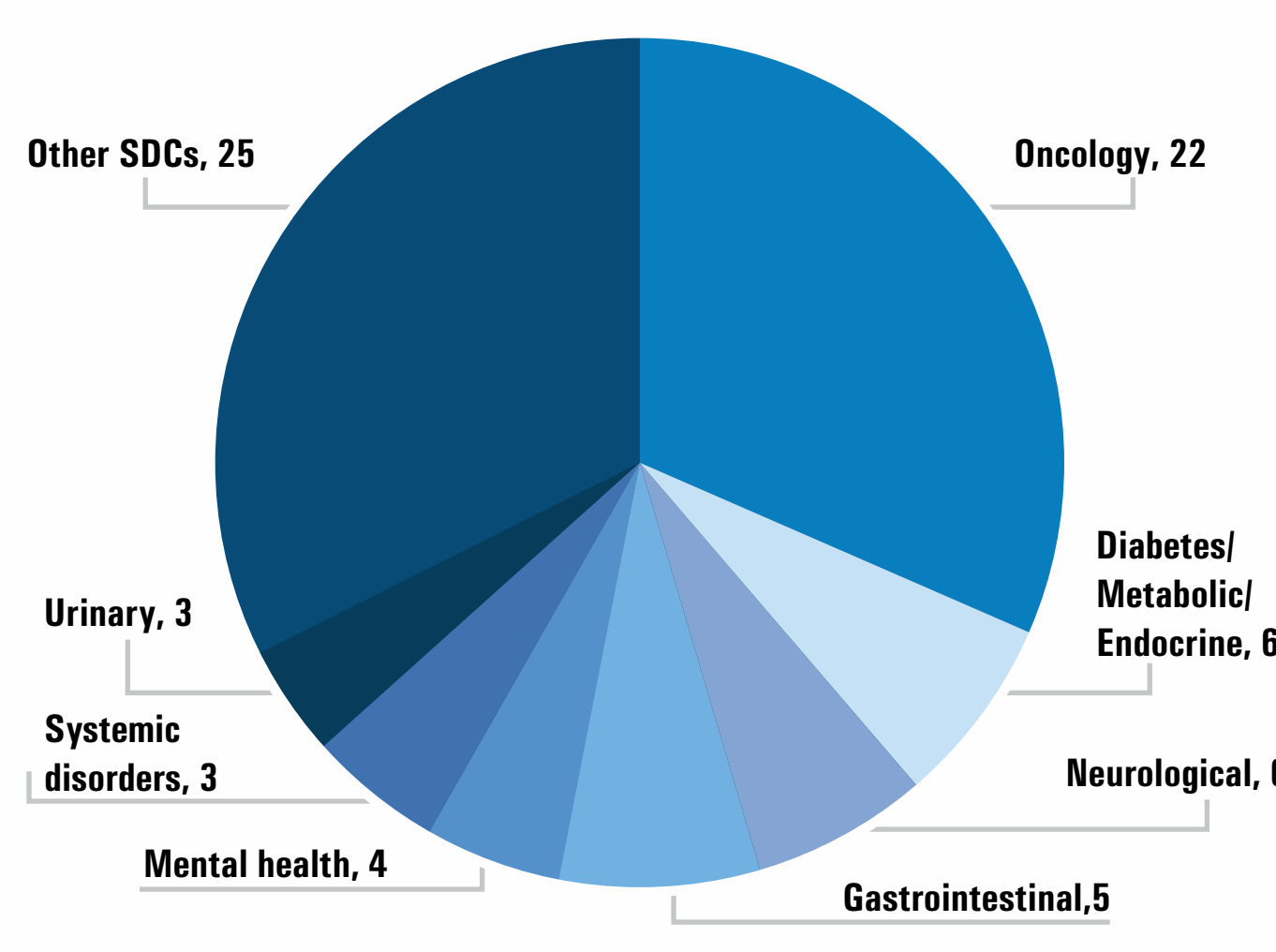


Figure 2

Disease area as per analysis

- No information: 18
- Oncology: 40 posters, followed by infectious and neurology
- Most frequent disease: COVID-19 (11 posters), followed by colorectal cancer and T2DM (6 posters each)

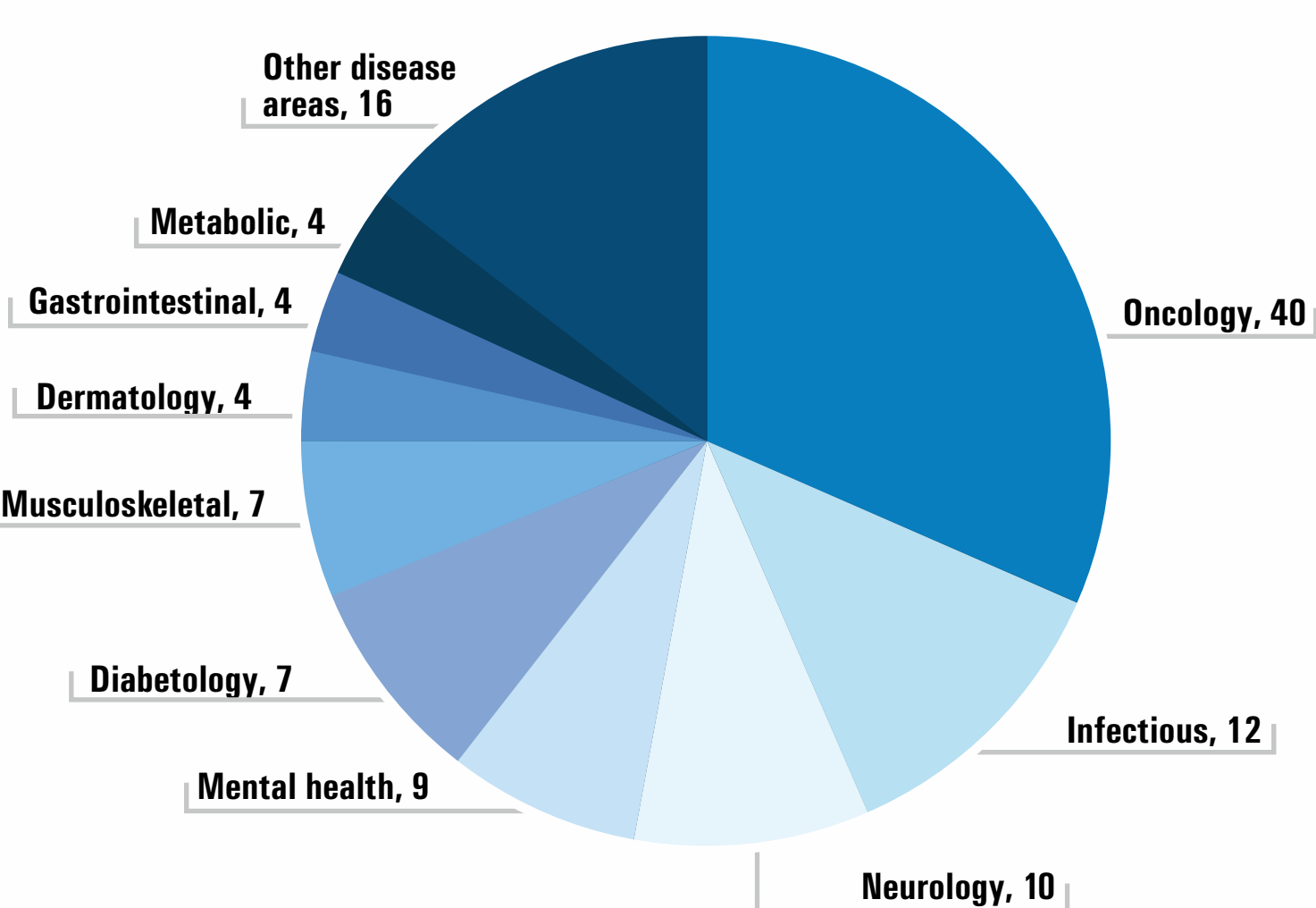


Figure 3

Study Type, Study Design

- 20/131 studies did not present RWE
- 14 studies: described methodology for collecting RWD
- 3 studies: systematic literature reviews of published studies, not restricted to RWE studies
- 3 studies: physician/ payer surveys about RWD collection/ evidence
- 111 RWE studies, study design:
 - Retrospective, observational design: 104 studies
 - Modelling studies, Systematic reviews: 3 studies each
 - Patient survey: 1 study
- Duration of data collection range: 5 months to 20 years
- 20 studies: duration of data collection not clearly specified

Sources of RWE

Category of RWD source

- 9 different types of RWD sources were used
- Most frequent: claims database (43 studies)
- 2 studies used multiple RWD sources

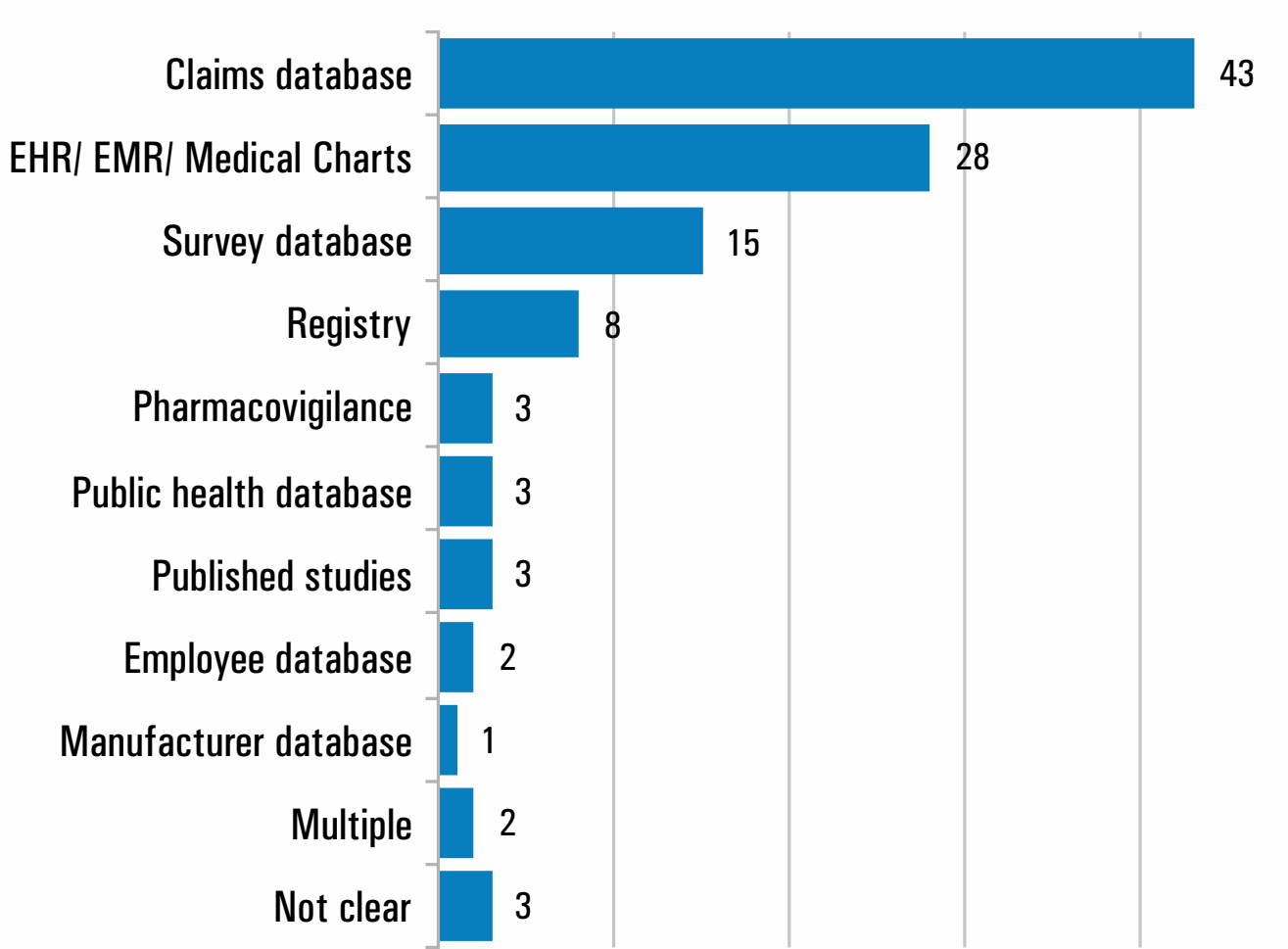


Figure 4

Name of the RWD source

- Information for RWEs came from 62 different RWD sources
- Most frequent: Syapse’s database (13 studies), followed by MEPS (8 studies)

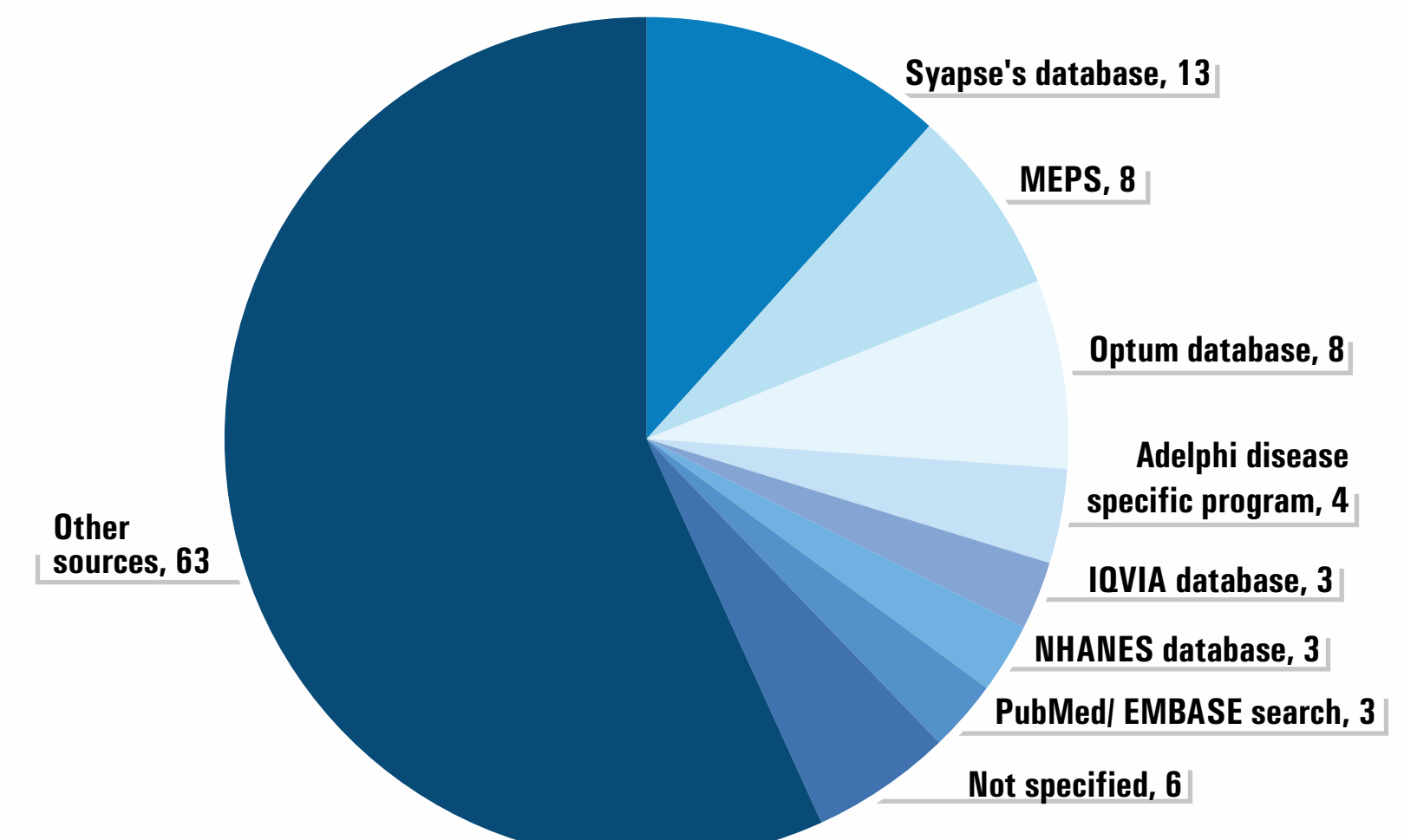


Figure 5

Population, Intervention, Comparators

- Population for the 131 studies came from 15 different countries
 - Most frequent: USA (76 studies)
 - 4 studies: multiple countries
 - 22 studies did not specify country of population
- Sample size
 - Reported by 95 studies
 - Ranged from 40 patients to 531 million patients
 - < 1000: 22 studies
 - 1000-10,000: 32 studies
 - 10,000-100,000: 26 studies
 - 100,000-1 Million: 6 studies
 - > 1 Million: 9 studies
 - 36 studies did not specify sample size
- Intervention was specified in 45 studies
- Comparator was specified in 11 studies

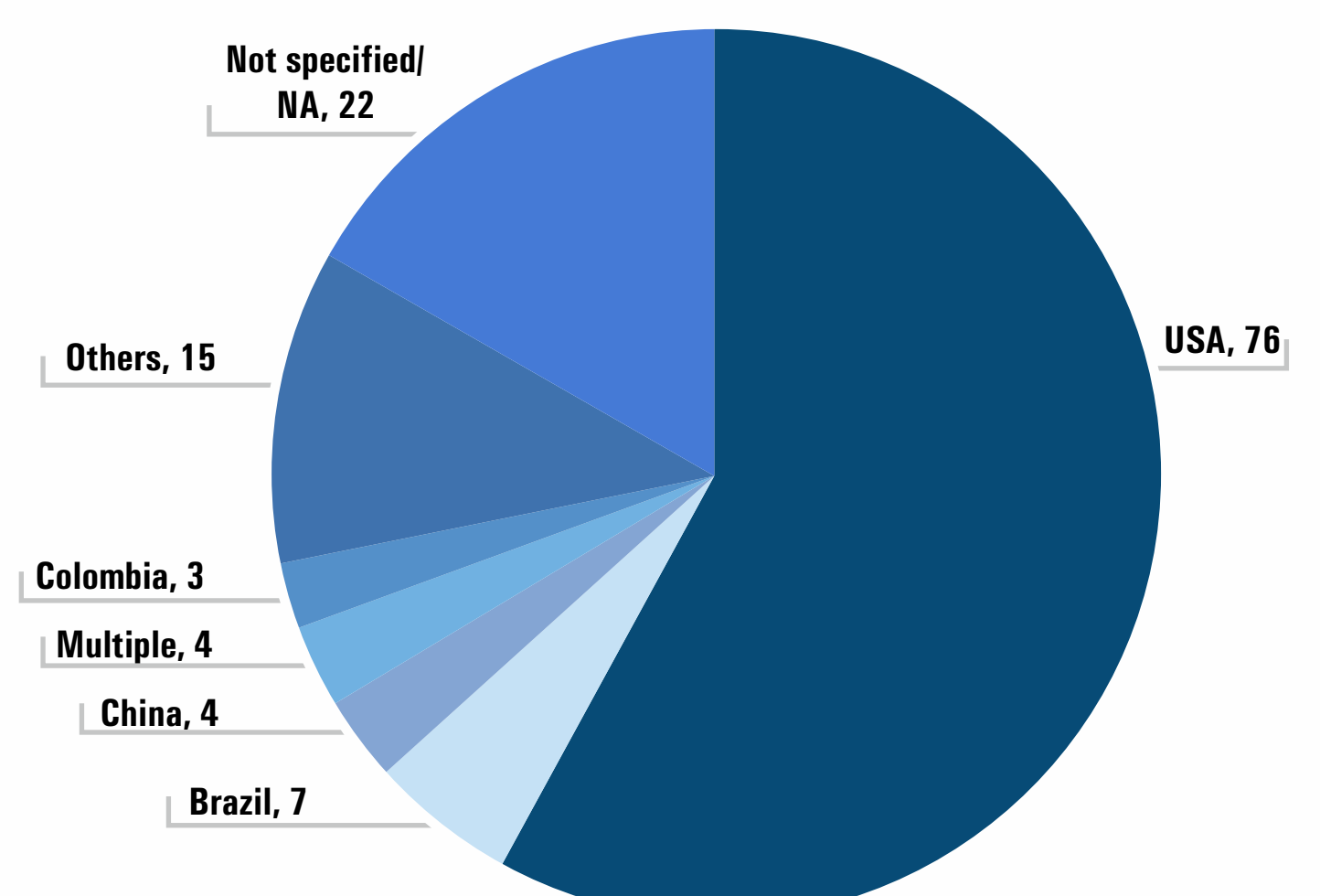


Figure 6

Poster Content

- 20 studies had significant disparity between abstract and poster content
 - Numbers and conclusions changed: 8 study
 - Numbers changed, but conclusions are the same: 7 study
 - Outcomes/ objectives changed: 3 study
 - Conclusions changed: 1 study
 - Incomplete abstract: 1 study
- Additional content in posters
 - 90 posters had expanded information in all the sections of the poster
 - 39 posters provided minimal additional information, specially in the results section
 - 2 posters had the exact same content as the abstract
- Study limitations were discussed in 40/131 (30.5%) posters
- Disclosures in Posters
 - Funding/ disclosures were found in only 48/131 (36.6%) studies

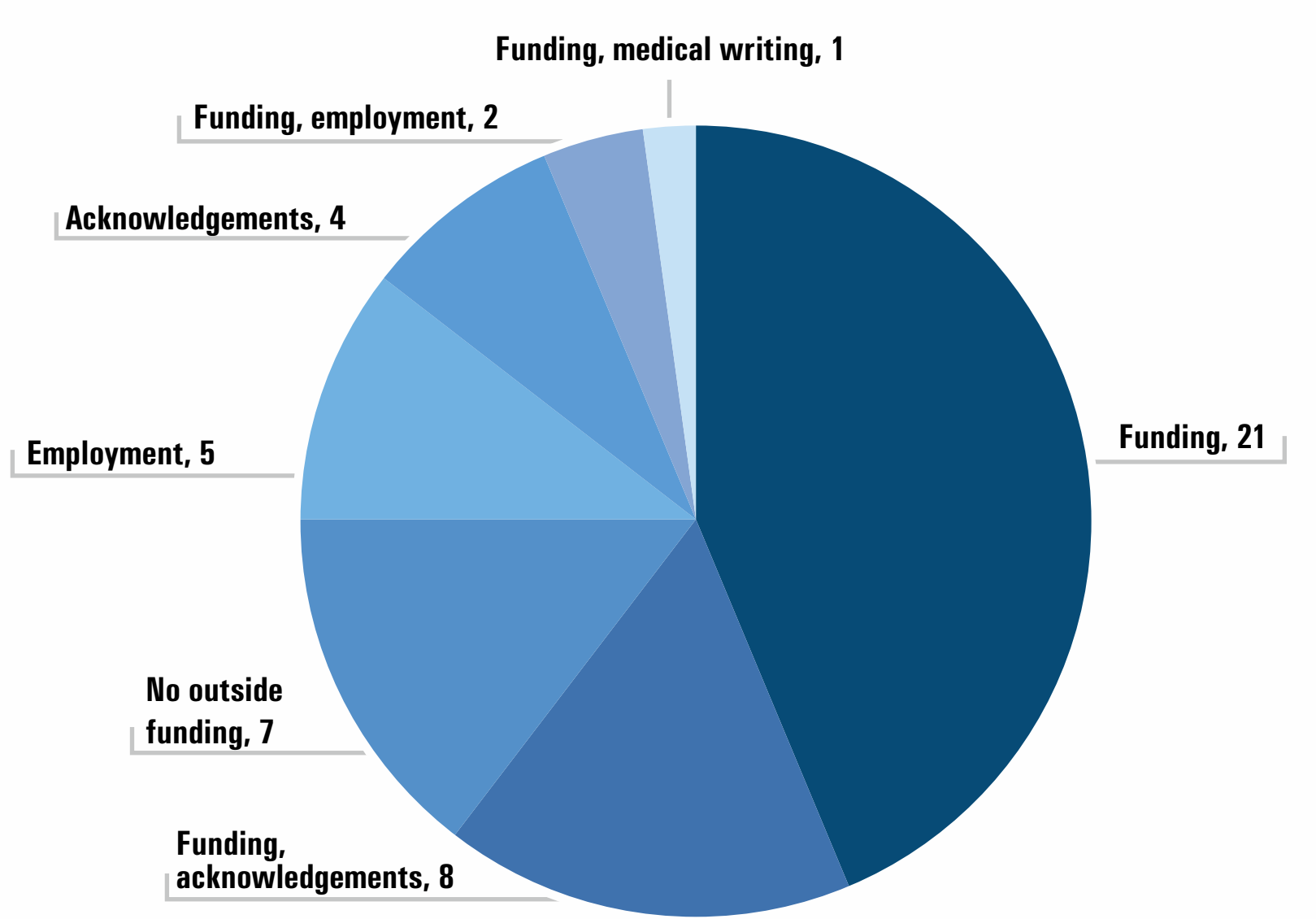


Figure 7

Miscellaneous Observations

- Content of 2 posters were presented in a different conference previously
- One study collecting data from administrative claims presented 2015 data about women undergoing treatment for breast cancer

Discussion

- Industry representation is more than academia in RWD & IS category
- One company presented 13 related posters
- SDC as per poster and Disease area as per analysis are different
- Most RWE studies presented are from oncology
- Most study designs were retrospective and observational; most studies used a claims database to source the RWD
- Study sample size had large variation; 9 studies had over 1 million participants: depict the power of RWE studies to involve a large number of participants
- Significant disparity between the poster and abstract content was found in 20 studies: quality issue
- Not all studies discuss study limitations and disclosures

Limitations

- Only a superficial analysis of research trends was performed
- Deep-dive into the finer details of the RWE research was not done

Conclusion

- RWE studies presented in ISPOR 2022 gave a glimpse of ongoing RWE research

References

1. <https://www.ispor.org/conferences-education/conferences/past-conferences/ispor-2022>