



# Real World Evidence Studies Presented in ISPOR 2022: A Descriptive Analysis of Research Posters

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## 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 2022
- 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

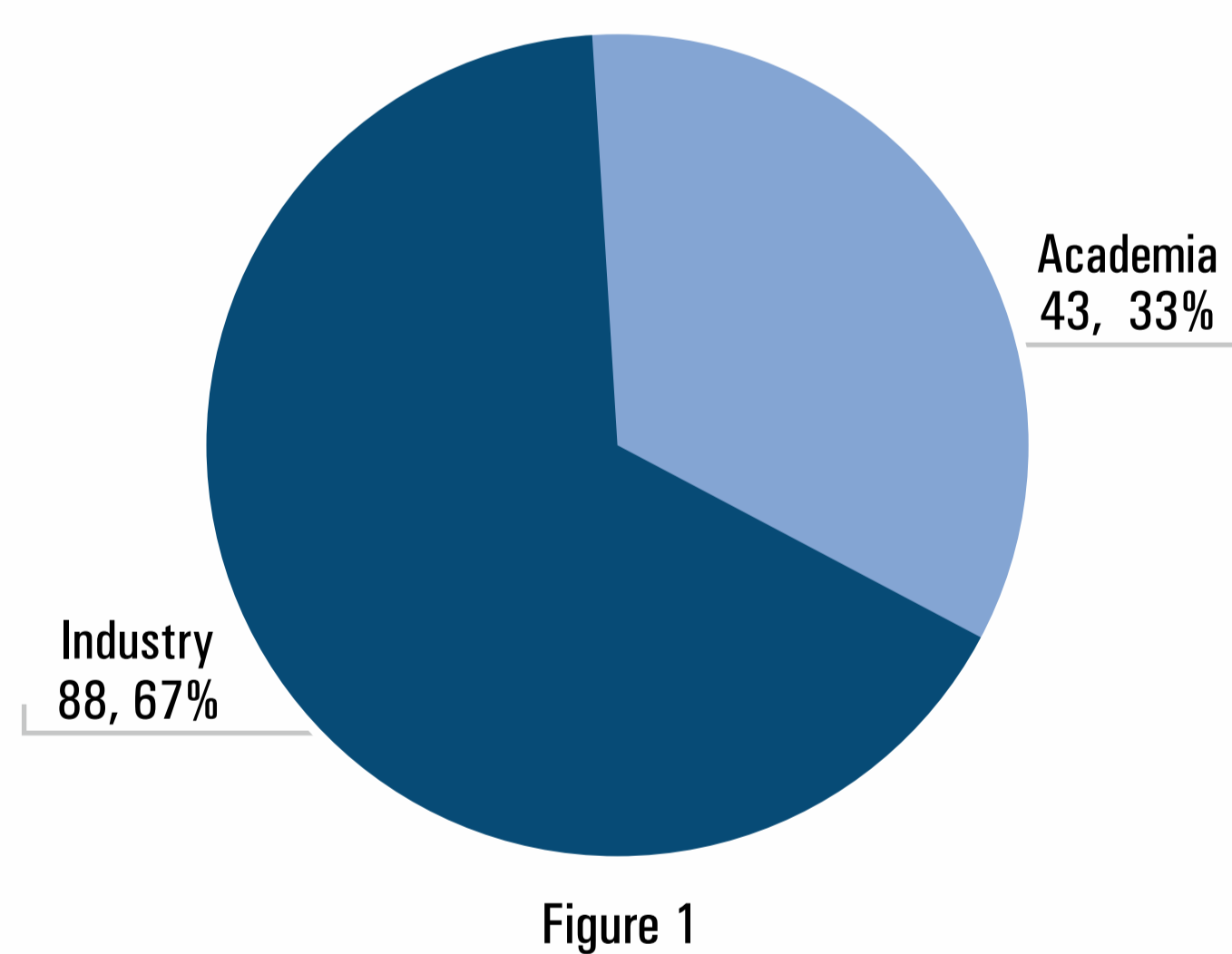
### Poster Details

- 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

### First Author Affiliation Details

2/3<sup>rd</sup> 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)



### Disease Area Details

#### SDC details as per poster

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

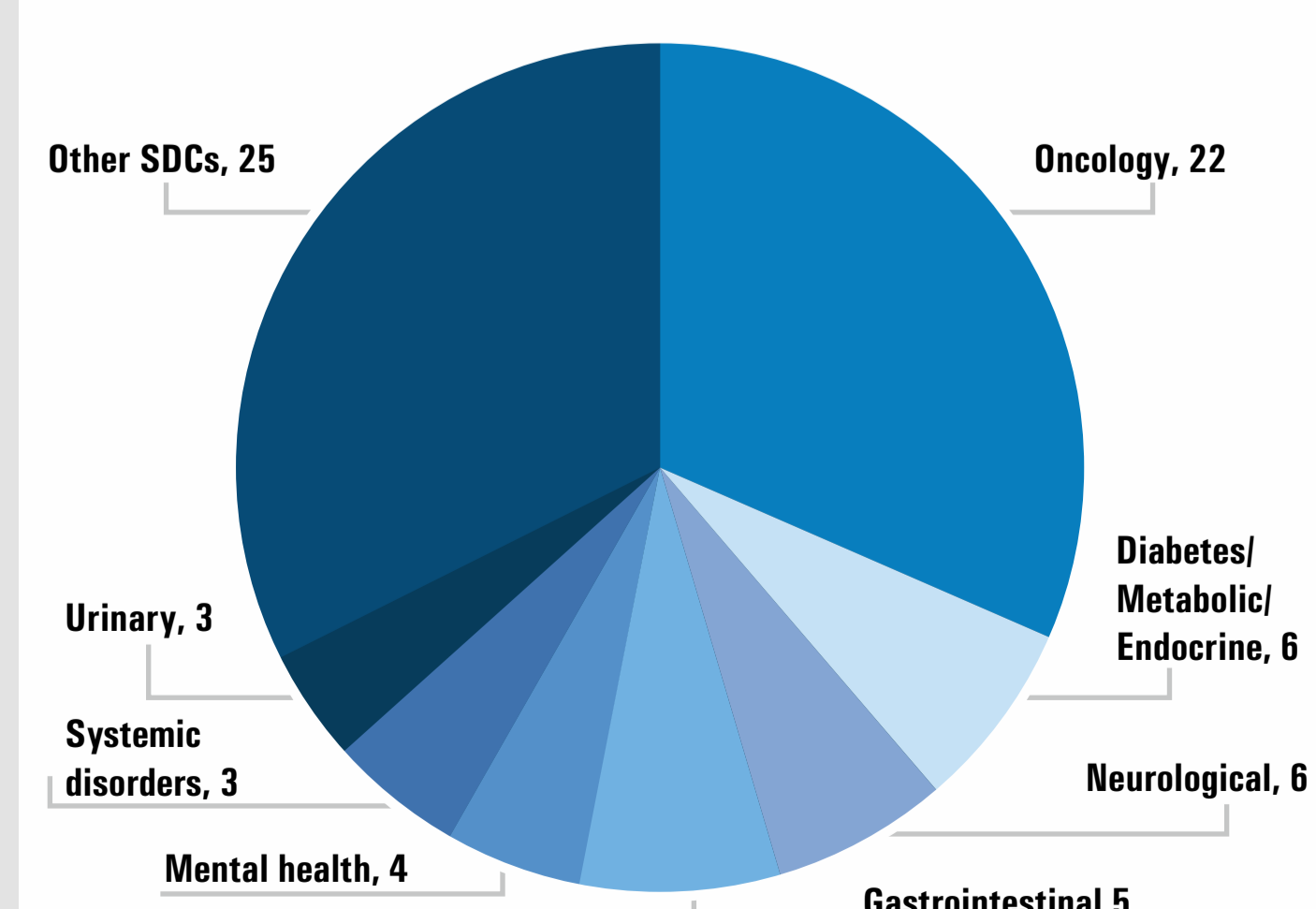


Figure 2

#### 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)

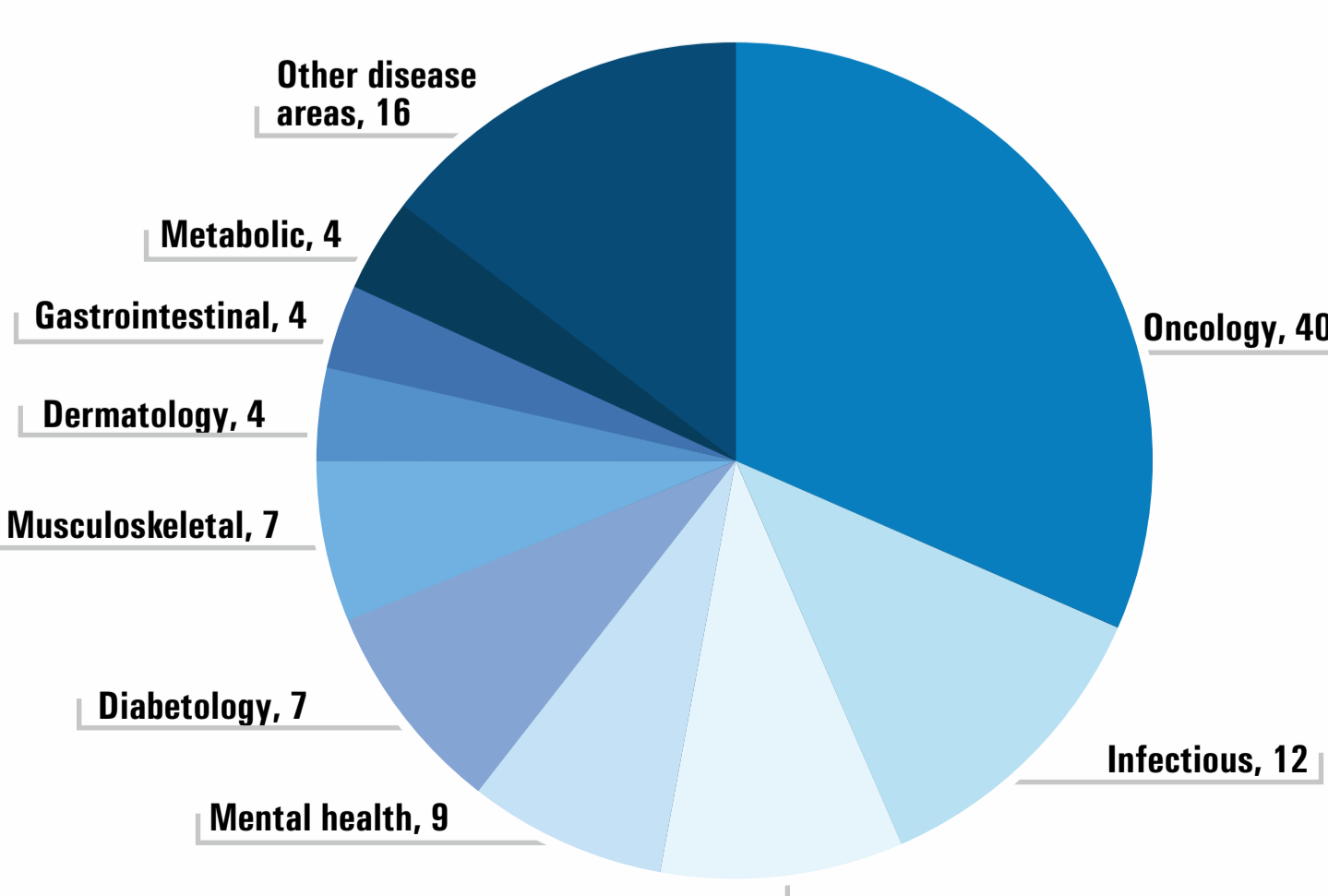


Figure 3

## 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

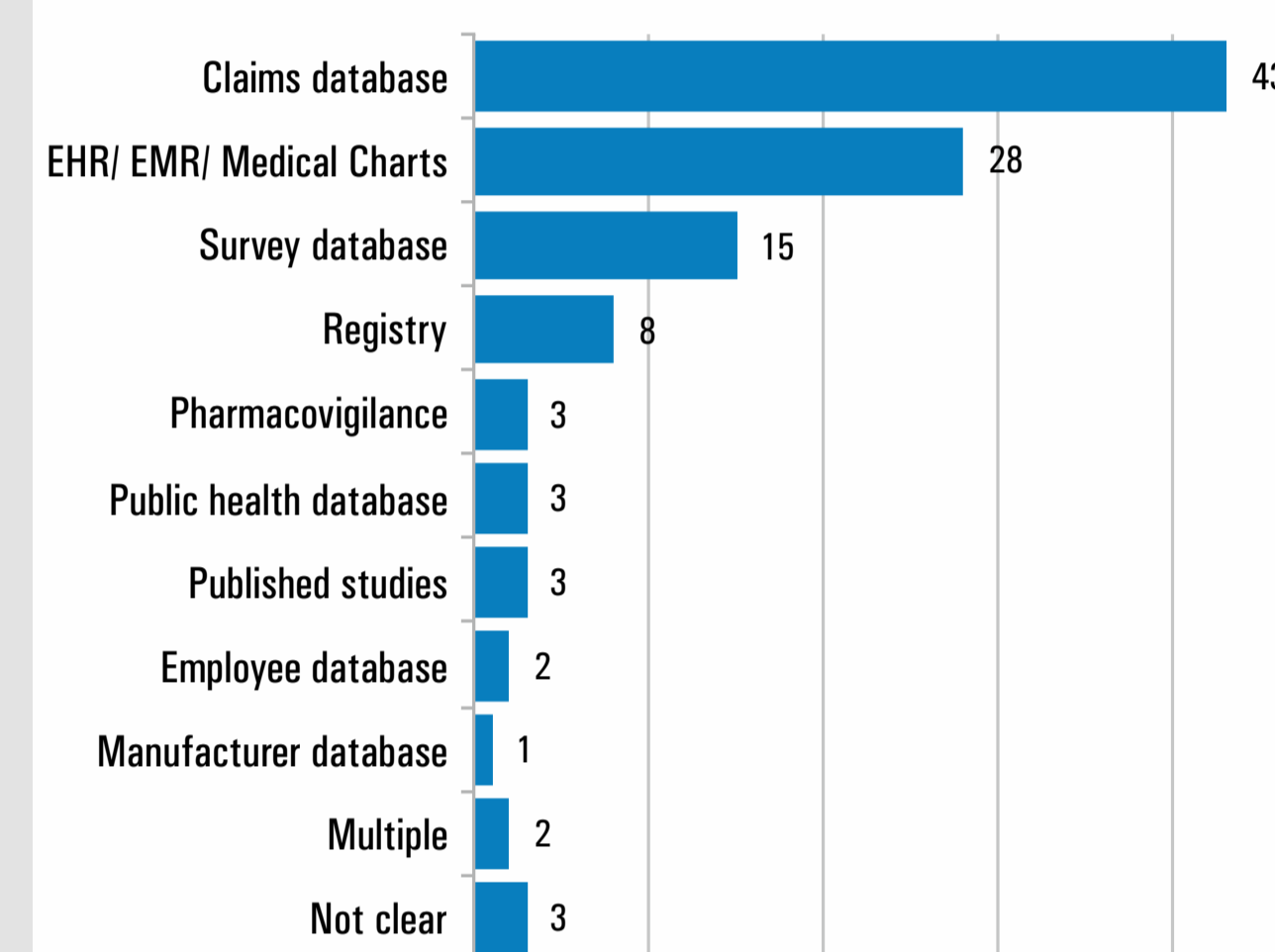


Figure 4

### 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)

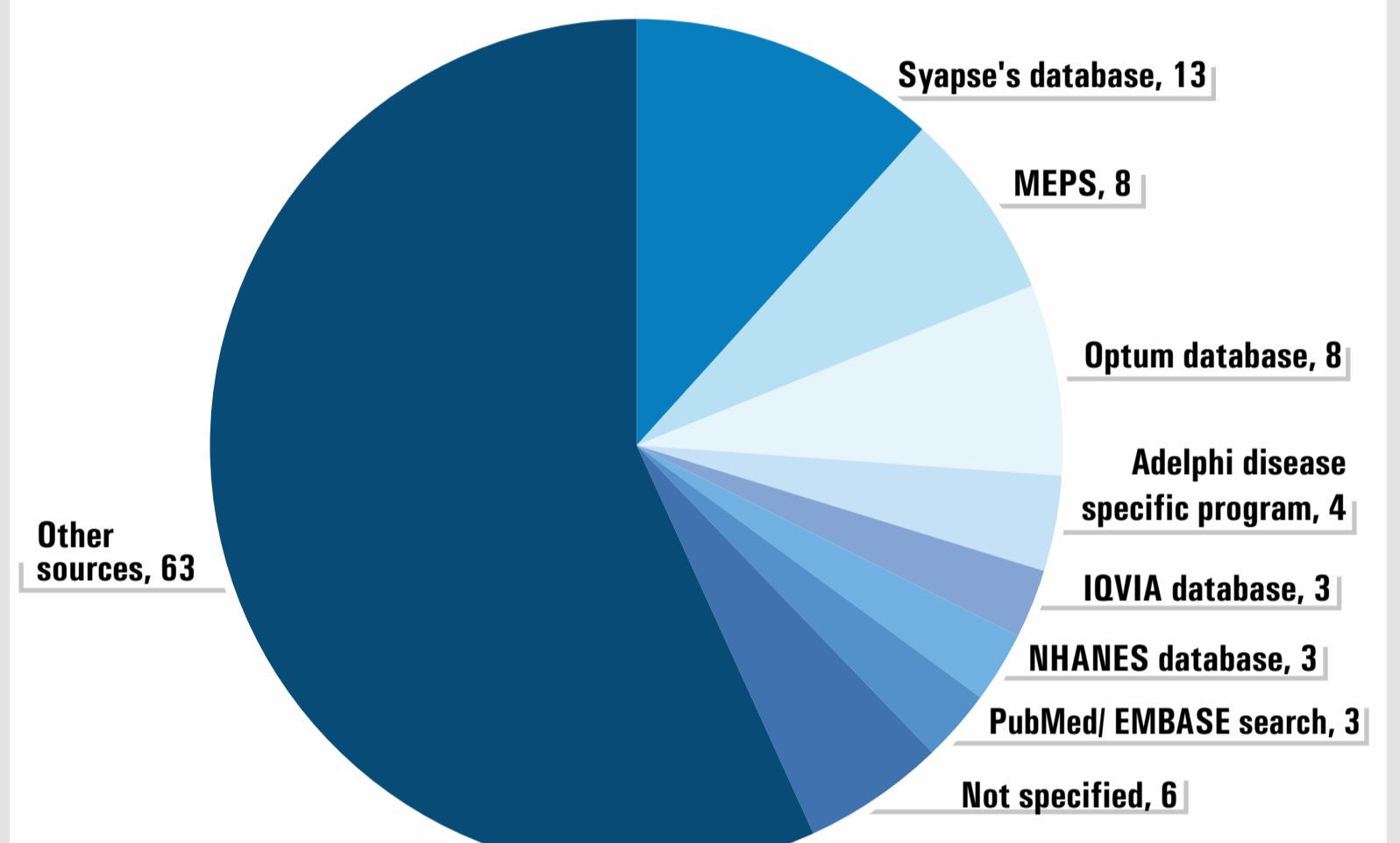


Figure 5

## 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

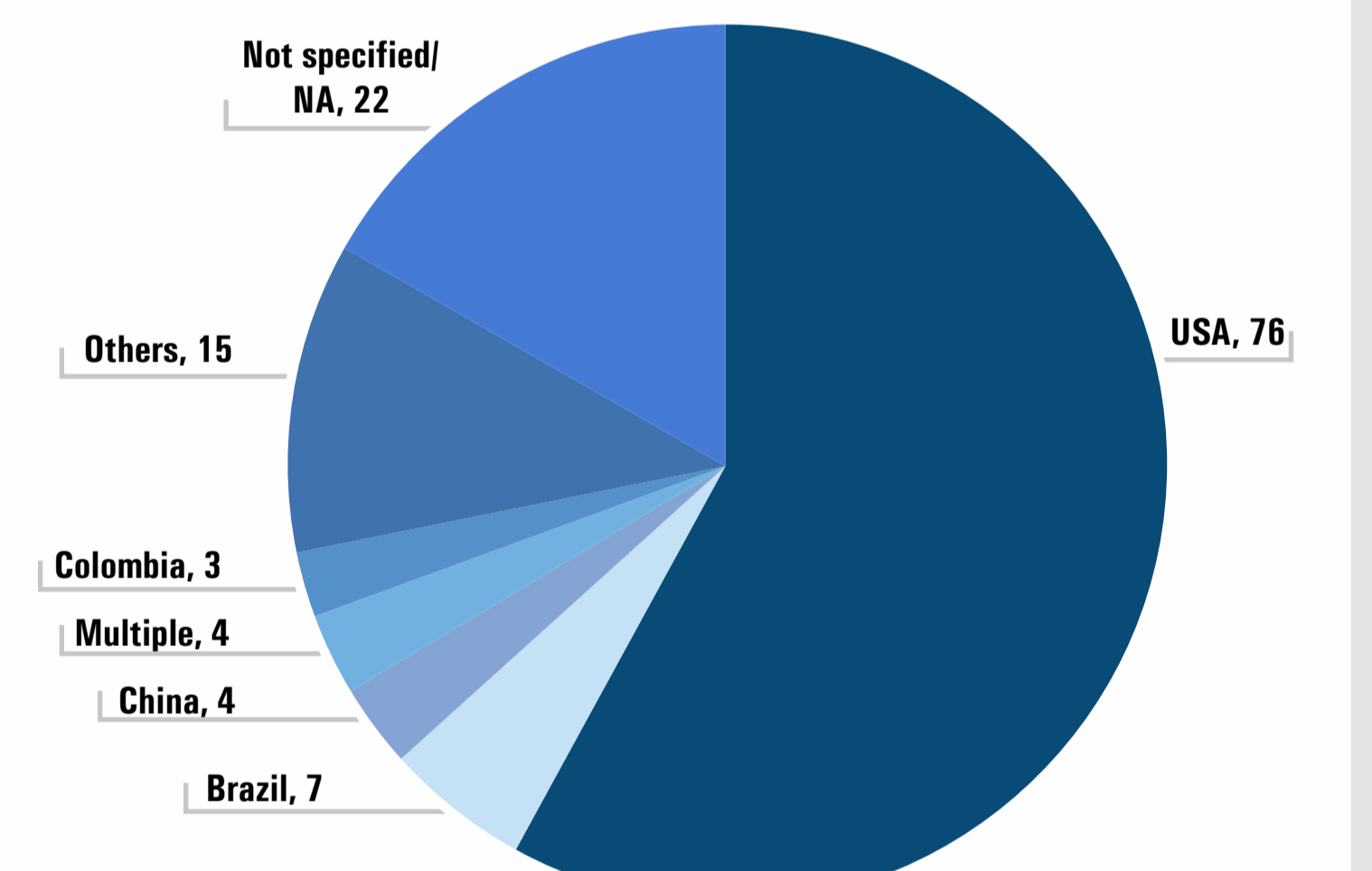


Figure 6

## 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>