

Maximising Research Impact: Is Less More?

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Objectives

- To investigate factors that may contribute to the decision to select an abstract for an oral presentation.

Background

- In recent years a number of guidelines have been developed to help standardise the publications process and improve transparency.^{1,2}
- These guidelines provide information on best practice for publication development and list essential information that should be included. However, there is limited evidence-based guidance on effective abstract development.
- Abstract review committees are responsible for determining the scientific merit and novelty of an abstract. It is unclear whether other abstract variables, for example, the number of outcomes reported in the results, influence abstract review committee decisions.

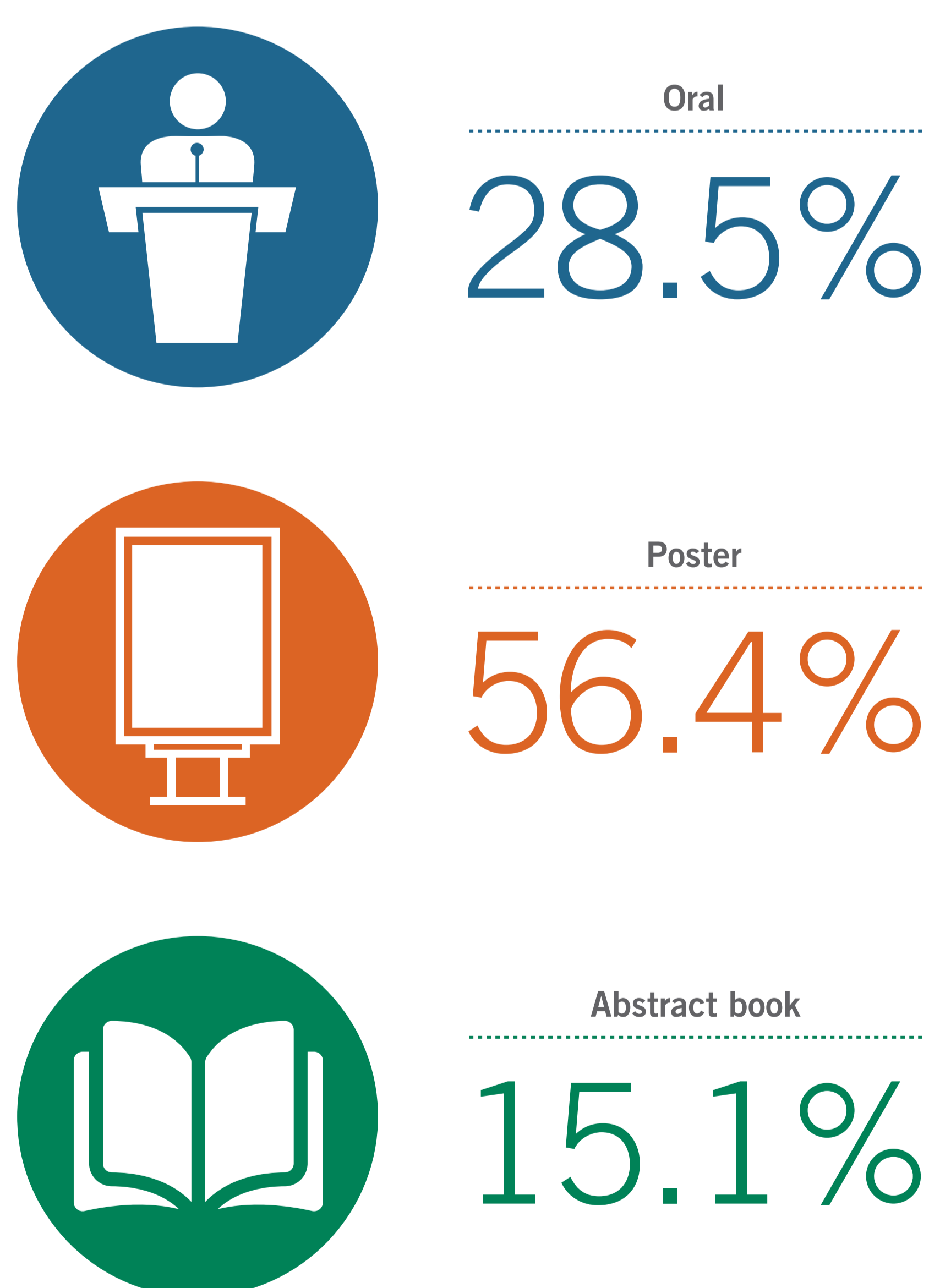
Methods

- All accepted abstracts reporting data from randomised controlled trials (RCTs) at the European League Against Rheumatism Annual European Congress of Rheumatology (EULAR) in the years 2014 and 2016 were included in this analysis.
- The following were recorded for each abstract:
 - The number of outcomes reported in the Results section
 - Funding source (academic vs industry-sponsored)
 - Whether a figure or table were used to present data
- All reported safety data were included as a single outcome.
- A one-way ANOVA and a post-hoc Tukey's test were performed to compare the number of outcomes reported in abstracts selected for either an oral presentation, a poster presentation or abstract book publication. A two-sided *t*-test was used to compare the mean number of outcomes reported in academic vs industry-sponsored abstracts.

Results

- A total of 8,363 abstracts were accepted to EULAR in 2014 and 2016 and published in the EULAR supplements. Of these, 344 were identified as reporting data from RCTs: 98 (28.5%) were selected for oral presentation, 194 (56.4%) for poster presentation and 52 (15.1%) for abstract book publication (Figure 1).

Figure 1 | The proportion of abstracts accepted for each presentation type



344 abstracts were identified as reporting data from RCTs.

Abstract

Objectives

- Abstract review committees evaluate a large number of abstracts within a short period of time. We investigated whether any relationship exists between the number of outcomes reported in an abstract and the decision to select abstracts for oral presentations.

Research Design and Methods

- All accepted abstracts reporting data from randomised controlled trials (RCTs) at the European League Against Rheumatism Annual European Congress of

Figure 2 | Number of outcomes reported

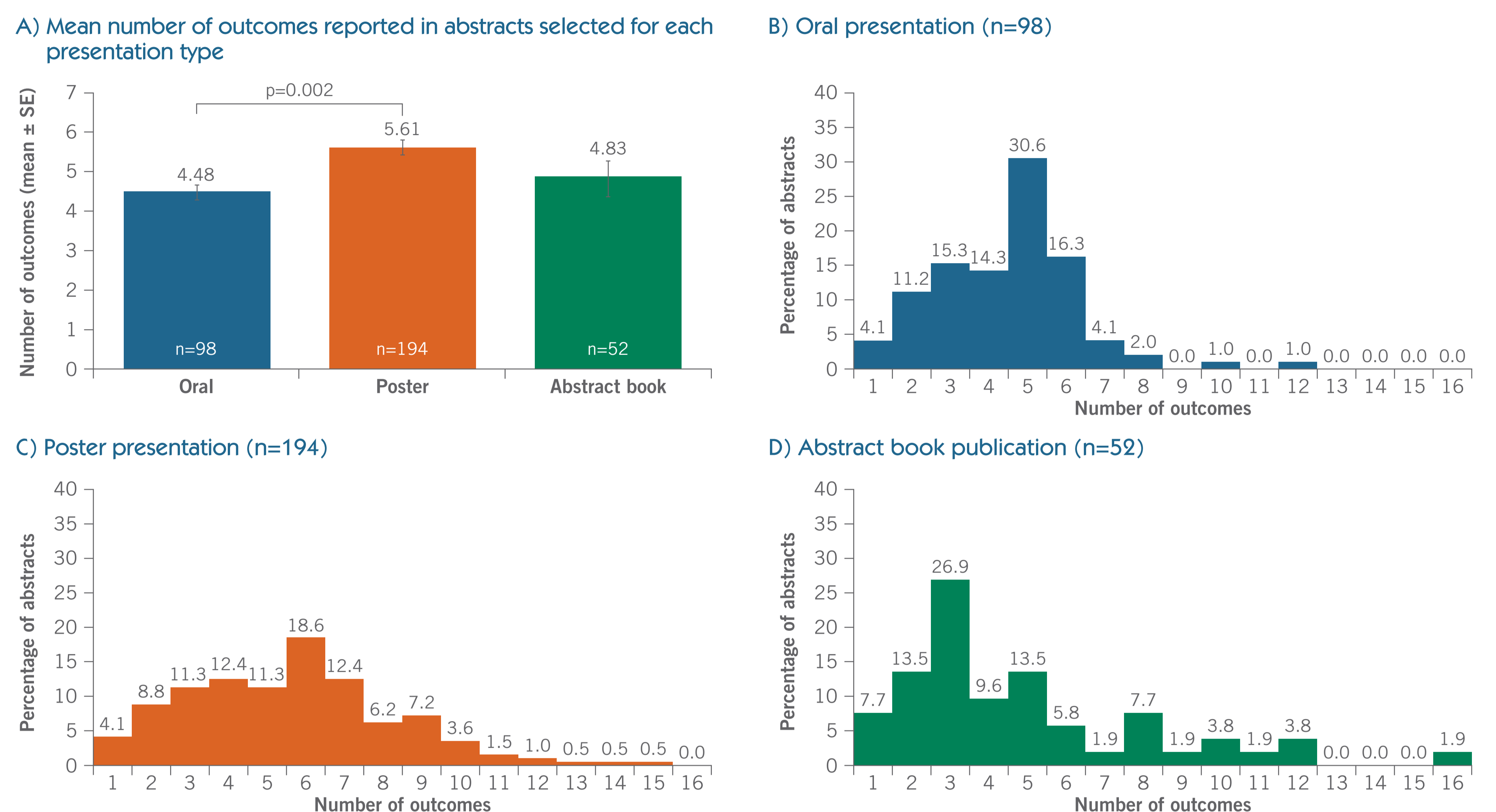


Figure 3 | The proportion of all abstracts including either a table or figure

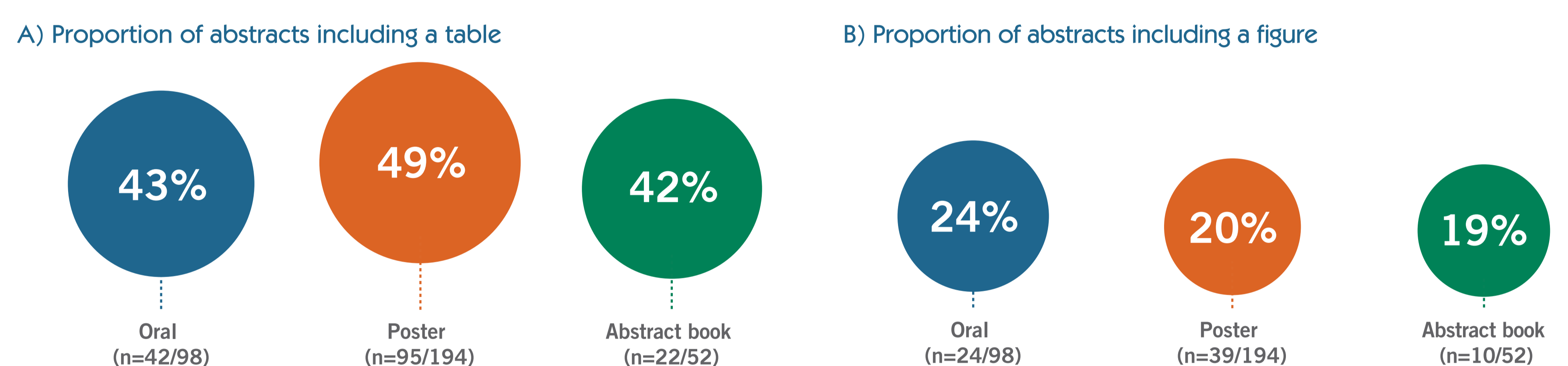
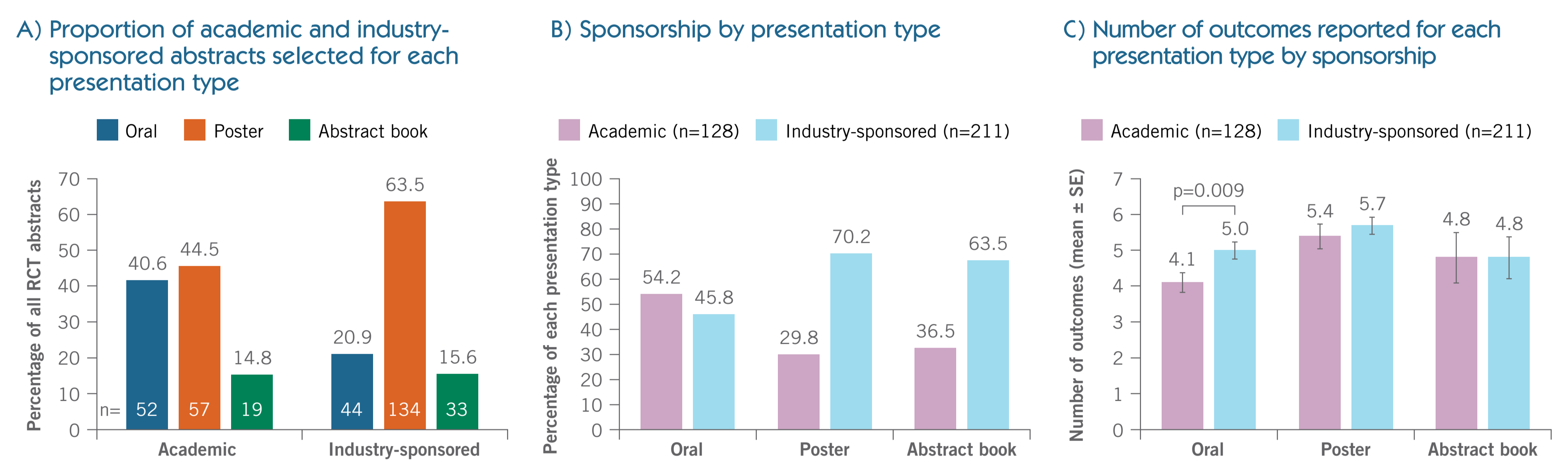


Figure 4 | Analysis of abstracts by sponsorship



- In comparison to oral presentations, posters reported a significantly greater number of outcomes (mean [SD], 5.61 [2.7] vs 4.48 [1.9], $p=0.002$; Figure 2).
- A greater proportion of abstracts included a table. Including a table or a figure did not have a significant effect on the presentation type awarded to an abstract (Figure 3).
- 339 abstracts were identified as either academic (37%) or industry-sponsored (63%). A greater proportion of academic abstracts were selected for oral presentation vs industry-sponsored abstracts (40.6% vs 20.9%; Figure 4); the majority of industry-sponsored abstracts were selected as poster presentations (63.5%). Of all the abstracts accepted as an oral presentation, 54.1% were sponsored by academia and 45.9% were sponsored by industry (Figure 4).
- Across all presentation types, industry-sponsored abstracts reported a significantly greater number of outcomes than academic-sponsored abstracts (5.4 [2.7] vs 4.8 [2.5], $p=0.02$, data not shown). Of the three presentation types, the largest difference in the mean number of reported outcomes was observed for oral presentations (5.0 [1.5] vs 4.1 [1.9], $p=0.009$, industry vs academic; Figure 4).

References

- Hopewell S. Lancet 2008;371:281–283; 2. Battisti W. Ann Intern Med 2015; 163:461–463.

Rheumatology (EULAR) 2014 and 2016 were included in this analysis. The number of outcomes reported, alongside abstract type (oral presentation, poster, abstract book) were recorded. A one-way ANOVA and a post-hoc Tukey's test were performed to compare groups.

Results

- 8363 abstracts were accepted to EULAR 2014 and 2016. Of these, 344 abstracts were identified as reporting data from RCTs: 98 (28.5%) were selected for an oral presentation, 194 (56.4%) for a poster and 52 (15.1%) for abstract book publication. Compared with oral presentations, posters reported significantly more

Conclusions

- The data reported here suggest that there may be a relationship between the number of reported outcomes and the decision to award an abstract with either an oral or poster presentation.
- Sub-analyses examining differences between academic and industry-sponsored abstracts demonstrated that industry-sponsored abstracts report significantly more outcomes than academic abstracts. Furthermore, a greater proportion of academic abstracts were accepted for oral presentations.
- These data suggest that including an optimal number of outcomes in a research abstract may increase the chances of selection for an oral presentation.
- Further analyses are now required to investigate whether other confounding factors, for example, the type of outcome reported, influence the correlation observed in this study.

Acknowledgements

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outcomes in the results section of the abstract (mean 5.61 [SD±2.7] vs 4.48 [1.9], $p=0.002$), a smaller proportion included a figure (20% vs 24%, insignificant) and a greater number included a table (49% vs 43%, insignificant). A smaller proportion of RCT abstracts selected for an oral presentation were sponsored by industry (oral: 45.9%; poster: 70.1%; abstract book: 67.4%).

Conclusions

- These data imply that including an optimal number of outcomes in a research abstract may increase the chances of selection for an oral presentation.