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In search of the holy grail of graphs

What do we know about visualization of group-level PRO data from cancer clinical trials for **health care professionals** and **other stakeholders**? Results from a systematic literature review

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SISAQOL-IMI



Setting International Standards in Analysing Patient-Reported Outcomes and Quality of Life Endpoints in Cancer Clinical Trials – Innovative Medicines Initiative

Recommendations on

- implementation of PRO measures in cancer clinical trial design,
- analysis of PRO data,
- harmonization of terms for clinically meaningful change and
- communication tools/visualisation of PRO data from clinical trials.

The content of this presentation **MUST NOT** be taken as recommendations of the SISAQOL-IMI consortium. Disclaimer:



Methods



2 step systematic search approach of online databases identifying

- studies/trials investigating visualisation formats of PRO data in oncology
- visualisation advice for PRO data irrespective of the medical field

title and abstract screening – full text screening – data extraction/synthesis

healthcare professionals (HCPs): mostly clinicians, nurses other stakeholders: researchers, experts

Results



1,223 hits retrieved – 19 references included – 15 references provide information for HCPs; 7 for other stakeholders

Though there is no clear preference for a visualisation type across groups

- bar charts are valued for side-by-side comparisons (max. 6 bars/chart)
- pie charts are well understood and positively rated for proportions changed data
- icon arrays get mixed results, well understood but small differences are difficult to spot
- HCPs prefer to see data over time (line charts, max. 4 lines/chart)
- both groups favour annotations indicating statistical/clinical significance

Conclusions



There is no "one-size fits all" solution to be found in the literature.

Literature provides only few clear recommendations on the graphical presentation of group-level PRO data for HCPs and other stakeholders.

Different types of visualisations are needed depending on the study endpoint/used analysis.

SISAQOL-IMI will provide evidence- and consensus-based recommendations on how to communicate cancer clinical trial PRO data in different complexity levels.

Join for more visualisation content: Friday Afternoon Poster Presentations Slot 8



Franziska Gross

Poster No. 2003

What do we know about visualisation of group-level PRO data from cancer clinical trials for **patients**? Results from a systematic literature review

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Thank you very much for your attention!





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