

Do drug dossiers of pharmaceutical companies provide additional information on study methods compared to journal publications?

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Background

- Since the latest health care reform in Germany (2011), pharmaceutical companies have to submit dossiers for early benefit assessments of drugs.
- These dossiers contain tabular descriptions of study methods for relevant RCTs.
- These descriptions of study methods have to adhere to CONSORT, including items 2b to 14b with a mandatory participant flow diagram.
- CONSORT is the standard of reporting in many medical journals.

Objective

- To evaluate to what extent tabular descriptions in drug dossiers contain additional CONSORT-relevant information on study methods compared to journal publications
- To investigate the effect of the CONSORT endorsement status of journals
- To examine the effect of journal publications' supplementary study information (protocol / SAP)

Methods: selection criteria

- **Studies:**
 - The first 10 drug dossiers
 - RCTs with the new drug (i.e. tabular description available)
 - Clinical study report available
- **Journal publications:**
 - RCT-publications that were cited by the company
 - Primary publication, including supplementary materials (e.g. webappendix) and other journal publications cited by the primary publication for details on study methods.

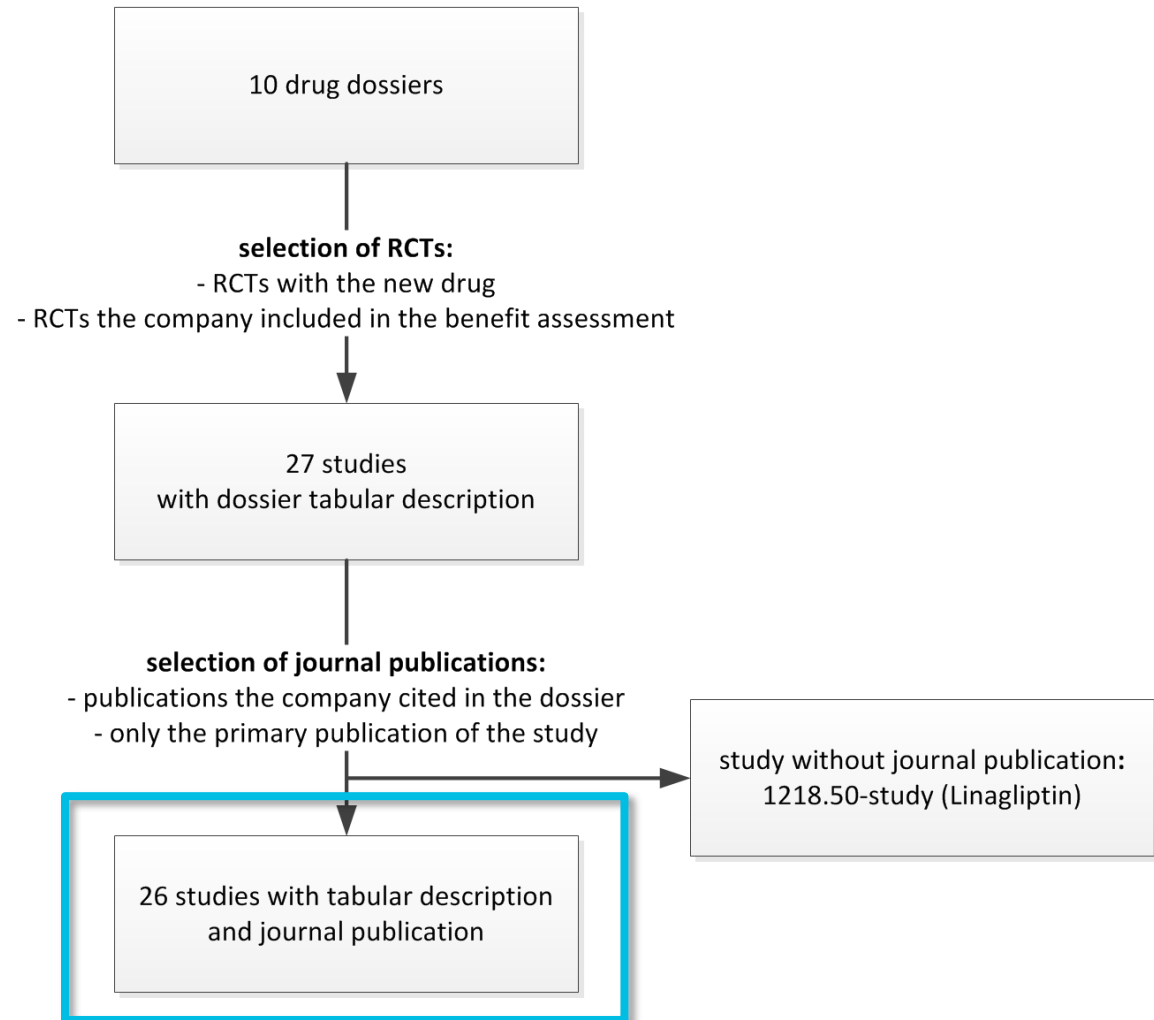
Methods: assessment

- Two reviewers independently assessed additional relevant information in the tabular descriptions compared to publications, for individual CONSORT items 2b to 14b.
- Information in the tabular description was categorized on the basis of the CONSORT requirements as:
 - 1. Fully new** information (*without* any information in the publication)
 - 2. Partially new** information (*with* some information in the publication)
 - 3. No new** information (independent of information in the publication)

Methods: analysis

- Analysis of all assessed CONSORT items (2b to 14b)
 - Introduction: objectives or hypotheses (2b)
 - Methods: trial design (3a, 3b), participants (4a, 4b), interventions (5), outcomes (6a, 6b), sample size (7a, 7b), randomisation (8a, 8b, 9, 10), blinding (11a, 11b), statistical methods (12a, 12b)
 - Results: participant flow (13a, 13b), recruitment (14a, 14b)
- Calculation of additional information per study:
 - Percentage of items with new information
- Characterization of individual CONSORT items:
 - Percentage of studies with new information

Results



Journal Publications (1)

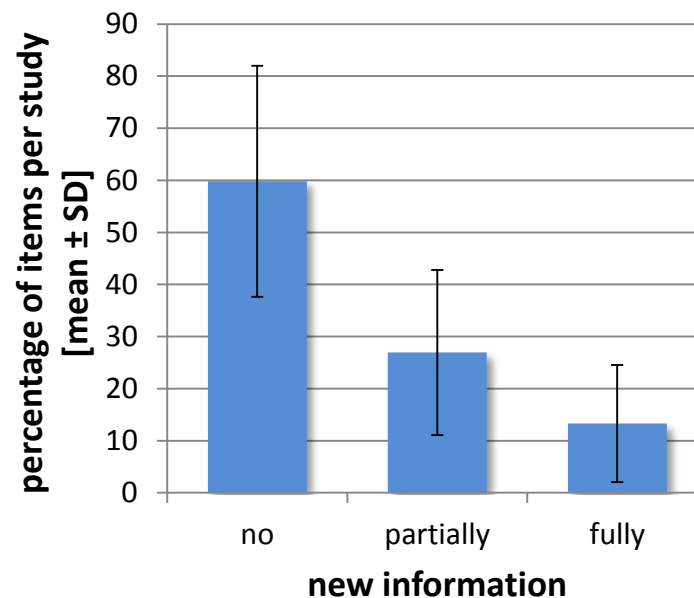
■ New England Journal of Medicine	13 studies (50%)
■ Journal of Hand Surgery (am. vol.)	4 studies (15%)
■ Neurology	3 studies (11%),
■ Lancet	2 studies (8%),
■ Diabetic Medicine	1 study,
■ Diabetes, Obesity & Metabolism	1 study,
■ Gastroenterology	1 study,
■ Journal of Hepatology	1 study

Journal Publications (2)

- Endorsement of CONSORT: 20 publications (77%)
 - general medical journals: 15 publications (100%)
 - specific medical journals: 5 publications (46%)
- Supplementary webappendix: 18 publications (70%)
 - general medical journals: 13 publications (87%)
 - specific medical journals: 5 publications (46%)
- Supplementary protocol and SAP: 6 publications (23%)
 - general medical journals: 6 publications (40%)
 - specific medical journals: 0 publications (0%)
- 1 publication cited another paper for details on study methods.

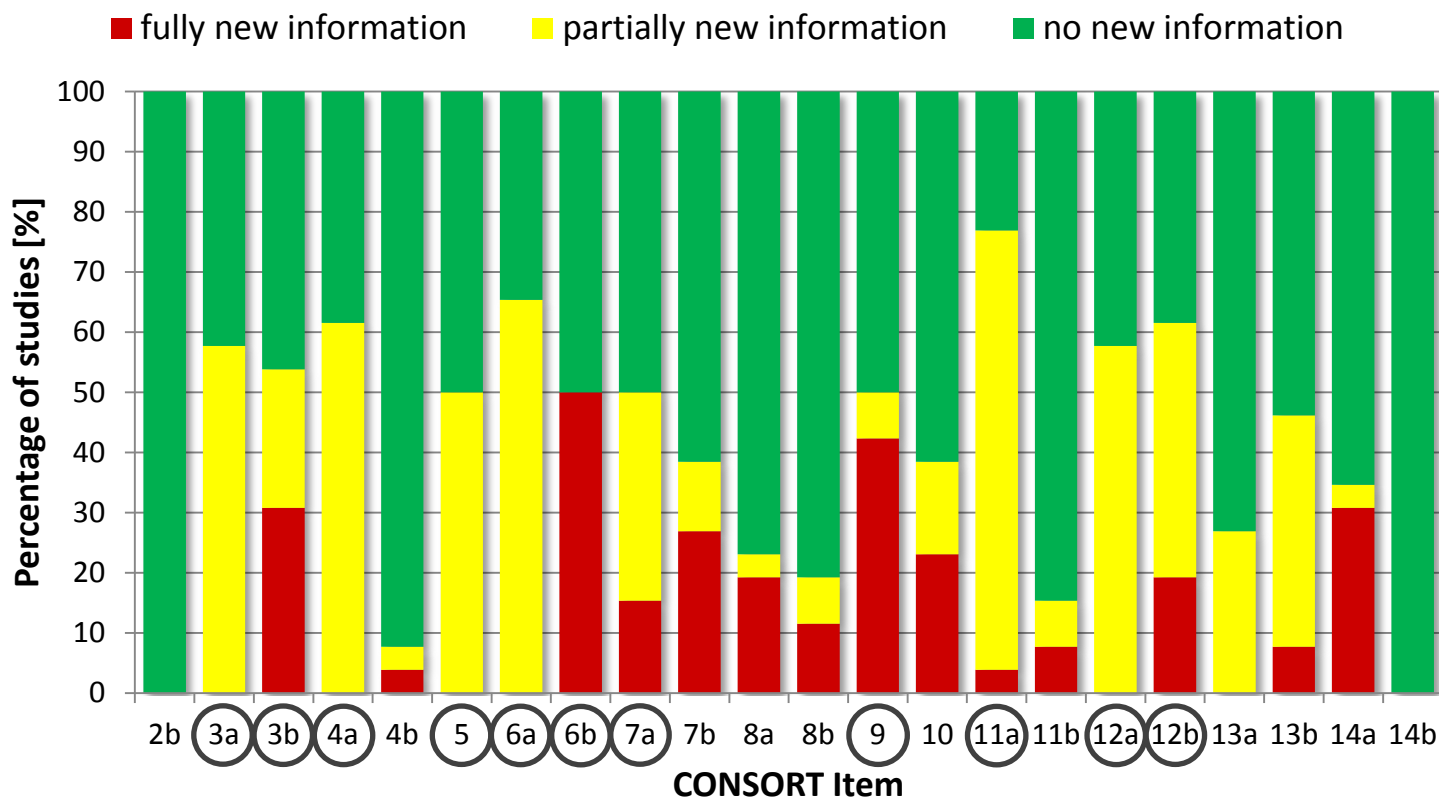
Result (a): additional information per study

Percentage of items per study with no, partially or fully new information (average across studies)



The tabular descriptions provided additional information in 40% of the items, of which 13% (~ 3 items) reported fully new information and 27% (~ 6 items) reported partially new information.

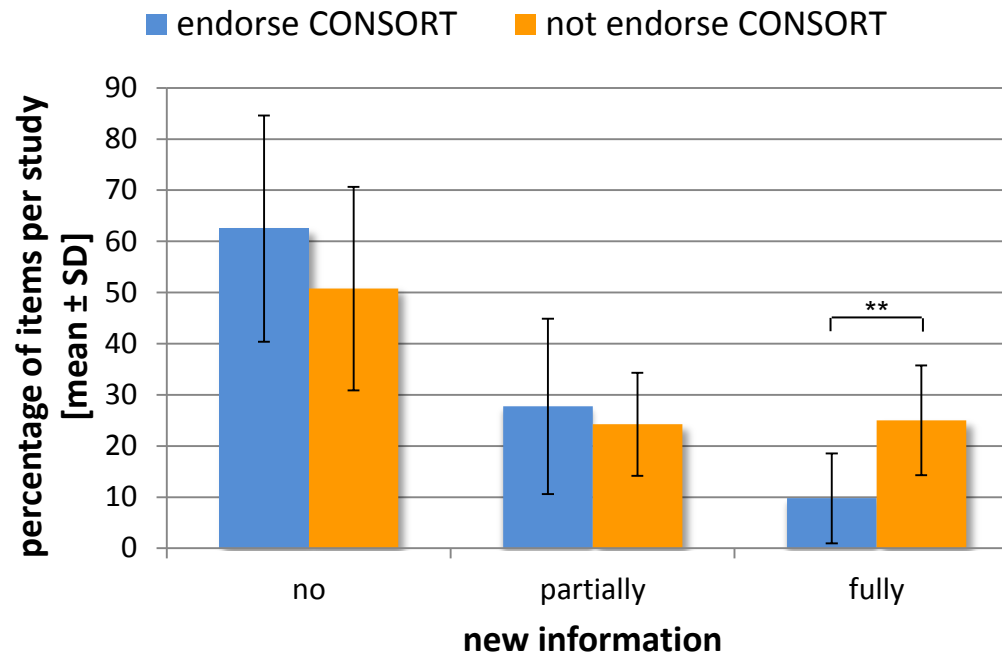
Percentage of studies with fully new, partially new, and no new information for individual CONSORT-items



In 50 % of all assessed items (11/22), at least 50 % of the studies provided additional information in the tabular descriptions.

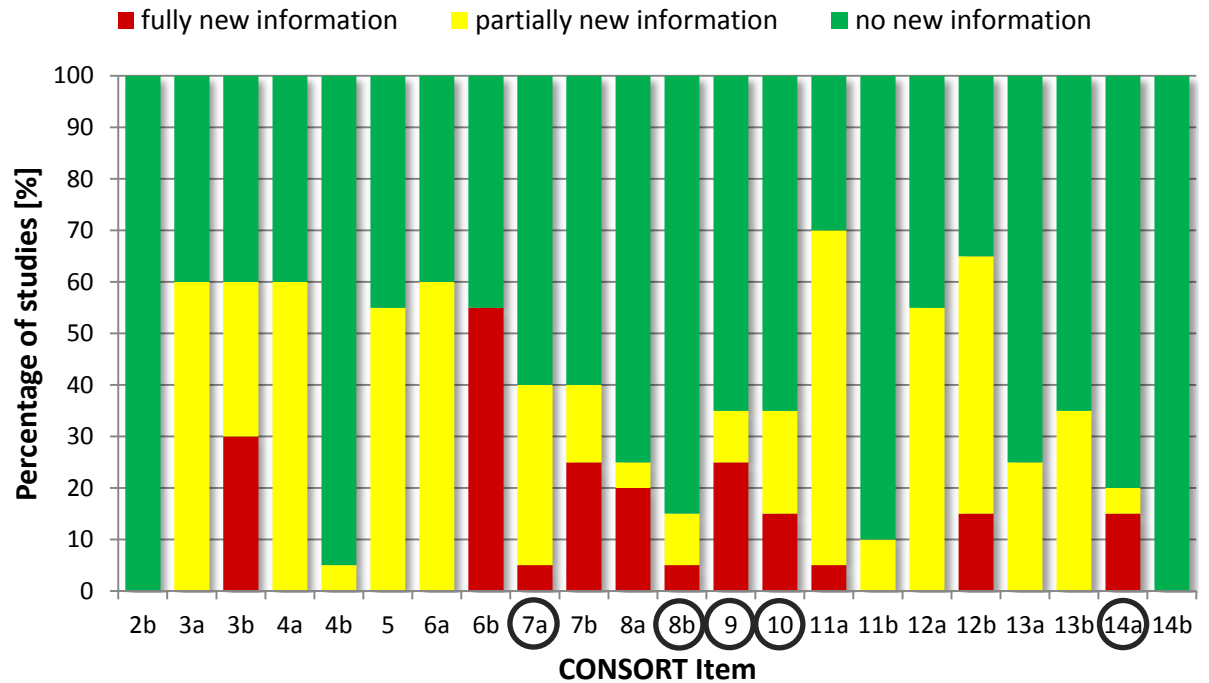
Result (b): Effect of CONSORT endorsement status

Percentage of items per study with no, partially or fully new information (average across studies) for journals endorsing CONSORT vs. not endorsing CONSORT

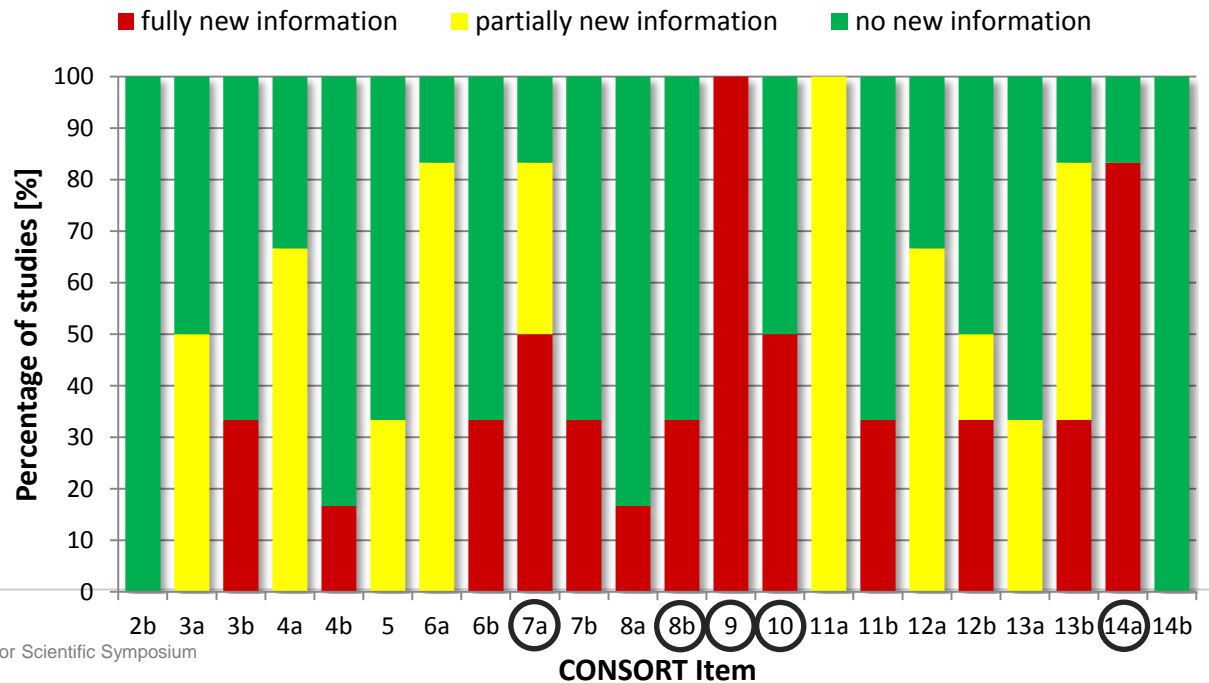


The tabular descriptions provided more fully new information (25% vs. 10%) for studies published in journals that *do not* endorse CONSORT.

studies published in journals that endorse CONSORT (n = 20)

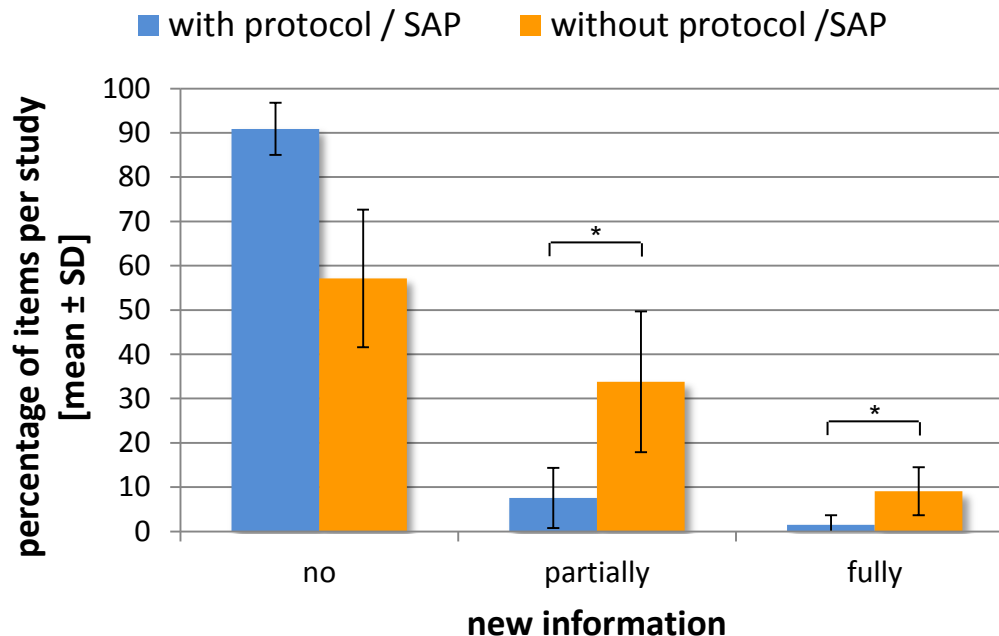


studies published in journals that do not endorse CONSORT (n = 6)



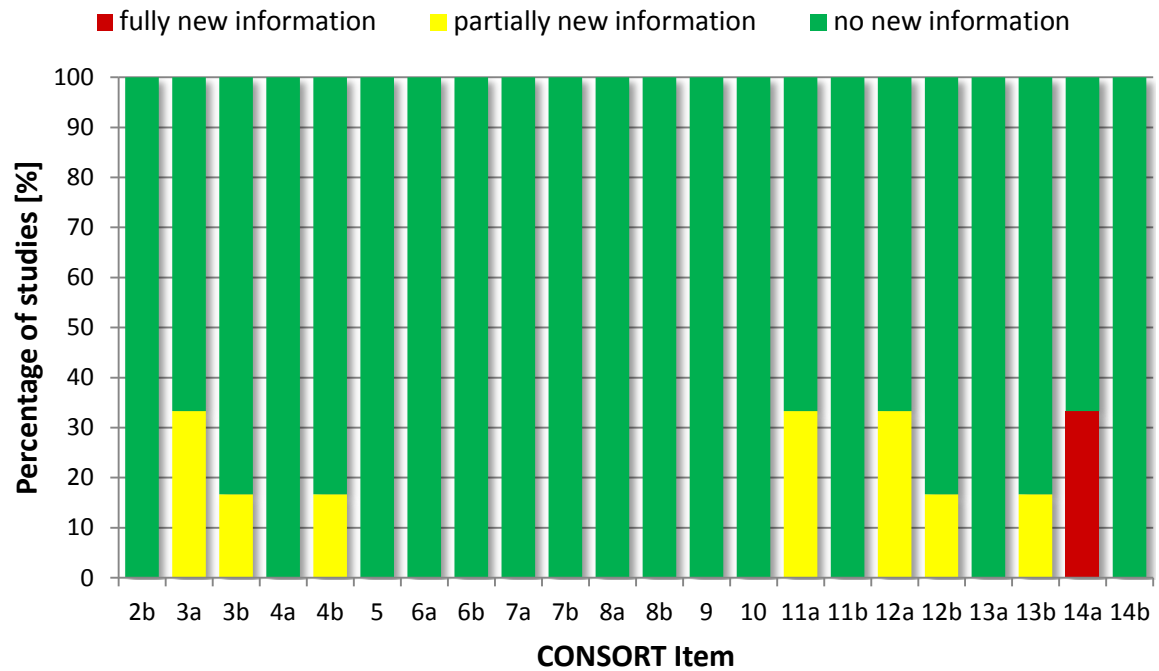
Result (c): Effect of supplementary protocol / SAP

Percentage of items with no, partially or fully new information for studies published in the "New England Journal of Medicine" with or without a supplementary protocol / SAP

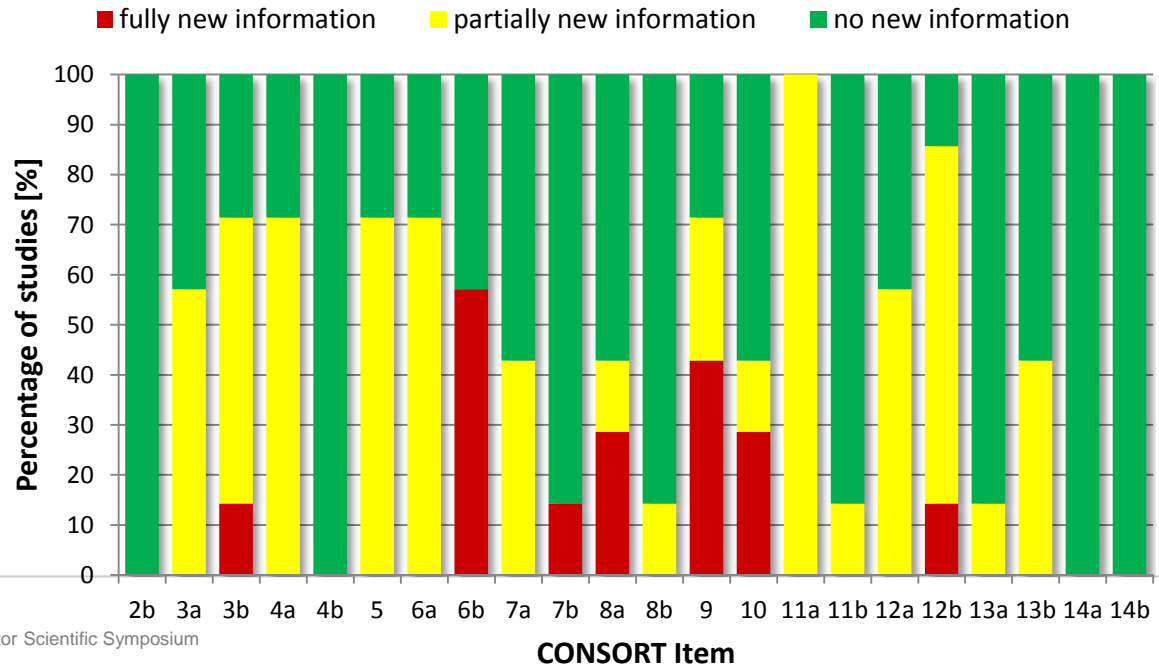


The tabular descriptions provided more additional information for studies published without a supplementary study protocol *in the same journal* (New England Journal of Medicine).

Studies published in the NEJM with supplementary study protocol / SAP (n = 6)



Studies published in the NEJM without supplementary study protocol / SAP (n = 7)



Summary & Conclusions

- The tabular descriptions in drug dossiers provide additional information on study methods compared to publications.
 - Additional information on study methods is publicly available soon after the introduction of new drugs into the German health care market.
- The effect is stronger for studies published in journals that *do not* endorse the CONSORT statement.
 - CONSORT-statement improves reporting quality of journal publications
- The effect is stronger for studies published *without a* supplementary study protocol / SAP in the NEJM
 - Journals should request the submission of study protocols as a compulsory prerequisite for accepting a manuscript for publication

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