**Appendix 1 – Differences between outcomes when comparing the published trial to the trial registry among adequately registered trials (stratified by journal)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Anaesthesia  (n=8) | | | Anesthesia & Analgesia  (n=18) | | | Anesthesiology  (n=16) | | | British Journal of Anaesthesia  (n=31) | | | Canadian Journal of Anesthesia  (n=16) | | | European Journal of Anaesthesiology  (n=13) | | |
|  | A | B | A | | B | A | | B | A | | B | A | | B | A | | B |
| Trials with any primary or secondary outcome discrepancy a | 4 (50%) | 1.00 | 17 (94%) | | 0.53 | 14 (88%) | | 0.71 | 30 (97%) | | 0.67 | 16 (100%) | | 0.75 | 13 (100%) | | 0.15 |
|  |  |  |  | |  |  | |  |  | |  |  | |  |  | |  |
| **Trials with primary outcome discrepancies b** | 1 (13%) | 1.00 | 9 (50%) | | 0.44 | 7 (44%) | | 0.86 | 20 (65%) | | 0.65 | 5 (31%) | | 1.00 | 4 (31%) | | 0.25 |
| Registered primary outcome not reported as primary outcome | 0 (0%) | N/A | 6 (33%) | | 0.17 | 3 (19%) | | 0.00 | 12 (39%) | | 0.17 | 2 (13%) | | 0.50 | 2 (15%) | | 0.00 |
| Registered primary outcome not reported | 0 (0%) | N/A | 3 (17%) | | N/A | 2 (13%) | | N/A | 4 (13%) | | N/A | 1 (6%) | | N/A | 1 (8%) | | N/A |
| Registered primary outcome reported as secondary outcome \* | 0 (0%) | N/A | 3 (17%) | | 0.33 | 1 (6%) | | 0.00 | 10 (32%) | | 0.20 | 1 (6%) | | 1.00 | 1 (8%) | | 0.00 |
| Reported primary outcome not registered as primary outcome | 0 (0%) | N/A | 5 (28%) | | 0.60 | 4 (25%) | | 1.00 | 12 (39%) | | 0.83 | 4 (25%) | | 1.00 | 4 (31%) | | 0.25 |
| Reported primary outcome not registered | 0 (0%) | N/A | 4 (22%) | | 0.50 | 3 (19%) | | 1.00 | 11 (35%) | | 0.82 | 2 (13%) | | 1.00 | 3 (23%) | | 0.00 |
| Reported primary outcome registered as secondary outcome \*\* | 0 (0%) | N/A | 1 (6%) | | 1.00 | 1 (6%) | | 1.00 | 1 (3%) | | 1.00 | 2 (13%) | | 1.00 | 1 (8%) | | 1.00 |
| Timing of reported primary outcome different from primary outcome registered | 1 (13%) | 1.00 | 4 (22%) | | 0.00 | 3 (19%) | | 1.00 | 4 (13%) | | 0.50 | 0 (0%) | | N/A | 1 (8%) | | 0.00 |
|  |  |  |  | |  |  | |  |  | |  |  | |  |  | |  |
| **Trials with secondary outcome discrepancies c** | 4 (50%) | 0.75 | 16 (89%) | | 0.44 | 13 (81%) | | 0.62 | 30 (97%) | | 0.53 | 16 (100%) | | 0.69 | 12 (92%) | | 0.17 |
| Registered secondary outcome not reported as secondary outcome | 0 (0%) | N/A | 5 (28%) | | 0.20 | 5 (31%) | | 0.20 | 7 (23%) | | 0.14 | 7 (44%) | | 0.29 | 4 (31%) | | 0.25 |
| Registered secondary outcome not reported | 0 (0%) | N/A | 4 (22%) | | N/A | 4 (25%) | | N/A | 6 (19%) | | N/A | 5 (31%) | | N/A | 3 (23%) | | N/A |
| Registered secondary outcome reported as primary outcome \*\* | 0 (0%) | N/A | 1 (6%) | | 1.00 | 1 (6%) | | 1.00 | 1 (3%) | | 1.00 | 2 (13%) | | 1 | 1 (8%) | | 1 |
| Reported secondary outcome not registered as secondary outcome | 3 (38%) | 1.00 | 16 (89%) | | 0.38 | 12 (75%) | | 0.50 | 30 (97%) | | 0.50 | 14 (88%) | | 0.71 | 10 (77%) | | 0.00 |
| Reported secondary outcome not registered | 3 (38%) | 1.00 | 16 (89%) | | 0.38 | 12 (75%) | | 0.50 | 29 (94%) | | 0.45 | 14 (88%) | | 0.64 | 10 (77%) | | 0.00 |
| Reported secondary outcome registered as primary outcome \* | 0 (0%) | N/A | 3 (17%) | | 0.33 | 1 (6%) | | 0.00 | 10 (32%) | | 0.20 | 1 (6%) | | 1.00 | 1 (8%) | | 0.00 |
| Timing of reported secondary outcome different from secondary outcome registered | 1 (13%) | 0.00 | 5 (28%) | | 0.40 | 1 (6%) | | 1.00 | 6 (19%) | | 0.17 | 3 (19%) | | 0.33 | 4 (31%) | | 0.25 |

A: Data presented are the number of trials (%). All percentages are column percentages with the denominator set to the total number of trials published.

B: Data presented are the proportion of trials where the identified discrepancy favoured statistical significance (see article text for details).

All uses of ‘registered’ pertain to the outcome as registered in the trial registry and all uses of ‘reported’ pertain to the outcome as reported in the published manuscript. If there are one or more occurrences of the discrepancy in a trial, the trial will be counted as having the described discrepancy. Subcategories are not mutually exclusive so if individual studies have more than one discrepancy, the sum of the subcategories will be larger than the parent category.

“N/A” represents values where it could not be determined whether the discrepancy favoured statistical significance: either when the discrepancy involved an outcome not being reported or when there were no studies with the discrepancy.

a Trials with at least one discrepancy between the primary or secondary outcomes reported in the published article and those registered in the trial registry.

b Trials with at least one discrepancy between the primary outcome reported in the published article and that registered in the trial registry.

c Trials with at least one discrepancy among any of the secondary outcomes reported in the published article and those registered in the trial registry.

\* While the wording is slightly different, both rows are equivalent, as both show a registered primary outcome being reported as a secondary outcome.

\*\* While the wording is slightly different, both rows are equivalent, as both show a registered secondary outcome being reported as a primary outcome.