

## Appendix 2 (as supplied by the authors): Summary and rationale for small and large treatment effects

Approach	Small effect	Large effect
Standardized Mean Difference	0.20	0.80
Mean Difference in minimal important difference units	0.60	2.00
Mean Difference in natural units	0.60 point reduction	2.00 point reduction
Ratio of Means	0.92, 8% less	0.63, 37% less
Relative Risk	0.80 (80%), 20% RRR	0.50 (50%), 50% RRR
Risk Difference	0.04 (4%), 4 per 100 fewer, NNT=25	0.20 (20%), 20 per 100 fewer, NNT=5

Answers are based on consensus among the group of investigators. We used the following empirical data and guidelines to justify small and large treatment effects.

**Standardized Mean Difference (SMD):** as a rule of thumb, 0.2 SD represents a small difference, and 0.8 represents a large effect (1). Cohen proposed these values on theoretical grounds, which have subsequently become accepted.

**Minimal Importance Difference (MID) units:** a consensus statement suggests that a 1 point change on a 10 point pain scale constitutes an MID (2). We have previously published guidelines indicating that half (0.5) the MID is a small treatment effect (3). Reporting results in MID units risks naïve misinterpretation. For example, some may be under the impression that for estimates above 1 MID, the treatment has important benefits for all patients, and estimates below 1 for none. Even if the pooled estimate lies between 0 and 1 (or 0 and -1), treatment may have an important impact on many patients (4). We suggest the following guide for interpretation: if the pooled estimate is greater than 1 MID unit, many patients are likely to gain important benefits from treatment. If the estimate of effect lies between 0.5 and 1 MID unit, the treatment may benefit an appreciable number of patients. As the pooled estimate falls below 0.5 MID units it becomes progressively less likely that an appreciable numbers of patients will achieve important benefits from treatment (3,5).

**Mean Difference (MD)** in natural units: Please see above.

**Ratio of Means (RoM):** our estimates were based on Cohen's proposed values, with SMDs of 0.2, and 0.8 corresponding to increases in RoM of approximately 8% and 37%, respectively. This is based on work correlating the SMD to the RoM using 232 meta-analyses that included at least 5 trials and that reported continuous outcomes (6).

**Relative Risk (RR)** estimates are based on published guidelines on the interpretation of these measures of treatment effect (7).

**Risk Difference (RD)** estimates are based on published guidelines on the interpretation of these measures of treatment effect (8,9).

### References

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