

GRADE system for assessing strength of evidence base

Developed by the GRADE Working Group (www.gradeworkinggroup.org)

Grades and interpretations:

High: Further research is very unlikely to change our confidence in the estimate of effect.

Moderate: Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

Low: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.

Very low: Any estimate of effect is very uncertain.

Type of evidence and starting level

Randomized trial–high

Observational study–low

Any other evidence–very low

Criteria for increasing or decreasing level

Reductions

Study quality has serious (–1) or very serious (–2) problems

Important inconsistency in evidence (–1)

Directness is somewhat (–1) or seriously (–2) uncertain

Sparse or imprecise data (–1)

Reporting bias highly probable (–1)

Increases

Evidence of association† strong (+1) or very strong (+2)

Dose-response gradient evident (+1)

All plausible confounders would reduce the effect (+1)

†Strong association defined as significant relative risk (factor of 2) based on consistent evidence from two or more studies with no plausible confounders

Very strong association defined as significant relative risk (factor of 5) based on direct evidence with no threats to validity.