Glossary

TERMS USED IN THERAPEUTICS

Allocation concealed: deemed to have taken adequate measures to conceal allocation to study group assignments from those responsible for assessing patients for entry in the trial.

Allocation not concealed: deemed to have not taken adequate measures to conceal allocation to study group assignments from those responsible for assessing patients for entry in the trial.

Unclear allocation concealment: the authors of the article did not report or provide us with a description of an allocation concealment approach that allowed for the classification as concealed or not concealed.

Blinded: the clinicians, patients/participants, outcome assessors and/or statisticians were unaware of who received which study intervention. Those blinded are indicated in parenthesis. If "initially" is indicated (eg, …blinded [patients and outcome assessor initially]…) the code was broken during the trial, for instance, because of adverse effects.

Blinded (unclear): the authors did not report or provide us with an indication of who, if anyone, was unaware of who received which study intervention.

Unblinded: all participants in the trial (clinicians, patients/participants, outcome assessors, and statisticians) were aware of who received which study intervention.

DEFINITIONS RELATING TO DATA PRESENTATION IN THERAPEUTICS

AR: absolute risk.

ARI (absolute risk increase): the absolute difference in rates of events, when the experimental treatment harms more patients than the control treatment, and calculated as |EER − CER|.

ARR (absolute risk reduction): the absolute arithmetic difference in event rates, |EER − CER|.

CI (confidence interval): the CI quantifies the uncertainty in measurement; usually reported as 95% CI, which is the range of values within which we can be 95% sure that the true value for the whole population lies.

HR (hazard ratio): a measure of the relative frequency of an event in two groups that takes into account the fact that frequency may vary over time, that people may have been followed for differing amounts of time, and that people are no longer at risk of an event, such as death, once it has happened. It is roughly equivalent to the relative risk (RR).

NNH (number needed to harm): the number of patients who, if they received the experimental treatment, will lead to 1 additional person being harmed compared with patients who receive the control treatment, and calculated as 1/ARI.

NNT (number needed to treat): the number of patients who need to be treated to create or prevent one additional outcome, calculated as 1/ARR. The lower the NNT, the more effective the intervention.

Odds of an event: the probability, or event rate, divided by (1 − event rate).

OR (odds ratio): a measure of the relative benefit of the experimental treatment that can be obtained by dividing the experimental odds by the control odds.

RR (relative risk): the relative frequency of an event in one group compared with another, calculated as the event rate in the experimental group over the event rate in the control group (EER/CER).

RRI (relative risk increase): the increase in rates of events, comparing the experimental patients to control patients in a trial, and calculated as |EER − CER|/CER.

RRR (relative risk reduction): the proportional reduction in rates of events between experimental and control participants in a trial, calculated as |EER − CER|/CER.

TERMS USED IN SYSTEMATIC REVIEWS

Heterogeneity: occurs when there is more variation between the study results than would be expected by chance alone. When heterogeneity occurs, a **fixed effects** pooled ORs may be invalid and a **random effects** pooled OR is preferred.

Calculating an NNT using the patient's expected event rate (PEER): if the PEER is known or can be estimated, a number needed to be treated (NNT) can be calculated from an OR using the following formula:

$$NNT = \frac{1 - [PEER \times (1 - OR)]}{(1 - PEER) \times PEER \times (1 - OR)}$$

Effect size: is an estimate of a treatment's effectiveness derived by dividing the difference in effect between the intervention and control group by the standard deviation of their difference. The proportion of control group scores that are less than the average score in the experimental group is obtained by referring the Normal distribution in statistical tables (table).

Percentage of control scores that would be below the average experimental score for various effect sizes

Effect size	Percentage of control scores which would be below the average experimental score
0	50
0.4	66
0.8	79
1.0	84
1.6	95

TERMS USED IN DIAGNOSIS

The following terms are used in comparing a new test against a diagnostic (gold) standard

Sensitivity: the proportion of people who have the disorder (according to the diagnostic [gold] standard) who are detected by the test.

Specificity: the proportion of people who do not have the disorder (according to the diagnostic [gold] standard) who are determined by the test to not have the disorder.

Likelihood ratio for a positive test result: the likelihood that a positive test comes from a person with the disorder rather than one without the disorder = sensitivity/(1 - specificity).

Likelihood ratio for a negative test result: the likelihood that a negative test comes from a person with the disorder rather than one without the disorder = (1 - sensitivity)/specificity.