

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 (e.g., central randomisation; numbered, opaque, sealed envelopes; sealed envelopes from a closed bag; numbered or coded bottles or containers; drugs prepared by the pharmacy; or other descriptions that contain elements convincing of concealment).

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 (e.g., no concealment procedure was undertaken, sealed envelopes that were not opaque, or other descriptions that contain elements not convincing of concealment).

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 classification as concealed or not concealed.

Blinded: any or all of the clinicians, patients, participants, outcome assessors, or statisticians were unaware of who received which study intervention. Those that are blinded are indicated in parentheses. If “initially” is indicated (e.g., 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.

WHEN THE EXPERIMENTAL TREATMENT REDUCES THE RISK FOR A BAD EVENT

RRR (relative risk reduction): the proportional reduction in rates of bad events between experimental (experimental event rate [EER]) and control (control event rate [CER]) patients in a trial, calculated as $|EER - CER| / CER$ and accompanied by a 95% confidence interval (CI).

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

NNT (number needed to treat): the number of patients who need to be treated to prevent one additional bad outcome; calculated as $1 / ARR$, rounded up to the next highest whole number, and accompanied by its 95% CI.

WHEN THE EXPERIMENTAL TREATMENT INCREASES THE PROBABILITY OF A GOOD EVENT

RBI (relative benefit increase): the increase in the rates of good events, comparing experimental and control patients in a trial, also calculated as $|EER - CER| / CER$.

ABI (absolute benefit increase): the absolute arithmetic difference in event rates, $|EER - CER|$.

NNT: calculated as $1 / ABI$; denotes the number of patients who must receive the experimental treatment to create one additional improved outcome in comparison with the control treatment.

WHEN THE EXPERIMENTAL TREATMENT INCREASES THE PROBABILITY OF A BAD EVENT

RRI (relative risk increase): the increase in rates of bad events, comparing experimental patients to control patients in a trial, and calculated as for RBI. RRI is also used in assessing the effect of risk factors for disease.

ARI (absolute risk increase): the absolute difference in rates of bad events, when the experimental treatment harms more patients than the control treatment; calculated as for ABI.

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

Confidence interval (CI): 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.

Terms used in diagnosis

Sensitivity: the proportion of patients with the target disorder who have a positive test result ($a / [a + c]$) (Figure).

Specificity: the proportion of patients without the target disorder who have a negative test result ($d / [b + d]$) (Figure).

Pretest probability (prevalence): the proportion of patients who have the target disorder, as determined before the test is carried out ($[a + c] / [a + b + c + d]$) (Figure).

Pretest odds: the odds that the patient has the target disorder before the test is carried out (pretest probability / $[1 - \text{pretest probability}]$).

Likelihood ratio (LR): the ratio of the probability of a test result among patients with the target disorder to the probability of that same test result among patients who are free of the target disorder. The LR for a positive test is calculated as sensitivity / $(1 - \text{specificity})$. The LR for a negative test is calculated as $(1 - \text{sensitivity}) / \text{specificity}$.

Post-test odds: the odds that the patient has the target disorder after the test is carried out (pretest odds \times LR).

Post-test probability: the proportion of patients with that particular test result who have the target disorder (post-test odds / $[1 + \text{post-test odds}]$).

		Target disorder	
		Present	Absent
Test result	Positive	a	b
	Negative	c	d

Figure. Comparison of test results with a diagnostic standard.