Levels of Evidence

Glossary of Terms

10. Meta-analysis of randomized controlled trials

Meta-analysis: Meta-analysis refers to an analysis of analyses, that is, the statistical analysis of a large collection of analyses resulting from individual studies for the purpose of integrating the findings. (Glass, 1976 & Glass, 1981)

Randomized controlled trials: A trial is a planned experiment designed to assess the efficacy of a treatment by comparing the outcomes in a group of subjects treated with the test treatment with those outcomes observed in a comparable group of subjects receiving a control treatment. Both groups are enrolled, treated and followed over the same time period. Different study groups are assigned by random allocation, that is, each subject has an equal chance of being assigned to either the treatment or the control group, rather than by conscious decisions of investigators or subjects. (Meinert, 1986)

9. Large-sample randomized controlled trials

Randomized controlled trials: A trial is a planned experiment designed to assess the efficacy of a treatment by comparing the outcomes in a group of subjects treated with the test treatment with those outcomes observed in a comparable group of subjects receiving a control treatment. Both groups are enrolled, treated and followed over the same time period. Different study groups are assigned by random allocation, that is, each subject has an equal chance of being assigned to either the treatment or the control group, rather than by conscious decisions of investigators or subjects. (Meinert, 1986)

Large-sample: The sample for the study equals or exceeds the projected sample size that was generated through a statistical sample size calculation technique such as a power analysis.

8. Small-sample randomized controlled trials

Randomized controlled trials: A trial is a planned experiment designed to assess the efficacy of a treatment by comparing the outcomes in a group of subjects treated with the test treatment with those outcomes observed in a comparable group of subjects receiving a control treatment. Both groups are enrolled, treated and followed over the same time period. Different study groups are assigned by random allocation, that is, each subject has an equal chance of being assigned to either the treatment or the control group, rather than by conscious decisions of investigators or subjects. (Meinert, 1986)

Small-sample: The sample for the study either (1) did not meet the size generated through a statistical sample size calculation technique such as power analysis or (2) was not calculated using a statistical technique.

7. Non-randomized controlled prospective studies

Non-randomized controlled prospective study: A study in which (1) the sample is drawn from a potential pool of subjects from whom the data are to be collected and (2) the allocation to the treatment or control group is made by
birth date, chart number, day of clinic appointment, bed availability, or any other strategy that would make the allocation known to the investigator prior to obtaining informed consent from the patient. (Association of Cancer Online Resources, 2000)

6. Non-randomized controlled retrospective studies

Non-randomized controlled retrospective study: A study in which (1) the sample is drawn from existing data sources such as existing medical record and (2) the allocation to the treatment or control group was made by birth date, chart number, day of clinic appointment, bed availability, or any other strategy that would make the allocation known to the investigator prior to obtaining informed consent from the patient. (Association of Cancer Online Resources, 2000)

5. Cohort Studies

Cohort Study: An observational study that begins by identifying exposed individuals (study group) and non-exposed individuals (control group) to a factor being observed over time with regard to disease, health, or other outcome. Almost always longitudinal in that a particular group of patients is followed forward from a point in time. May or may not be population-based. (Rothman, 2002)

4. Case-controlled studies

Case-controlled study: An observational, non-interventional (usually retrospective) study that begins by identifying individuals with a disease, health or other status (cases) for comparison to individuals without the disease, health, or other status (controls or reference group) from a single population. (Rothman, 2002)

3. Non-controlled clinical series, descriptive studies

Non-controlled clinical series: A descriptive, observational study of a series of cases (more than 1) typically describing the manifestations, clinical course, and prognosis (outcomes) of a condition or health status. (Zwanstein, 1999)

Descriptive studies: An observational study that seeks to determine the distribution or variation of a single variation or the relationship (correlation) between two or more variables that exist in a single population.

2. Case Studies

Case study: A descriptive, observational study of a single case typically describing the manifestations, clinical course, and prognosis (outcomes) of a condition, disease, health, or other status. (Zwanstein, 1999)

1. Consensus of Experts & Manufacturer's Recommendation

Consensus of Experts: Conclusions, standards or guidelines that based in the collective agreement of a group of authorities in the field of concern.

Manufacturer’s Recommendation: Suggested directions for action or methods from the persons responsible for a product’s development and creation.
0. **Anecdotes**


**References**

Association of Cancer Online Resources. (2002). Clinical Trials.  


