Type of Endpoints in Clinical Trials

1. Continuous Outcome

- Measures and scores are used to evaluate the outcome.
- Outcome expressed using quantitative descriptive statistics.
- Example, expressed as mean (SD) and median (IQR)
- The effect size of these outcomes in RCTs is the **Mean Difference**

2. Categorical Outcomes (AKA, dichotomous or binary)

- The authors count the number of patients in each category/group.
- Each patient in the study is classified into one category according to the occurrence of a specific event.
- For example, mortality, adverse events, ... etc.
- These outcomes are usually expressed as count (and percentages)
- The effect size of these outcomes is the **Risk Ratio (Relative Risk)**

3. Survival Outcomes

- Time-to event data
- Common in studies on cancer patients
- Example, time to death
- The effect size of these outcomes is the **Hazard Ratio (HR)**

*Please, note that some survival outcomes can be expressed as continuous and categorical outcomes. For example, (1) survival time can be expressed as the "**median survival time**" but the effect size here will also be the HR, calculated by dividing the median survival time in the experimental and the control groups, (2) survival rates as **overall survival rate (OS)** represent the number of patients who survived until a specific time point as 3-year OS or 5-year OS, and (3) **progression free survival rate (PFS)** which represents the number of patients who had no disease progression until a specific time point as 3-year PFS or 5-year PFS.*