Clinical Terms

- **Evidence-based medicine:** "… the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients." Sackett DL, et al. *BMJ* 1996;312:71-72.
- **Descriptive study designs:** e.g., case reports, case series, cross-sectional studies, suggest or generate hypotheses.
- **Analytic study designs:** e.g., observational studies, randomized controlled trials, test hypotheses.
- **Sensitivity:** e.g., true positive/true positive + false negative, tests with high sensitivity are used for screening. False positives do occur, but few people with the disease are missed (low false negative).
- **Specificity:** e.g., true negative/false positive + true negative, tests with high specificity are used to confirm the presence of a condition/disease.
- **Mean:** the average.
- **Median:** the value that is the middle, i.e., there are 50% of the values less than this and 50% more.
- **Mode:** the most common value.
- **Standard deviation:** standard deviation of ± 1 includes approximately 68% of observations; ± 2 includes approximately 95% observations; ± 3 includes 99.7% of the observations.
- **Positive predictive value:** true positive/true positive + false positive.
- **Type 1 and type 2 errors:** Type 1 error rejects the null hypothesis even though it is true (the null hypothesis states that there is no difference between 2 groups). A type 2 error does not reject the null hypothesis even though it is false.

Statistical Terms

- **Statistical power:** Clinical significance and statistical significance are unrelated. If study results have a power of 80%, it means that if there is a difference between 2 groups, there is an 80% chance of correctly detecting it.
- **Confidence interval:** A confidence interval (CI) of 95% means that the CI holds true for 95 of 100 samples similar to the one in the study.
- **Validity:** extent to which the investigation correctly represents the relationship being studied.
- **Reliability:** ability of a test to reach the same results under the same conditions.
- **Relative risk:** Incidence in the exposed population/ incidence in the unexposed population (can only be calculated after a prospective or experimental study).
- **Incidence:** number of new cases of a condition per year.
- **Prevalence:** overall proportion of a population with the specified condition.