Study Design Quiz
by Laura King, MA, ELS

Directions: Respond to the following questions based on your knowledge of chapter 20 (§20.2-§20.7; pp 838-851 in print) of the AMA Manual of Style.

1. Which type of study assesses the efficacy of the treatment intervention in a controlled, standardized, and highly monitored setting and usually among highly selected samples of patients?
   - randomized controlled trial
   - case series
   - sensitivity analysis
   - cost-benefit analysis

2. In which type of study do participants receive more than 1 of the treatments under investigation, usually in a randomly determined sequence and with a prespecified amount of time (a “washout period”) between sequential treatments?
   - parallel-design, double-blind trial
   - noninferiority trial
   - prospective cohort study
   - crossover trial
3. In which type of study does the investigator use information already collected to look for associations?

   - retrospective study
   - prospective study
   - historical study
   - survey study

4. In which type of study does the investigator identify a group of individuals and then observe them for a specified period after study initiation?

   - retrospective study
   - prospective study
   - meta-analysis
   - diagnostic test study

5. Which type of study assesses whether 1 or more treatments are superior to the others?

   - parallel-design, double-blind trial
   - retrospective cohort study
   - case-control study
   - crossover trial

6. Which type of study follows up a similar group of individuals who are initially free of the outcome of interest but for whom the outcomes have been defined before the events occur?

   - prospective cohort study
   - crossover study
   - case series
   - cost-benefit analysis

7. Case-control studies are always

   - prospective
   - retrospective
   - overmatched
   - multivariate
8. Which type of study compares a less expensive treatment or intervention against a treatment or intervention that is already known to be effective to assess whether the new intervention is no worse than the existing treatment?

- meta-analysis
- case-control study
- noninferiority trial
- randomized controlled trial

9. Which type of study compares those who have had an outcome or event with those who have not?

- case-control study
- case series
- cohort study
- meta-analysis

10. Which type of study can be used to describe the experience of an individual or institution in treating a disease?

- case-control study
- crossover trial
- case series
- equivalence study

11. Which type of study is a systematic pooling of the results of 2 or more studies to address a question of interest or hypothesis?

- case-control study
- meta-analysis
- noninferiority trial
- parallel-design, double-blind trial

12. Which type of study generally yields estimates of likelihood ratios, sensitivity, specificity, positive predictive values, and negative predictive values?

- crossover study
- cost-effectiveness study
- meta-analysis
- diagnostic test study
13. In longitudinal survey studies, the same respondents are surveyed
   at several time points
   at a single time point
   only once
   cross-sectionally

14. Which type of study converts clinical measures of outcomes into monetary units, allowing both expenses and advantages to be expressed on a single scale?
   cost-benefit analysis
   cost-effectiveness analysis
   equivalence study
   sensitivity analysis

15. Which type of study benefits from the publication of a flow diagram showing the flow of participants in the study, including when and why participants dropped out or were lost to follow-up and how many participants were evaluated for the study end points?
   case series
   randomized controlled trial
   meta-analysis
   survey study