

randomization, and the step of drug administration. Although most clinical trials in oncology stratify patients before randomization, this particular schema is unique in that the published flow chart actually includes a box showing the step of stratification. Subjects in the two arms received the same drugs, except that arm B received an additional drug, bexarotene. CP refers to carboplatin plus paclitaxel. Carboplatin is in a class of drugs called platinum drugs. Paclitaxel is in a class of drugs called taxanes.

h. Staging and Restaging—The Czito Schema

In a clinical study involving chemotherapy and radiation, Czito et al. (63) provided a schema that indicates steps where staging occurred (Fig. 2.11). Although staging is used in clinical trials in oncology, infections, immune diseases, and other disorders, it is only on occasion that the step of staging is actually depicted in the schema. Staging was specifically included in this schema to emphasize the fact that staging was done at two different points during the course of the clinical trial.

The trial was a single-arm trial. Because the trial had only one arm, the subjects were not randomized. In other words, subjects were not randomized to be treated with arm A drugs or arm B drugs, because there was only one arm. As this was a phase I trial, the main purpose was to determine the DLT, that is, to determine a dose suitable for using in a subsequent phase II trial.

Chemotherapy was given every day for 38 days. Radiation was given on the same days as the drugs, except not on Saturdays or Sundays. The days for radiation treatment are made unambiguous by the schema, as it shows arrows only on week days (not on weekends).

i. Methodology Tip—Staging

The term *staging* refers to measuring the parameters of a cancer, with respect to a set of criteria accepted by the medical profession. For most cancers, there are established, published criteria for determining whether the cancer is at, for example, stage I, stage II, stage III, or stage IV. By staging, what is meant is the determination of the size, number, and location of tumors, and the comparison of these values

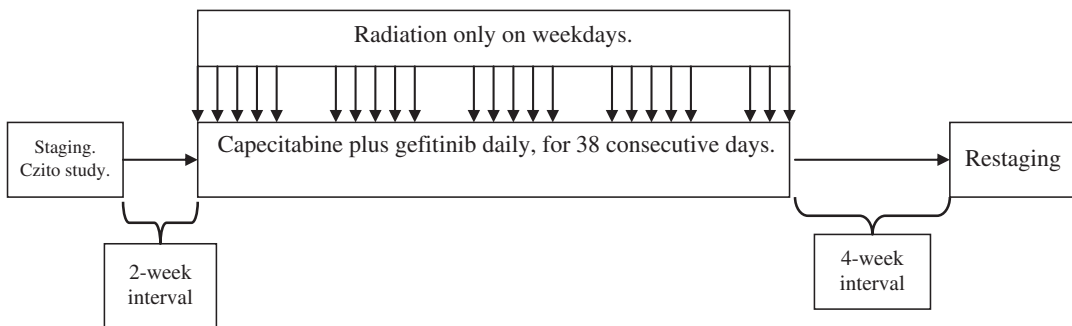


FIGURE 2.11 Schema of a single-arm clinical trial. Staging of the tumors occurred at two time points, as indicated.

⁶³Czito BG, Willett CG, Bendell JC, et al. Increased toxicity with gefitinib, capecitabine, and radiation therapy in pancreatic and rectal cancer: phase I trial results. *J. Clin. Oncol.* 2006;24:656–62.