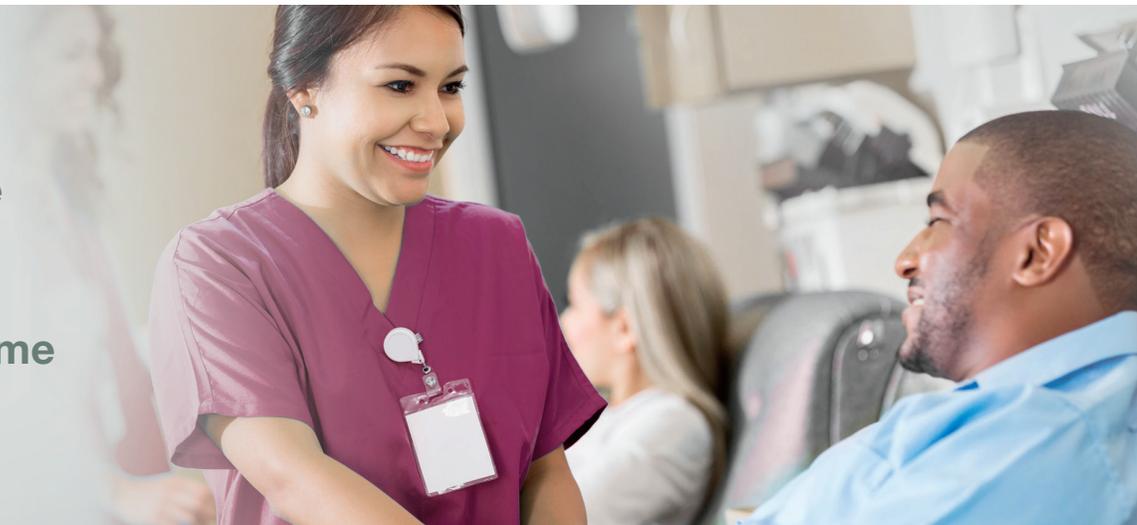


Scientific Expertise

Flexibility

Fast Turnaround Time



Responding to an Unexpectedly High Drop Rate

NEED

- A single-dose, relative bioavailability study (in healthy-normal subjects) needed to be performed at a dosage level which typically would be reached in the clinical setting after a slow up-titration
- Nausea/vomiting was an anticipated side effect, so the sample size was adjusted to account for potential dropouts
- Upon execution tolerability proved worse than expected as the number of subjects who vomited and dropped from the study reached 75% of the original sample size, forcing the study to be stopped and redesigned

APPROACH

- To save the study, the sponsor, investigator, pharmacist, pharmacokineticist, and statisticians convened and discussed traditional anti-emetics, and based on mechanism of action, and various other potential agents that may improve tolerability of the dose. It was decided that the best approach to try and maintain the original timelines for the study was to incorporate a prophylactic treatment with diphenhydramine 50mg orally (given at 1, 3, and 9 hrs post-dose)
- In rapid fashion (less than 4 days) an amendment that incorporated the prophylactic treatment and increased sample size was designed, written, and reviewed by signatories
- The new protocol was submitted to a specially-called IRB meeting and approved within 6 days

BENEFITS

- New subjects were recruited and dosing occurred only 12 days after stopping the first study
- Nausea and vomiting was reduced from approximately 75% to 7.5% with the addition of prophylactic diphenhydramine
- The study was successfully completed with minimal impact on original timelines

See Other Case Studies

[Bioanalytical Support of Oncology Studies](#)

[Standardizing Database Structure for Programs](#)

[IND Support for Asian Biotech](#)