CASE STUDY

Driving Success:

Caidya's Logistical and Site Management Solutions in a Complex FMT Study for GI-aGVHD

Situation

A clinical trial for the treatment of gastrointestinal acute graft-versus-host disease (GI-aGVHD) using fecal microbiota transplantation (FMT) required precise logistical handling and site management. The study population consisted of adult patients with hematologic diseases who developed Stage 3 or 4 GI-aGVHD resistant to steroids. The aim was to evaluate the safety and efficacy of FMT as a potential therapy for this condition.

Challenges

During the study, several hurdles were encountered, including regulatory concerns and low enrollment rates. The regulatory authority in Germany initially rejected the study twice, citing concerns about the safety and manufacturing process of the investigational medicinal product (IMP). However, after a face-to-face meeting with the sponsor and providing a robust scientific approach, the study was approved. The enrollment rate was lower than anticipated, with the nature of the indication making pre-screening difficult. Implementing an eligibility process was needed to ensure all enrolled patients met and adhered to the selection criteria. Strong medical management support and well-trained clinical research associates (CRAs) were deemed essential for the success of the study.

Solutions

Effective site management played a crucial role in maintaining close contact with the sites, motivating them, and addressing any concerns or issues promptly. Intensive monitoring at the beginning of the study was necessary to confirm remote eligibility checks onsite. In cases where a Data Safety Monitoring Board (DSMB) was involved, monitoring frequency had to be flexible, rather than adhering strictly to a predetermined interval. Retraining of sites, especially those initiated early in the study, was recommended to ensure a high level of understanding, given the complexity of the indication. Regular communication through informational letters, newsletters, and sponsor letters proved useful in updating sites on recruitment progress and other relevant topics.

Logistical Solutions

Several logistical considerations were identified for the successful implementation of FMT in the study. The IMP needed to be shipped in dry ice and stored at -80°C in a monitored freezer. Thawing of the IMP was to be done in a water bath at 37°C for 5 to 15 minutes, followed by immediate administration to the patient. The patient's position during administration was crucial, with the recommendation to lie on the left side with elevated legs and pelvis or in a Trendelenburg position. Monitoring of vital signs was necessary until the expulsion of the inoculum or at least for 2 hours post-administration.

Conclusion

Despite the initial delays, the study went on to enroll the planned patients with a maintained enrollment rate. The revised timelines and enrollment projections were regularly reviewed to ensure adherence to the plan. IDMC meetings were conducted on time with positive outcomes. The activation of China sites stayed on track, and successful investigator meetings were held. Non-enrolling sites were closed to reduce costs.

Focus on Delivery Excellence

Continuous site support enabled successful administration of intricate treatment procedure

Proactive planning and clear communication supported complex enrollment process