Pediatric Pain Management: A Case Study

Experience and an unmatched understanding of sponsors’ expectations have made KCR an expert in Pain Management Studies.

Background

An analgesic compound study undertaken in the United States was foundering; recruitment problems were creating serious delays in the project timeline. The compound, designed for short-term management of moderate-to-severe pain requiring analgesia at the opioid level, was initially registered for use in adult patients. Critical clinical data was now required for patients in the 12- to 17-year-old age range in order to extend the approval. With the study at a standstill, KCR was contracted to provide rescue recruitment for the project within Europe.

Challenges

The most critical issue was a diverse target population. The study required patients in age ranges of 12-17, as well as cohorts in the 18- to 64-age bracket. The broad definition of targeted post-surgical subjects required careful consideration in three key areas: sites profile; types of surgical procedures; and investigator specialization.

Additionally, differences within study-phase classification between the United States and the European Union required a solution.

In the area of operations, certain execution challenges needed to be addressed, including:

- PK procedures in pediatric patients necessitating an intensive sampling schedule
- Pain scales use
- Rescue medication – PCA not being standard in many CEE sites
- Procedural requirements for patient consent

Solutions

The KCR rescue team created a comprehensive plan to get the study back on track. The rescue strategy included the implementation of the following services:

- Project Management
- Feasibility Assessment
- Site Selection
- Site Contracting and Payments
- Investigators’ Meetings and Training
- Study Authorization (RA, EC)
- Site Monitoring and Site Management
- Clinical Trial Supply and Samples Distribution within Europe.

KCR is a Contract Research Organization (CRO) with a dynamic team of over 300 professionals operating across 19 countries in Europe as well as the U.S. With 18 years of experience, almost 400 trials executed, 35,000 patients recruited and over 3,000 sites contracted, KCR is a strategic solutions provider and a reliable alternative to top tier CROs, delivering the all-important flexibility. We provide services on long standing contracts to 12 out of the Top 20 Global Pharma companies, as well as biotech firms from Europe, Israel, and the U.S.
1. A THOROUGH RISK MANAGEMENT PLAN
   • Identified initial risks at the proposal stage
   • Developed a detailed Risk Exposure Assignment Matrix very early in the process
   • Continually reassessed risks during the entire project
   • Prepared a proper Mitigation Plan

2. AN EXTENSIVE FEASIBILITY ASSESSMENT
   • Planned a feasibility assessment and performed a detailed review of local SoCs for post-surgical pain management
   • Analyzed the eligibility of various surgical procedures in the light of protocol restrictions
   • Contacted over 40 potential investigational sites with varying profiles of surgery wards
   • Continued the feasibility activities even after the project was approved by RA and EC and during the recruitment phase, due to a challenging target population
   • Pre-selected backup sites

3. SMART SITES SELECTION STRATEGY
   • Selected a total of 7 investigational sites: 2 general surgery wards for adult patients; and 5 pediatric surgical sites for pediatric subjects
   • Determined the best target indications: appendectomy, urology and trauma
   • Contracted departments of pediatric surgery and urology; general pediatric surgery ward and 1 intensive care and pediatric anesthesiology unit
   • Targeted only planned surgeries, due to the requirement for parents to sign the ICF

4. CLINICAL EXECUTION
   • Conducted thorough training for Study Teams at all investigational sites, due to poor experience of most pediatric surgical wards in CTs
   • Revisited the least-experienced sites (by CRM) to ensure that the protocol was properly understood and the whole study team was on-board with the project.
   • Assured an extensive and proactive clinical monitoring approach, with the initial MV immediately following the first patient’s surgery
   • Established effective communication between the Study Team (Monitors and PM) and the Investigator Teams in all sites
   • Performed active analysis of the recruitment and SF causes on a daily basis by PM, allowing prompt reaction to any possible issues

5. AN EXPERIENCED STUDY TEAM: THE KEY TO SUCCESS
   • Activated a dedicated, professional and experienced Study Team
   • Engaged a Clinical Research Manager with 12 years of clinical trial experience to lead the project
   • Achieved the expected results thanks to high engagement of CRAs, CTAs, Regulatory, Legal and Medical Affairs Teams

RESULTS
The KCR team successfully obtained RA and EC approvals on time, with no additional questions issued; the silent approval was granted 60 days after submission. The effective site-negotiation process resulted in contracting 7 public hospitals with no substantial delays (often, due to bureaucratic issues, facilities of these types present challenges in this area). The recruitment target was achieved within timelines (13 adults and 40 adolescents enrolled within 32 weeks of recruitment). Quality was confirmed by internal GCP compliance visits performed by KCR internal QA Department. The Pediatric Pain Study Sponsor has expressed confidence in KCR’s ability to continue to deliver impressive results. KCR has been awarded an even more demanding study related to the same compound administered to children ages 2 to 11. KCR gladly accepted this challenge.