Streamlining Regulatory Submissions for a Novel Advanced Therapy Medicinal Product Trial

Background

The European regulatory landscape for advanced therapy medicinal products (ATMPs) is complex, and the approval pathway depends on product classification. The European Medicines Agency (EMA), via its Committee for Advanced Therapies (CAT), is responsible for providing scientific recommendations on the classification of ATMPs as gene therapy medicinal products (GTMPs), somatic cell therapy medicinal products (sCTMPs), tissue-engineered products (TEPs), or combinations thereof. However, product classification may not always be clear-cut given the proliferation of novel approaches to ATMP development.

According to a survey of Alliance of Regenerative Medicine members, approval times for initial clinical trials in Europe span from fewer than 30 days to more than a year, with an average approval time of three to six months. These timelines vary widely by country and are longer for trials with gene therapies due to the additional regulatory submissions and permits required for products sub-categorized as genetically modified organisms (GMOs).



Average time for new clinical trials in Europe with ATMPs

Shortened approval timeline for Premier Research sponsor (GMO approvals not required in four out of six countries)

&

C F I

Trial Approval Time in Months

GENE THERAPY/ONCOLOGY

56

Premier Insight 275

Objective

A European ATMP developer engaged Premier Research for assistance with planning a Phase 2a study in six countries within the European Economic Area, which is regulated by European Union gene therapy legislation. The investigational medicinal product (IMP), a genetically modified naked DNA plasmid, was given the outcome of an ATMP/GTMP by the CAT. Given the borderline nature of the IMP and the potential regulatory hurdles associated with GTMPs sub-categorized as GMOs, Premier Research worked with the sponsor and regulators to reduce the number of submissions required and accelerate study start-up timelines.

Reducing regulatory burden and accelerating study start-up

In each of the six countries involved in the clinical trial, additional regulatory submissions and permits would have been required if the IMP were classified as a GMO, lengthening the development timeline and delaying study start-up. To address this hurdle, Premier Research developed a regulatory approach to perform a documented risk assessment and rationale for classification of the IMP to persuade the GMO authorities in each country that this non-viral-based product did not require additional GMO approvals.

We provided a written position statement to the respective GMO authorities indicating that the IMP did not fall under the GMO sub-category per the definitions in the relevant EU directives, as the plasmid did not have any biological entity capable of replication or transfer of genetic material. In four of the six countries, no additional GMO approvals were required. Consequently, we were able to move forward with only ATMP reviews, shortening the timeline for regulatory approvals by one to three months and accelerating study start-up, site initiation visits, and patient enrollment. Eliminating the requirement for GMO approval also broadened the range of sites that could participate in the clinical trial, as GMO accreditation and permits were no longer needed in these countries.

Takeaway

When planning a gene therapy trial in Europe, it is critical to understand the nuances of country-specific regulatory guidelines. Partnering with a team experienced in developing flexible, creative approaches to navigating the complex regulatory landscape for these advanced therapies can streamline the process, accelerating study start-up.

Premier Research has conducted more than 60 cell and gene therapy trials in the past five years in multiple therapeutic areas, including oncology, hematology, neurology, and rare disease. Contact us to schedule a consultation with our gene therapy experts.

Study Description

Phase 2a study of a naked DNA plasmid classified as a gene therapy medicinal product by the EMA CAT

Therapeutic Area Oncology

Geographic Scope

Belgium, Bulgaria, Czech Republic, Germany, Norway, Poland

Number of Study Sites 25

Number of Patients to be Enrolled 50

Outcome

Additional GMO submissions not required in four of the six countries, reducing the number of regulatory submissions required and accelerating study start-up by one to three months.

