

CASE STUDY

Unrivalled Global Reach

Specialized Complex Study Coordination Hits Target

Study Description

A Phase II, double-blind, randomized, placebo-controlled, dose-comparative study of efficacy, tolerability, and safety

Study Objective

Proof of concept

Study Compound

Novel cardiac myocyte modulator

Patient Population

Patients with chronic heart failure (NYHA Class II/III)

Treatment Period

Twenty-four weeks

Primary Efficacy Parameter

Safety and tolerability of study drug in subjects divided into two cohorts: left ventricular ejection fraction (LVEF) \leq 40% and LVEF $>$ 40%

Participating Countries

United States, Belgium, Italy, Netherlands, Czech Republic, Germany, Poland, United Kingdom, Israel, Mexico, Australia

Study Specifics

- > Active sites: 67
- > Patients randomized: 511
- > Recruitment period: 18 months
- > Recruitment dates:
April 2001 – September 2002

Quintiles Services

Project Management, Clinical Monitoring, Data Management, Biostatistics, Pharmacovigilance, Regulatory, IVRS, Medical Writing, Medical Services, Study Site Coordinators, CEVA

Overview

Quintiles' global experience and exceptional project management were critical to the success of this complex global study.

Key Challenges

- > *The study included two cohorts of patients randomized across three doses of study drug or placebo. There were seven key efficacy end points plus two substudies.*
- > *There were 11 different relationships to manage: Three core laboratories, (CPX, Echocardiography and CMR), three committees, (DSMB, Executive, and Endpoint), multiple third-party suppliers, and two customers.*
- > *Patients had to be stable on treatment for at least six months and have reproducible Exercise Tolerance Testing results in two visits prior to randomization.*
- > *The study aimed for a balanced recruitment of low (\leq 40%) and high ($>$ 40%) LVEF. The balance had to be maintained for patients entering the sub-studies. High EF patients were more difficult to locate as they are not routinely recognized as suffering from CHF and are therefore not referred to hospitals. They also had a high screen failure rate due to increased exercise capacity.*
- > *Recruitment of patients into the CPX sub-study involved a specialized high-tech assessment available only at selected sites. The equipment had to be provided by a third-party supplier.*

How Were These Challenges Met?

- > *Quintiles conducted a comprehensive investigator meeting at the start of the study and provided Study Site Coordinators to sites requiring additional support. Quintiles also accompanied the customer on regular site visits to maintain investigator understanding of the study protocol and procedures.*
- > *Six statisticians analyzed the complicated efficacy endpoints to ensure that timelines were met.*

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> *Quintiles' CEVA service group tracked data from the sites to the three core laboratories and coordinated the activities of the DSMB and endpoint committees. In turn, the CEVA group reported to the Global Project Manager.*

> *Quintiles' experience pointed to Central and Eastern Europe as the most likely areas to locate the higher EF patients. Hospitals there serve large numbers of patients and doctors tend to refer patients to hospitals at an earlier stage.*

> *Quintiles held an interim investigator meeting where the third-party supplier provided training in the use of the complex equipment for the substudy assessments.*

Outcome

Quintiles screened 818 patients and randomized 511 within 18 months, thereby achieving all of its targets in a highly complex Proof of Concept study.