

PHASE IIB-III



inVentivHealthclinical.com

»» TRANSFORMING PROMISING IDEAS INTO COMMERCIAL REALITY

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»» Overview

GLOBAL PARTNERS. TRIAL EXPERTS.

Every day, biopharmaceutical and medical device companies are faced with the challenge to enhance innovation, accelerate pipeline development, and improve efficiencies and quality, all while lowering costs. These competing pressures are driving sponsors to look for new ways to meet their clinical and financial objectives – flexibly and reliably.

At inVentiv Health Clinical, our ability to connect the right teams, resources and expertise across the development spectrum means our clients can get the customized services that help alleviate these pressures. Combining comprehensive product development services, a worldwide network of experienced resources, and therapeutic expertise to safely keep study timelines on track, inVentiv Health Clinical ***transforms promising ideas into commercial reality.***



»» Data-Driven, Cost-Effective Solutions

FEASIBILITY STUDIES

Today, regulatory authorities require more and more clinical data, protocols are increasingly complex, and enrolling patients and qualified investigators is always challenging. For these reasons, protocol and recruitment plans should be evaluated early and carefully to avoid costly delays.

INVESTIGATOR RECRUITMENT AND SITE MANAGEMENT

Rapid identification of potential investigators and their patient populations is the first step in making sure your study's timeline remains on track. Our vast internal database, external tools such as Citeline®, and extensive connections allow us to identify the right investigators for your study.

Our rigorous oversight helps us recruit patients and ensure protocol requirements are satisfied and enrollment goals are met.

AN INVENTIV HEALTH CLINICAL FEASIBILITY ASSESSMENT CAN:

- Help identify strategies to mitigate costs and risks
- Validate whether the protocol meets global requirements
- Identify the best sites
- Provide meaningful insight into the potential challenges of multicultural and global recruitment
- Evaluate the impact of competitive trials
- Optimize patient access and retention

KEY ACTIVITIES PERFORMED BY INVENTIV HEALTH CLINICAL INCLUDE:

- Selecting qualified investigators
- Training investigators and site staff on protocol requirements, best practices and technology tools, such as electronic data capture (EDC) and safety systems
- Monitoring for compliance with study plan, protocol and IRB review
- Controlling investigational products
- Reporting safety data
- Informing sites about performance and contractual issues
- Serving as a site's contact for communicating with Inventiv Health Clinical, sponsors and IRBs

»» Data-Driven, Cost-Effective Solutions

PATIENT ENROLLMENT AND RETENTION

inVentiv Health Clinical's experienced team of specialists can help you find and retain the right patients for your global trials. We utilize modern health care communication channels, print and digital marketing, claims data and multimedia-based recruitment techniques. Our highly efficient enrollment process attracts broad pools of quality, prescreened patients and assists investigators with recruiting, screening and enrollment.

Once investigators are identified, inVentiv Health Clinical's experienced patient recruitment/retention project managers and proven programs go to work. From the very start, we focus our sites' energies on patient enrollment through strategic consultation and effective deployment.

Strategic Consultation

- Consulting with the physician able to deliver the most effective message at the point of care
- Regularly contacting and providing positive reinforcement to all site participants
- Providing recruitment strategies and materials to help sites quickly begin successful recruitment
- Making recommendations on advertising, educational and promotional strategies to drive interested participants to the research sites

Deployment

- Providing central screening to support the patient screening process
- Implementing public relations, social media and community/advocacy outreach efforts that include events, digital marketing campaigns and mobile applications
- Pharmacy outreach
- Providing metrics and reporting through our proprietary online reporting and tracking tool

Patient Compliance and Retention

The best way to support compliance and retention is through regular, informative contact with the patients. Therefore, we provide:

- Dynamic patient educational materials
- Loyalty programs for patients
- Motivational tips
- Appreciation items related to the disease
- Digital solutions to engage and remind participants of upcoming events

Rapid, Efficient Trial Execution

GLOBAL STUDY START-UP (GSSU)

A leading indicator of success in a trial is the ability of the team to quickly identify and activate qualified, credentialed and motivated sites. To that end, inVentiv Health Clinical utilizes a Global Study Start-Up (GSSU) team to lead this effort. Each study has an experienced manager assigned to the trial to coordinate and facilitate start-up activities. A dedicated plan is developed to set the start-up strategy, review country mix, assess essential documents, and set the timeline for sequential and parallel activities minimizing lag time, wait time and re-work. The GSSU manager is a part of the overall project team reporting to the project manager, who tracks start-up activities and generates performance metrics so clients can easily see the progress of their studies.

GSSU services include:

- Assignment of an experienced and focused GSSU manager
- Stand-alone GSSU plan approved by the client
- Projected study start-up timeline
- Management of IRB/EC submissions
- Informed consent review
- Essential document collection and submission
- Comprehensive GSSU metrics tracking, benchmarked against projections
- Maintenance of post-start-up documents
- Translation management
- Coordination of site contracts and budgeting

PROJECT MANAGEMENT

inVentiv Health Clinical sets industry standards for the quality of our professionals, the tools we use, and the strategies and efficiencies we bring to managing projects. Through a sound team structure, close communication, and detailed tracking and measurement, our project management group consistently delivers high-quality work for our clients.

During the course of a trial, we monitor critical milestones and:

- Lead the project team and manage its resources
- Coordinate and track project activities against projections and forecasts
- Serve as liaison between sponsor and project team members
- Create and enforce project timelines
- Ensure adequate training of project team members
- Communicate trial progress to key stakeholders
- Identify risks and develop mitigation plans

➤➤ Rapid, Efficient Trial Execution

CLINICAL MONITORING

Once investigators are identified, inVentiv Health Clinical's monitors provide continuing support to the investigators and their staffs to establish standards, reinforce priorities, address issues and measure site performance. Open and frequent communication plays an especially important role. We recognize that investigators are important partners with a shared objective for a successful, compliant and safe clinical study. inVentiv Health Clinical has the processes in place to maintain these critical relationships.

Clinical monitoring services include:

- Study procedure development
- Source document review
- Patient eligibility confirmation
- Patient compliance tracking
- Supply inventory management
- Adverse events reporting
- Regulatory compliance monitoring
- Regulatory documentation maintenance

MEDICAL WRITING

Clear, concise and professional presentation of study findings is an important factor in any development program. With a full complement of medical writing services, inVentiv Health Clinical professionals can fulfill all your documentation and writing needs.

Let inVentiv Health Clinical professional writers help you with:

- Regulatory writing
- Protocols and protocol amendments
- Informed consent forms/patient information leaflets
- Clinical study reports
- Subject narratives
- Investigator brochures
- Integrated summaries of safety/efficacy
- Literature summaries
- Clinical expert reports
- INDs, NDAs, BLA s, CTAs (Module 2) summary documents
- IND and NDA annual reports
- Safety aggregate reports (PSURs, PADERS, line listings, DSURs)
- Clinical trial registry synopses

»» Data Services

DATA MANAGEMENT

Without clean, reliable data, no trial can be successful. Look to inVentiv Health Clinical for an innovative approach to clinical data management that has been shaped by superior industry experience. This depth of experience enables us to precisely pair technology and proven processes with clinical studies – from small, Phase II–IIIb clinical trials to large, Phase III–IV multinational studies – and helps streamline the route to more efficient and effective solutions.

inVentiv Health Clinical's study-specific approach to data management begins with a careful review of the study specifications, client preferences/history, data to be collected and technologies available. We then provide guidance to clients on the most appropriate method for data collection to best serve the needs of study sites and project teams.

Our robust, scalable and software-independent processes enable inVentiv Health Clinical to efficiently capture, maintain, clean and deliver data for your project regardless of phase, therapeutic area, size or data capture. inVentiv Health Clinical has expertise in a variety of software applications and can recommend one that is right for your study.

COMPREHENSIVE DATA MANAGEMENT SERVICES INCLUDE:

- Case Report Form (CRF)/eCRF design
- Database design, implementation
- Data validation, review and cleaning
- Medical coding
- Data management processes inspected by an independent quality control team
- Comprehensive management of data from third-party electronic data vendors
- Data consolidation, migration and conversion including CDISC SDTM transformations
- Study rescue services
- Consultation and data management strategies, systems, procedures and metrics
- Flexible staffing

»» Data Services

BIOSTATISTICS AND STATISTICAL PROGRAMMING

inVentiv Health Clinical biostatisticians have a broad knowledge base in all aspects of clinical trials, from sample size calculation and design specifications during planning stages, to analysis, display and interpretation of data in the final stages of the study. These dedicated professionals include Ph.D. and MS-level statisticians and statistical programmers located in North America, Europe and Asia who adhere to a single set of global standards and manage various regulatory agency requirements. Our functional teams can also use our clients' standard operating procedures if preferred. We plan the analyses before the study begins, then provide reports, statistical summaries, and efficacy and safety analyses as the study progresses.

inVentiv Health Clinical pharmacometrics experts can also utilize more advanced techniques for population PK analysis through medical and biostatistical modeling, and biomarker and clinical outcome simulations. We can provide assistance with PK/PD models of clinical studies for innovative and generic products.

Our use of PKStm, WinNonlin®, and WinNonlin®Autopilot™ can provide you with a complete PK/PD data management and reporting solution.

BIOSTATISTICS AND STATISTICAL PROGRAMMING SERVICES INCLUDE:

- Protocol development, including sample size and power calculations
- Randomization schedules
- Statistical analysis plans
- Statistical programming in SAS®
- Statistical analyses using current methodologies
- Interpretation and reporting of data for clinical trial reports and publications
- Statistical and strategic consulting for product development
- Interim analysis for early decision making
- Database integration
- Adaptive design consulting and simulation support
- Data monitoring board management and support
- NDA-ready data listings
- CDISC-compliant datasets
- Integrated safety and efficacy summaries

»» Data Services

INTERACTIVE RESPONSE TECHNOLOGIES

Our interactive response technologies (IRT) automate randomization and clinical supply management and offer easy-to-use reports and electronic patient diaries using the Web, telephone and mobile devices. Our team of experienced specialists and statisticians provides expert IRT solution and randomization consulting, project management and comprehensive support to ensure highly effective and reliable solutions.

Technology

The inVentiv Health Clinical IRT platform supports rapid study configuration and deployment through an extensive library of reusable, plug-and-play components for the Web and telephone. This enables delivery of cost-effective solutions faster than the average industry timelines with little or no programming.

Service

On time, every time delivery of quality IRT solutions is the mission of our IRT services team. Being part of a full-service CRO, we understand the challenges study managers face during study start-up. By providing quality IRT solutions within the timelines set by the clinical study managers, we enable them to focus on the many other key start-up activities. Our IRT services group has supported more than 140 studies, 5,200 sites and 40,000 system users to date.

Quality

Our IRT software platform has been designed to meet the highest quality standards, and our testing and validation processes are comprehensive and rigorous. Our platform contains an extensive library of pre-validated, highly configurable components that support rapid deployment of quality solutions. Our setup, change control and support processes are governed by a comprehensive set of mature SOPs that implement best practices and auditable consistency in all of our processes and deliverables.

Inventory Management Services

- Drug supply ordering and tracking
- Shipments to sites/depots
- Predictive, target threshold and just-in-time supply models
- Drug expiration date management
- Multistudy supply pooling
- Low inventory alerts

Randomization Services

- Static and dynamic randomization schemes, stratification and cohorts
- Adaptive trial designs
- Parallel and cross-over trials
- Variable dosing and titration
- Automatic randomization limit alerts
- Multilingual telephone voice prompts and technical support
- Emergency unblinding service for authorized individuals
- Critical conditions and milestone achievement alerts

Real-time Web Reporting

- Interactive Web reports for subject and inventory information
- Downloadable Web reports in various formats
- Blinded and unblinded configured reports
- Transaction data capture on confirmation reports

eDiary Services

- Patient-reported outcomes capture
- Automatic eDiary compliance alerts
- Real-time reporting of patient-reported outcomes

IRT Service Options

- Integration with electronic data capture (EDC) systems
- Custom integrations with CTMS, ePRO and other systems
- Site activation with optional IRB data capture and extension rules

Safety and Pharmacovigilance

GLOBAL SAFETY AND PHARMACOVIGILANCE

Working globally, inVentiv Health Clinical provides integrated or stand-alone services to support product safety monitoring in compliance with regulatory requirements for safety surveillance in pre- and post-approval settings.

inVentiv Health Clinical has the flexibility and experience to deliver – whether our clients' needs are best met on a project-by-project basis, through a functional service provider or in a consultative relationship. Our global, integrated team of skilled professionals has deep expertise in industry-specific pharmacovigilance services. They are highly experienced in product safety and pharmacovigilance, and understand the changing regulatory environment.

CLINICAL TRIAL SERVICES

To manage clinical trial safety, our team provides qualified medical analysis and review of all serious adverse events (SAEs), and creates the required reports for submission to global regulatory authorities.

Services include:

- SAE monitoring and case processing, including case narratives
- Expedited report submissions in electronic and paper formats
- Periodic safety report preparation and submission
- ARISg® safety database management
- Interim safety listings

»» Post-Marketing Safety Services

GLOBAL SAFETY AND PHARMACOVIGILANCE

With regulatory authorities placing an increased emphasis on benefit/risk profiles of marketed drugs, companies can no longer rely solely on periodic reports that list adverse events (AEs).

Regulatory authorities expect greater assessment and analysis of AEs, as well as recommendations for increased safety surveillance monitoring to achieve earlier signal detection.

To assist companies during post-marketing surveillance, we can:

PREPARE/SUBMIT

- Individual case safety reports in MedWatch or CIOMS I formats
- Periodic safety update reports (PSURs) and periodic adverse drug event reports (PADERS)
- Periodic benefit risk and evaluation reports (PBRERs)
- Expedited reports to global regulatory authorities

PROVIDE

- Standard operating procedures and work practices to manage pharmacovigilance activities
- Customized programs for managing spontaneous and solicited AE reports
- EudraVigilance registration and testing and xEVMPD initial entries and updates
- Scientific literature reviews for identification of adverse events
- Litigation case processing
- A global, multilingual call center
- Case management support

MANAGE FOR CLIENTS

- Standard and non-standard/off-label medical inquiries from consumers and healthcare providers
- Product quality complaints
- inVentiv Health Clinical's ARISg® safety database, which supports both the Medical Dictionary for Regulatory Activities (MedDRA) and the World Health Organization (WHO) Drug Dictionary
- Your safety database using inVentiv Health Clinical's ARISg safety database and securely access client safety databases (e.g., Argus™) to assist companies during post-marketing surveillance





»» TRANSFORMING PROMISING IDEAS INTO COMMERCIAL REALITY

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