FDA Actions to Accelerate and Modernize Early and Late-Stage Clinical Development

The U.S. Food and Drug Administration (FDA) is announcing actions to accelerate and modernize clinical research across the full continuum of drug development —from the Investigational New Drug (IND) phase to late-stage pivotal trials. The FDA's work is outlined in **Operation TrialBlazer**, a U.S. Department of Health and Human Services (HHS) initiative.

EARLY-STAGE ACTIONS

The FDA is committed to ensuring the U.S. remains the global standard for pharmaceutical innovation and regulatory rigor for the benefit of American patients and innovators. The agency is eliminating unnecessary regulatory burden, clarifying phase-appropriate requirements, and building partnerships with government, academic medical centers and the private sector.



Expedited Investigational New Drug Pilot Program Request for Information

The proposed Expedited IND pilot program would leverage America's world-class research institutions as collaborative partners to shorten the time from drug identification to first-in-human study, while protecting clinical trial participants. Drug sponsors would partner with qualified research institutions, such as academic medical centers or contract research organizations, in developing Phase 1 IND submissions for first-in-human clinical trials, using a rolling IND submission platform that would create a more flexible and adaptable pre-IND process and increase the quality of IND submissions, with the goal of minimizing the need for clinical holds. The FDA is requesting public feedback before initiating the program.



New Phase 1 IND Navigator Webpage

Navigating IND requirements in the early stages of clinical research is complex and can be particularly challenging for smaller companies without large regulatory teams. A new IND resources webpage consolidates IND requirements, guidance documents, and practical examples in one place, providing companies with more easily accessible resources to prepare for clinical development.



New Phase 1 IND Chemistry, Manufacturing, and Controls (CMC) webpage

In the past, some companies have submitted more data than is necessary at that step in the development process, creating unnecessary work that delays promising treatments from reaching early-stage clinical trials. To address this, the agency updated its CMC IND webpage for CDER-regulated drugs to clarify key phase-specific CMC requirements for first-in-human Phase 1 INDs, ensuring companies generate and submit only the data that is needed. By focusing exclusively on phase-appropriate requirements, companies can save 6 to 12 months of development time.



New Phase 1 Contact Center

Complementing the Phase 1 webpage is a Phase 1 Contact Center, reachable at 240-276-9358 or Phase1Questions@fda.hhs.gov. Contact Center specialists will offer real-time responses to questions about clinical protocols, regulatory requirements, and other early-phase trial considerations, and if needed, facilitate engagement with appropriate subject matter experts within the agency.



Quantitative Systems Pharmacology-Based Dose Selection for Minimum Anticipated Biological Effect Level in First-in-Human Trials - Draft Guidance

To continue moving away from historical methods of using animal toxicology studies to select the first-in-human dose, this draft guidance is intended to help facilitate appropriate dose selection for newer therapies with more complex mechanisms. This draft guidance helps drug developers use an advanced quantitative medicine approach, specifically quantitative systems pharmacology, to select an appropriate first-in-human dose in Phase 1 trials. It focuses primarily on products for which the minimum anticipated biological effect level (MABEL) approach is recommended to guide starting doses for first-in-human trials.

LATE-STAGE TRIAL ACTIONS

The FDA is enhancing its guidance for industry to facilitate greater efficiency further along the drug development continuum.



Demonstrating Substantial Evidence of Effectiveness for Human Drug and Biological Products - Revised Draft Guidance

The FDA revised this draft guidance to clarify circumstances in which drug developers may be able to rely on one rigorous, adequate and well-controlled pivotal clinical investigation, plus confirmatory evidence, to demonstrate substantial evidence of effectiveness for drug approval. The guidance recognizes that advances in our understanding of biological processes and the increasing availability of high-quality data have transformed the evidentiary landscape for drug development.



Master Protocols for Drug and Biological Product Development - Revised Draft Guidance

The FDA revised this guidance to include information on basket trials, a type of master protocol where a drug is evaluated for multiple diseases, conditions, or disease subtypes. The guidance also includes information on umbrella and platform trials, which are types of master protocols that evaluate multiple drugs. By coordinating multiple investigations under one framework, master protocols can reduce duplicative infrastructure, streamline data collection, and accelerate the generation of evidence needed to support regulatory decision-making.

This work is an ongoing, iterative process: The FDA will continue to collaborate, engage stakeholders, and innovate to ensure our guidance remains relevant, science-based, and responsive to the realities of modern drug development.