



Clinical Trials Services Section Home

History

The concept of clinical trials traces back to ancient civilizations, where empirical observations were made to assess the effects of various remedies. However, the systematic approach to clinical trials as we know it today began to take shape in the 18th century with the pioneering work of James Lind. In 1747, he conducted what is considered one of the first controlled clinical trials, investigating the efficacy of different treatments for scurvy among sailors.

Evolution Till Date

Advances in medical knowledge, technology, and ethical considerations have shaped the evolution of clinical trials. The introduction of double-blind, placebo-controlled trials further enhanced the reliability of results. The development of ethical guidelines, such as the Declaration of Helsinki, emphasized the importance of patient rights, informed consent, and minimizing risks.

Pharmaceuticals

Testing new drugs for safety and efficacy.
2.

Medical Devices

Assessing the safety and functionality of innovative medical devices.
4.

Vaccines

Testing new vaccines for infectious diseases.
6.

Regenerative Medicine

Studying stem cell therapies and tissue engineering.
8.

Neuroscience

Investigating treatments for neurological disorders such as Alzheimer s and Parkinson s.
10.

Rare Diseases

Studying treatments for rare and orphan diseases.
12.

Infectious Diseases

Testing antiviral and antibiotic treatments.
14.

Allergies

Studying treatments for allergic reactions and immunotherapy.
16.

Gastrointestinal Disorders

Investigating treatments for conditions like irritable bowel syndrome.
18.

Ophthalmology

Evaluating treatments for eye diseases like macular degeneration.
20.

Future Prospects of Clinical Trials

The future of clinical trials holds exciting possibilities driven by technological advancements and innovative approaches:

1.

Digital Health

Incorporating wearable devices and mobile apps for real-time data collection.
3.

Virtual Trials

Conducting trials remotely, increasing accessibility and reducing logistical challenges.
5.

Patient-Centric Trials

Involving patients in trial design and decision-making.
7.

Long-Term Safety

Monitoring post-marketing safety to detect rare adverse events.
9.

Ethical Considerations

Continuously addressing ethical concerns in emerging fields like gene editing.

Clinical trials are the cornerstone of evidence-based medicine, driving advancements across various industries and improving patient care. The history, notable contributors, and evolving methodologies underscore their significance. With a multitude of industrial applications and a promising future shaped by technology and innovation, clinical trials remain integral to the pursuit of medical progress and better healthcare outcomes.