

Conduct of Clinical Trials

Clinical trials help answer critical questions about the benefits and risks of investigational drugs. Extensive clinical trial testing is required before regulators can approve a new medicine for sale to patients. Pfizer complies with all applicable laws, regulations, and international guidelines governing the conduct and oversight of our clinical trials as part of our commitment to patient safety and ethical research. Pfizer also has a policy of conducting all clinical trials according to global standards regarding quality, safety, and ethics. It is our objective to conduct clinical research in ways that promote collaboration and trust between biopharmaceutical companies, patients, physicians, governments, and academia.

Background

Clinical trials—research studies involving human participants—are the best way to answer safety and efficacy questions about potential new treatments for diseases. Clinical trials are required before a new medicine can receive the approval of regulatory authorities to be marketed in a country. Regulatory authorities require the developer of a new medicine, also known as the sponsor, to demonstrate the safety and effectiveness of the medicine with scientific data gathered through a clinical trial. There are comprehensive laws, regulations, and guidelines that govern the conduct of clinical trials, and are conducted in accordance with a written protocol setting out how the trial is designed. In a clinical trial, participants receive an investigational drug(s) according to the research plan created by the physician-researcher performing the clinical trial—called an investigator. These studies may involve one or more “treatment arms,” which allow for the safety and efficacy of the investigational drug to be compared to other available treatments, or if no treatment is available, one group of volunteers may receive an inactive substance designed to resemble the drug, called a placebo. Clinical trials are often conducted in a double-blind manner where the investigator, the participant, and the sponsor do not know if a participant is receiving the investigational drug or placebo during the trial.

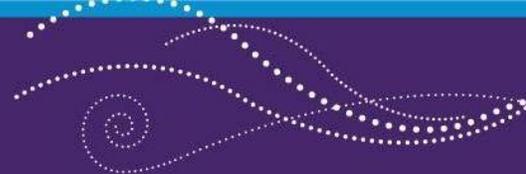
For a potential new medicine to be investigated in a clinical trial, the sponsor of the trial must first file required information with the appropriate regulators; information includes extensive preclinical data from laboratory research and animal testing. These preclinical tests are conducted in accordance with established international standards, called good laboratory practices, and with animal welfare and protection statutes. The regulators then determine if the investigational drug is suitable for initial testing in humans to gain more information about the drugs’ benefits and risks. Initial clinical testing involves administering low doses of the investigational drug to healthy human participants to assess the safety of the product. These “Phase 1” studies are usually conducted where trained medical staff can closely observe participants for safety-related effects. If development advances, the clinical trials increase in size, cost, and complexity. Later-stage trials that examine both safety and efficacy can involve hundreds of investigative sites, thousands of diverse participants, and cost millions of dollars.

Well-established safeguards, through legislation and international guidelines, are in place to protect the welfare, rights, and privacy of clinical trial participants. Every clinical trial has a detailed protocol that first must be approved by an institutional review board (IRB) or ethics committee. These groups are independent of the sponsor and serve to protect clinical trial participants. Participation in clinical trials is always voluntary and contingent upon the informed consent of the participants.

As the clinical trial proceeds, investigators work under the oversight of the IRB or ethics committee and are monitored by the sponsor to ensure that the approved protocol is strictly followed. Data integrity and the safety of all participants are of paramount importance. All adverse events, whether treatment-related or not, are reported to the sponsor, tracked, and reviewed. If significant concerns arise about the safety or effectiveness of the test treatment, regulators are informed, and the clinical trial may be halted. The sponsor’s clinical research investment does not end at regulatory approval—additional trials are routinely conducted after product approval. These include trials requested by regulators to further study the safety and efficacy of the medicine post approval as well as trials done voluntarily by the sponsor to gain additional medical knowledge about the drug.

Biopharmaceutical companies, health care professionals, and regulators have taken steps to ensure ethical practices and increase transparency in the conduct of clinical trials. Registries of ongoing clinical trials and results are available at public websites such as www.ClinicalTrials.gov. Industry associations, such as the Pharmaceutical Research and





Manufacturers of America (PhRMA) and International Federation of Pharmaceutical Manufacturers and Associations (IFPMA), have robust codes of conduct, including ethical standards for relationships between health care professionals and pharmaceutical companies that are well established and followed across the industry.¹ In addition, biopharmaceutical companies are required to publicly report payments to health care professionals, including clinical investigators in industry-sponsored clinical trials.²

Key Facts and Figures

- In 2017, PhRMA member companies invested approximately \$97 billion in research and development of medicines and vaccines with over 8,000 medicines in development globally with the potential to aid patients.³
- Because of stringent requirements to demonstrate safety and efficacy, an average of only one out of 10 molecules that enter clinical trials becomes an approved medicine.⁴
- The U.S. National Institutes of Health clinical trials database, www.ClinicalTrials.gov, contains information about 316,342 studies with locations in all 50 states and in 209 countries, as of September 2019.⁵

Pfizer's Position

Pfizer works to discover and develop innovative, safe, and effective ways to develop breakthroughs that change patients' lives. Pfizer is committed to the safety of people who take part in our clinical trials anywhere in the world and upholds the highest ethical standards in all of our research initiatives regardless of where the research is conducted, including those conducted collaboratively with another sponsor, third party, or contract research organization. All Pfizer-sponsored interventional studies are conducted in accordance with local laws and regulations, as well as principles derived from relevant international standards including: the Council for International Organizations of Medical Sciences (CIOMS) International Ethical Guidelines, the International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use (ICH) E6 guideline for Good Clinical Practice, the PhRMA's Principles on Conduct of Clinical Trials and Communication of Clinical Trial Results, the Declaration of Helsinki, and the United States Belmont report. Pfizer policies governing the conduct of global clinical trials and disclosure of payments to health care professionals (including payments to clinical investigators for work on Pfizer-sponsored clinical trials) are posted publicly at www.pfizer.com.⁶

How the Health Care System Benefits

Pfizer's approach to the clinical trial process upholds a commitment to develop medicines to meet patients' greatest medical needs while preserving collaboration and trust between biopharmaceutical companies, patients, physicians, government and academia. Pfizer's publicly disclosed information enables patients to learn more about ongoing research, helps to provide patients with the information they need to consider participating in a clinical trial.

What It Means for Pfizer

Pfizer's commitment to patient safety, rigorous ethical and scientific standards, and openness about clinical trials facilitates the process of medicine development so that Pfizer can continue to provide patients with new treatments.

¹ Pharmaceutical Researchers and Manufacturers of America, "Code on Interactions with Healthcare Professionals." Available at <http://www.phrma.org/about/principles-guidelines/code-interactions-healthcare-professionals>; International Federation of Pharmaceutical Manufacturers and Associations, "Code of Practice 2012." <http://www.ifpma.org/ethics/ifpma-code-of-practice/ifpma-code-of-practice.html>.

² The Patient Protection and Affordable Care Act (PPACA, P.L. 111-148), as amended by the Health Care and Education Reconciliation Act of 2010 (HCERA, P.L. 111-152), is collectively referred to in this paper as the Affordable Care Act of 2010 (ACA).

³ PhRMA. "Industry Profile 2019." www.phrma.org/report/industry-profile-2019

⁴ See: www.bio.org/sites/default/files/Clinical%20Development%20Success%20Rates%202006-2015%20%20BIO,%20Biomedtracker,%20Amplion%202016.pdf.

⁵ National Institutes of Health. ClinicalTrials.gov. Available at <http://www.clinicaltrials.gov/>, accessed September 13, 2019.

⁶ Pfizer, Research & Development, Policy on Public Disclosure and Authorship. Available at: http://www.pfizer.com/research/research_clinical_trials/registration_disclosure_authorship.jsp.

