Changing Landscape of Clinical Trials Data Capture and Reporting during Covid 19 Pandemic

On January 30, 2020, the WHO declared the novel acute respiratory infection caused by the "SARS-CoV-2" virus, termed "Coronavirus Disease-2019 (COVID-19)" as a Public Health Emergency of International Concern.{9} As of July 20, 2020, over 14 million people worldwide are confirmed to be infected, leading to increasing fatality rates.{10}

Pharma companies worldwide are under public and competitive pressure to explore their innovation on drug development and revamp their reputation. During this increasing need for self-care and prevention, mankind is getting more dependent on technology and sponsors are implementing decentralized and stay-at-home clinical trials. Thereby, use of technology could further overcome ethical and regulatory barriers to enhance patient safety and trial data integrity compared with traditional trial designs. However, lack of human connection may not be always convincing and should be taken into consideration.

In the past, regulators and sponsors have had differences of opinions in publishing their confidential proprietary information and certain patient-level data. **This may be the time to pause and re-analyze clinical trial transparency and how it will help mankind overcome this pandemic with the best treatment option available.**

A pandemic such as the COVID-19 definitely demands transparency in clinical trials. Lack of full conclusive scientific evidence from the various ongoing trials could lead to ignorance of an effective treatment to curb the spread of the disease. Although there are various regulations and policies in place, sponsors and companies are still striving to understand the scope with regard to the depth on disclosure of trial plan or outcomes. It is becoming increasingly important for companies to develop the expertise on trial data disclosures and to meet the regulatory and local requirements. Generally, bigger pharma companies are able to meet their compliance obligations with a dedicated team and requisite tools compared with smaller companies who may lack the resources to disclose data appropriately. Nevertheless, smaller companies are gradually paving their way to gain the requisites. Compliance also values credibility and reputation of the company. The future of clinical trials could be overwhelming if we consolidate the advances and proceed toward greater data transparency.

Regulatory Legroom

Recently, a number of regulatory authorities including the FDA, European Medicines Agency, Medicines and Healthcare products Regulatory Agency, Health Products Regulatory Authority, and others have released several guidance documents and dedicated teams of ethics committees to expedite regulatory and ethical review processes to maintain the ethical and quality standards.{11,12,13,14,15} **Most of the regulators have also implemented a fast-track approval system considering human safety as priority**. For instance, the European Commission also published Recommendation (European Union) 2020/403, considering the shortage of necessities during the outbreak to supply non-CE marked devices in the interest of protection of health, as long as they comply with necessary specifications. However, **documentation is the key that would be required for any future inspection purposes**.{16}

Some of the key initiatives from the various regulators are mentioned below:{17,18, 19,20}

- Prioritize, expedite review, and provide fast-track approval for clinical trials marked as COVID-19
- Engage ethics committees to ensure patient safety concerns
- Support sponsors to amend any existing trial protocols or suspend trials if possible
- Encourage sponsors on remote trial monitoring and providing investigational medicinal product (IMP) to trial participants
- Report serious adverse events and submit annual safety reports and end-of-trial notifications

Provide waivers as necessary in case of pandemic-related protocol deviations Regulatory bodies are working closely with the innovators/sponsors to foster the development of safe and effective medical counter measures against the COVID-19 pandemic. They are under extreme pressure to ensure that the best treatment options are available at the earliest to protect public health and safeguard public from the use of fraudulent products claiming to prevent, treat, or diagnose COVID-19.

Despite several initiatives from regulatory authorities, many of the ongoing clinical trials are unregistered, and their data continue to be unavailable to both the general public and the

scientific community. In addition, sharing of incomplete trial data are leaving them handicapped in the drug approval process and, in turn, to serve the mankind.??

Sponsors' Design Innovation

A whole new era of conducting virtual clinical trials is underway, and it is a great deal of responsibility for the sponsors to maintain patient safety and data integrity. Companies are evolving capabilities and improving methods on real-time data capturing. Moreover, companies have deployed methods such as at-home care and remote monitoring to minimize the impact on ongoing clinical trials.{23,24,25,26}

The FDA guidance issued in the context of COVID-19 also states that it is important to report the changes implemented during the trial in the wake of the pandemic.{27} **It is crucial for the sponsors to stay abreast of actions or guidelines of their local or regional regulatory agencies and to document every action.** Meanwhile, sponsors should engage with researchers, HCPs, and patients to disclose the data appropriately.

Importance of Clinical Trial Transparency During the COVID-19 Pandemic

Most regulatory guidelines provide a window period of 12 months from primary or study completion date to post the trial results on the public registries. Although some regulations do not mandate clinical trial disclosure for early phase trials, it may be worthwhile publishing important trial observations on a public domain at the earliest, especially in situations such as the pandemic.{33} Currently, WHO data presents several potential COVID-19 drugs and vaccines that are being tested in various ongoing clinical trials.{34,35} Several sponsors claim their potential drug or vaccine candidates to be in advanced stages of the clinical trial by revealing vague or bare preliminary trial observations, leaving the community in dilemma on the safety and efficacy of the medicine.{35,36,37} In the urgency of the situation, it is also of utmost importance for the sponsors to comply with regulations while also considering patient safety in disclosing essential critical trial data.

Summary of Benefits of A Renewed Approach to Clinical Trials Transparency

- Regulatory Authorities: Availability and disclosure of full clinical trial data on a timely manner to take the right decision during the drug approval process. This will ensure that the best treatment option will be available at the earliest to overcome this global health crisis.
- Pharma Industry/Sponsors: Clinical data transparency could avoid duplication of research work and unnecessary financial losses while encouraging improvement in the design, conduct, and oversight of clinical trials, thereby providing appropriate diagnosis, treatment, and prevention for COVID-19.
- HCPs and Medical Community: Appropriate disclosure of clinical trial data will help the medical community to take the right decision ahead of time by choosing the most appropriate treatment for and prevention of COVID-19. It could further help the HCPs in explaining the available experimental drug or vaccine to the COVID-19 patients. This will further enhance the patient's confidence and trust on the entire healthcare system.
- General Public Including Patients: Access to real-time data for the general public will build confidence in the existing healthcare systems and security of their own health. This could motivate the common people to fight against such an outbreak.

Navigating a New Regulatory Landscape

The clinical research industry is adapting to a rapid change that has been accepted at all levels, starting from the regulatory authorities, sponsors, contract research organizations, and trial sites to the patients or trial subjects. There is more room for new technologies and start-up inventions to address increasing needs on clinical trial data sources and to remotely connect with patients.

Clinical trials are mostly patient-centered, and before long, the industry will be emerge more efficient in conducting clinical trials virtually with connected devices, medications delivered at home, and timely virtual communication, therefore achieving accurate data capturing and transparency and, at the same time, gaining and improving patient trust.

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