Regulatory Functions of the Philippine FDA in Clinical Trials By James Dennis C. Gumpal, M.D., LLB

The Philippine Food and Drug Administration (FDA) is a regulatory authority that oversees clinical trials, ensuring the safety, efficacy, and ethical conduct of research involving human participants. The FDA aligns its regulatory framework with national laws and international standards, and upholds a rigorous set of guidelines designed to protect participants while facilitating the generation of high-quality data in clinical research. This essential role not only fosters public trust in the research process but also reinforces the commitment to ethical research practices, ultimately contributing to advancements in healthcare and patient safety (Gonzales, 2019; Santos et al., 2021).

Key Regulatory Functions of the Philippine FDA:

1. Approval and Monitoring of Clinical Trials:

The Philippine Food and Drug Administration (FDA) is mandated to ensure the integrity and safety of clinical trials through its Center for Drug Regulation and Research (CDRR). This regulatory authority is integral to the governance of clinical trials involving investigational drugs, biologics, and medical devices in the Philippines, thereby upholding both public health and ethical standards within the research community.

Approval Process: Before initiating any clinical trial, sponsors are required to obtain prior written approval from the FDA. This process is critically designed to ensure that the proposed trial adheres to rigorous regulatory, scientific, and ethical criteria. The FDA's review encompasses multiple components, including the clinical trial protocol—which delineates the study's objectives, design, methodology, and statistical analysis—alongside a thorough assessment of investigator qualifications and ethical clearances obtained from Institutional Review Boards (IRBs) (FDA Circular No. 2012-007). This comprehensive evaluation process not only reinforces the credibility of the investigational research but also safeguards the rights and welfare of human subjects involved in the trials (Bacani, 2017).

Ongoing Monitoring: Following the approval of a clinical trial protocol, the FDA retains an ongoing oversight role throughout the trial's duration. This continuous monitoring ensures compliance with Good Clinical Practice (GCP) and relevant regulatory requirements. By undertaking regular reviews and inspections, the FDA can identify any non-compliance issues, facilitating timely corrective actions to mitigate potential risks to participant safety and maintain adherence to approved study protocols (Santos & Cruz, 2020). Such vigilance is essential to ensure that the ethical standards are consistently upheld, thereby protecting the welfare of trial participants from the onset through to the conclusion of the research. Gonzales, 2019; Santos et al., 2021).

2. Issuance of Clinical Trial Clearance (CTC):

The Clinical Trial Clearance (CTC) is an essential prerequisite for the commencement of clinical trials to ensure that all trials are conducted in a manner that prioritizes the safety and well-being of participants while adhering to established ethical standards (FDA, 2020).

The application process for obtaining a CTC involves several specific procedures, which include the following steps:

2.1. Submission of the Clinical Trial Protocol:

Researchers must submit a detailed clinical trial protocol that outlines the study design, objectives, methodology, statistical considerations, and data management plans. This document should ensure that the trial is scientifically sound and feasible (FDA, 2020).

2.2. Investigator's Brochure:

The investigator's brochure must be prepared in accordance with regulatory guidelines, summarizing all relevant clinical and non-clinical data on the

investigational product. This brochure informs the investigators and participants about the drug's safety and efficacy (FDA, 2020).

2.3. Informed Consent Forms:

Informed consent documents that clearly describe the study's purpose, procedures, risks, benefits, and the rights of participants must be submitted. These forms are critical for ensuring that participants are fully informed before agreeing to join the trial (FDA, 2020).

2.4. Approval from the Ethics Review Board:

Before applying for CTC, researchers must obtain approval from a recognized ethics review board, which assesses the ethical implications of the trial and the protections in place for participants (FDA, 2020).

2.5. Review Process:

Following the submission of all required documents, the FDA conducts a comprehensive review of the application. This includes an evaluation of the protocol, informed consent forms, and the ethics board approval (FDA, 2020).

3. Regulatory Oversight of Good Clinical Practice (GCP) Compliance:

The regulatory oversight of Good Clinical Practice (GCP) compliance is aimed at ensuring that clinical trials adhere to ethical standards and scientific principles. The primary goal of GCP is to safeguard the rights, safety, and well-being of trial participants, while also ensuring the reliability and integrity of clinical trial data.

To achieve GCP compliance, the FDA employs a variety of mechanisms and procedures, which include the following:

3.1. Inspections of Clinical Trial Sites:

The FDA conducts systematic inspections of clinical trial sites to verify that studies are being executed in compliance with regulatory requirements.

These inspections assess various aspects such as the qualifications of the investigators, the informed consent process, the handling of investigational products, and adherence to the approved trial protocols (Department of Health, 2020).

3.2. Review of Clinical Trial Data:

The FDA reviews the data generated from clinical trials to ensure that it is accurate, reliable, and obtained through methods that comply with GCP. This review includes analyses of efficacy and safety data, as well as evaluation of the statistical methodology employed in the interpretation of results (Department of Health, 2020).

3.3. Monitoring Adherence to Protocols:

The FDA ensures that all clinical trials are carried out in accordance with the pre-approved protocol. This includes monitoring any changes to the protocol that may affect the study's integrity or the rights of participants, requiring that any amendments undergo appropriate review and approval before implementation (Department of Health, 2020).

3.4. Handling of Non-compliance:

The FDA is empowered to address instances of non-compliance with GCP standards through a range of regulatory actions. Penalties for non-compliance may include warnings, fines, suspension, or even termination of the clinical trial. Such measures are essential to maintain the integrity of clinical research and ensure participant safety (Department of Health, 2020).

Investigators and sponsors are required to report any adverse events or serious breaches of protocol to the FDA and to relevant ethics review boards. This ongoing responsibility plays a crucial role in monitoring the study's safety profile throughout its duration (Department of Health, 2020).

4. Safety Reporting and Pharmacovigilance:

Safety reporting and pharmacovigilance are integral components of clinical research, focusing on the continuous monitoring of the safety of investigational products, particularly concerning their adverse effects. Sponsors of clinical trials are mandated to report any serious adverse events (SAEs) and suspected unexpected serious adverse reactions (SUSARs) to the Food and Drug Administration (FDA) in a timely manner. This requirement ensures participant safety and upholds the integrity of clinical trials.

4.1. Reporting Requirements

Upon the occurrence of an SAE, sponsors must notify the FDA within specific timeframes, typically 7 days for SUSARs that are deemed serious and unexpected, and within 15 days for other SAEs that are serious and known or previously reported. The prompt reporting of these events allows for the early identification of potential risks associated with investigational products, facilitating timely implementation of necessary actions to mitigate harm to participants (FDA, 2014).

In addition to individual reports of SAEs and SUSARs, sponsors are also required to conduct ongoing safety assessments as part of their clinical trial oversight. This entails periodic safety updates to the FDA, often summarized in a Development Safety Update Report (DSUR), which consolidates all safety-related information gathered during the trial and highlights any significant changes in risk-benefit profiles (FDA, 2014).

4.2. Role of the FDA in Pharmacovigilance

The FDA's role in pharmacovigilance extends beyond the clinical trial phase; it encompasses post-market surveillance of investigational products once they are approved and commercialized. This post-market phase is essential for monitoring long-term safety and efficacy, as the use of products in the general population may reveal adverse reactions that were not evident during pre-approval clinical trials (FDA, 2014).

4.2.1. Adverse Event Reporting System (AERS)

The FDA employs a variety of tools and strategies to facilitate pharmacovigilance, including the **Adverse Event Reporting System** (**AERS**), where healthcare professionals and consumers can report adverse events and product problems. This data is critical for assessing the safety of drugs after they reach the market and may lead to updated labeling, risk communications, or even product withdrawal if significant safety concerns arise (FDA, 2014).

The primary function of the Adverse Event Reporting System (AERS) is to collect, manage, and analyze data related to adverse events (AEs) and product problems associated with approved therapeutic products. By facilitating the reporting of adverse events, AERS aims to enhance the safety of drugs and medical devices in the market, thereby protecting public health.

4.2.1.1. Functionality of AERS

AERS serves as a centralized database where healthcare professionals, researchers, manufacturers, and consumers can report any adverse events related to drugs and biologics. The system captures a wide array of information, including the description of the adverse event, the suspect product, and any relevant medical history of the individual who experienced the event (FDA, 2020). This comprehensive data collection allows for a thorough assessment of potential safety issues.

4.2.1.2. Reporting Procedures

It is the legal and ethical duty of healthcare providers and sponsors to report serious adverse events, including those that are unexpected or may suggest a causal relationship with the product. The FDA defines serious adverse events as any untoward medical occurrence that results in death, is life-threatening, requires hospitalization, results in a significant disability, or is a congenital anomaly (FDA, 2020). Mandatory reporting timelines are established: SUSARs typically require reporting within 7 days and other serious AEs within 15 days.

Moreover, the AERS also accommodates voluntary reports from consumers and other stakeholders, allowing a broader perspective on the experiences of patients using various therapeutic products. This inclusivity enhances the quality of data collected and aids in recognizing trends that might indicate emerging safety concerns (FDA, 2020).

Consumers can report AEs and SUSARs directly to the FDA using the following methods:

4.2.1.3. **MedWatch Online Form:**

1. Visit the FDA MedWatch website at FDA MedWatch.

https://www.fda.gov/safety/medwatch-fda-safety-information-and-adverse-event-reporting-program

- 2. Click on "Report a Serious Problem."
- 3. Use the "Online Reporting Form" which provides a user-friendly interface to submit details about the adverse event.
- 4. Fill out the required fields, including personal details (optional but recommended) and information regarding the adverse event.
- 5. Submit the completed report electronically.

4.2.1.4. **MedWatch Mobile App:**

Consumers also have the option to download the MedWatch mobile app, available for both iOS and Android devices. This app allows users to report adverse events directly from their mobile devices, making the reporting process convenient and accessible.

4.3. Alternative Reporting Methods

In addition to online reporting, consumers can also report AEs and SUSARs through the following methods:

Fax: Complete the MedWatch Form (Form 3500) and fax it to the FDA at (1-800-FDA-0178).

Mail: Download the MedWatch Form (Form 3500) from the FDA website, complete it, and send it to the following address:

Food and Drug Administration MedWatch 5600 Fishers Lane, HF-2 Rockville, MD 20857

Phone: For consumers who prefer to report by phone, inquiries and reports can be made by calling the FDA at 1-800-FDA-1088.

4.4. Importance of AERS in Pharmacovigilance

The significance of AERS lies in its ability to identify and evaluate the safety profiles of drugs post-approval. Through ongoing data analysis, the FDA can detect potential safety signals—indications that may suggest a causal relationship between a drug and a specific adverse event. These signals inform regulatory actions, such as updating labeling information, issuing safety communications, or imposing restrictions on product use (FDA, 2020).

Additionally, AERS data contributes to the refinement of clinical guidelines and therapeutic practices by informing healthcare providers about potential risks associated with specific products. The comprehensive analysis of reported data aids in formulating a clear understanding of the risk-benefit balance crucial for informed clinical decision-making (FDA, 2020).

5. Evaluation of Clinical Trial Results for Market Authorization:

The evaluation of clinical trial results enables the FDA to determine the efficacy, safety, and overall quality of the products seeking approval for commercial distribution (FDA, 2020).

Upon receipt of clinical trial data, the Food and Drug Administration (FDA) initiates a comprehensive evaluation process to determine if the investigational product adheres to established regulatory standards necessary for market authorization. The evaluation process can be detailed in the following stages:

5.1. Initial Review of Submission

Acknowledgment of Receipt: The FDA first acknowledges receipt of the clinical trial data, verifying that all necessary documents have been submitted according to regulatory guidelines.

Preliminary Assessment: A preliminary review is conducted to determine whether the submission is complete and conforms to the required format. This initial check ensures that all relevant data, including clinical protocols, statistical analyses, and results from various phases of the trial, are included.

5.2. Assessment of Clinical Efficacy

Efficacy Evaluation: The FDA scrutinizes the data to evaluate the investigational product's efficacy. This involves assessing the primary and secondary endpoints outlined in the clinical trial protocol to determine if the product fulfills the intended purpose.

Statistical Analysis Review: The statistical methodologies employed in the data analysis are evaluated to confirm their appropriateness and rigor. This may include looking at sample sizes, control groups, and the handling of missing data (FDA, 2020).

5.3. Identification and Evaluation of Safety Risks

Adverse Event Analysis: The FDA reviews reports of adverse events documented during the clinical trials. This assessment aims to identify any

patterns or significant safety concerns that may arise in relation to the investigational product.

Risk-Benefit Assessment: A thorough risk-benefit analysis is conducted, weighing the identified risks against the potential therapeutic benefits. This evaluation is critical in determining whether the product can be safely marketed (FDA, 2020).

5.4. Verification of Data Integrity and Quality

Data Integrity Verification: The FDA examines the processes in place to ensure data integrity throughout the trial, including data collection, management, and reporting. This includes reviewing the sources of data and the accuracy of the reported outcomes.

Quality Control Measures: The agency assesses the quality control practices and standard operating procedures that governed the clinical trials. This includes evaluating compliance with Good Clinical Practice (GCP) guidelines to ensure that the trials were conducted ethically and the data collected was reliable (FDA, 2020).

5.5. Consultation with Advisory Committees

Expert Review: In some instances, the FDA may seek input from advisory committees comprising independent experts in relevant fields. These panels provide additional insights and recommendations regarding the clinical trial data, particularly in complex cases or those involving significant public interest (FDA, 2020).

5.6. Final Decision Making

Summary of Findings: Following the comprehensive evaluation, the FDA compiles a summary of its findings, detailing the efficacy, safety, and overall quality of the investigational product.

Regulatory Action: Based on the findings, the FDA will make a regulatory decision, which may include granting marketing authorization, requesting additional studies, or denying approval pending further evidence.

5.7. Communication of Results

Applicant Notification: The FDA formally communicates its decision to the sponsor of the investigational product, providing feedback and any requirements for post-market surveillance or additional data collection (FDA, 2020).

Public Disclosure: In accordance with regulatory transparency, the FDA may also publish summaries of significant findings related to the clinical trial evaluation, contributing to healthcare providers' and consumers' understanding of new products.

Through this thorough and systematic evaluation procedure, the FDA ensures that only those investigational products that meet high standards of safety, efficacy, and quality are approved for market access, thereby safeguarding public health and fostering confidence in the therapeutic products available to consumers.

6. Ethical Compliance and Protection of Human Subjects:

The protection of human subjects in clinical trials is a fundamental aspect of ethical clinical research, and it is a critical responsibility upheld by the Food and Drug Administration (FDA). The FDA collaborates closely with ethics committees and Institutional Review Boards (IRBs) to ensure that all clinical trials conducted under its jurisdiction comply with ethical standards. This collaboration is essential to uphold the rights, safety, and welfare of participants, especially when dealing with potentially vulnerable populations.

6.1. Collaboration with Ethics Committees and IRBs

Role of Ethics Committees and IRBs: Ethics committees and IRBs are responsible for reviewing clinical trial protocols to ensure that they are

designed and conducted ethically. The FDA works with these entities to assess the appropriateness of the trial's design, the risks involved, and the informed consent process (FDA, 2013).

Protocol Review: Before a clinical trial can commence, IRBs must review the study protocol to ensure that it aligns with ethical principles as outlined in the Belmont Report and other relevant guidelines. This includes evaluating the risk-to-benefit ratio and ensuring that the study design minimizes risks to participants.

6.2. Ethical Compliance as a Prerequisite for Trial Approval

Requirement for Ethical Approval: The FDA mandates that all clinical trials receive ethical approval from an IRB prior to initiation. This requirement serves as a prerequisite for the FDA's review and approval of clinical trials, ensuring that ethical considerations are integral to the study design and implementation (FDA, 2013).

Monitoring for Violations: Once a trial is underway, the FDA monitors compliance with ethical standards. Any identified ethical violations, such as failure to obtain proper informed consent or neglecting participant welfare, can lead to serious consequences, including sanctions, suspension of the trial, or withdrawal of marketing authorization (FDA, 2013).

6.3. Informed Consent Processes

Informed Consent Requirements: The FDA places significant emphasis on the informed consent process, which is essential for respecting participants' autonomy. Researchers are required to provide potential participants with comprehensive information about the trial, including its purpose, procedures, risks, benefits, and their rights as participants (FDA, 2013).

Ongoing Informed Consent: Informed consent is not a one-time process but must be maintained throughout the trial. Researchers have an obligation to keep participants informed of any new information that may affect their willingness to continue participating in the study.

6.4. Protection of Vulnerable Populations

Identification of Vulnerable Populations: The FDA recognizes that certain groups, such as children, prisoners, pregnant women, and individuals with cognitive impairments, may require additional protection due to their vulnerability in the context of clinical research.

Special Considerations: When conducting trials involving these populations, the FDA mandates that researchers take extra precautions to ensure that the welfare of these participants is prioritized. This includes additional informed consent procedures, provisions for assent from minors, and rigorous scrutiny of the study protocol to justify the inclusion of these populations (FDA, 2013).

6.5. Post-Approval Monitoring and Enforcement

Continued Ethical Oversight: Even after trial initiation and FDA approval, ethical oversight continues. The FDA may conduct inspections and audits to evaluate compliance with IRB decisions and ethical guidelines.

Adverse Events Reporting: Researchers and sponsors are required to promptly report any ethical concerns or adverse events that arise during the trial. These reports are crucial for the ongoing evaluation of participant safety and ethical compliance.

7. Regulatory Guidance and Capacity Building:

The FDA provides comprehensive regulatory guidance to sponsors, investigators, and Institutional Review Boards (IRBs). Through a variety of initiatives, including circulars, training programs, and workshops, the FDA seeks to enhance understanding of regulatory requirements and to promote high standards in clinical research practices.

7.1. Issuance of Regulatory Circulars

Purpose of Circulars: The FDA regularly issues circulars that serve as official communication tools to inform stakeholders about regulatory updates, guidelines, and expectations pertinent to clinical trials. These circulars address essential topics such as ethical considerations, data

management, risk assessment, and compliance with regulatory requirements (FDA, 2020).

Accessibility: By making these circulars publicly available, the FDA ensures that sponsors, researchers, and IRBs have access to the latest information and are equipped to align their practices with current regulatory standards. This transparency fosters a culture of compliance and accountability within the clinical research community.

7.2. Training Programs

Capacity Building Initiatives: The FDA conducts a range of training programs designed to equip sponsors, investigators, and IRB members with the knowledge and skills necessary to navigate the complex landscape of clinical research regulation. These training initiatives cover critical areas such as Good Clinical Practice (GCP), regulatory submissions, and ethical conduct in research (FDA, 2020).

Workshops and Seminars: In addition to formal training sessions, the FDA organizes workshops and seminars that facilitate interactive discussions on best practices and emerging issues in clinical research. These platforms provide opportunities for participants to engage with experts, share experiences, and collaboratively seek solutions to common challenges faced in clinical trials.

7.3. Promoting High Standards in Clinical Research

Setting Standards: Through its guidance and educational initiatives, the FDA aims to elevate the overall quality of clinical research conducted in the Philippines. By ensuring that stakeholders understand and comply with regulatory requirements, the FDA promotes the adoption of high standards in study design, participant safety, and data integrity.

Encouraging Ethical Conduct: A key focus of the FDA's initiatives is to instill a strong ethical foundation in clinical research practices. By emphasizing the importance of ethical considerations, particularly in relation to informed consent and the protection of vulnerable populations,

the FDA strives to ensure that the rights and welfare of participants are always prioritized (FDA, 2020).

7.4. Collaborative Efforts

Engagement with Stakeholders: The FDA actively collaborates with various stakeholders, including healthcare professionals, academic institutions, and industry representatives, to foster a unified approach to clinical research regulation. This collaborative engagement strengthens the capacity of the research community to comply with regulatory standards and to promote advancements in public health (FDA, 2020).

In summary, the Philippine Food and Drug Administration (FDA) serves as a critical regulatory authority overseeing clinical trials to ensure the safety, efficacy, and ethical conduct of research involving human participants. By aligning its regulatory framework with national laws and international standards, the FDA implements stringent guidelines aimed at protecting participants and facilitating the generation of high-quality data. This vital role not only enhances public trust in the research process but also reinforces a commitment to ethical research practices, thereby contributing significantly to advancements in healthcare and patient safety.

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