PSEHB/MDED Notification No. 0929-1
September 29, 2021

To: Directors of Prefectural Health Departments (Bureaus)

Director of Medical Device Evaluation Division, Pharmaceutical Safety and Environmental Health Bureau, Ministry of Health, Labour and Welfare
(Official seal omitted)

Handling performance evaluation tests of diagnostic medical devices using existing medical image data without additional invasion/intervention

In recent years, the practical application of diagnostic medical devices utilizing advanced technologies, such as medical imaging support systems that employ artificial intelligence technologies and gene mutation analysis systems that use DNA sequencers, has been progressing. We have decided to handle the performance evaluation test conducted by collecting existing medical image data or biological samples, as well as existing information on diagnosis and treatment related to them, without additional invasion/intervention for the purpose of using these data as an attachment to the marketing approval application form for such diagnostic medical devices as follows. Please fully inform the relevant business operators and organizations in your jurisdiction of this fact.

Notice

1. Performance evaluation tests subject to this handling

This handling applies to performance evaluation studies of diagnostic medical devices utilizing artificial intelligence technology for medical image diagnosis support systems, gene mutation analysis systems that use DNA sequencers, etc., which collect existing medical image data or biological samples and existing medical information, related to these (limited to those obtained in routine medical care or provided in biobank, databases, etc. where they are collected, and excluding data obtained in interventional clinical research; hereinafter referred to as “Medical image data, etc.”) This procedure applies to the performance evaluation tests conducted by collecting the above.

This handling may also be applicable to data other than medical image data or biological specimens. If there is any doubt about its application, consult the

Pharmaceuticals and Medical Devices Agency (hereinafter referred to as “PMDA”).

2. Specific handling

(1) When existing medical image data or biological samples alone are collected and used for the performance evaluation of diagnostic medical devices, after adding necessary information for evaluation (provided that collation with original documentation, such as medical record information, is not required to ensure the reliability of the data used in the study),this study does not constitute a clinical trial. Therefore, the Ministerial Ordinance on Standards for the Implementation of Clinical Trials of Medical Devices (Ministry of Health, Labour and Welfare Ordinance No. 36 of 2005; hereinafter referred to as the “Medical Device GCP Ordinance”) does not apply.

In addition, appropriate management (e.g., establishment of the QC/QA system) must be implemented to ensure the reliability of medical image data or biological samples used in tests, and the Ordinance for Enforcement of the Act on Securing Quality, Efficacy, and Safety of Pharmaceuticals, Medical Devices, Regenerative and Cellular Therapy Products, Gene Therapy Products, and Cosmetics (Ordinance No. 1 of the Ministry of Health and Welfare, 1961) must be implemented. The attached materials must be prepared in accordance with the criteria for the reliability of application materials, as stipulated in Article 114-22 of the Enforcement Regulations for the Act on Quality, Efficacy, and Safety Assurance of Pharmaceuticals, Medical Devices, etc. (hereinafter referred to as “Enforcement Regulations”). In addition, at the time of PMDA’s quality inspection, the applicant should be able to explain that appropriate control is being maintained, based on the supporting documents.

The prepared documents should be attached to the marketing approval application as documents related to design and development under Item 1(b) of Article 114-19, Paragraph 1 of the Enforcement Regulations (“Regarding Application for Marketing Approval of Medical Devices” [Notice from the Director of the Pharmaceutical and Food Bureau, Ministry of Health, Labour and Welfare, dated November 20, 2014, PFSB Notification No. 1120-5 (hereinafter referred to as the “Director’s Notice”)] Attachment 1, (b)-1. Documents on performance and safety).

(2) When collecting existing medical image data or biological samples and existing information on diagnosis and treatment related to these (such as confirmed diagnoses used as correct answers), and using them to evaluate the performance of diagnostic medical devices (when it is necessary to verify the medical information used in the test against the original data, such as medical records, to ensure the reliability),the test does not constitute a clinical trial. Therefore, the Medical Device GCP Ministerial Ordinance does not apply. From the viewpoint of ensuring ethics and reliability, the following points should be met.

i. With regard to the provision of “medical image data or biological samples and

related information on diagnosis and treatment" to third parties (including developers and regulatory authorities) and their utilization for approval applications, the applicant shall handle those data etc. based on the Act on the Protection of Personal Information (Act No. 57 of 2003) and the Ethical Guidelines for Life Science and Medical Research Involving Human Subjects (Ministry of Education, Culture, Sports, Science and Technology, Ministry of Health, Labour and Welfare, and Ministry of Economy, Trade and Industry Notification No. 1 of 2021) and be able to explain the appropriateness of the handling at the time of approval application upon request from the PMDA.

ii. The medical image data or biological samples used in the study, along with related information on diagnosis and treatment must be appropriately controlled to ensure reliability (e.g., establishment of the QC/QA system), and the materials must be prepared in accordance with the standard for the reliability of application materials specified in Article 114, Section 22 of the Enforcement Regulations. In addition, at the time of PMDA's quality inspection, the applicant must be able to explain that such appropriate control is being maintained, based on the supporting documents.

The generated documentation shall be attached to the application form for marketing approval as a substitute for the results of clinical studies in Article 114, Paragraph 19, Item 1 (1) of the Enforcement Regulations (documentation on clinical evaluation in Attached Table 1-2 of the Director's Notification).

3. Other considerations

For studies subject to this handling, it is desirable to consult the PMDA about the study protocol and methods for securing reliability before conducting the study. In addition, whether the evaluation of the medical device is possible solely through the performance evaluation test using existing medical image data will be judged separately; therefore, a consultation should be held with the PMDA before making the approval application.