

September 29, 2021

To: Directors of Prefectural Health Departments (Bureaus)

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

### Handling of Performance Evaluation Tests of Diagnostic Medical Devices Using Existing Medical Image Data without Involvement of Additional Invasiveness or Intervention

In recent years, the practical application of diagnostic medical devices adopting advanced technologies, such as medical diagnostic imaging support systems using artificial intelligence technologies and gene mutation analysis systems utilizing DNA sequencers, has been undertaken. This time, it has been determined that performance evaluation tests to be conducted by collecting existing medical image data or biological samples and existing medical information related to these, etc. without involvement of additional invasion or intervention for the purpose of using them as attached data to marketing approval applications for the abovementioned diagnostic medical devices will be handled as described below. All prefectural governments are therefore requested to fully recognize and thoroughly inform related companies and organizations under your jurisdiction of this Notification.

#### Items

##### 1. Performance evaluation tests subject to this handling

This handling applies to performance evaluation tests of diagnostic medical devices such as medical diagnostic imaging support systems utilizing artificial intelligence technologies and gene mutation analysis systems using DNA sequencers that are conducted by collecting existing medical image data or biological samples and existing medical information related to them, etc. (limited to those obtained in routine medical practice or provided by biobanks, databases, etc. from which they are collected, excluding data, etc. obtained from clinical research, etc. requiring intervention; hereinafter referred to as “medical imaging data, etc.”) without involvement of additional invasion or intervention (including transmission of diagnostic results).

\* This English version of the Japanese Notification is provided for reference purposes only. In the event of any inconsistency between the Japanese original and the English translation, the former shall prevail.

In addition, this handling may also be applicable to data other than medical image data or biological samples. If there is any doubt about the application of this handling, consult the Pharmaceuticals and Medical Devices Agency (hereinafter referred to as the “PMDA”).

## 2. Specific handling

- (1) Cases where only existing medical image data or biological samples are collected and used for performance evaluation of a diagnostic medical device after adding new information necessary for evaluation (cases where it is not necessary to cross-check with source documents [medical chart information, etc.] to secure reliability of data, etc. used for the test)

Since this test is not a clinical trial, the Ministerial Ordinance on Good Clinical Practice for Medical Devices (MHLW Ordinance No. 36 of 2005 ; hereinafter referred to as “GCP Ordinance for Medical Devices”) is not applicable.

In addition, appropriate management (e.g., establishment of the QC/QA system) shall be implemented to ensure the reliability of medical image data or biological samples to be used for the tests, and attached data shall be prepared in accordance with the Reliability Standards for Application Data stipulated in Article 114-22 of the Enforcement Regulations 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 of 1961 ; hereinafter referred to as the “Enforcement Regulations”). At the time of the compliance review by the PMDA, the applicant shall be able to explain based on the supporting data that the said proper management is being carried out.

The prepared data shall be attached to the marketing approval application as those related to the design and development specified in Article 114-19, Paragraph 1, Item 1 (b) of the Enforcement Regulations (Attached Table 1, B-1. Data on performance and safety of the “Application for Marketing Approval of Medical Devices” [PFSSB Notification No. 1120-5 dated November 20, 2014 issued by the Director-general of the Pharmaceutical and Food Safety Bureau, Ministry of Health, Labour and Welfare; hereinafter referred to as the “Director-general’s Notification”).

- (2) Cases where existing medical image data or biological samples and existing medical information related to these (information on definite diagnosis used as ground truth data, etc.) are collected and used for performance evaluation of a diagnostic medical device (cases where it is necessary to cross-check with source documents [medical chart information, etc.] to secure reliability of the medical information used for the test)

Since this test is not a clinical trial, the GCP Ordinance for Medical Devices is not applicable. From the viewpoint of securing the ethics and reliability, however, the following items shall be fulfilled:

- [1] At the time of filing the approval application, the applicants shall be, upon request of the PMDA, able to explain that consent of patients, etc. has been properly obtained for the commercial use of medical image data or biological samples and medical information related to these, including their provision and disclosure to third parties

(including the developer and regulatory authorities) based on supporting data (For the appropriateness of consent, refer to the Act on the Protection of Personal Information [Act No. 57 of 2003] and Ethical Guidelines for Medical and Biological Research Involving Human Subjects [Notification No. 1 of the Ministry of Education, Culture, Sports, Science and Technology, Ministry of Health, Labour and Welfare, and Ministry of Economy, Trade and Industry in 2021]).

- [2] Appropriate management (e.g., establishment of the QC/QA system) shall be implemented to ensure the reliability of medical image data or biological samples and medical information related to these to be used for the tests, and attached data shall be prepared in accordance with the Reliability Standards for Application Data stipulated in Article 114-22 of the Enforcement Regulations. At the time of the compliance review by the PMDA, the applicant shall be able to explain based on the supporting data that the said proper management is being carried out.

The prepared data shall be attached to the marketing approval application as data substituting for the results of clinical studies in Article 114-19, Paragraph 1, Item 1 (f) of the Enforcement Regulations (Attached Table 1, F-2 Clinical evaluation data of the Director-general's Notification).

### 3. Other notes

For studies subject to this handling, it is desirable to consult the PMDA about the study protocol, method for securing reliability, etc. before conducting the test. In addition, a consultation with the PMDA should be held before filing the approval application as to whether or not the concerned medical device can be assessed only with the performance evaluation test using existing medical image data, etc. because it is separately judged for individual devices.