Letter to the Editor:

Sharing Image Data from Clinical Trials

Dear Editor:

The International Committee of Medical Journal Editors (ICMJE) recently published data sharing statements for clinical trials (1). We, as trialists in radiology field, advocate sharing image data. Sharing image data is important because imaging biomarkers are increasingly used for the assessment of therapeutic response in oncologic trials. First, to truly meet the intent of data sharing, it is desirable to share source image data as well as measurement data (e.g., tumor size) derived from the image data. Second, in some diagnostic trials in radiology or ophthalmology fields, image data per se are an essential data to be shared.

As noted in the ICMJE statements, there remain several unresolved issues including "appropriate scholarly credit to those who share data, and the resources needed for data access, the transparent processing of data requests, and data archiving." Image data sharing poses additional challenges associated with unique nature of image data. First, image data sharing is expensive due to the large data sizes. An elegant but still affordable platform for data sharing will be needed to facilitate image data sharing. Second, image data have comprehensive morphologic information, which often precludes complete de-identification. For example, recognizable face images can be reconstructed from brain cross-sectional image datasets (2). Fundoscopic images contain information of personally unique shapes of the retinal vessels. Anonymization to image content may impair useful information necessary for secondary research.

While there is no current consensus how to organize and share image data, efforts are still being made to meet the challenges in image data sharing. Several ongoing projects in the United States, including those by National Cancer Institute (3) or American College of Radiology Image Network (4), may serve exemplary platforms for image data sharing. In Korea, the investigators of Low-dOse CT for appendicitis Trial (LOCAT) (5), which is a large trial comparing low-dose computed tomography (CT) and standard-dose CT in patients with suspected acute appendicitis, are planning to share the image data.

DISCLOSURE

The authors have no potential conflicts of interest to disclose.

AUTHOR CONTRIBUTION

Conceptualization: Lee KH. Writing - original draft: Ko Y, Kim KW, Lee KJ. Writing - review & editing: Lee KH.

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