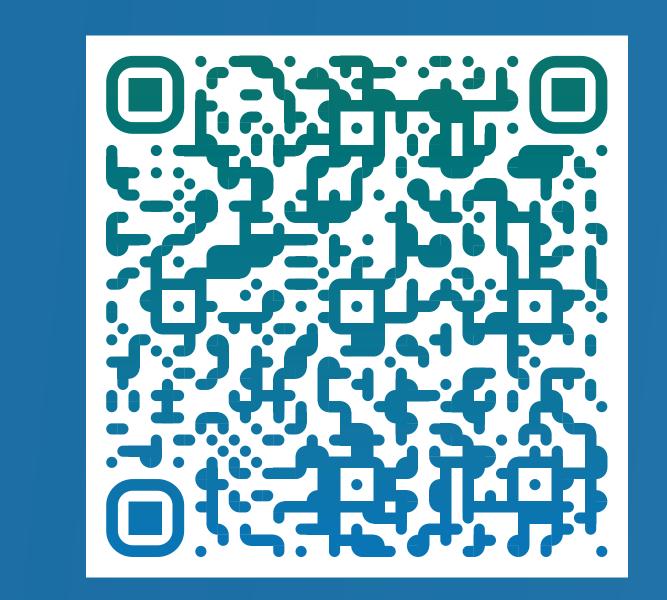# Assure Clinical Trials Quality while ensuring efficiency: Automatic Data Classification and Quality Protocol Adherence of Medical Imaging Data

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[1] QMENTA Inc, Boston, MA 02110, USA. The presenters are employed by and hold stock or options in QMENTA.

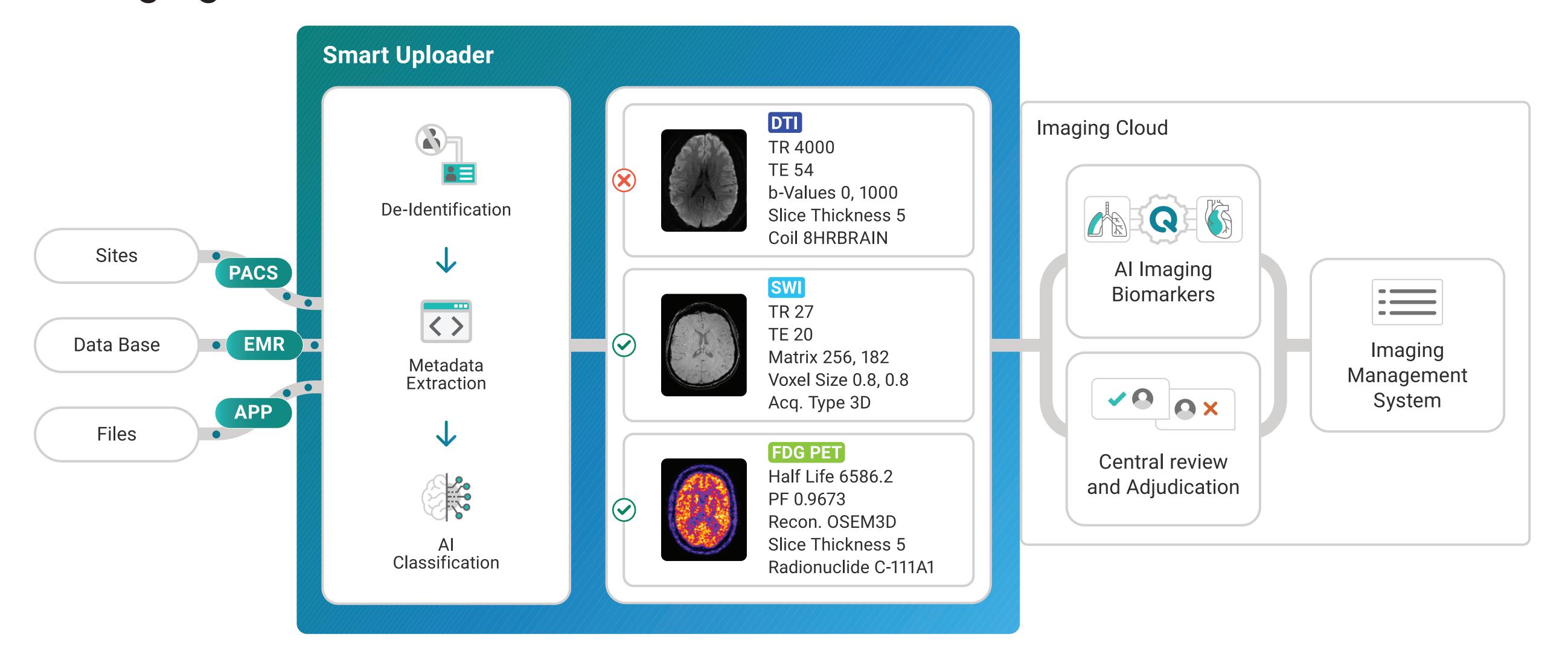**QMENTA®**

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## OBJECTIVE

**Imaging biomarkers** can be derived from multiple medical imaging modalities and are helpful for assessing safety and effectiveness of **clinical trials**. However, the variety of imaging modalities not only are difficult to archive, but also their compliance with the imaging charter needs to be ensured.

We propose an **automatic data classification and Quality Protocol Adherence (QPA)** approach for medical imaging data named **Smart-Uploader**.
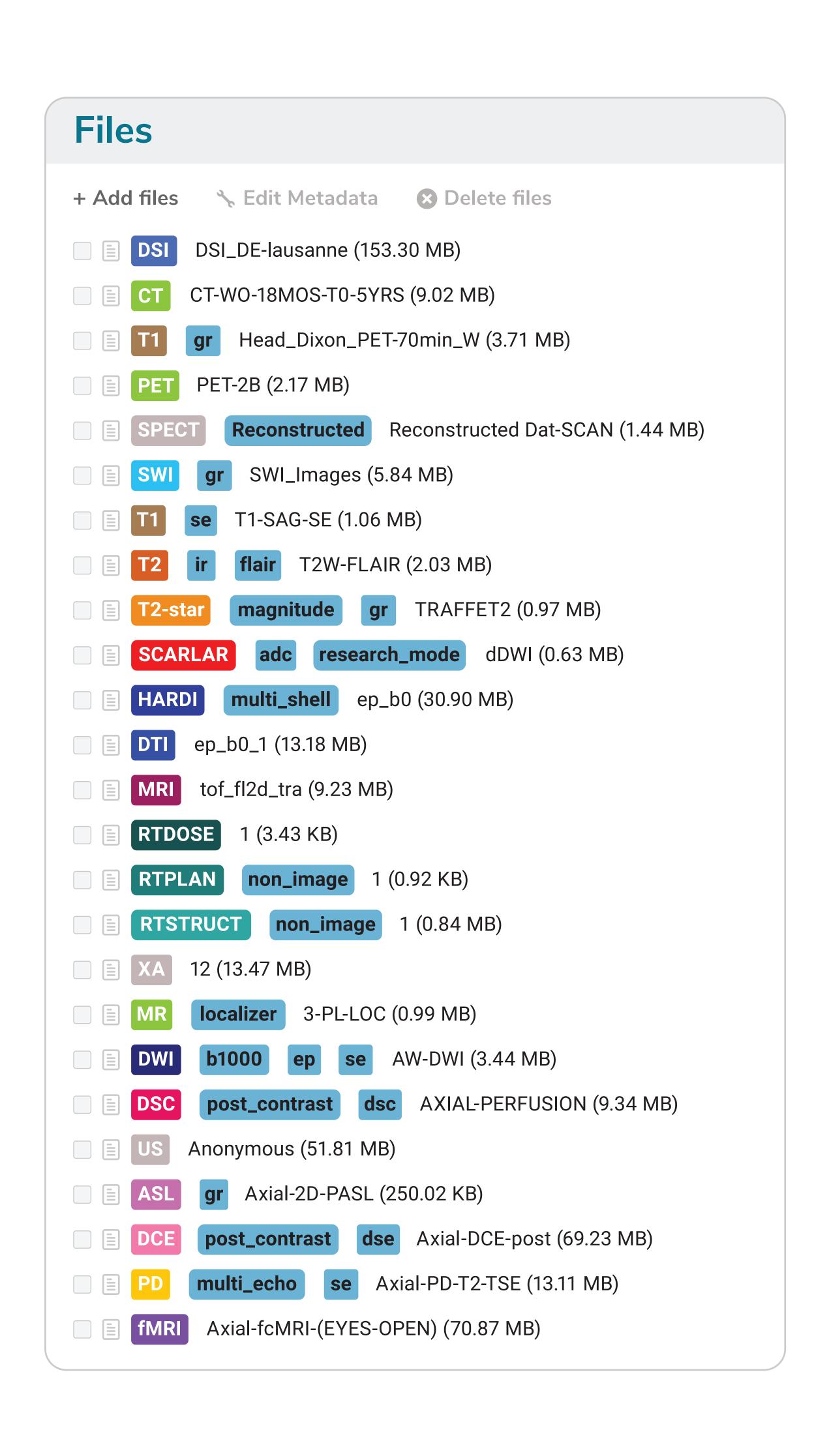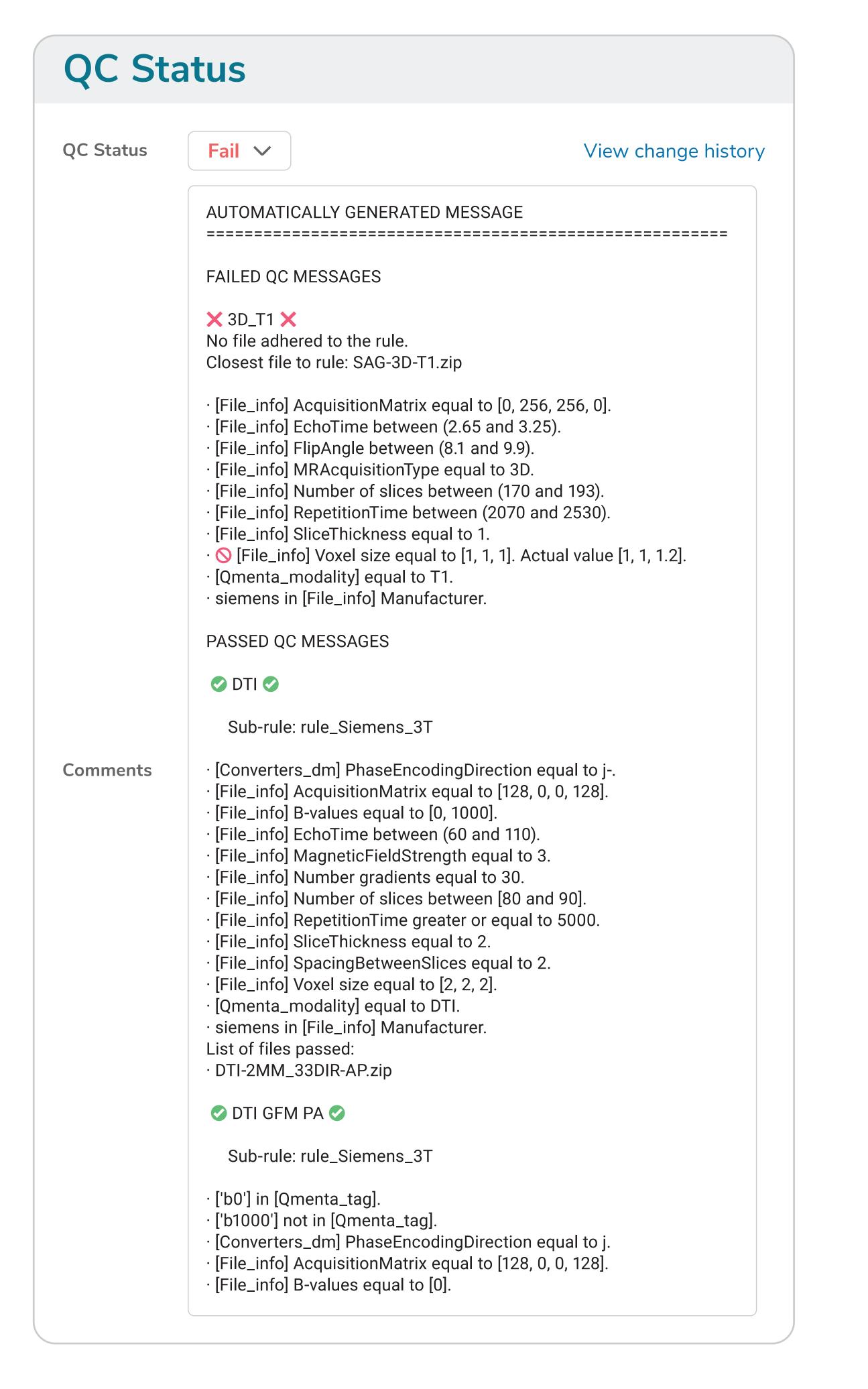
## SMART-UPLOADER DESIGN

- Integrated within a centralized **cloud-based platform** for medical image data.
- Automatic data **PHI de-identification** and **classification** via a CNN.
- **Live Automatic QPA** --> Assess the compliance of the data with the imaging charter.
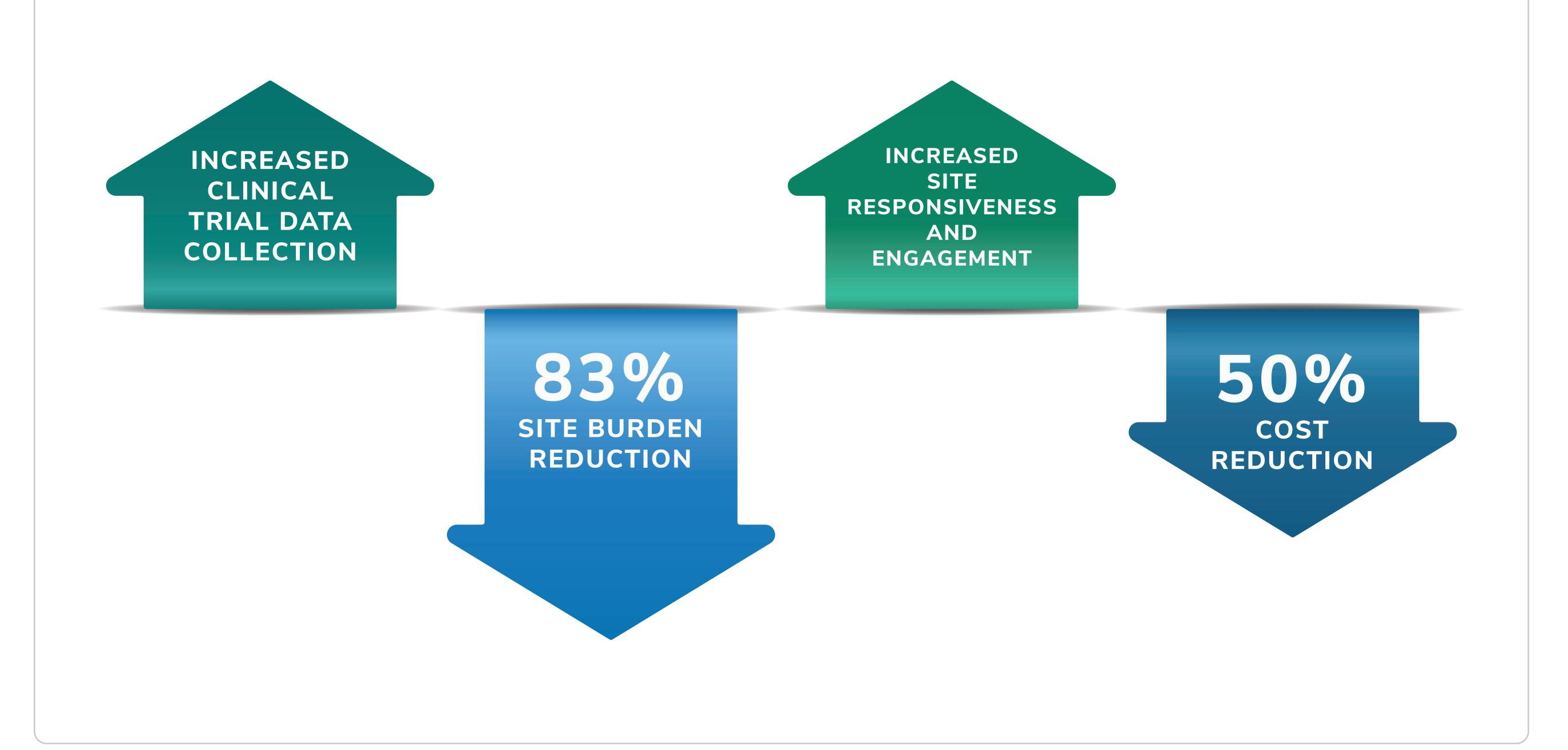


## SMART-UPLOADER RESULTS

- Classifies more than 25 imaging modalities.
- QPA applies any rule defined in the imaging charter and assesses the meta-information to output a pass/fail summary.
- An **across-vendor comparison** is performed avoiding human error.
- Results provided in less than 5 min after data upload.



## CONCLUSIONS

The proposed solution for automatic medical image data classification and protocol adherence **facilitates data management and identification of protocol deviations** which increase the quality of imaging endpoints, efficiency in clinical trials and generate time-savings.

INCREASED CLINICAL TRIAL DATA COLLECTION

INCREASED SITE RESPONSIVENESS AND ENGAGEMENT

**83%** SITE BURDEN REDUCTION

**50%** COST REDUCTION

### Bibliography

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Rowe M, et al. (2019). Advanced medical imaging handling and analysis in clinical trials. Alzheimer's & Parkinson's Diseases Congress - AD/PD™ Lisbon.

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