Developing range of TE (Table 1) for local protocols, we observed inconsistencies in the parameter values. Using a DICOM coded tag system, we were able to extract the appropriate parameters for each exam. This led to the development of a semi-automated QC reporting approach that was implemented for all clinical sites. The desired expected parameter range is determined based on the local practice and clinical protocol. This approach has been implemented at different institutions and has shown promising results.

**Figure 2.** This is a clinical example demonstrating how the DICOM coded tag system is used to extract relevant parameter ranges. The desired expected parameter range is delineated in the table below. The localized heat map indicates the parameter range for each exam, showing consistency across different exams.

**Conclusion and Discussion:**

The developed QC methodology is an efficient quality assurance tool that can help improve quality of imaging acquisitions in ongoing clinical trials. It allows for a semi-automated approach to QC reporting, which can be easily adapted to different institutional settings and clinical protocols. The methodology can be further improved by incorporating feedback loops to continuously refine and optimize the process. Overall, the DICOM driven methodology offers a robust and flexible solution for quality assurance in clinical trials involving MRI imaging.