**CONCLUSION**

In the proposed work, we have developed a deep learning model for the classification of tuberculosis drug response using CT images. The prediction is made using a deep learning CNN model. This study demonstrates the effectiveness of deep learning techniques, with the proposed CNN-based model achieving a 97.27% classification accuracy. CNN can increase precision and speed up the diagnosis and treatment of tuber- culosis, enabling more rapid evaluations of drug sensitivity and resistance. This can therefore result in more specialized and successful treatment plans. The proposed model doesnot exhibit overfitting and yielded good results in the testing set. Additionally, the creation and implementation of the user interface helps radiologists diagnose tuberculosis in real-time. Overall, the proposed approach can greatly support radiolo- gists in making more informed medical judgments when it comes to determining the treatment response of samples of tuberculosis. It is important to understand that using CNNs to predict drug resistance is just one factor in the process; other factors that must be considered in order to provide reliable predictions include choosing the right model architecture and having a high-quality dataset. It is imperative to collaborate with domain experts and physicians to ensure that the model’s predictions align with clinical practice and decision-making.