RESULTS - Cont

The overall agreement rate between initial and secondary review was 82.2%, with kappa of 0.78 ± 0.06. The agreement rate between the initial review and the consensus of the tumor board was 79.0%, with a kappa of 0.74 ± 0.07. There was perfect agreement on studies with improvement (1a or 1b) with lower levels of agreement (63.6-82.4%) for studies with worsening imaging findings (3a-4).

CONCLUSION

Using a structured reporting system to categorize MRIs in brain tumor patients allows for precise characterization of variation between report conclusions on primary and secondary review. Overall agreement is good, but variation rates increase with worsening findings which may be harder to correctly interpret. BT-RADS scores reflecting worsened imaging findings (3a-4) are associated with higher rates of changes in management, including new chemotherapy, radiation therapy, and/or enrolling in a clinical trial. Future work includes prospective studies to assess BT-RADS prospective interrater reliability and ability to predict progression free and overall survival.

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REFERENCES