Meningioma Radiomics

The quality of radiomics studies for meningioma is insufficient. Acknowledgment of radiomics quality score (RQS), (TRIPOD) Transparent reporting of a multivariable prediction model for individual prognosis or diagnosis checklist, and The Image Biomarker Standardization Initiative (IBSI) guidelines may improve the quality of meningioma radiomics studies and enable their clinical application [1].

For Park et al. Meningioma Radiomics significantly contribute added value in predicting recurrence when integrated with the clinicopathological features in patients with World health organization grade 2 meningioma. Furthermore, the combined model can be applied to identify high-risk patients who require adjuvant radiotherapy [2].

In 2022 Ugga et al. presented a wide-ranging overview of radiomics and artificial intelligence applications in meningioma imaging [3].

Gu et al. reviewed in 2020 the latest advancements of radiomics and its applications in the prediction of the pathological meningioma grade, meningioma histological subtype, meningioma recurrence possibility, and meningioma differential diagnosis, and the potential and challenges in general clinical applications. In this review, they highlighted the generalization of shared radiomic features among different studies and compare different performances of popular algorithms [4]

In 2020 a clinicoradiomic model showed good performance and high sensitivity for risk prediction of brain invasion in meningioma [5].

1)
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