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From Image to Insight

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SY16-2

Tumor Oxygenation Biomarkers and Sodium MRI in Neuro-Oncology

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Conventional MRI primarily depicts tumor morphology, while advanced quantitative imaging may provide additional information on tumor physiology. This lecture presents our studies of adult H3 K27-altered diffuse midline glioma, focusing on clinical and imaging characteristics and tumor oxygenation biomarkers for differential diagnosis and prognostication. Ongoing work using 23Na MRI will also be introduced. These studies may help expand our understanding of tumor physiology beyond structural MRI and support further evaluation of quantitative imaging biomarkers in neuro-oncology.

Keywords: *Neuro-oncology, Glioma, Tumor oxygenation, Sodium MRI, Quantitative MRI*