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Designing GABA-Edited Magnetic Resonance Spectroscopy Studies: Considerations of Scan Duration, Signal-To-Noise Ratio and Sample Size

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Highlights

- Measurement error and group-level variance can be used to optimize scan duration in GABA-edited MRS studies.
- Observed measurement variability depends on voxel location.
- Scan times may be reduced to ~7 min or less in contrast to current recommendations (~10 min).
- Sample sizes required to detect various effect sizes as a function of scan duration were calculated.

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