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Leiden

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## **Methodology matters: characterization of glioma through advanced MR imaging**

Schmitz Abecassis, B.

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Stellingen behorende bij het proefschrift getiteld:

## **Methodology Matters: Characterization of Glioma through Advanced MR Imaging**

1. To bring CEST closer to clinical use, future research should focus not only on developing robust processing methods but also on ensuring these methods remain scientifically sound, while also practically feasible for clinical application. *(this thesis)*
2. The most effective way to introduce ultra-high field imaging into clinical care, is to integrate it as a complementary tool alongside routine clinical MR protocols. *(this thesis)*
3. Machine learning is better suited for pathologies with very well-defined imaging characteristics, unlike glioma. *(this thesis)*
4. To consider the implementation of new MR techniques, such as CEST, into clinical practice, not only substantial validation is needed, but also a careful consideration of practical aspects such as standardization, accessibility and costs. *(this thesis)*
5. Machine learning algorithms need to be continuously trained and updated to remain relevant.
6. Ultra-high field MR imaging would make the most sense for advanced imaging techniques, as they would exponentially benefit from the increased signal-to-noise ratio (SNR).
7. More intense collaboration between research groups and MRI vendors will speed up the implementation of advanced MR techniques into clinical practice.
8. While a healthy lifestyle, including regular exercise, cannot cure brain tumors like gliomas, it can significantly improve patients' quality of life.
9. Science cannot exist without continuous scrutiny; it is a process not an ideal.
10. The journey to earning a PhD is much like training for a marathon.