

Summary

Outcome

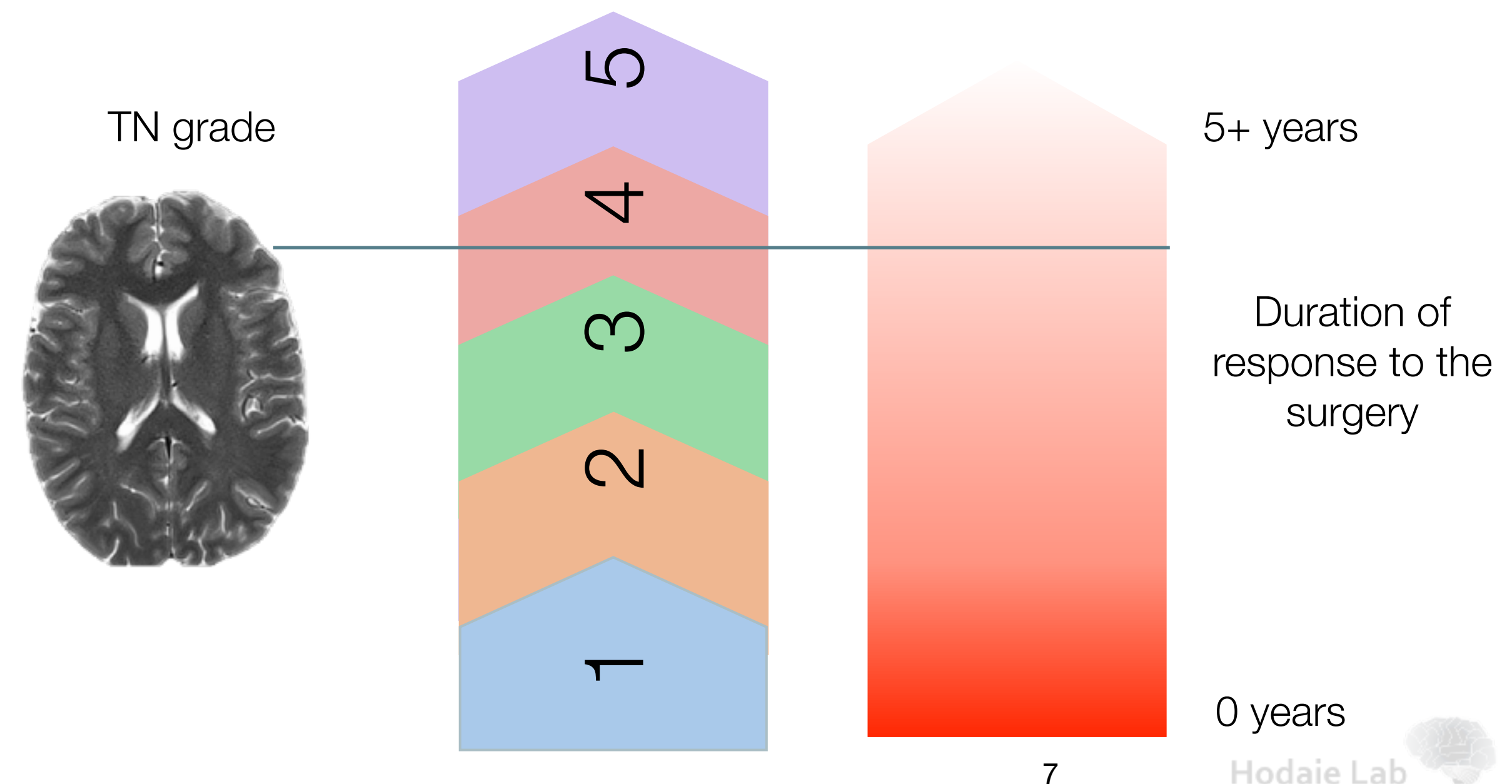
- Potential framework to provide a foundation for future development of ML-driven, clinical tools for TN assessment and surgical outcome prognostication.

Key takeaways

- Comparably to imaging data, clinical data may also be applied in ML to better understand and treat TN.
- TN-related features were largely prioritized by unsupervised ML
- TN classes defined based on the duration of surgical response are distinguishable by ML algorithms and express specific clinical symptoms, identified by PC1 (Pain grade).

Future directions

- **Supervised ML** utilizing advanced imaging data (objective measure) and novel pain grade metric (from subjective reports) to develop a surgical outcome prognostication tool. Exploring deep learning architectures
- **A novel classification of TN** which will reflect the potential surgical outcome and allow for better patient selection for surgery



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