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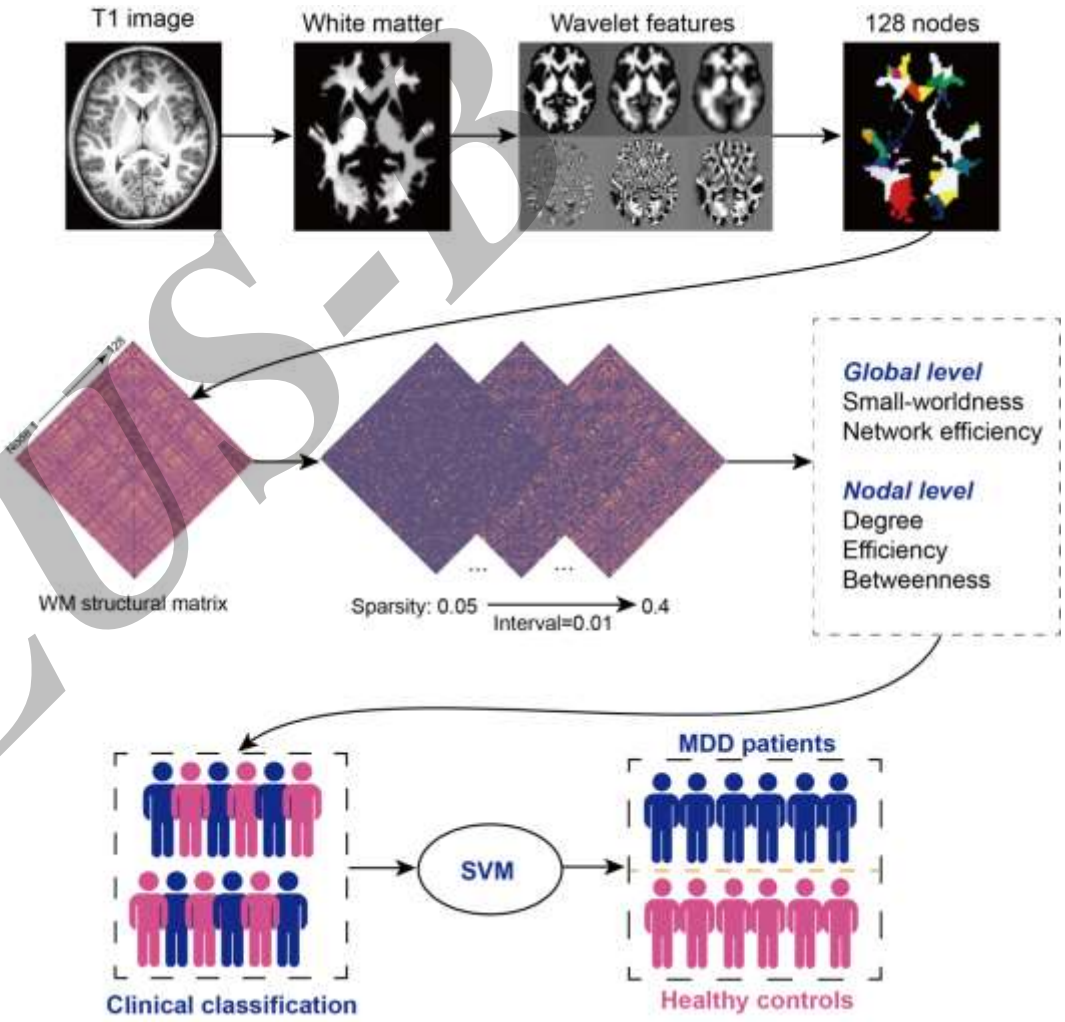
Aberrant network topological structure of sensorimotor superficial white-matter system in major depressive disorder

Key words: Major depressive disorder; Magnetic resonance imaging; White matter; Brain networks

Research Summary

This study mainly investigated the abnormalities and classification value of global and nodal network topological metrics of white matter morphological network in major depressive disorder (MDD) patients.



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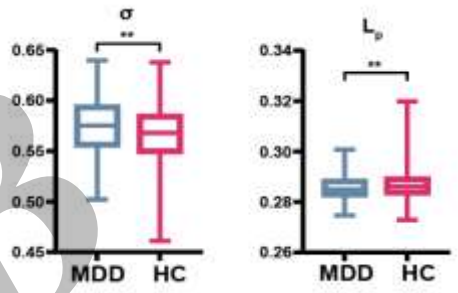
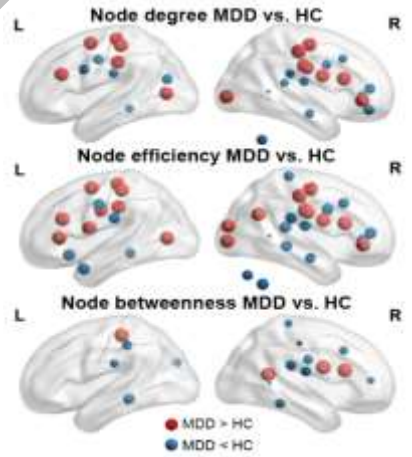
Innovation points

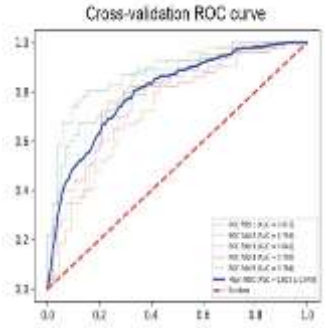
● **Employing** a novel approach, namely white matter morphological network analysis, to gain a comprehensive understanding of how brain structure changes in MDD.



● **Revealing** topological alterations of white matter morphology networks in MDD patients, primarily located in the sensorimotor superficial white matter system.



● **Demonstrating** that network nodal topological properties can be utilized as classification features to effectively distinguish MDD patients from healthy controls.



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