Connectome predictive modelling of PTSD symptom severity

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- No new FDA approved drugs for PTSD since 2001
- Early stages of drug discovery based on hypothesis driven region of interest approaches
- Data-driven/network-based approach: identify new targets for clinical trials

Quality of evidence	Recommend FOR	Suggest FOR
High	None	None
Moderate	Paroxetine*, sertraline*, venlafaxine *FDA approved	None
Low	None	Prazosin (only for the treatment of PTSD-associated nightmares)

https://www.ptsd.va.gov/professional/treat/txessentials/clinician_guide_meds.asp

• What we did:

 Generated connectome "fingerprint" correlated with PTSD symptoms

• What we found:

- Cross-network hypoconnectivity
- <u>Default mode</u> and <u>central</u> <u>executive</u> reduced functional connectivity dominated
- Visual network lower and higher connectivity

• Clinical implications:

- Drugs/neuromodulation to modulate networks of interest
- Clinical trial design: target engagement and individualized biomarker-driven treatments

