Tissue vs Cell-line Sigantures Ε **AUC scores Pathway Enrichment scores** wmean 1.00 randomWalk 1.00 wsum causalReasoning Pathway Enrichment Score (Cell-line)

'0

'0

'0

'0

'0

'0 0.75 AUC Score (Cell–line)
90 overconnectivity Method SigNet randomWalk Connectivity Mapping wmean Topology (Causal) 0.50 networkPropagation Topology (Node prioritization) Zhang overconnectivity networkPropagation **Enrichment** interconnectivity interconnectivity viper GSEAweight1 KS GSEAweight0 SigNet 0.25 fgsea GSEAweight1 viper mlm Zhang mdt 0.25 causalReasoning GSEAweight0 fgsea XSum KS udt XCos 0.00 0.50 0.75 0.50 0.25 1.00 0.25 0.75 1.00 Pathway Enrichment Score (Tissue) AUC Score (Tissue)