

# Improving Computational Drug Repositioning Through Multi-Source Disease Similarity Networks

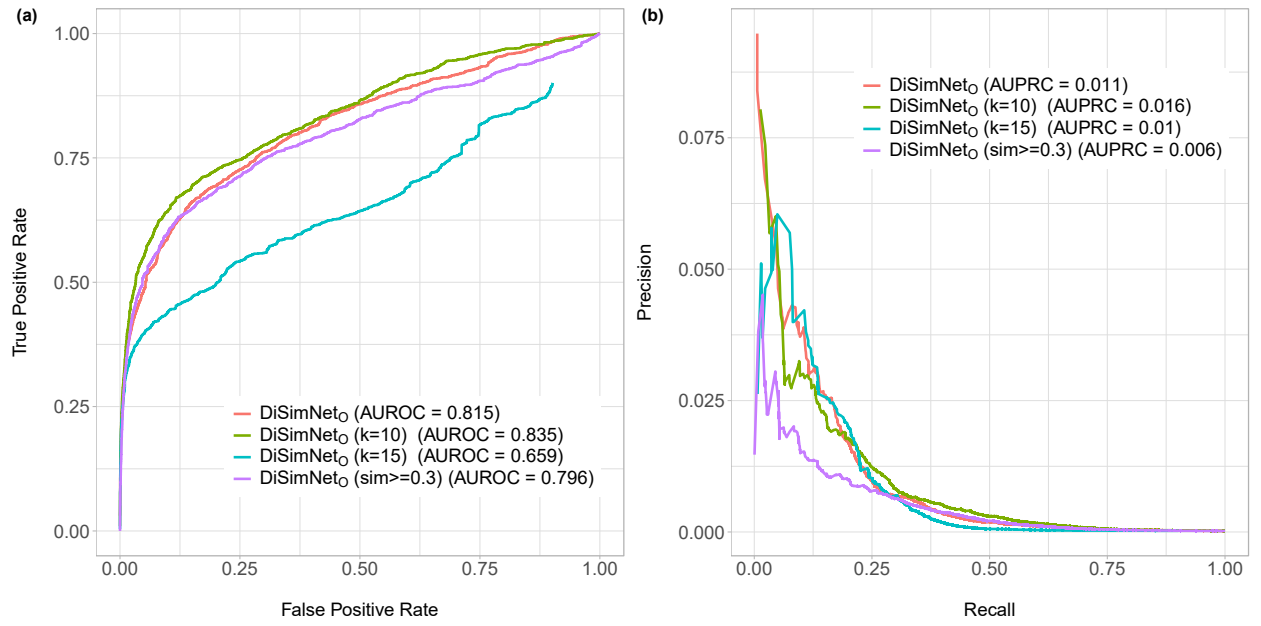
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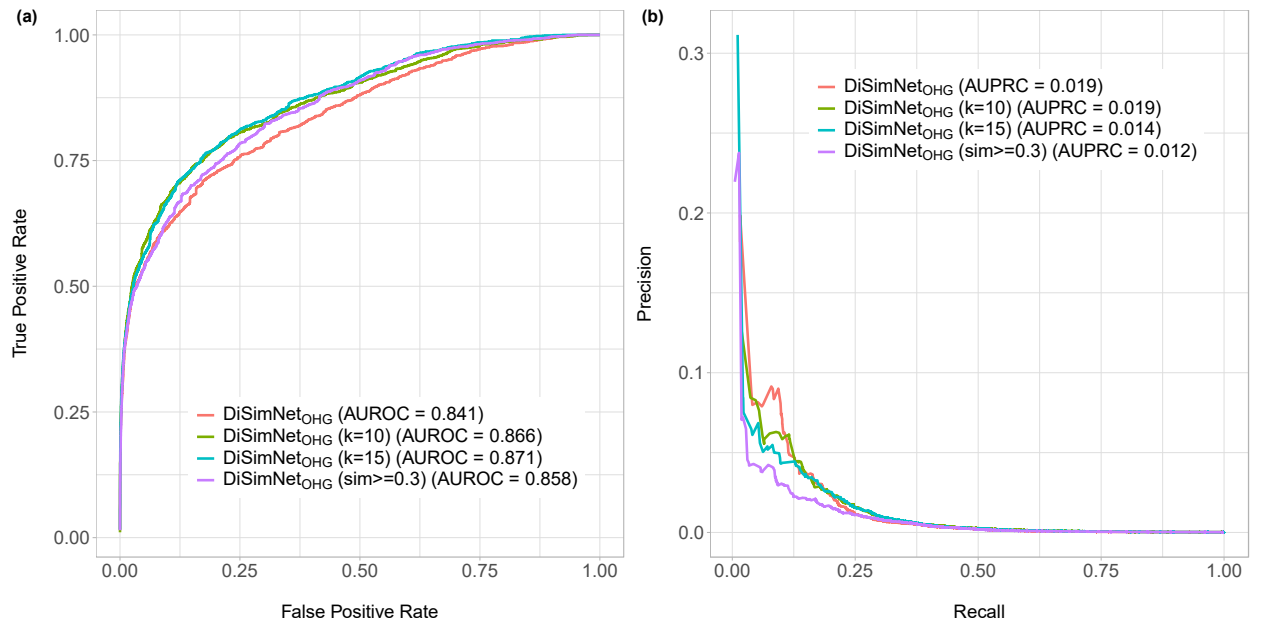
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**Keywords:** Drug Repositioning; Multi-Source Disease Similarity Networks; Disease Multiplex Networks; Multiplex-Heterogeneous Networks; Random Walk with Restart (RWR)

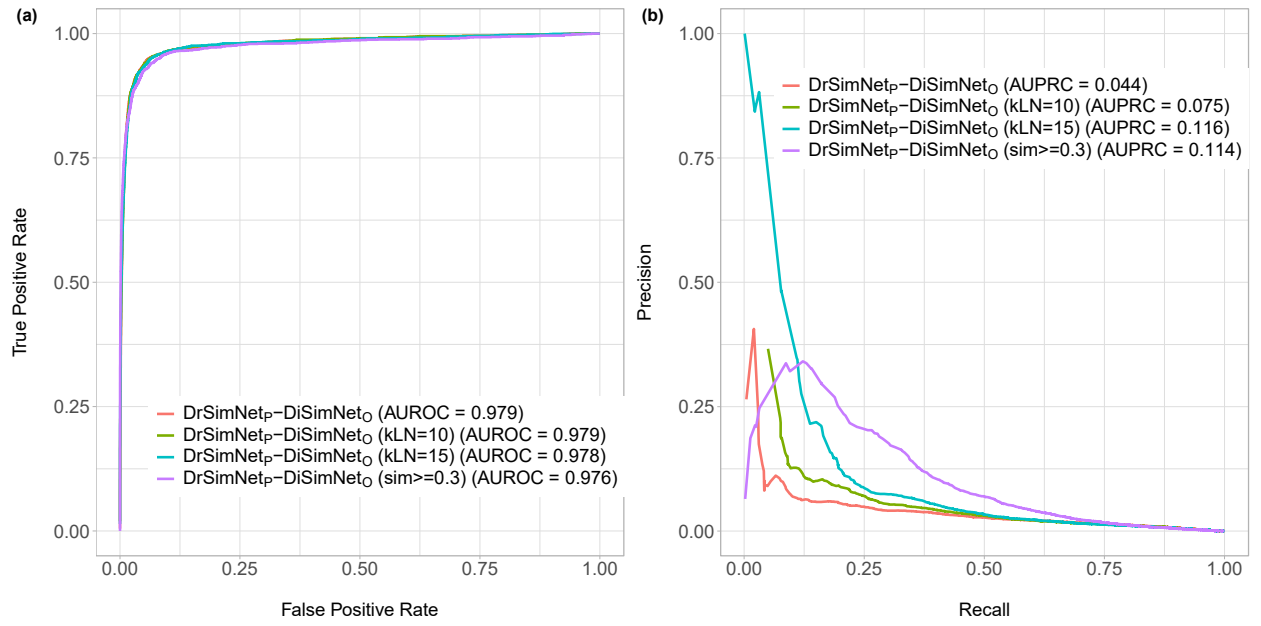
## Supplemenatry Figures



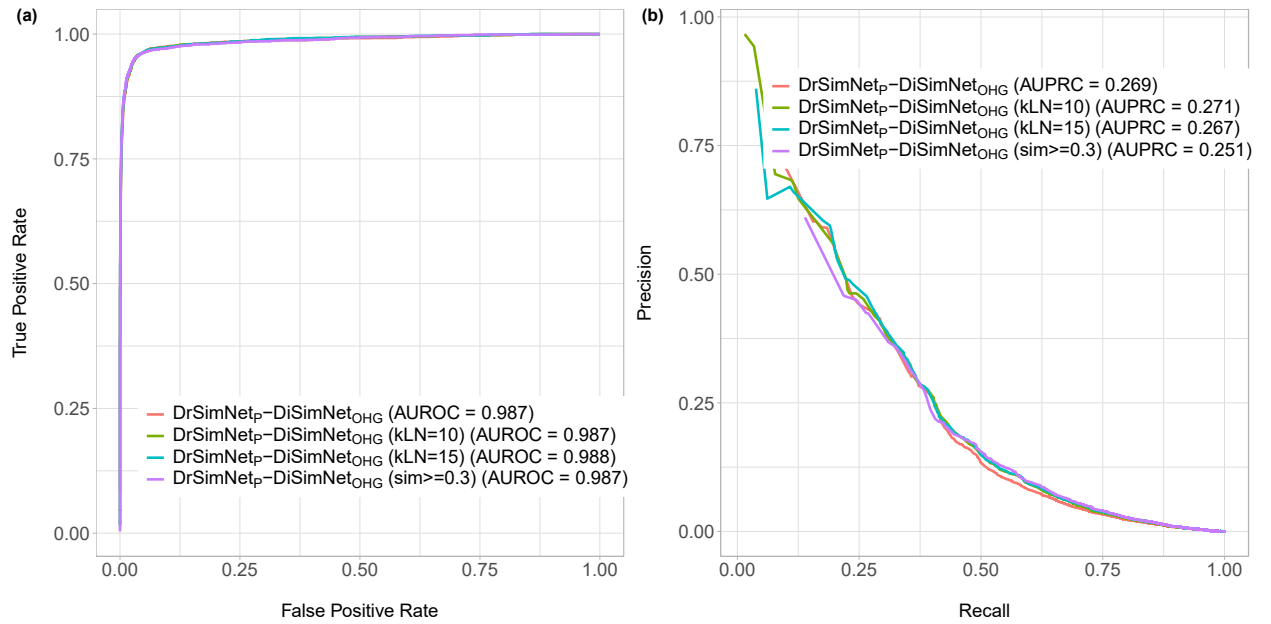
**Figure S1.** Performance comparison of DiSimNet<sub>O</sub> variants with different neighbor selection criteria (kLN = 5, 10, 15, sim $\geq$ 0.3) for monoplex disease similarity networks. **(a)** AUROC curves. **(b)** AUPRC curves.



**Figure S2.** Performance comparison of DiSimNet<sub>OHG</sub> variants with different DiSimNet<sub>O</sub> neighbor selection criteria (kLN = 5, 10, 15, sim $\geq$ 0.3) for multiplex disease similarity networks. **(a)** AUROC curves. **(b)** AUPRC curves.



**Figure S3.** Performance comparison of heterogeneous networks with DrSimNet<sub>P</sub> and DiSimNet<sub>O</sub> variants (kLN = 5, 10, 15, sim $\geq$ 0.3). **(a)** AUROC curves. **(b)** AUPRC curves.



**Figure S4.** Performance comparison of multiplex-heterogeneous networks with DrSimNet<sub>P</sub> and DiSimNet<sub>OHG</sub> variants (kLN = 5, 10, 15, sim $\geq$ 0.3). **(a)** AUROC curves. **(b)** AUPRC curves.