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NeDRex-Web: An Interactive Web Tool for Drug Repurposing by Exploring Heterogeneous Molecular Networks

Finding new indications for approved drugs is a promising alternative to *de novo* drug development, an often lengthy and costly process. Systems medicine has brought forth several different approaches to tackle this important task. We recently published NeDRex, a network medicine tool for the identification of disease modules and drug repurposing. NeDRex-Web (<https://web.nedrex.net>) brings features of the NeDRex platform to a user-friendly and research oriented web application to explore the large heterogeneous molecular networks. Focusing mainly on drug repurposing, NeDRex-Web implements customizable disease module identification (MI) and drug prioritization (DP) workflows to support users of diverse backgrounds in their research. Users are assisted during every step of their analysis, including: the definition of relevant input sets; the selection from various algorithms for MI or DP; and the prioritization of the results by their statistical significance. The guided connectivity search provides an easy way to identify links between node sets of interest and can be used to create induced networks, e.g. diseasesomes.

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