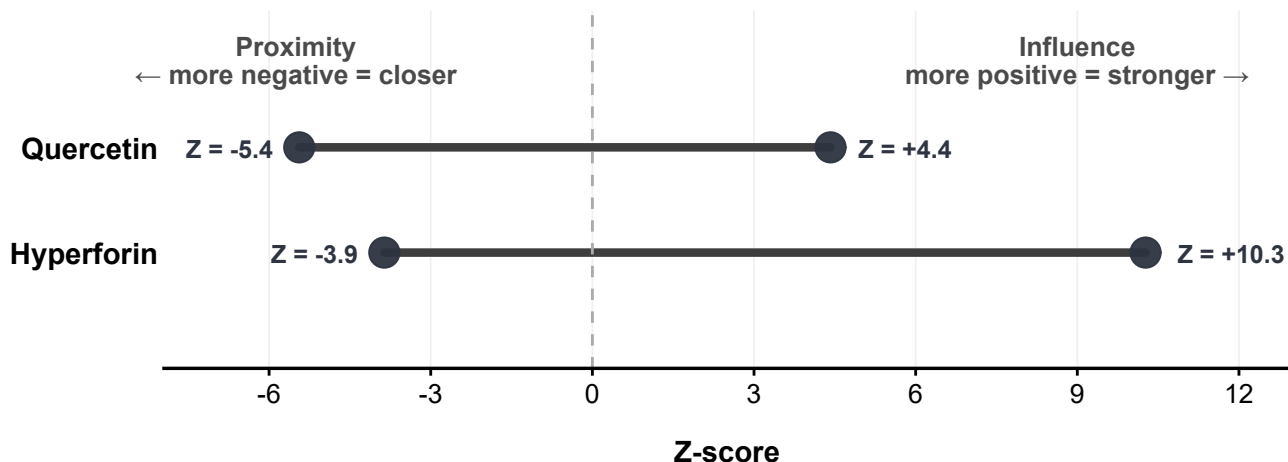**Proximity does not predict influence**

Proximity ranking is threshold-dependent; influence ranking is stable

[CORE INFERENCE] The rank reversal demonstrates that shortest-path proximity does not predict functional influence. Lines connect each compound's proximity Z-score with its influence Z-score (random walk with restart, RWI). Both metrics derived from degree-matched permutation null models (n = 1,000). Data: STRING v12.0 (≥900).