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Identification of critical regulatory genes in cancer signaling network using controllability analysis

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Highlights:

- Controllability analysis of cancer regulatory mechanisms to identify 'driver genes'
- Indispensable backbone driver genes critical for steering the state of the network
- Critical genes are associated to cancer and are targets of antineoplastic drugs
- Driver genes as mediators for driving cancer phenotype into a healthy state
- Insights into cancer mechanisms and means for identification of drug targets