## Open Peer Review on Qeios

## Navitoclax

National Cancer Institute

## Source

National Cancer Institute. <u>Navitoclax</u>. NCI Thesaurus. Code C64776.

An orally active, synthetic small molecule and an antagonist of a subset of the B-cell leukemia 2 (Bcl-2) family of proteins with potential antineoplastic activity. Navitoclax selectively binds to apoptosis suppressor proteins Bcl-2, Bcl-XL, and Bcl-w, which are frequently overexpressed in a wide variety of cancers, including those of the lymph, breast, lung, prostate, and colon, and are linked to tumor drug resistance. Inhibition of these apoptosis suppressors prevents their binding to the apoptotic effectors Bax and Bak proteins, thereby triggering apoptotic processes in cells overexpressing Bcl-2, Bcl-XL, and Bcl-w. This eventually reduces tumor cell proliferation.