The selective effect of NSC-631570 on women reproductive cancers

First indications on the selective effect of NSC-631570 on the cancer cells were provided in an early study when different oxygen consumption by normal liver cells and Ehrlich's tumor ascitic cells after the incubation with NSC-631570 was revealed. In the tests on the Jurkat lymphoma model, NSC-631570 has been proven to be a strong apoptosis inductor. Profound research showed NSC-631570 brought about the depolarisation of mitochondrial membranes and consequently the activation of caspases. NSC-631570 induced apoptosis in a panel of cancer cell lines (ovarial and cervical cancer HeLa, HeKB, HeKS32, HeBcl3, HeNFR and HeIKK, human colon cancer SW480, human renal carcinoma HEK293, human osteosarcoma MG-63) by activating the caspases of the intrinsic cell death pathway. Interestingly, non-transformed fibroblasts (hTERT) cell line was insensitive to the drug. In the tests on human ovarian and cervix carcinoma cells HeLa, squamous carcinoma cells WHCO5, normal kidney cell line Graham 293, and transformed kidney cell line Vero from African green monkey, NSC-631570 inhibited the tubulin polymerization and caused a metaphase block in cancer cells which is characterized by abnormal chromosomal distribution, and results in the formation of micronuclei and apoptosis.

Biography

Wassil Nowicky completed his Diplom-Ingenieur degree at Technical University of Lviv, Ukraine and Doctor of Technology degree. He is the Director of Nowicky Pharma and President of the Ukrainian Anti-Cancer Institute, Austria. He is Inventor of anticancer preparation on basis of celandine alkaloids “NSC-631570”; author of over 300 scientific articles dedicated to cancer research. He is the member of the New York Academy of Sciences, member of the European Union for Applied Immunology and American Association for scientific progress.

Wassil Nowicky
Ukrainian Anti-Cancer Institute, Austria

Notes: