Newly developing drugs affecting apoptosis

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Apoptosis is the process of programmed cell death that occurs both physiologically as well as pathologically. It is a vital component in development of the embryo, hormone dependent atrophy, elimination of potentially harmful self-reactive lymphocytes, normal cell turnover and elimination of irreparably damaged cells. Inappropriate apoptosis (either too little or too much) is one of the causative factor in many human diseases. Defective apoptosis is involved in many cancers and autoimmune diseases. On the other hand, increased apoptosis is involved in neurodegenerative diseases, ischemic damage and death of virus infected cells. Currently, so much research is going on in the field of drugs affecting apoptosis so as to develop better drugs for above mentioned conditions. The goal of this poster is to provide the general overview on recent advances in this field. Some of the drugs included in this poster are:

- Oblimersen: It is a Bcl-2 antisense oligonucleotide. It reduces bcl-2 expression and sensitises cells to chemotherapy-induced apoptosis. It has potential to be used in chronic lymphocytic leukaemia (CLL), Melanoma and small cell and non-small cell lung cancer.
- IDN-6556: It is a potent inhibitor of caspases. It is being studied to see if it can improve liver function in cirrhosis with end stage liver disease.
- INO-1001: It is poly(ADP-ribose) polymerase (PARP) inhibitor. It has shown hemodynamic improvement in porcine myocardial ischemia and reperfusion.

Biography
Vipul M Navadiya has completed his MBBS from Veer Narmad South Gujrat University, India. Currently, he is second year Resident in Department of Pharmacology, Government Medical College, Surat, India.

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