## Open Peer Review on Qeios

## C-VISA BikDD:Liposome

National Cancer Institute

## Source

National Cancer Institute. <u>C-VISA BikDD:Liposome</u>. NCI Thesaurus. Code C88264.

A formulation composed of DOT AP:cholesterol liposome nanoparticles complexed with the plasmid C-VISA BiKDD, with potential antineoplastic activity. C-VISA BikDD: liposome consists of a pancreatic-cancer-specific expression vector VISA (VP16-GAL4-WPRE integrated systemic amplifier) and a pancreatic-cancer-specific promoter CCKAR (cholecystokinin type A receptor) (CCKAR-VISA or C-VISA) which drives expression of the gene BikDD, a mutant form of the potent proapoptotic gene Bik (Bcl-2 interacting killer). Upon administration and transduction into pancreatic tumor cells, expression of BikDD by C-VISA BikDD:liposome may induce pancreatic tumor cell apoptosis and suppress pancreatic tumor cell proliferation. BikDD binds with greater affinity to anti-apoptotic proteins bcl-2, bcl-xl, bcl-w and Mcl-1 and is more potent than wild-type Bik. DOT AP:cholesterol liposome is composed of cationic lipid dioleoyl-trimethylammonium propane (DOT AP) and cholesterol at molar ratio of 1:1.