Open Peer Review on Qeios

Deuteporfin

National Cancer Institute

Source

National Cancer Institute. <u>Deuteporfin</u>. NCI Thesaurus. Code C132685.

A photosensitizing agent composed of four sub-porphyrin derivatives, methoxyethyhydroxyethyl-dipropionic, di-methoxyethyl-dipropionic, hydroxyethy-vinyl-dipropionic and methoxyethy-vinyl-dipropionic, with potential photosensitizing activity upon photodynamic therapy (PDT) and potential diagnostic imaging activity. Upon intravenous administration, deuteporfin preferentially targets and accumulates in cancer cells, especially those in the lymphatic system. Following photoactivation with an appropriate wavelength, deuteporfin generates highly cytotoxic singlet oxygen species, and induces oxidative stress that results in the damage and death of cancer cells. In addition, deuteporfin could be used as a tracer in near-infrared (NIR) fluorescence lymph node mapping.