

Open Peer Review on Qeios

Nafazatrom

National Cancer Institute

Source

National Cancer Institute. Nafazatrom. NCI Thesaurus. Code C1010.

A pyrazolinone derivative with potential antimetastatic activities. Nafazatrom, originally developed as an antithrombotic agent, inhibits the key prostaglandin catabolic enzyme, 15-hydroxyprostaglandin dehydrogenase, which prolongs the biological half-life of prostacyclin (prostaglandin I2; PGI2) and prevents intravascular coagulation. This agent also serves as a reducing cofactor with the hydroperoxidase moiety of cyclooxygenase and accelerates the conversion of arachidonic acid into precursors of PGI2. An elevated level of PGI2 prevents aggregation of platelets; subsequently it decreases the formation of tumor cell-platelet aggregates as well as their sequestration in blood vessels, which is an important initiating step in the development of metastasis.

Qeios ID: EHZOLK · https://doi.org/10.32388/EHZOLK