

Highly reactive epoxide chloroethylene oxide generated during the reaction of vinyl chloride on the production of polyvinyl chloride can cause hepatorenal damage and TP53 mutations. These mutations increase the risk of hepatic angiosarcoma.

Thorium Dioxide (Thorotrast)

[Thor with Carbonated-soda](#)

Thorium Dioxide (Thorotrast) can cause KRAS-2 mutation, which contributes to malignancy in the liver.

Anabolic Steroid Use

[Steroid-stairs](#)

Long-term anabolic steroid injection use can lead to hepatic angiosarcoma. Some athletes use these steroids to raise strength and muscle mass.

Radon Exposure

[Exposed to Radiation](#)

Radon exposure can damage the p53 tumor suppressor gene, which is believed to lead to liver carcinogenesis.

Considerations

Poor Prognosis

[Gravestone](#)

Hepatic angiosarcoma has a poor prognosis due to its resistance to chemotherapy and radiotherapy. Data show that median expectation of life is less than 6 months.