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# Arsenic Trioxide Capsule Formulation ORH 2014

National Cancer Institute

## Source

National Cancer Institute. *Arsenic Trioxide Capsule Formulation ORH 2014*. NCI Thesaurus. Code C133720.

An orally bioavailable capsule formulation of the inorganic toxic compound arsenic trioxide (As<sub>2</sub>O<sub>3</sub>), with potential antineoplastic activity. Although the mechanism of action (MoA) of As<sub>2</sub>O<sub>3</sub> is not well understood, upon oral administration of ORH 2014, As<sub>2</sub>O<sub>3</sub> appears to bind to DNA, prevent DNA synthesis, and cause DNA fragmentation, which leads to an induction of apoptosis in proliferating cells, including tumor cells. In addition, As<sub>2</sub>O<sub>3</sub> causes damage to and induces degradation of the promyelocytic leukemia protein/retinoic acid receptor-alpha (PML/RARα) fusion protein, and inhibits the activity of the enzyme thioredoxin reductase.