ANISINA (ATM-3507)

A new class of cytotoxic chemotherapy

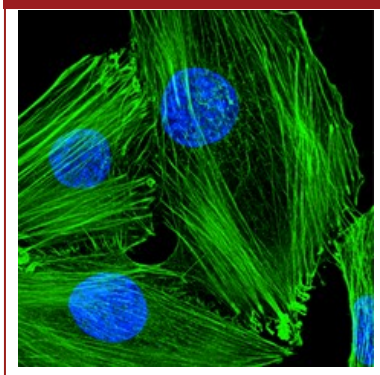
Highly specific destruction of a cancer cell's skeleton

Primary Use of Anisina

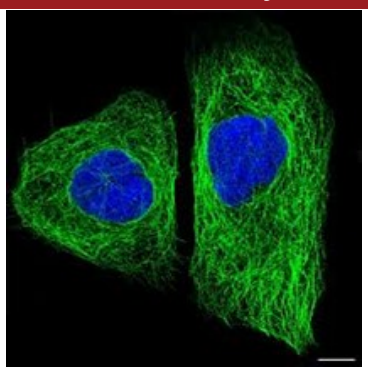
To work in combination with taxanes and vinca alkaloids to provide comprehensive destruction of a cancer cell's cytoskeleton.

* Anti-cancer effect of taxanes and vinca alkaloids = 1
* Anti-cancer effect of Anisina = 1
* Anti-cancer effect of Anisina + taxanes and vinca alkaloids = 100

The Cytoskeleton



Microfilaments



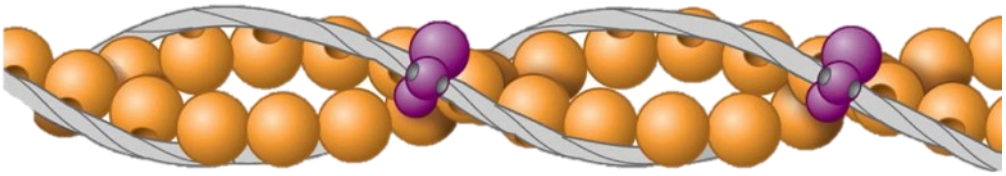
Microtubules

The cytoskeleton serves many functions, a key one being how a cell divides. There are two main components of the cytoskeleton, known as microfilaments and microtubules. Both are needed for cell division.

The most widely-used drugs in chemotherapy for the past 30 years target the microtubules. These are the taxanes (paclitaxel, docetaxel) and the vinca alkaloids (vincristine, vinblastine, vineralbine).

Anisina is the first drug to destroy the microtubules of cancer cells.

Anisina—Selectively targeting cancer cells



Picture of an individual microfilament showing a central chain (brown) of actin protein surrounded by a double chain (grey) of tropomyosin protein.

Anisina targets an isoform of tropomyosin known as Tm5NM1 that is present in the microfilaments of normal cells but not essential for their division. Cancer cells rely on Tm5NM1 for their division. Anisina blocks the ability of Tm5NM1 to join together.

Anisina

Combining with anti-microtubule drugs to provide a level of anti-cancer potency not previously seen.

Being developed for a range of adult and pediatric cancers.