

How does Artesunate Help with Cancer?

Artesunate is a substance derived from the plant *Artemisia annua*. It was initially, and still is used to treat malaria, however, recently it has shown great promise as a cancer therapy. Further, it has been used in combination with some chemotherapies to improve outcomes in advanced cancer patients. When treating cancer patients, it is important to follow a holistic approach and use as many tools as are available to weaken the cancer and strengthen healthy cells. Artesunate is another weapon in the arsenal of natural remedies that can make a significant difference in the fight against cancer.

The mechanism of action for artesunate in the context of cancer therapy is very well defined. Cancer cells tend to absorb iron at high levels and this is thought to accelerate the mutation rate within these cells. Iron reacts with oxygen to form free radicals. This process is accelerated with Artesunate which activates mitochondrial apoptosis, or normal cell death, by iron catalyzed lysosomal reactive oxygen species production. In other words, this substance will use the iron within the cancer cells against them by creating excess oxygen in the cell. Cancer cells and pathogens, unlike our body's healthy cells, lack the antioxidant defense system to protect them from this excess oxygen.

Preliminary data from Bastyr Integrative Oncology Research Center indicates that IV Vitamin C (IVC) in conjunction with IV Artesunate makes a substantial difference in advanced cancers. IV Artesunate is often administered right before high dose IV vitamin C and there is evidence that these therapies work synergistically together. In patients with Stage 4 Breast cancer, after 1 year the group that received no IV Vitamin C and IV Artesunate had a 74% survival rate. Compared to the IV Vitamin C and IV Artesunate group which had a 90% survival rate after 1 year. By year 2 the results were even more significant as the group that did not receive treatment had a 68% survival rate compared to 90% in the treatment group. It is also important to note that no adverse events were associated with this treatment.

These preliminary results strongly suggest that high dose IV Vitamin C and IV artesunate improves survival in stage 4 breast cancer patients. Evidence is growing that the use of this therapy is effective for a wide range of cancers, including; lung cancer, prostate cancer, glioma, melanoma, colon cancer, liver cancer, pancreatic cancer, laryngeal cancer, and cervical cancer. Research has shown that Artesunate can increase quality of life in addition to improving survival rates. Just like any other cancer therapy, it is important that it is used under the supervision of an experienced Naturopathic Physician who focuses in oncology.

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