

# Artemisinin Cancer Protocol



CURT GRAYDON MICHAEL · DIENSTAG, 11. SEPTEMBER 2018 ·



- **Curt Graydon Michael's Artemisinin Cancer Protocol:**

98% of cancer cells destroyed in 16 hours by taking artemisinin (derivative of wormwood) using pure science and not blind hope, voodoo or quackery.

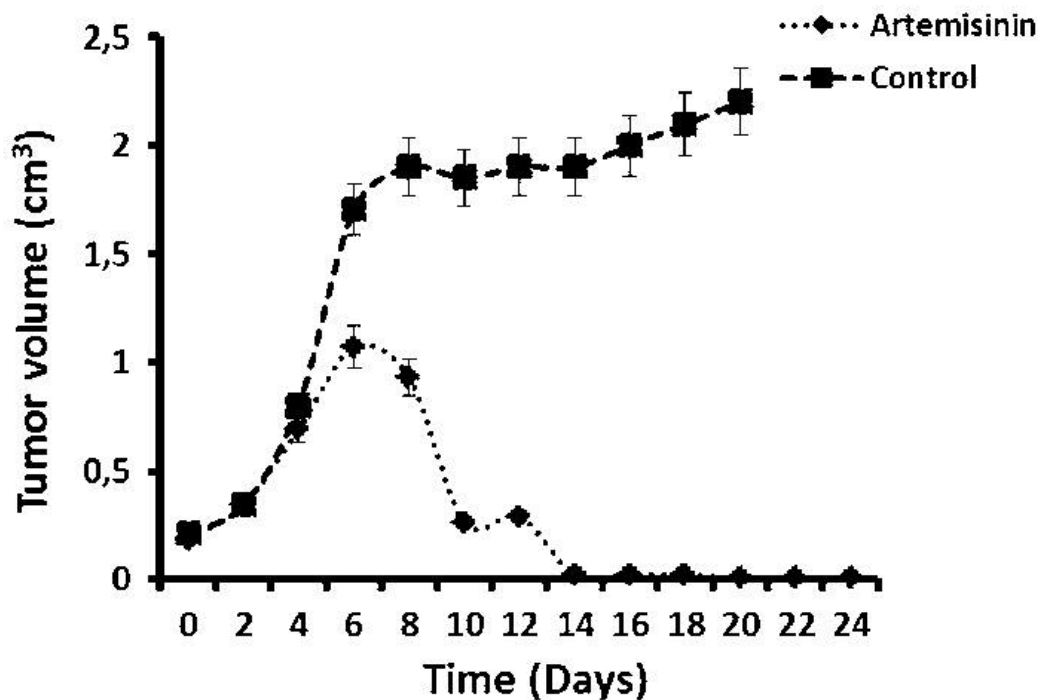
The artemisinin produces two oxygen atoms in the presence of high concentrations of iron (prevalent in cancer cells and viruses) and destroys the cancer cell within 16 hours through a process called ferraptosis. It's the same process that has made artemisinin the number one treatment for malaria worldwide as both cancer cells and viruses sequester iron at concentrations that are thousands of times greater than normal cells.

Artemisinin is activated by haem, an animal based iron containing compound. Recent research shows that cancer cells have higher haem levels as compared to the non-cancer cells, in addition to an elevated haem biosynthesis pathway. Artemisinin has an endoperoxide moiety that forms powerful free radicals in the presence of high levels of iron destroying cancer cell membranes. And when activated by haem in cancer cells, artemisinin attacks more than 300 proteins, several of which are essential for the survival of cancer cells, causing almost complete apoptosis.

The only side effects of taking artemisinin are usually extreme fatigue and possible nausea caused by the cancer cell die off symptoms. As well, sometimes artemisinin can cause an increase in urine production called diuresis which is a condition in which the kidneys filter too much bodily fluid and thereby produce an excess of urine. And, artemisinin can also cause natriuresis which is the process of sodium excretion in the urine through the action of the kidneys meaning that one must monitor urine colour while on the protocol. Dark urine will be a sign of either or both kidney stress or dehydration. The fix is easy as all you have to do is drink more water and take in more sodium or temporarily stop the protocol until urine colour returns to normal

(<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3153718/>).

The graph shown below is a typical example of the efficacy of artemisinin. It highlights the complete destruction of a one cubic centimetre tumour in as little as 14 days.



[https://www.researchgate.net/figure/Effect-of-artemisinin-on-the-evolution-of-tumor-volume-in-mice\\_fig2\\_262910835](https://www.researchgate.net/figure/Effect-of-artemisinin-on-the-evolution-of-tumor-volume-in-mice_fig2_262910835)

The science, studies, protocol, a short 6 minute video and where to source supplies are all listed below.

The first half of this document is supplementary but contains important information on the nature of the herb artemisinin. And please note that I get emails from people using artemisinin claiming great successes from stage four brain cancers to stage four prostate cancers to stage four metastasized breast cancers but I also get emails about complete abject failure.

If money is not an object and travel is possible, then please stop reading and google "artemisinin IV clinics" as intravenous delivery is always the preferred method of receiving any protocol or drug. Canadians have a few artemisinin clinics scattered throughout the country. Most American states forbid doing anything other than radiation, chemotherapy or surgery for cancer and therefore Americans would generally have to travel out of the country for those services. For those without artemisinin IV as an option, please keep reading.

**The basis of the artemisinin protocol is to ingest 1,000 mg of artemisinin daily.**

But, there are four key aspects to the success of this and any health related protocol:

1. **solubility,**

2. **delivery,**
3. **bioenhancement,**
4. **targeting.**

**Artemisinin is poorly soluble.** In fact, the better way to say it is that artemisinin is **not** soluble at all in water and yet most people take it with water as they would an aspirin.

**Since artemisinin is not water soluble, it is also not blood soluble and will be eliminated by the body.** However, artemisinin is slightly oil soluble, but barely. Meaning that you will need a form of artemisinin that is either IV (intravenous artesunate) or IM (intramuscular artesunate), or a liposomal form of artemisinin or you will need either DMSO or vodka as the solvent for the artemisinin to be effective.

Reading this for the first time might be confusing and it might sound complicated but it will become clearer in subsequent reads.

As well, delivery is a key issue for any medical or alternative protocol since the most effective forms of delivery bypass the liver and prevent the CYP enzymes in either the liver or the gastrointestinal system from metabolizing and eliminating either the medications or the supplements. The most **effective** forms of delivery are IV, IM, sublingual, nebulizer, suppositories and finally transdermal while the most **ineffective** method of delivery is always oral.

And since delivery is a key issue, I always suggest using more than one form of delivery for artemisinin meaning combining liposomal artemisinin with oral capsules or artesunate with oral capsules etc.

**If you have cancer, then use more than one form of artemisinin.**

**Artemisinin has low bioavailable** and artemisinin initiates its own metabolism of elimination from the body by using the intestinal tract and liver enzyme CYP 3A4, leading to a very quick half lifetime of less than 2 hours in the blood. So, if you take artemisinin with water as most people do, it will not be dissolved and it will be removed by the body within 2 to 4 hours meaning that it will not reach any cancerous zones in the body and therefore be almost **100% ineffective**.

The quick half life is also why I always suggest taking any form of artemisinin with bioperine (ground black pepper) and grapefruit juice as both will prevent CYP enzymes in the liver from metabolizing the artemisinin and thereby both piperine and grapefruit juice will bioenhance the effectiveness of the artemisinin.

**And in my opinion, artemisinin (regardless of the version) done without iron is less effective since artemisinin needs free (unbound) heme (animal) iron to be activated** and yet most people still take artemisinin without taking iron. The decision to take your artemisinin with or without iron I leave to you. The science is given below.

"Further, to assess the role of intracellular iron in selective neoplastic cell toxicity, studies have shown that an increase in intracellular iron concentration can increase artemisinin cytotoxicity 100-fold if cancer cells are loaded with iron or iron-saturated holotransferrin [23]. Cancer cells significantly increase their iron requirements, as well as their iron metabolism rate and expression of transferrin receptors when compared with normal healthy cells, making them more susceptible to artemisinin cytotoxicity [7,24,25,26,27].

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5872176/>

**And finally, artemisinin is not wormwood even though artemisinin comes from wormwood (artemisia annua).** You can take artemisia annua powder or infuse the artemisia plant (with some baking soda to enhance artemisinin extraction) as both have been shown to be just as effective as their derivative artemisinin. However, it should be noted that the high efficacy of artemisia annua is based on the fact that artemisinin is poorly soluble. There are synergies with the complete plant and the artemisinin in the plant. But, it's difficult to know how much artemisinin one is taking if you are drinking infusions made from the whole plant leaves or powder. My suggestion would be to take both, artemisinin and infusions made from artemisia annua since both would work synergistically. However, drinking infusions should be pulsed (3 days on and 4 days off). The leaves can be purchased on Amazon.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5133043/>

"In healthy mice, artemisinin serum levels were 40-fold greater in dried leaf fed mice than those fed with pure artemisinin. Human trial data showed that when delivered as dried leaves, 40-fold less artemisinin was required to obtain a therapeutic response compared to pure artemisinin."

<https://www.wjgnet.com/2220-3192/full/v3/i4/39.htm>



For teas, any wormwood or artemisia powder can be purchased from Amazon. You will need at least one pound (500 grams).

It is also recommended to add 1-3 capsules of sodium butyrate to any artemisinin protocol (IV, IM, liposomal, capsule) as the sodium butyrate has been shown to significantly enhance the effectiveness of the artemisinin. Those with heart conditions should not take more than once capsule of sodium butyrate. Sodium butyrate can be purchased from Amazon.

- [https://www.amazon.com/BodyBio-Sodium-Butyrate-Vegetarian-Capsules/dp/B0058A9SF0/ref=sr\\_1\\_5?dchild=1&keywords=sodium+butyrate&qid=1600923710&sr=8-5](https://www.amazon.com/BodyBio-Sodium-Butyrate-Vegetarian-Capsules/dp/B0058A9SF0/ref=sr_1_5?dchild=1&keywords=sodium+butyrate&qid=1600923710&sr=8-5)

#### **Here are the findings:**

- The combination of 20 microM DHA and 1 mM sodium butyrate killed all (100%) Molt-4 cells at the 24-hour time-point and did not significantly affect lymphocytes. DHA in combination with butyric acid acts synergistically at low doses. The combination may provide a less toxic, inexpensive and effective cancer chemotherapy.



Sodium Butyrate can be purchased directly off Amazon  
(<https://www.amazon.com/BodyBio-Sodium-Butyrate-Vegetarian-Capsules/dp/B0058A9SF0>)

**The actual step by step artemisinin protocol is detailed halfway through this document.**

Please remember that this protocol is based on published and validated science and proven biochemistry. The success of this artemisinin protocol is absolutely dependant on the execution of the methodology described herein and as validated in most of the recent peer reviewed medical studies on artemisinin.

Please, take the 20 minutes and read this entire protocol including the comments section. If all of this is already too much for you, then watch the 6 minute video linked below.

- **Supportive Video link**

[https://www.youtube.com/watch?v=\\_Or8xLOGBu8](https://www.youtube.com/watch?v=_Or8xLOGBu8)

Note that this protocol can be used as a prophylactic (preventative) treatment and I always encourage spouses and partners to do it alongside their inflicted loved ones as support. The safety profile is remarkable (no death registered from the use of artemisinin in any medical papers worldwide whatsoever). Millions take artemisinin every day in the treatment of malaria as sanctioned by the World Health Organization. Artemisinin's efficacy in malaria treatment is similar to its efficacy in cancer treatment for identical reasons; viruses and cancer cells sequester iron by hundreds of times greater than normal cells.

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- **Share Link:**

<https://www.facebook.com/groups/1416312548513386/>

• **Feedback:**

**And if you do follow this protocol, please give feedback in the comment section as others depend on it.**

## **Artemisinin Cancer Protocol Introduction:**

The following has been used successfully, with my suggestion, in 32 prostate cancer cases, 21 breast cancer cases, 1 thyroid cancer case and 2 leukemia case (and 5 dogs all with metastasized cancer growths). The numbers are still growing and by now, I have stopped counting the number of people that it's helped. When I first started this site, the result was always a 100% remission of the cancer and in each case it was achieved in less than 8 weeks. At no point was it suggested that the participants (or pets) withdraw or stop their normal medical treatment as the protocol is meant to be used with normally prescribed treatments as there are no contraindications (other than combining it with radiation therapy and with vitamin E). Note that artemisinin has been shown to enhance chemotherapy treatments.

**Artemisinin should not be combined with radiation therapy** because radiation treatments release iron stored in cancer cells to surrounding tissue. For best results, those inflicted are encouraged to wait until at least two months after their last radiation treatment before beginning any artemisinin protocol.

**However, artemisinin is compatible with chemotherapy.** In a study published last year, German researcher T. Efferth, Ph.D., tested artemisinin in combination with 22 chemotherapy drugs and found that artemisinin enhanced the drugs' effectiveness. When artemisinin is used in combination with chemotherapy, it should be taken several hours after the chemotherapy treatment ends. "It is difficult for artemisinin to achieve the antitumor goal of clinical therapy alone. Combination of artemisinin and its derivatives with traditional chemotherapeutic drugs can significantly enhance the anti-cancer effect of other chemotherapy drugs without any obvious adverse effects."  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6102173/>

• **Step by Step Protocol:**

**You will need the following for one 15 day protocol (I would suggest that you double any purchase order and repeat the protocol 3 weeks later as 3 weeks is the suggested washout period after doing any artemisinin protocol):**

**1 32 oz bottle of liposomal Artemisinin from Healthy Drops**  
(<https://www.healthydrops.net/product/liposomal-artemisinin-annua>)

If liposomal is unavailable...

**1 Bottle of Artemisinin (90 capsules of 100mg)** - 3 bottles if using Hepalin's Artemix

**1 Bottle of Iron** (preferably animal based iron with liver as only animal based irons are haem based - Feosol is best in my opinion as it is both haem and non haem iron. If necessary, Floradix or Hubener (liquid iron supplement that are vegetable based non haem) still will work, albeit not as well. And yes, you can omit the iron but the evidence for the use of iron is so strong that omitting it will almost nullify the efficacy of the artemisinin. The science of it is highlighted below. Your bottle will need to total approximately 400 mg of iron (9 days at 30mg).

**2 Bottles of Piperine** (Bioperine brand) (ground pepper extract) - 10mg capsules used to bioenhance the artemisinin.

**1 Bottle of vitamin C** chewables (500 mg) to be taken with the iron to increase iron bioavailability. More vitamin C than 500 mg won't help since the body can only process 500 mg within a few hours.

**Grapefruit Juice** also to bioenhance the artemisinin by 2 fold as shown in recent studies.

**1 Bottle of any oil** (fish, hemp, coconut, olive, etc) as artemisinin is slightly oil soluble. This only applies if not using liposomal artemisinin and if not using DMSO or alcohol. It is the least preferred method although it's still better than taking the artemisinin with water.

And optional but strongly suggested is using DMSO with capsuled artemisinin.

**DMSO** is an ideal dissolving agent for artemisinin capsules as artemisinin is not soluble in water and barely soluble in oil. However, it is 100% soluble in DMSO and alcohol (vodka). Again, best is to use liposomal artemisinin from a source like Healthy Drops and then you don't need the DMSO or the alcohol as the liposomal version is highly bioavailable.

**DMSO grapefruit mix is my preferred method if taking capsules:**

I always suggest taking the 500 mg of artemisinin capsules with 20ml of DMSO mixed with 200 ml of grapefruit juice as it guarantees 100% solubility, complete intracellular delivery, enhanced bioavailability and you don't get intoxicated. To me, DMSO is the perfect delivery solution if liposomal artemisinin is unavailable.



You only need 20 ml of DMSO to make the 500 mg of artemisinin soluble. You will taste the extreme bitterness of the DMSO if you mix it with grapefruit juice but at least it's tolerable. **And note**, since solubility and delivery are the keys to execution of any protocol, **I would take any and all capsule versions of this protocol** (artemisinin capsules, artemix, etc.) with the DMSO grapefruit mix. Omit the grapefruit juice and replace with any other juice if taking medicinals as the grapefruit juice will bioenhance over 50% of all medicinals currently on the market for the greater part of the day (200 ml of grapefruit juice will bioenhance most supplements and medicinals for approximately 12 hours).

- If using oil instead of DMSO (not recommended but it's better than using water), the type of oil is irrelevant. Drink only enough oil to swallow the 5 artemisinin capsules. More may give you the runs.
- The iron is important and nowadays, iron supplements often come with added vitamin C for better absorption. Again, try to use a haem based product (animal - usually liver).
- As for artemisinin, I always suggest liposomal artemisinin first and then Artemix when using capsules as they are more bioavailable and buy direct from Hepalin (<https://www.hepalin.com/artemix.htm>). The Artemix capsules are a mix of Artesunate 50mg, Artemisinin 50mg, and Artemether 40mg). Note that there are only 30 capsules per bottle so you will need three bottles for one session of the protocol.

- Why Artemix? Because Artemix contains three artemisia annua components: artesunate, artemisinin and artemether. The artesunate is water soluble. The artemether is oil soluble, making absorption and bioavailability slightly better and easier. But, the artemisinin is both water and oil insoluble.
- Note that all three Artemix components, Artesunate 50mg, Artemisinin 50mg, and Artemether 40mg, are again, all 100% soluble in alcohol and DMSO.
- And again, grapefruit juice increases the bioavailability of artemether more than 2 fold so chase your Artemix with grapefruit juice (unless taking other meds).



<https://www.hepalin.com/artemix.htm>

- **As said previously, my preference is always liquid liposomal artemisinin from Healthy Drops**

(<https://www.healthydrops.net/product/liposomal-artemisinin-annua>). The liposomal version is highly bioavailable and is easily absorbed and contains 200 mg of artemisinin per teaspoon. Again, liposomal artemisinin is more bioavailable than regular artemisinin capsules.



<https://www.healthydrops.net/product/liposomal-artemisinin-annua>

- For liposomal artemisinin, 1,000 mg per day is still the suggested dose (without no days off for three weeks straight).
- Liposomal artemisinin does NOT have to be pulsed as the clearance method from the body is different than capsules. Capsule form (powder) is rapidly cleared by the liver by CYP enzymes whereas liposomal circulation is determined by the rate and extent of both drug release and uptake of liposomes by cells of the mononuclear phagocyte system (MPS). The **mononuclear phagocyte system** (MPS) has been defined as a family of cells comprising bone marrow progenitors, blood monocytes and tissue macrophages.
- However, the liposomal artemisinin still needs to be activated and that happens with haem (heme) iron.
- The liposomal protocol is different than the capsule artemisinin protocol given that liposomal artemisinin does not need to be pulsed. My recommendation is to do three weeks on followed by three weeks off as a washout period and then repeat.
- The amount to take with respect to liposomal can be less but most studies still use approximately 1,000 mg per day and liposomal is safer on the liver which is where most artemisinin stress occurs.
- Most artemisinin protocols call for twice daily administrations of 500 mg of artemisinin regardless of the form (liposomal or capsule). Studies have shown that splitting dosages increases absorption. However, since it's not always practical for those inflicted to split their dosages, some take one daily dose of 1,000 mg all at once.
- "Investigation on mice showed that the liposomal formulations blood-circulation time was prolonged more than the free drug. **The half-life of artemisinin in the liposomal formulation was also improved by more than 5-fold.**" Free artemisinin was rapidly cleared from plasma and hardly detected 1 hour after administration. Conversely, both liposomal

formulations showed much longer blood-circulation time than free artemisinin; artemisinin was still detectable after 3 and 24 hours of administration, respectively, for conventional and PEGylated liposomes. AUC(0-24 h) values were increased by approximately 6 times in both of the liposomal formulations, in comparison with free artemisinin. A strong effect of formulation on the half-life of artemisinin was enhanced by more than 5-fold by the incorporation of PEG into liposomes. <https://www.mdpi.com> › pdf

- “Conversely, both liposomal formulations showed much longer blood-circulation time than free artemisinin; artemisinin was still detectable after 3 and 24 hours of administration, respectively, for conventional and PEGylated liposomes. AUC(0-24 h) values were increased by approximately 6 times in both of the liposomal formulations, in comparison with free artemisinin. A strong effect of formulation on the half-life of artemisinin was enhanced by more than 5-fold by the incorporation of PEG into liposomes.”  
<https://www.ncbi.nlm.nih.gov/pubmed/22142592>
- And yes, I would still chase the liposomal version with grapefruit juice and some ground black pepper since I like to take the liver enzyme CYP2B6 out of the equation with respect to any potential internal processing of the artemisinin.



Some people can't get liposomal artemisinin or DMSO or heme based iron, so here's the minimum you would need to get started.

### **Does iron have to be taken and why?**

The short and quick answer is “yes, iron should be taken before taking artemisinin” as it increases the cancer kill percentage by a factor of 3 (from below 30% to above 90%). The amount of iron that is recommended is not huge as it's only 20 - 30 mg and taken only on the nights before taking artemisinin. It's less than two days of the RDA daily recommended allowance and it's only for nine days if doing capsules.

As well, iron supplements are notoriously poor for being absorbed by the body which is fine since what we need is free unbound iron to activate the artemisinin. In fact, it is estimated that only 10% of all iron supplements are actually absorbed by the body (<https://www.clinicalcorrelations.org/2015/03/26/iron-deficiency-anemia-a-guide-to-oral-iron-supplements/>)

Understand that this protocol is not trying to increase bound iron in the body. The purpose of the iron is to activate the artemisinin.

And no, having higher ferritin levels than normal does not make you a higher cancer risk (other than liver cancers). In fact anemia is a greater cancer risk than hemochromatosis (too much iron in the blood). “The established biomarkers of **iron** status were not associated with **increased cancer risk**. By contrast, higher serum **ferritin** was related to lower **risks of breast cancer** and **cancer** mortality. The findings suggest that higher **iron** load does not constitute a **cancer risk** factor in the general population.”

And...

“We showed that mice fed an iron-deficient diet had significantly higher tumor volumes and lung metastasis compared to those fed normal iron diets. Furthermore, we found that mild iron deficiency was significantly associated with lymph node invasion in young BC patients ( $p < 0.002$ ).  
<https://bmccancer.biomedcentral.com/articles/10.1186/1471-2407-13-307>

**Can you omit the iron?** Yes, but then you also nullify the efficacy of the artemisinin.

The reason...

The short-lived **artemisinin**-generated radical species have been linked to its anti-parasitic and anti-**cancer** activities. The anti-**cancer** activity of **artemisinin** derivatives can significantly increase when iron complexes are added in the cell culture medium.  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6263261/#:~:text=The%20short%2Dlived%20artemisinin%2Dgenerated,medium%20%5B3%2C66%5D>.

**Conclusion:** Pathologic studies showed that the cytotoxic effects of artemisinin were dose dependent **and the presence of iron enhanced the artemisinin's anticancer potency**.

[https://www.researchgate.net/publication/305176309\\_Effects\\_of\\_co-administration\\_of\\_Artemisinin\\_and\\_iron\\_on\\_histopathological\\_alterations\\_of\\_AG\\_S\\_gastric\\_adenocarcinoma\\_cell\\_line](https://www.researchgate.net/publication/305176309_Effects_of_co-administration_of_Artemisinin_and_iron_on_histopathological_alterations_of_AG_S_gastric_adenocarcinoma_cell_line)

“Work by 19 other research groups in 11 countries (summarized in reference 4) has corroborated the importance of heme (iron) in the activation of artemisinin and its derivatives. ***The results from this paper are consistent with the current hypothesis that heme is only the activator of artemisinin, not its target.***” (<https://www.ncbi.nlm.nih.gov/pubmed/16185154>)

The original study on artemisinin and cancer done in 2004 by [Narendra P Singh 1](#), [Henry C Lai](#) actually used holotransferrin and proved then that the addition of iron caused significant greater apoptosis “Results: DHA treatment significantly decreased cell counts and increased the proportion of apoptosis in cancer cells compared to controls ( $\chi^2=4.5$ ,  $df=1$ ,  $p < 0.035$ ). Addition of holotransferrin

significantly further decreased cell counts ( $\chi^2=4.5$ ,  $df=1$ ,  $p<0.035$ ) and increased apoptosis ( $\chi^2=4.5$ ,  $df=1$ ,  $p<0.035$ )."

<https://pubmed.ncbi.nlm.nih.gov/15330172/>

Also...

"We analyzed the role of ferrous iron in the cytotoxicity of artemisinin toward tumor cells. ***Iron(II)-glycine sulfate (Ferrosanol) and transferrin increased the cytotoxicity of free artesunate, artesunate microencapsulated in maltosyl-beta-cyclodextrin, and artemisinin toward CCRF-CEM leukemia and U373 astrocytoma cells 1.5- to 10.3-fold compared with that of artemisinins applied without iron.*** Growth inhibition by artesunate and ferrous iron correlated with induction of apoptosis."

<https://www.ncbi.nlm.nih.gov/pubmed/15336316>

And...

"In conclusion, artemisinin has been studied in several cancer cell lines but there were no data about artemisinin/ iron combination treatment against the AGS cell line according to our search. ***The results of our study showed that the addition of iron enhanced the cytopathic effects of artemisinin against AGS cancer cell lines.***"

<https://pdfs.semanticscholar.org/be85/9d5230290fba9e5c408581362bb15dafb001.pdf>

In addition...**most cancer patients are anemic and anemia increases cancer risk meaning that not only is too much iron bad but also too little iron is bad.**

"According to a study published in March 2015 in the journal PLOS ONE, **people who have iron deficiency anemia have a significantly higher overall cancer risk than those who don't**, and the risk of pancreatic, kidney, liver, and bladder cancers is significantly elevated even up to five years after iron deficiency" <https://www.everydayhealth.com/.../iron.../cancer/>

"Anemia prevalence varied widely; most studies found that between **30% and 90% of patients with cancer had anemia**. ... Treatment of anemia may have a significant impact on patient survival and QOL. However, a standard definition of anemia is needed, as is research about the effect of anemia on cancer progression." <https://www.ncbi.nlm.nih.gov/m/pubmed/15050883/?fbclid=IwAR1K2SapP0EvoenyTs-s-FLXaQYYh-vW6JvAsBmw9yvThmrvGT-c242I0q8>

"Depending on the tumor type, **between 32% and 49% of patients are anemic** at the time of cancer diagnosis,<sup>2</sup> and approximately 50% of all patients will develop anemia at some point. Anemia in patients with cancer reflects



multiple possible etiologic factors.” <https://www.healio.com/hematology-oncology/news/online/%7B5e9dda46-346e-4ef9-b9bc-dc9aff3f37a9%7D/anemia-a-prevalent-condition-among-patients-with-cancer>

And finally,

**Most of the iron taken in the form of a supplement is not absorbed by the body which is perfect given that artemisinin only requires free heme iron for activation. Since most supplemental iron is not absorbed, it also does not provide a cancer risk.**

“A new study recently published in the medical journal *Blood* reveals that it may be difficult for the body to absorb iron in quantities that are necessary and desirable. This may be due to a small, protein-like molecule with the name of hepcidin. A group of researchers working with Diego Moretti, senior assistant to ETH Professor Michael B. Zimmermann, has now shown how hepcidin inhibits the absorption of iron supplements in the intestine more profoundly than previously thought.

<https://www.sciencedaily.com/releases/2015/11/151106062318.htm>

So...

The iron should be haem based iron (animal) as haem has been shown to activate the artemisinin. Amazon will be your best source for a heme based iron supplement as most local health food stores don't carry the specialized iron and some only carry brands that have a blend as shown below. Blends (haem and non haem) will work. But again, take your iron with vitamin C.



Feosol® Complete with Bifera® is a patented formula that contains two forms of iron: heme and non-heme. Heme iron is animal-based, like the iron in steak. Non-heme iron includes plant-derived iron, like the kind you find in spinach. <https://www.feosol.com/en/about/complete-iron-supplement> <https://www.amazon.com/Feosol-Complete-Bifera-Iron->

**Artemisinin capsules have to be taken in pulse form (3 days on and 4 days off).** If not done in pulse form, the bioavailability is quickly reduced both the liver and the intestinal tract. **I suggest 3 days on and 4 days off** starting Thursday nights since the artemisinin/cancer interaction will make you incredibly tired and it will be difficult to work.

**Liposomal artemisinin does NOT have to be pulsed** as the clearance method from the body is different than capsules. Capsule form (powder) is rapidly cleared by the liver by CYP2B6 enzymes whereas liposomal circulation is determined by the rate and extent of both drug release and uptake of liposomes by cells of the mononuclear phagocyte system (MPS).

**Since liposomal artemisinin does not have to be pulsed (days on and days off) it is advisable to take 1,000 mg of liposomal artemisinin each day in the morning on an empty stomach for three weeks straight. Thereafter, a three week washout period is suggested during which one can switch and do the Fenbendazole protocol or other protocols perhaps using metformin as metformin is one of the few water only soluble anticancer protocols out there.**

**“Fasting” before and after taking artemisinin is suggested** to ensure that there is no iron in the stomach and to ensure that the artemisinin is absorbed properly. “Fasting” need not be longer than 2 to 3 hours depending on the meal. I suggest waiting an hour after ingesting artemisinin before resuming meals. Normal non animal non haem liquids (nothing containing iron) are encouraged during the “fasting period.”

**And before you start, understand that the science is 98% effective in 16 hours.** So, if we fail in our goal it is only because of an improper execution of the protocol. As a result, I always encourage people to think outside of the box with respect to delivery.

### **Delivery variations:**

Cancer needs to be attacked from all angles (literally). Oral is always the first method of attack given that it is the easiest. However, oral has delivery challenges. Use suppositories for rectal and ovarian cancers or to increase bioavailability of the artemisinin. Mold suppositories can be bought from Amazon. I suggest using liposomal artemisinin for the suppositories and freezing them and supplementing any oral dosage with rectal and/or vaginal dosages. And again, please consider artemisinin pastes (salves) mixed with DMSO to be used topically over the cancer. Only DMSO and ethanol/alcohol make artemisinin 100% soluble. But only DMSO will act as a solvent and as an intracellular carrier.



You can use DMSO mixed with almost anything as a topical compress to pull products intracellular. Again, I can't express enough just how important it is to think outside the box as proper and targeted execution is absolutely vital.

**Topical Salves (do not have to be pulsed and can be applied throughout the day):**

The first try at making a salve or topical ointment is always an experiment so I suggest first making small batches in shot glasses. Then, the ratio is dependent on the use. For therapeutic artemisinin, the artemisinin and DMSO are the most important ingredients and as such, they should always be mixed first and they should take priority in ratio since you don't want to waste them. Any form of artemisinin can be mixed with DMSO for topical applications.

And you can experiment with your topical ointments. The base is always DMSO and you can add almost anything to that base. Quite often I use colloidal silver and DMSO in a 50/50 mix. I have also used DMSO and hydrogen peroxide. And I have used DMSO and MSM as well as DMSO and sodium bicarbonate. Herbs such a turmeric can be added as well as any essential oil. In all of these cases, the DMSO is both the solvent and the intracellular carrier.

I find it helpful to soak a cotton pad with the DMSO mixture and place the soaked pad directly on top of the affected area.

I also like using a derma roller, as picture below, to perforate the skin before applying the DMSO mix. In my experience, the difference when using the derma roller is remarkable. They are cheap and available on Amazon or from a local beauty supply shop.

Finally, I suggest using coconut oil or a lotion 30 minutes after applying a DMSO salve as otherwise the skin becomes abrasive and itchy.

Topicals do not have to be pulsed and there is no need to take iron for topicals as you do not want iron overload.



Make the salve using DMSO and artemisinin (or colloidal silver), prep area with the dermal roller, apply cotton pads and soak with mixture and leave on for 15 minutes. Apply lotion or coconut oil thereafter.

### **Solubility:**

**Artemisinin solubility profile:** "Soluble in methanol, ethanol (24 mg/ml) at 25° C, DMF, DMSO (57 mg/ml) at 25° C, acetone, chloroform (25 mg/ml), dichloromethane, and ethyl acetate; **almost insoluble in water.**"

<https://www.scbt.com/p/artemisinin-63968-64-9>

According to the Merck Index, artemisinin is expected to be soluble in most aprotic solvents (solvents that have no hydrogen atoms) and **slightly soluble in oil**. <https://www.sigmaaldrich.com/catalog/product/sigma/361593?lang=en&region=CA>

### **Contraindications:**

**Vitamin E**

**Do not take vitamin E while on the artemisinin protocol** as vitamin e has been shown to inhibit the ferroptosis process (small-molecule lipophilic antioxidants (e.g., ferrostatin-1 and  $\alpha$ -tocopherol) and iron chelators (e.g., deferoxamine) can prevent ferroptotic cell death).

## **MSM**

**I would also not take MSM (Methylsulfonylmethane)** while on the artemisinin protocol as MSM has been shown to bind iron. However, if you are inclined to take MSM, I would do so a couple of hours after taking artemisinin and quite a few hours before ingesting iron. This mostly applies to those taking iron, and less so for those not taking iron, while on the artemisinin protocol.

## **Artemisinin Protocol:**

**You should do 3 separate sessions of 3 days on and 4 days off** (unless doing liposomal as liposomal does not have to be pulsed (no days off are needed and as such it is suggested that 1,000 mg of liposomal artemisinin be taken for three weeks straight each morning on an empty stomach).

**A 3 week washout period is suggested by most studies before repeating any protocol.**

And keep vigilant of urine colour while on any artemisinin protocol. Dark urine will indicate kidney stress which should quickly clear within a day or two of stopping the protocol.

Finally, I can't stress the importance of doing more than one type of artemisinin if you are dealing with cancer. In other words, do liposomals or artesunate (or both) for three weeks and then switch to capsules with DMSO for three weeks (making sure you pulse the DMSO and capsule combinations).



Prep the night before if taking artemisinin capsules. Pull 5 or 10 capsules apart and first soak the artemisinin powder in DMSO with ground pepper added thereafter). Here is an example of using 1,000 mg (10 capsules of artemisinin), 1/4 teaspoon ground black pepper and 45 ml of DMSO. Wrap and in the morning add 200 ml of grapefruit juice and drink. Thereafter, chase with as much grapefruit juice as is needed to get rid of the DMSO taste.

### • Session One:

#### Thursday night (week 1 - session 1):

1) 20 - 30 mg of iron supplement plus 2 x 10 mg of piperine and 1,000 mg of vitamin C to be taken at night with your meal (eat anything you wish as long as you take the iron supplement). The iron is vital regardless of your iron levels so do not miss the iron supplementation, please.

2) No food after 8:00 pm (we are trying to limit any iron from being in the stomach when you take the artemisinin in the morning).

#### Friday morning (week 1 - session 1):

3) 5 x 100 mg of artemisinin at approximately **6:00 am** with hemp oil (or any oil, since the artemisinin is slightly fat soluble) along with 2 x 10mg of piperine and 1-2 capsules of sodium butyrate. Grapefruit juice increase bioavailability of artemether so chase the oil and artemisinin with grapefruit juice. Even better is to open the 5 artemisinin capsules and mix with 20 ml of DMSO and some ground pepper and let sit for 15 minutes and then add the grapefruit juice (no oil needed if using DMSO). But the best option is to use 500 mg of liposomal artemisinin with piperine and grapefruit juice with ground black pepper. You could also use a tea (infused and pressed) made from artemisia annua as a chaser should you wish.

4) Fast between the first round of artemisinin and the second round.

5) 5 x 100 mg of artemisinin at approximately **10:00 am** with hemp oil (or any oil, since the artemisinin is slightly fat soluble) along with 2 x 10mg of piperine and 1-2 capsules of sodium butyrate. Grapefruit juice increase bioavailability of artemether so chase the oil and artemisinin with grapefruit juice. Even better is to open the 5 artemisinin capsules and mix with 20 ml of DMSO and some ground pepper and let sit for 15 minutes and then add the grapefruit juice (no oil needed if using DMSO). But the best option is to use 500 mg of liposomal artemisinin with piperine and grapefruit juice with ground black pepper. You could also use a tea (infused and pressed) made from artemisia annua as a chaser should you wish. Fast until noon.

Eat however and whatever from noon until 8:00 pm.

#### **Friday evening (week 1 - session 1):**

6) Take another 20 - 30 mg of iron supplement plus 2 x 10 mg of piperine and 1,000 mg of vitamin C to be taken at night with your meal (eat anything you wish as long as you take the iron supplement). The iron is vital regardless of your iron levels so do not miss the iron supplementation.

7) No food after 8:00 pm (we are trying to limit any iron from being in the stomach when you take the artemisinin in the morning).

#### **Saturday morning (week 1 - session 1)**

8) 5 x 100 mg of artemisinin at approximately **6:00 am** with hemp oil (or any oil, since the artemisinin is slightly fat soluble) along with 2 x 10mg of piperine and 1-2 capsules of sodium butyrate. Grapefruit juice increase bioavailability of artemether so chase the oil and artemisinin with grapefruit juice. Even better is to open the 5 artemisinin capsules and mix with 20 ml of DMSO and some ground pepper and let sit for 15 minutes and then add the grapefruit juice (no oil needed if using DMSO). But the best option is to use 500 mg of liposomal artemisinin with piperine and grapefruit juice with ground black pepper. You



could also use a tea (infused and pressed) made from *artemisia annua* as a chaser should you wish.

9) Fast between the first round of artemisinin and the second round.

10) 5 x 100 mg of artemisinin at approximately **10:00 am** with hemp oil (or any oil, since the artemisinin is slightly fat soluble) along with 2 x 10mg of piperine and 1-2 capsules of sodium butyrate. Grapefruit juice increase bioavailability of artemether so chase the oil and artemisinin with grapefruit juice. Even better is to open the 5 artemisinin capsules and mix with 20 ml of DMSO and some ground pepper and let sit for 15 minutes and then add the grapefruit juice (no oil needed if using DMSO). But the best option is to use 500 mg of liposomal artemisinin with piperine and grapefruit juice with ground black pepper. You could also use a tea (infused and pressed) made from *artemisia annua* as a chaser should you wish.

Fast until noon.

Eat however and whatever from noon until 8:00 pm.

#### **Saturday evening (week 1 - session 1):**

11) Take another 20 - 30 mg of iron supplement plus 2 x 10 mg of piperine and 1,000 mg of vitamin C to be taken at night with your meal (eat anything you wish as long as you take the iron supplement). The iron is vital regardless of your iron levels so do not miss the iron supplementation.

12) No food after 8:00 pm (we are trying to limit any iron from being in the stomach when you take the artemisinin in the morning).

#### **Sunday morning (week 1 - session 1)**

13) 5 x 100 mg of artemisinin at approximately **6:00 am** with hemp oil (or any oil, since the artemisinin is slightly fat soluble) along with 2 x 10mg of piperine and 1-2 capsules of sodium butyrate. Grapefruit juice increase bioavailability of artemether so chase the oil and artemisinin with grapefruit juice. Even better is to open the 5 artemisinin capsules and mix with 20 ml of DMSO and some ground pepper and let sit for 15 minutes and then add the grapefruit juice (no oil needed if using DMSO). But the best option is to use 500 mg of liposomal artemisinin with piperine and grapefruit juice with ground black pepper. You could also use a tea (infused and pressed) made from *artemisia annua* as a chaser should you wish.

14) Fast between the first round of artemisinin and the second round.

15) 5 x 100 mg of artemisinin at approximately **10:00 am** with hemp oil (or any oil, since the artemisinin is slightly fat soluble) along with 2 x 10mg of piperine and 1-2 capsules of sodium butyrate. Grapefruit juice increase bioavailability of artemether so chase the oil and artemisinin with grapefruit juice. Even better is to open the 5 artemisinin capsules and mix with 20 ml of DMSO and some ground pepper and let sit for 15 minutes and then add the grapefruit juice (no oil needed if using DMSO). But the best option is to use 500 mg of liposomal artemisinin with piperine and grapefruit juice with ground black pepper. You could also use a tea (infused and pressed) made from artemisia annua as a chaser should you wish.

Fast until noon.

- **End of Session One**

You have now completed session one. You have taken a total of 30 artemisinin pills and your bottle is 1/3 empty (as is your iron supplement).

- **Take Monday, Tuesday, Wednesday and Thursday off** (unless doing liposomal since liposomal does not have to be pulsed and should be done daily for three weeks straight).

Take 4 days off of the routine and eat normally and act normally and please **DO NOT** take the iron on your days off.

Again, if using liposomal artemisinin, the suggested protocol is to take twice daily 500 mg of artemisinin on an empty stomach for three weeks on followed by three weeks off. And again, iron is recommended to be taken the night before taking artemisinin. However, given the length of the three week duration, I would suggest that iron is only taken every other day while doing liposomal artemisinin or one week on, one week off and the final week on.

- **Session two (week two)**

**If all has gone well during week one and if urine colour has not turned dark, consider double the dose of the artemisinin.**

**Thursday night (Week 2 - session 2)**

**Repeat session one in it's entirety as printed above.**

By Sunday morning of session two, you will have completed session two and you will have taken a total of 60 artemisinin pills and your bottle will now be 2/3 empty.

- **End of Session Two**
- **Session Three (week three)**

**And again, consider double the dose of the artemisinin if you have not done so in session two.**

**Thursday night (Week 3 - session 3)**

**Repeat session one (or two) in it's entirety as printed above.**

By Sunday morning of session three, you will have completed session three and you will have taken a total of 90 artemisinin pills and your bottle will now be empty.

- **End of Session Three**

**Optional during the 3 week washout period of the artemisinin protocol:**

- Fenbendazole: 1 gram (226 mg) taken once per day for 3 days on followed by 4 days off if doing capsule forms.
- But, Fenbendazole should really only be taken in liposomal form as it is poorly absorbed by the body. If doing liposomal fenbendazole, then just like artemisinin liposomal, there is no need to pulse as liposomals are not cleared by the liver.
- Liposomal fenbendazole can be taken in the same way as the liposomal artemisinin. One tablespoon of liposomal fenbendazole (approximately 250 mg) should be taken in the morning on an empty stomach with grapefruit juice and Bioperine.

- The Fenbendazole liposomal form is new and is now available from Healthy Drops. Their version is highly bioavailable and comes as 250 mg of Fenbendazole per tablespoon. Take one tablespoon per day with D3 5,000 IU, E 800mg, curcumin 600mg and CBD oil (25 mg).

[https://www.healthydrops.net/Liposomal\\_MyBendazole\\_16\\_ounces/p5759917\\_20159098.aspx](https://www.healthydrops.net/Liposomal_MyBendazole_16_ounces/p5759917_20159098.aspx)

- Fenbendazole should/must also be taken with supplements (D3, E, K3, B12 etc) as it seems to synergistically cause apoptosis in cancer cells.





- **Studies show almost no benefit to taking Fenbendazole if taken without the suggested supplements.**

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2687140/>.

- Fenbendazole in capsule form is also "easily soluble with DMSO."
- Some suggest taking Fenbendazole with food.
- However, Fenbendazole is **not** water soluble.
- And, Fenbendazole is not ethanol soluble and only "slightly oil soluble" meaning that it is not "food" soluble meaning that taking a form of Fenbendazole that is not in liposomal form or without DMSO is almost useless.
- If liposomal Fenbendazole is not available to you then it should be taken with DMSO as only DMSO has been found to make it "freely soluble."
- Fenbendazole can be taken both orally and topically using DMSO.
- Oral use with DMSO is simple given that 22.6 ml of DMSO is needed to dissolve 100% of 226 mg of Fenbendazole. Mix DMSO and Fenbendazole together first and then top up with 150 ml of any juice would be my suggestion as the juice makes the DMSO palatable. I would use grapefruit juice to inhibit liver metabolism and to make the Fenbendazole more bioavailable.
- Again, Fenbendazole is very poorly absorbed meaning that the delivery method is crucial to any protocol success. "It is less well absorbed than albendazole, with a bioavailability of only 1% to 2% after administration of a single oral dose. The low bioavailability is attributable both to the low solubility of the oral formulation and to the high-level of first-pass metabolism in the liver. Ingestion with fatty food increases absorption."
- Fenbendazole can also be done topically in a DMSO/Fenbendazole/coconut oil salve.
- And, Fenbendazole can be done by way of suppositories by freezing a liposomal fenbendazole/coconut oil mix into suppository forms bought on Amazon.
- Fenbendazole is soluble in a 10mg:1ml of DMSO ratio meaning 226 mg of fenbendazole requires 22.6ml of DMSO.
- If all of the above is too much to think about, then I would suggest using the BIOHACKIT day and night version as pictured below. It can be ordered from <https://werone.co/eng/product/biohackit-fenbencur-febendazole-herbal-anti-tumor-formula-capsules>



werone.co

<https://werone.co/eng/product/biohackit-fenbencur-febendazole-herbal-anti-tumor-formula-capsules>

**Going forward now that you have completed the artemisinin protocol:**

If you have cancer issues then you will be tired, exhausted and not hungry because of the artemisinin. There should be no other side effects.

Wait 3 weeks to 6 weeks to repeat the entire protocol. Thereafter do it twice a year.

- **Where to source the artemisinin and piperine:**

The links to buy artemisinin and piperine are here:

<https://www.hepalin.com/artemix.htm>

<https://www.healthdrops.net/product/liposomal-artemisinin-annua>

<https://www.iherb.com/pr/Doctor-s-Best-Artemisinin-100-mg-90-Veggie-Caps/7592>

<https://www.iherb.com/pr/Source-Naturals-BioPerine-10-mg-120-Tablets/992>

[https://www.amazon.com/Artemisinin-Capsules-BioPerine-Absorption-Vegetarian/dp/B06XWY27J8/ref=pd\\_sbs\\_121\\_1?\\_encoding=UTF8&pd\\_rd\\_i=B06XWY27J8&pd\\_rd\\_r=693a35b2-bc2e-11e8-85dd-873fcc9bd247&pd\\_rd\\_w=qvyTD&pd\\_rd\\_wg=YR1Wj&pf\\_rd\\_i=desktop-dp-sims&pf\\_rd\\_m=ATVPDKIKX0DER&pf\\_rd\\_p=0bb14103-7f67-4c21-9b0b-31f42dc047e7&pf\\_rd\\_r=7E1FDDQG6D0MACGCE4DS&pf\\_rd\\_s=desktop-dp-sims&pf\\_rd\\_t=40701&psc=1&refRID=7E1FDDQG6D0MACGCE4DS](https://www.amazon.com/Artemisinin-Capsules-BioPerine-Absorption-Vegetarian/dp/B06XWY27J8/ref=pd_sbs_121_1?_encoding=UTF8&pd_rd_i=B06XWY27J8&pd_rd_r=693a35b2-bc2e-11e8-85dd-873fcc9bd247&pd_rd_w=qvyTD&pd_rd_wg=YR1Wj&pf_rd_i=desktop-dp-sims&pf_rd_m=ATVPDKIKX0DER&pf_rd_p=0bb14103-7f67-4c21-9b0b-31f42dc047e7&pf_rd_r=7E1FDDQG6D0MACGCE4DS&pf_rd_s=desktop-dp-sims&pf_rd_t=40701&psc=1&refRID=7E1FDDQG6D0MACGCE4DS)

<http://herbern.webs.com/apps/webstore/products/show/5589595>

And you can buy the iron, the vitamin C and the oil at any health food store.

**- Conclusion:**

Finally, there is much more out there on the subject but sometimes those inflicted should do their own due diligence. Note that any veterinarian is familiar with artemisinin as they use it on dogs with cancer all the time (talk to your local vet). I do this protocol at least twice a year as a preventative measure. There are millions taking artemisinin for malaria and hundreds of thousands taking artemisinin for parasites. I have yet to come across a single article or claim that artemisinin caused harm and/or death.

**Finally, should you wish to continue reading material on artemisinin that was produced by someone other than me...**

**• Supportive Pubmed Studies**

- Pubmed Studies on Artemisinin and Cancer:

[http://ar.iiarjournals.org/content/31/12/4417.long?fbclid=IwAR0lkbXgjj6aeB4MHR\\_v3oU4qAc0Il\\_rGDh23a1tbea\\_gvaLp76ZyQrMiwC](http://ar.iiarjournals.org/content/31/12/4417.long?fbclid=IwAR0lkbXgjj6aeB4MHR_v3oU4qAc0Il_rGDh23a1tbea_gvaLp76ZyQrMiwC)

<https://www.ncbi.nlm.nih.gov/pubmed/15330172> (2005)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5058767/>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2629082/>

<https://www.pfeifer-protocol.com/2014/10/artemisinin/>

- Pubmed Studies on Artemisinin, Resveratrol and Cancer:

<https://www.ncbi.nlm.nih.gov/pubmed/25048878>

- Pubmed Studies on Piperine and Cancer:

<https://www.ncbi.nlm.nih.gov/pubmed/24272201>

<https://www.ncbi.nlm.nih.gov/pubmed/24819444>

<https://www.ncbi.nlm.nih.gov/pubmed/23939040>

**Artemisinin Study re Prostate Cancer**

**Interventions:** High-dose, pulsed oral artemisinin 300-400 mg three times a day every other week for 3-24 months (median 9.5 months, IQR 5-12 months). All patients were treated with an array of other naturopathic therapies.

**Outcome measures:** The primary outcomes were the PSA doubling time and velocity; secondary outcome measures were signs and symptoms of metastasis and survival.

**Results:** Of those patients who have previously undergone RP, 2/5 (40%) had improved PSA kinetics after artemisinin therapy. Of those with no prior RP, 5/10 (50%) had improved PSA kinetics. No patient developed signs of metastasis and no patients died. There were no reported adverse effects.

**Conclusions:** This pilot study provides preliminary evidence to suggest that high-dose, pulsed oral artemisinin therapy may have activity in patients with CaP. A larger controlled trial is warranted to confirm these preliminary beneficial effects.

<https://restorativemedicine.org/journal/preliminary-case-series-of-artemisinin-for-prostate-cancer-in-a-naturopathic-practice/>

## **Background:**

Artemisia Annua (Sweet Wormwood) is a shrubby perennial native to China. The leaf of the plant contains up to 0.04 percent Artemisinin. This herb has been used over the centuries by Chinese medical practitioners. Artemisinin came to the attention of the World Health Organization in the 1970s when Quinine lost efficacy against malaria.

Artemisinin is the only drug effective against malaria and hundreds of millions of doses are prescribed for that purpose every year. The artemisinin molecule has an affinity for iron, which the malarial parasite sequesters internally. Artemisinin enters the malarial parasite and combines with sequestered iron to create Reactive Oxygen Species, rupturing the parasite.

Like malarial parasites, cancer cells concentrate and sequester high levels of iron. Moreover cancer cells overexpress cell surface receptors for iron-containing compounds like ferritin and holotransferrin. Therefore, Artemisinin has a high affinity for cancer cells, and upon entering the cell combines with intercellular iron creating ROS-mediated apoptosis. Artemisinin is the only chemotherapeutic agent that lacks the tertiary amine necessary to usher the drug back out of the cell.

This document is based on the research of Dr. Henry Lai and Dr. Narendra Singh at the University of Washington, and the medical practice of Dr. Ba Hoang of

Vietnam and San Jose, California. There are a few points of divergence among experts studying Artemisinin, therefore more than one protocol is outlined below.

Some researchers believe that Artemisinin users experience **autoinduction**, whereby the body metabolizes the drug so rapidly that blood plasma levels of it drop.

[http://www.pubmedcentral.nih.gov/articlerender.fcgi?  
tool=pubmed&pubmedid=15676041](http://www.pubmedcentral.nih.gov/articlerender.fcgi?tool=pubmed&pubmedid=15676041)

For this reason we discontinue Artemisinin one or two days a week, however, eight days off may be necessary to completely clear artemisinin from blood plasma. If diminished efficacy is noticed, a period of eight days off may restore artemisinin's original effectiveness. Suggestion: use 15-25 mg/kg/day of DCA (sodium dichloroacetate) during the week off artemisinin. DCA use causes build-up of metabolite 5-ALA (5-aminolevulinic acid), a heme precursor which artemisinin uses. <http://dca-information.pbworks.com/>

PhytoArtemisinin may enhance efficacy of other artemisinin compounds. PhytoArtemisinin contains 700mg of Phytosaponin (Gleditsia Sinensis) and 200mg of Artemisinin per capsule. Phytosaponin can help artemisinin penetrate cell membranes and help to reduce tumor resistance to artemisinin in some cases. Phytosaponin also is active against cancers and inflammatory diseases.

[http://www.allergyresearchgroup.com/proddesc/discuss/PhytoArtemisininPDFPr  
oductSheet040405.pdf](http://www.allergyresearchgroup.com/proddesc/discuss/PhytoArtemisininPDFProductSheet040405.pdf)

[http://www.ncbi.nlm.nih.gov/pubmed/12673105?  
ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed\\_ResultsPanel.Pub  
med\\_DiscoveryPanel.Pubmed\\_Discovery\\_RA&linkpos=2&log\\$=relatedarticles&l  
ogdbfrom=pubmed](http://www.ncbi.nlm.nih.gov/pubmed/12673105?ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DiscoveryPanel.Pubmed_Discovery_RA&linkpos=2&log$=relatedarticles&logdbfrom=pubmed)

Gleditsia as a COX-2 inhibitor

[http://www.ncbi.nlm.nih.gov/pubmed/19082515?  
ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed\\_ResultsPanel.Pub  
med\\_DiscoveryPanel.Pubmed\\_Discovery\\_RA&linkpos=1&log\\$=relatedarticles&l  
ogdbfrom=pubmed](http://www.ncbi.nlm.nih.gov/pubmed/19082515?ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DiscoveryPanel.Pubmed_Discovery_RA&linkpos=1&log$=relatedarticles&logdbfrom=pubmed)

### **Other various artemisinin protocols as described by physicians:**

Artemisinin and its semi-synthetic derivatives such as artemether and artesunate should be taken orally in plain yoghurt and/or full fat cottage cheese to improve absorption and prevent stomach upset. It should also be taken with Omega 3 (EPA/DHA, three grams each). GLA also induces apoptosis and vitamin D3 is vital for immune function. Artemether is toxic and dose should not exceed one

milligram per kilogram of body weight, per day. **Artemisinin must be taken on an empty stomach so the Artemisinin will enter the bloodstream and not bind with iron in the gut. The evening dose of Artemisinin is most important, as cancer is most active at night.** Must NOT be used within 2 months of radiation treatment because of risk of iron leakage. Best to not have smoked within 6 months of artemisinin usage (according to Dr. Singh).

#### **Alternative Artemisinin Protocol A:**

Empty stomach, at least 30 minutes before breakfast, two capsules Super Artemisinin with 3 grams each of EPA/DHA.

Mid-day, away from artemisinin, take 1 gram of Vitamin C (NOT slow release). Recirculates iron in the body.

At least 3.5 hours after the evening meal, Artemix plus two capsules Super Artemisinin. The dose of Artemix should be based on 1mg/kg body weight of the artemether component of the Artemix.

#### **Alternative Artemisinin Protocol B:**

In place of Artemix in Protocol A, substitute Hepasunate (Artesunate 50mg caps). <http://www.hepalin.com/hepasunate50.htm>

Artesunate is the most active derivative, but has the shortest half-life.

#### **Alternative Artemisinin Protocol C:**

Same as Protocol A, but delete Artemix. After the first two months, replace morning dose of Super Artemisinin with Phytoartemisinin.

#### **Alternative Artemisinin Protocol D:**

Not described herein, however an injectable form of Artesunate is available from <http://www.alldaychemist.com> , in 60mg vials, approx. USD 7.00 per vial.

#### **Sources of Artemisinin:**

1.) "Super Artemisinin" by NutriCology or Allergy Research Group is a nearly pure extract of artemisinin mixed with artemisinin leaf oil, (Dr. Hoang consults for these companies and a few others). Good service and competitive price from

<http://www.iherb.com/Allergy-Research-Group-Nutricology-Super-Artemisinin-60-Veggie-Caps/3484>

2) "Phytoartemisinin" by Nutricology or Allergy Research Group contains 700mg of Phytosaponin (Gleditsia Sinensis) and 200mg of Artemisinin per capsule.

<http://www.ihealthtree.com/phytoartemisinin-90-vcap-nutricology.html>

3.) "Artemix" - 50mg Artemisinin, 40mg artemether, 50mg artesunate per capsule. The latter two are semi-synthetic derivatives developed for treatment of malaria; artemether is toxic and dose must be limited to no more than 1 mg/kg/day. <http://www.hepalin.com/artemix.htm>

4.) "Hepasunate" - 50mg Artesunate per capsule.  
<http://www.hepalin.com/hepasunate50.htm>

Artemix and Hepasunate (Artesunate) are available from <http://www.hepalin.com>. Hepalin is owned by Wellcare Pharma, chosen to run clinical trials for the tagged products under development by researchers at the University of Washington. Clinical trials are two years away; time to market, perhaps a decade.

### **Supplements:**

The following supplements are said to improve efficacy:

Butyrate capsules (Dr. Singh's recommendation).  
<http://www.bodybio.com/storeproduct360.aspx>

Do NOT open these into the yogurt - they smell and taste bad.

The following are recommended by Dr. Hoang:

Lymphasol (3-4 caps, 2X a day with artemisinin)  
<http://www.goutwell.com/Lymphasol.html>

L-Carnitine EX (1 capsule, 2X a day with artemisinin)  
<http://www.goutwell.com/L-carnitineEX.html>

Germanium 132 (promotes oxidation, especially important for lung mets)  
<http://www.iherb.com/Allergy-Research-Group-Nutricology-Organic-Germanium-50-Veggie-Caps/3442?at=0>

Minecel (3 capsules 2X a day) if patient is anemic.  
<http://www.goutwell.com/Minecel.html>

Fumacell and Mitosol (important for brain mets) contact Duc at Fuma Natural: <http://www.goutwell.com> to order these supplements, they are not on the website.

## Links:

Publications Relating to Effects of Artemisinin and its Analogs on Cancer  
(4/30/2009): <http://depts.washington.edu/bioe/about/news/artemisinin.html>

Kill rate of artemisinin (vs chemo) on cancer cells <http://uwnews.org/article.asp?articleID=44335>

Holotransferrin: <http://www.leebio.com/transferrin-holo-human-P199.html>

Transferrin: <http://www.prospebio.com/Transferrin/?gclid=CP3avr6lkpoCFSRPagodsV9oNQ>

Ferrosanol: <http://www.nextbio.com/b/search/ov/Ferrosanol>

Effects of artemisinin-tagged holotransferrin on cancer cells:  
<http://tinyurl.com/nmfv6w>

Anticancer properties of Artemisinin derivatives and their targeted delivery by  
transferrin conjugation: <http://www.ncbi.nlm.nih.gov/pubmed/17942255>

ArtBioMedical: <http://www.artbiomedical.com/>

Throat cancer treated with injectable artesunate [Full text paper](#)

Side note (links on **Germanium**):

<http://www.oxygentimerelease.com/A/Therapies/Germanium/b14.htm>  
(mechanism of action)

<http://www.karlloren.com/ogc/research/books/book1/book1.htm>

<http://www.chestjournal.org/content/117/2/591.long> (Complete lung cancer  
remission.)

[http://www.ncbi.nlm.nih.gov/pubmed/15165414?  
ordinalpos=3&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed\\_ResultsPanel.Pu  
bmed\\_DefaultReportPanel.Pubmed\\_RVDocSum](http://www.ncbi.nlm.nih.gov/pubmed/15165414?ordinalpos=3&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

[http://www.ncbi.nlm.nih.gov/pubmed/15165415?  
ordinalpos=12&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed\\_ResultsPanel.Pu  
bmed\\_DefaultReportPanel.Pubmed\\_RVDocSum](http://www.ncbi.nlm.nih.gov/pubmed/15165415?ordinalpos=12&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

## Journal Articles:



Pharmacokinetics in humans:

[http://www.pubmedcentral.nih.gov/articlerender.fcgi?  
tool=pubmed&pubmedid=18415093](http://www.pubmedcentral.nih.gov/articlerender.fcgi?tool=pubmed&pubmedid=18415093)

Metabolism is self-limiting: [http://www.pubmedcentral.nih.gov/articlerender.fcgi?  
tool=pubmed&pubmedid=15676041](http://www.pubmedcentral.nih.gov/articlerender.fcgi?tool=pubmed&pubmedid=15676041)

Abstract on transferrin bound artemisinin:

[http://www.ncbi.nlm.nih.gov/pubmed/17942255?  
ordinalpos=26&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed\\_ResultsPanel.Pu  
bmed\\_DefaultReportPanel.Pubmed\\_RVDocSum](http://www.ncbi.nlm.nih.gov/pubmed/17942255?ordinalpos=26&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Binds to heme better than other iron containing molecules:

[http://www.ncbi.nlm.nih.gov/pubmed/18676152?  
ordinalpos=3&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed\\_ResultsPanel.Pub  
med\\_DefaultReportPanel.Pubmed\\_RVDocSum](http://www.ncbi.nlm.nih.gov/pubmed/18676152?ordinalpos=3&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

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