Breast Cancer Treatment

The Right To Choose An Herbal Cure

My Story and My Testimonial
Protecting Your Quality of Life and Your Loved Ones’ and Preventing Recurrence

Maryse David

Artemisia Annua
“A candle loses nothing to light another candle.”

Fr. James Keller

Ending Stereotypes!
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FOREWORD

This book story is not a fiction and the mentioned herb-based cancer treatments have been self-experimented by the author at her own risks. At the time of the experiment, no clinical trial had been conducted on humans. Nevertheless, the experiment worked very well and this herbal targeted treatment raises many questions regarding the existing conventional anticancer therapies and the patients’ incapacity to select a treatment option. It raises also many questions towards the real potential of herbs in traditional healing, what is also called «alternative medicine».

Cancers rates are really rocketing and intravenous conventional chemotherapy, with its many (and sometimes very dangerous) side effects, push higher the yearly costs of health care programs, with a questionable success rate. After more than forty years of intense researches, it is very unfortunate that oncologists do not have more treatment options to propose to their patients.

I am not the only one in Canada who wishes to cure her cancer with a targeted therapy, combining treatment and normal professional and social lives. What is more encouraging than being able to work, pursuing social and personal activities while curing this terrible disease!

Some of these «patient-tailored» oral chemotherapy treatments for less advanced cancers, not available in Canada, are generally prescribed for a long period of time (two years or more) and leave more flexibility to affected people in their daily agenda.

Unfortunately, for advanced breast cancer, few options are available, except a few but very costly new therapies that enable a longer life without any progression of the disease (from six to 12 months of survival rate according to statistics).

Federal and Provincial Governments as well as Health Care System would probably need more time to realize that they could more rationally spend taxpayers’ money by implementing more quickly clinical trials or therapies combinations or by authorizing new experiments, like in «integrative medicine», with a proven efficacy on patients in other countries, or with promising clinical trials.

Number of candidates would probably be glad to experiment these few or no side-effects treatments, especially among women diagnosed with breast cancer, whose first issue is to loose their hair, a few weeks after the beginning of intravenous chemotherapy treatments. A mastectomy is an important trauma by itself. So why adding trauma to treatment?

The struggle for the choice of therapies just begins! Each people is unique and therapies should adapt to this singularity to better treat the patient and better streamlining the Health Care expenditures.
WHY WRITING SUCH A BOOK

Events in life influence our thoughts and actions, and vice versa, as they also can affect our body. Until now, I was in shape, disease-free, except those of early childhood that troubled me more than normal: frequent colds and tonsillitis during the long winters or, an infected appendix removed at the age of nine years, were the rare and only health hazards that I had to face until the age of fifty-two years. I felt great until late 2010 when I was diagnosed with a metastatic, stage III, grade III breast cancer, with estrogen markers and several lymph nodes affected under the left arm and with a high risk of recurrence.

The cancer, in the present understanding we have of it, with its two hundred different forms discovered to date, does not seem to look like another disease. It is extremely sneaky and devastating: it destroys your life, but also the life of your loved ones. Several friends, colleagues of mine, or celebrities who also had a healthy lifestyle, exercising and watching their diet, did develop a cancer. As of now and in just two years, three friends of mine died from cancer, despite an intravenous conventional chemotherapy. They apparently caught an infection caused by a bacteria at the hospital, their immune system had become too weak to fight it. The sanitization of hospitals in Canada itself would require the writing of a book.

I was really saddened to see these friends passing away one by one, not necessarily because of cancer, but mainly because of the side effects of treatments. Consequently, I decided to try other alternative treatments. "Cancer" still nowadays often means «death». So, why not trying something else that could help those who really suffer! This was my thought and as I'm still alive today, with a normal active and busy life, despite my refusal of conventional treatments and strong warnings of several oncologists, an irresistible need to share my experience and encourage people less fortunate or less strong than I, was born.

Here lies the interest of the book you will be reading. This is a true story, my story, a woman who searches to understand the disease, why it had developed, and how, through her researches, thoughts, questioning, courage, convictions, inspirations, calm and serenity, and particularly, with the aid of a plant, reward of Mother Nature, she came to a sustainable recovery, despite the advanced stage of her breast cancer.
1. My Story

All started one day of July 2010 when right after hurting me, I felt a brief but violent pain in my left breast.

Right after this shock, I clearly felt a rounded mass under my skin ... At first, I thought that this was a consequence of the last day shock, and, that probably a small hematoma was formed but nothing really serious. I'm not one of those who run to the doctor for no real reason; I was feeling well, well enough to do my four-kilometer daily walk to go to the office, to ride my twelve stairs or to swim at the pool. I sometimes had hot flashes that plagued my days (and nights especially), but are there women who do not suffer a little of this discomfort at the time of menopause?

Biopsy and Expectation

Days passed, but the mass did not shrink. One day in August, I finally decided to contact my family doctor. After examination, he immediately expressed his fears to me and the imperative need to have a surgery to remove the lump. He urged me to have a mammogram, telling me to recontact him if the test was to take more than two weeks. Fortunately, after one week, I got the mammogram. When I saw again my family doctor, he requested that I had a biopsy to confirm his pessimistic diagnosis. The time passed, not without any anxiety, but without panic: I was ready to hear the truth anyway and my doctor knew it. I felt strong enough to face the truth. I had said nothing to my spouse yet, waiting for the final results: I did not want to alarm him unnecessarily, as well for my friends and co-workers to avoid panic. Even if the cancer is no longer synonymous with death systematic nowadays, you hesitate to talk of it and declare that you have cancer... The biopsy was done with local anesthesia and ultrasound: long needles pierce the breast and collect the "precious" substance of the suspicious mass. By the way, I was surprised a little how the biopsy was performed, with the same syringe, passing in and out five times in your breast, with a few cells collected; biopsy is performed in the ultrasound room, not especially sanitized, where we enter with shoes or winter boots! Fortunately, the "in and out" syringe did not meet any nasty bacteria and I did not develop infection!

Diagnosis and surgery

With no news after more than three weeks, I called my doctor to see if he had received the results. He said he had received them two or three days ago and thought that the Centre Breast Cancer women have contacted me directly for tracking... Given the emergency of the situation, I was therefore scheduled with an appointment the next day to confirm the bad news: it was indeed a breast cancer, stage III on IV (IV being the most severe stage), also very aggressive (grade III), with estrogen markers nodes under the armpit and metastasis. The tumor was quite impressive: almost 4 cm long and 2.5 cm wide. He told me that time was running out for surgery and for treatment. "The response to this aggressive cancer will probably have to be very aggressive", he confessed. He even
dared to add that he hoped that the cancer cells were not already spread to the brain, liver, lungs, bones...

From that moment, I was directly supported by the Cancer Centre of the Ottawa General Hospital, and had other preoperative and surgical tests. During one of the ultrasound examinations, doctors had noticed that there were two suspicious lymph nodes in the right breast and that they have to proceed to a second biopsy to see if these nodes were also cancer! Biopsy under ultrasound was impossible to achieve because of the small size of the lymph nodes and the lack of precision of the equipment used. This had to take place a week later, under magnetic resonance imaging (MRI) .... Several minutes to go in uncomfortable positions, followed this expectation of the results, which delayed the surgery! Meanwhile, the disease was probably continuing to spread...

Finally, the hospital contacted me to schedule surgery, partial mastectomy, on November 30, 2010, about three and a half months after my first visit to my family doctor. Some people might think that this is a long period of time before any treatment, but here in Canada, especially in Ontario, it is a normal waiting period. If I had stayed in Gatineau, Quebec, across the Ottawa River, the expectation for the same surgery would have certainly been much longer. Many women in Quebec, in my case, do not hesitate to cross the "river-border" to get treatment more quickly in Ontario. This is quite understandable.

Meanwhile, the results of the second biopsy come: this was not a cancerous tumor, but most likely a variation of two multiple mammary glands that are part of the breast tissue. Finally positive news: my right breast won’t be opened or "mutilated" by one of those horrible scars which is now part of my breast «landscape»! The scar on my tummy for removing the appendix, more than forty-two years ago, looks much better despite the less advanced technology at that time. But this is the price to pay to try to neutralize a cancer when the tumor is resectable. We cannot have all!

At the Ottawa General Hospital, a partial mastectomy even if with a general anesthesia, is a one-day surgery. You are required to show up at eight o'clock in the morning if your surgery is scheduled at ten o'clock. You leave the hospital in the evening the same day, with a collector pouch attached to your pants for collecting the contaminated blood flowing down your skin from a drain hung a few inches above... A nurse visits you at home the same evening or the next morning (depending the time you leave the hospital), to make sure you are well and, if you're curious, possibly answer your questions. In my case, she was able to answer my question about the change of dressing and what to do with the waste blood collector. I learned only at that time that the dressing would be changed after nine days, probably the same day of the drain removal (written instructions of the surgeon). She showed me how to empty the blood collector and how to count the amount of liquid wasted... I know that in Canada, we have a free health care system, a medicine for "poor" people as qualified by one of the doctors I know, but I think I made a bad assumption.

Finally all went well: I had no infection. After a few minutes during which I managed to mentally relax, in order to be able to sleep, hoping that this collector would not break overnight…
Meeting with the first oncologist, a specialist in radiotherapy

The first meeting with the oncologist took place a few days before Christmas at the Cancer Centre of the Ottawa Hospital.

As I entered, the receptionist agent requested I fill a questionnaire out. For the first consultation at the cancer center, I expected to receive a detailed questionnaire with questions about my lifestyle (diet, practicing a sport or exercise), on events occurred recently in my life (death of a loved one, divorce, job loss, etc...) or questions related to my work environment (factory work, exposure to chemicals or radio waves, etc...). But no question of this kind... The questionnaire wanted to know if I had children, already had cancer in the past, if my family had already developed one and in the affirmative, which part of the body, if I had had surgery, any heart problems, diabetes, so I felt a little bit frustrated. I thought I had already answered these questions in my previous visits to the Women's Breast Cancer Center before the surgery, but it seemed that it was not enough. I confess that at that time, a feeling of frustration, helplessness, abandonment or betrayal flew down on me. At this moment, I understood why we were still looking for therapies to fight cancer, after a battle started more than thirty years ago and why we continued to take people by the heart, seeking public funds by organizing "Marchetons", "Telethons", "Marathons" or movements such as "Shaved Heads", "Moustaches", "Daffodils", "Pink Ribbon" "Find A Cure", "Race for the Cure" and so on, with the creation of a lot of foundations, associations by type of cancer, hoping for the survival of our specie, that these organizations communicate all together...

Personally, I doubt without asking the right questions to people with cancer and without compilation of results, across Canada and other countries, it will be easy to move forward in the understanding of cancer cause and consequently, finding a treatment that really works, and perhaps even a vaccine, as the disease looks so complex.

After a few minutes of patience, my name was called and I was escorted into the examination room. A few minutes later, a gray hair man, good looking, entered into the room. He introduced himself and told me he was the radiation oncologist and that he had read the post-surgery report on me. He made a quick examination and told me that the scar was healing perfectly and that treatments could start shortly. Immediately, I asked him to what type of treatment he was thinking about. He replied that recently, treatments began with radiotherapy, possibly followed by chemotherapy, depending the stage and grade of cancer. He added that, at that time, my cancer would have a grade IV on V, instead of III on IV nowadays. Stage III means that the removed tumor was large and that the cancer had already spread to the lymph nodes and possibly to nearby tissues such as muscle or skin and tends to change quickly, especially with a grade III, which classifies cancer as "aggressive", with higher risk of spreading throughout the body. Stage IV would have meant that the cancer had spread to other parts of the body and potentially certain organs.

The doctor explained to me that precisely to avoid the risk of too rapid spread of the cancer, the treatment protocol now begins with chemotherapy, followed by twenty-five sessions of radiotherapy. He told me he would refer to his oncologist colleague and that the hospital would
contact me to confirm an appointment with the doctor. As he was concerned, he would probably see me again in May 2011 to begin radiation treatments. We were December 20, 2010.

On leaving the hospital, it seemed that I had just left another planet, a surreal world, with these changes for assessing stages of cancer, treatment protocol, additional time for an appointment with another oncologist to begin treatment ... My brain began to analyze the situation a little deeper, and deduced that I was in the hands of a "science" that was more an medical approximation than accuracy.
CASE STUDIES AND PUBLICATIONS

CASE STUDY: NEW APPLICATION OF ARTEMETHER FOR TREATING BRAIN CANCER

Update: June 28, 2012

ETDZS INDUSTRY LTD. have been exporting the anti-malarial drug, artemether, an artemisinin derivative (ARTEMOS) for many years. Recently, scientists from around the world have found the drug can kill cancer cells and the use of Artemos as an anti-cancer drug is a new application. Summarized here is the case of a patient suffering from brain cancer. Approximately five months after taking ARTEMOS, the patient experienced a miraculous recovery! In order for patients with associated diseases and their family and friends to share this information, here is a short report on the treatment of the following:

Patient Zhou Heping, a Chinese female, 52 years old, weighing 62 kg, height 155 cm, previously in good health, experienced a drop in right limb muscle strength (muscle strength score of 3) in February 2011 and complained of mild headache but no nausea, no vomiting and no visual changes. She went to the Navy General Hospital in Beijing for treatment and stereotactic surgery was performed. The intracranial biopsy pathology report showed a "diffuse large B-cell non-Hodgkin's lymphoma." One week post-operation, she returned home to Qinhuangdao City. On April 10, 2011, the patient began treatment with ARTEMOS (artemether, an artemisinin derivative) at a dose of 80 mg (2 soft capsules of 40 mg each), every night with boiled water. Professor Singh of the Department of Bioengineering, University of Washington, Seattle, USA, recommended the following treatment: vitamin C 250 mg and vitamin E 200 IU, every day after breakfast; artemether 80 mg at night, 3-4 hours after dinner, before going to bed; and daily walking for aerobic exercise. On April 11, at the First Hospital of Qinhuangdao magnetic resonance imaging (MRI) examination revealed left parietal lobe nodular masses in the thalamus area (Figure 1). Irregular groups of tumor-like shadows had maximum anteroposterior diameter of 47mm, maximum diameter from top to bottom 24mm, maximum diameter of about 28mm. Tests of liver and kidney function revealed no abnormal indicators. In only one and a half months after treatment, symptoms were improved, muscle strength recovered to 4 + level and a review of MRI examination from May 26, 2011 (Figure 2) showed tumor shrinkage of 77%, the maximum anteroposterior diameter of 27mm, maximum diameter from top to bottom 14mm, maximum diameter of about 19mm. Patient was without any discomfort. Another MRI done three months after treatment began on July 7, 2011 (Figure 3) and there was further shrinkage (trace measurement). The MRI of September 13, 2011 (Figure 4) showed no discernible masses. Currently, the patient has returned back home to Wulumuqi city in Xinjiang and on December 19, 2011 switched to taking 80 mg of artemether every other day (continued to take vitamin C and E daily at the same dose as above) and now exercises daily by walking 4-5 km.
Figure 1. MRI dated April 11, 2011 (at the start of treatment)
Figure 2. MRI dated May 24, 2011 (after 6 weeks of treatment with artemether)
Figure 3. MRI dated July 7, 2011 (after 3 months of treatment with artemether)
Figure 4. MRI dated September 13, 2011 (after 5 months of treatment with artemether)
Artemisinin in Cancer Treatment

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Updated August 2013
What is Artemisinin?

- Artemisinin is a sesquiterpene lactone isolated from the plant *Artemesia annua* L. (has been used for the treatment of malaria).
- Dr. Zhenxing Wei was first to isolate artemisinin in 1970.
- The artemisinin molecule contains an endoperoxide bridge that reacts with a ferrous iron atom to form free radicals.
- There are several analogs of artemisinin including artesunate and artemether.

How does Artemisinin work?

- Artemisinin causes the cancer cell to commit suicide.
- The artemisinin molecule contains an endoperoxide bridge that reacts with a ferrous iron atom to form free radicals.
- Generation of free radicals leads to macromolecular damages and cell death.
- Cancer cells have a very high iron uptake and thus they are more susceptible.
Research on Artemisinin: MOLT-4 (Leukemia Cell Line) Studies

- First study on artemisinin (1995) was done in cell culture (MOLT-4 lymphoblastoid leukemia cell line).
- Results show all MOLT-4 cells were killed in 8 hours by 200 micromolar of dihydroartemisinin.
- The drug is 100 times less toxic to human lymphocytes in culture.

| APOPTOSIS IN MOLT-4 LEUKEMIA CELLS (dihydro) Artemisinin (8 hours only) |
|--------------------------|------------------|
| Control                  | 0 %              |
| 200 μM                   | 100 %            |
| Hyperthermia (24 hr incubation) |
| Control                  | 3.26 %           |
| 44°C for 1 hr            | 5.01 %           |
| Hydrogen Peroxide (24 hr incubation) |
| Control                  | 3.52 %           |
| 176 μM                   | 40.09 %          |
| Mitoxantrone (24 hr incubation) |
| Control                  | 3.51 %           |
| 0.5 μM                   | 55.02 %          |
| Nevobiocin (24 hr incubation) |
| Control                  | 3.75 %           |
| 800 μM                   | 22.68 %          |
| Sodium Ascorbate (24 hr incubation) |
| Control                  | 3.47 %           |
| 2000 μM                  | 62.59 %          |
| X-ray (24 hr incubation) |
| Control                  | 3.2 %            |
| 100 rads                 | 9.5 %            |
Research on Artemisinin: Trials in Dogs

- Dog trials were begun soon after encouraging results in MOLT-4 experiments (1994-1995).
- Dogs of different breeds (male and female) having various types of cancers (lymphosarcoma, breast adenocarcinoma, osteosarcoma, ETC) were treated.
- Results: Specific results varied with dogs, but generally positive. Tumor sizes were drastically reduced. No reoccurrence of cancer in 5 dogs operated and given artemisinin.

Research on Artemisinin: Human Breast Cancer Cells

*in vitro*

- Most recent research was published (2001) on a breast cancer cell line (HB 27) *in vitro*.
- Breast cancer cells treated with dihydroartemisinin and holotransferrin were almost completely eliminated (after 16 hrs of treatment cell count was only 2% of that at time zero).
Research on Artemisinin: Human Breast Cancer Cells

*in vitro*

- A morphological examination of breast cancer cells treated with dihydroartemisinin and holotransferrin showed that they were undergoing apoptosis and necrosis.
- Drug had no effect on normal breast cells.

Research on Artemisinin:

Breast Cancer Cells *in vitro* undergo rapid and almost complete cell death (98%) after treatment with dihydroartemisinin and holotransferrin.
Principles of Artemisinin Therapy: How to kill cancer cells

- Starvation by depletion of nutrients
- Exercise by generating H$_2$O$_2$
- Drugs including vitamin C, vitamin D and E
- Artemisinin and analogs
- Alkaline pH in body

Case report:
Archive of Oncology, Volume 10 (In press)

Artesunate Treatment for Larynx Cancer in man

$^1$Narendra P. Singh, $^2$Krishna B. Verma, $^1$Henry Lai

Artesunate injections and tablets were administered to the patient over a period of nine months. The tumor was significantly reduced (by approximately 70%) after two months of treatment. Treatment reduced the sufferings and prolonged the life of the patient.
Benefits of Exercise

For killing of Cancer Cells:
• Generates Hydrogen Peroxide.
• Results in high concentrations of oxygen in the body.
• With the help of vitamin D, puts calcium in bones.
• Increases circulation allowing immune cells to reach cancer

General Benefits:
• Feeling of well-being (increased appetite)
• Increased excretory processes
• Raises Pain Threshold

Common Characteristics Observed among Cancer Patients (all of the following decrease calcium):
• Lack of sunshine in environment or aversion to going out in sun.
• Avoidance of physical activity or generally more sedentary lifestyle.
• Abnormal sleep habits (excessive sleeping, napping during the day etc.)
• Very limited consumption of/dislike of milk
• Eating late dinners and immediately retiring for the night
Conclusion

• Artemisinin can be used to treat various types of cancer.
• Side effects are minimal and it can be taken orally.

Frequently Asked Questions

• Q. How often and when should the drug be administered?
  
  A. Ideally, just once at bedtime as the immune system is at the lowest during the night and bacterial and cancer cells proliferate faster.

• Q. Is exercise essential?
  
  A. Yes. Importance-wise ranking: exercise, diet and drug.
Frequently Asked Questions

- Q. What is the half life of artemisinin
- A. Study in rats,
  - artemisinin 3-4 hr
  - artemether 12 hr
  - artesunate 40 min (human)
- Blood levels are higher in females

Frequently Asked Questions

- Q. Does artemisinin cross blood brain barrier?
- A. Yes
- Q. What is peak plasma level time
- A. Artemisinin and analogs are rapidly absorbed and peak in plasma within 1-2 hr
Frequently Asked Questions

• Q. Can Artemisinin be taken soon after or during radiation?

• A. No. Irradiated normal cells increase their transferrin receptors, allowing more uptake of iron and thus become sensitive to artemisinin. Artemisinin therapy can be started a minimum of two weeks after radiation (preferably more).

Frequently Asked Questions

• Q. Can artemisinin be given to smokers for the treatment of cancer?

• A. No, patients should have ceased smoking for at least two months before starting artemisinin. Research indicates that cells exposed to Benzo(a)Pyrene (primary carcinogen in cigarette smoke) have greater free iron content which makes even normal cells sensitive to killing by artemisinin.
Frequently Asked Questions

• Q. Do we need Holotransferrin?
  
  A. No we do not need Holotransferrin. Enough iron can be found in our daily diet.

• Q. What form of iron works with artemisinin?
  
  A. Artemisinin reacts with ferrous iron (Fe$^{2+}$). Transferrin carries ferric iron (Fe$^{3+}$) to the cell surface, the ferric iron is then converted to the ferrous form (Vitamin C can do this) and reacts with artemisinin.

Frequently Asked Questions

• Q. Should an iron supplement be taken along with artemisinin?
  
  A. No. This is not necessary. Iron is abundant in our diet in two forms: heme iron (found in animal products) and non-heme iron (found in plant products). Vitamin C helps in the absorption of non-heme iron, which is generally harder to absorb.
Frequently Asked Questions

• Q. Is a combination of Artemisinin derivatives better?
• A. A mixture of artemisinin, artesunate and artemether and is slightly better than individual components.

Frequently Asked Questions

• Q. How does Vitamin C affect the results?
• A. If taken after breakfast and after lunch, it enhances the iron absorption from the stomach. Iron is taken up more by cancer cells and thus Vitamin C makes cancer cells more susceptible for killing by artemisinin.
Frequently Asked Questions: Vitamin C

- Vitamin C also kills cancer cells in low doses without damaging normal cells.
- In Molt-4 cultures, a cell loss of approximately 40-50% was observed after 8 hours of treatment with Vitamin C (50 μM).

Frequently Asked Questions

- Q. How do other vitamins and antioxidants affect the results?
  
  A. Different studies show different results with vitamin E. Our own work shows glutathione enhances cancer cell growth and reduces the efficacy of artemisinin.
Frequently Asked Questions

• Q. What are toxic effects?
• A. In general, artemisinin and its analogs are relatively safe drugs with no obvious adverse reactions or noticeable side effects. Some patients complain of skin irritation and scratching in 1 to 2mg/kg/day doses.

• Anemia and weakness is reported by several patients on artemether but not by those on artesunate and artemisinin. Artemisinin does not have affinity to normal RBC unlike artemether

Frequently Asked Questions

• Q. How long the treatment should last?
• A. We have a very short experience, one pancreatic cancer patient is taking artesunate injections for last 22 months and a brain cancer patient taking artemisinin capsules for last 11 months. Artemisinin in low doses for a long duration may be safer anticancer treatment.
Frequently Asked Questions

• Q. Are there some on going clinical trial.
• A. No official clinical trial, but Dr. Joy Craddock MD (joyhealth@earthlink.net) and Dr. Dwight McKee MD (dmckeemd@aol.com) are conducting a clinical trial started 3 months ago on 30 cancer patients in Portland area. FDA approved a canine trial in DC area.
**LIST OF PUBLICATIONS RELATED TO ARTEMISININ AND ITS ANALOGS, AND THEIR EFFECTS ON CANCER**

Updated on July 22, 2014


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193. McCarty, M.F. Turning an 'Achilles' Heel' into an asset - activation of HIF-1-alpha during angiostatic therapy will increase tumor sensitivity to iron-catalyzed oxidative damage. Medical Hypotheses 61, 509-511 (2003).


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318. Wickerath M, Singh NP Additive cytotoxic effects of dihydroartemisinin and sodium
326. Xu H et al. Anti-malarial agent artemesunate inhibits TNF-α-induced production of proinflammatory cytokines via inhibition of NF-κB and PI3 kinase/Akt signal pathway in human rheumatoid arthritis fibroblast-like synoviocytes. Rheumatology 46, 920-


Artemisinin Pharmacology and Pharmacokinetics