



ActRx

ANTI-VIRAL & ANTI-FUNGAL

Anti-Cancer, Anti-Dengue, Anti-Alzheimer's
Anti-Influenza A & Anti-Bacterial



SUMMARY OF THE FINAL REPORT

The Impact of the Use of Botanical ACT Combination Treatment to the Standards of Care in the Management of Dengue: A Randomized Open-Labelled Clinical Trial.

Principal Investigator: Dr. Edna A Miranda

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Sponsor: ActRx

Summary:

This study at San Lazaro Hospital in Manila, Philippines began on January 15, 2012 and evaluated 288 subjects who were confirmed cases of Dengue. This clinical trial operated through March 15, 2014.

At the completion of the clinical study, statistics validated that the ActRx treatment protocol was proven safe and effective, with no deaths or adverse reactions.

1. The study established the Safety of the ActRx combination. There were no adverse reactions recorded in the ActRx treatment group and it eliminated the risk of mortality.
2. The ActRx treatment eliminated the virus fifty percent (50%) faster as documented by the disappearance of NS1.
3. The number of days of illness was significantly reduced by at least fifty percent (50%) in those patients treated with the ActRx protocol, something that was not anticipated.
4. The ActRx treatment protocol will reduce the number of days of incapacitation by at least fifty percent (50%).
5. The ActRx group recovered faster from fever.
6. There was a significant decrease in abdominal pain and abdominal tenderness in the ActRx treated group, something that surprised investigators.
7. The treatment allowed complete recovery from retro-orbital pain.
8. The treatment caused rapid normalization of white blood cells and platelet counts.
9. The cessation of bleeding was a critical finding in this study.
10. There was a significant reduction of body malaise and joint pains.
11. Early cessation of nausea/vomiting was attained in the ActRx treatment group.
12. ActRx is a **total oral treatment**, which offers one hundred percent (100%) patient compliance, thus promoting needle-free treatment.

The Investigators have come to the conclusion based on the study that ActRx is a highly efficient and successful treatment for Dengue. The future potential of ActRx combination therapy should be recommended to the World Health Organization (WHO) and The Department of Health (DOH) for inclusion in the formulary as the Standard of Care for the treatment of Dengue.



Dengue Research Council Summary of Act RX - 100% performance in curing dengue:

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How to Use the Dengue Treatment

What's in the kit:

Spray Bottle - Artemether liquid (60mg)

Packet A - 12 white tablets (Artesunate 50mg each)

Packet B - 10 orange/brown tablets (Berberine 400mg each)

Instructions:

STEP 1 - Spray (First thing to do):

Shake the bottle

Spray all the liquid under your tongue

Hold it there for 30 seconds

Then swallow

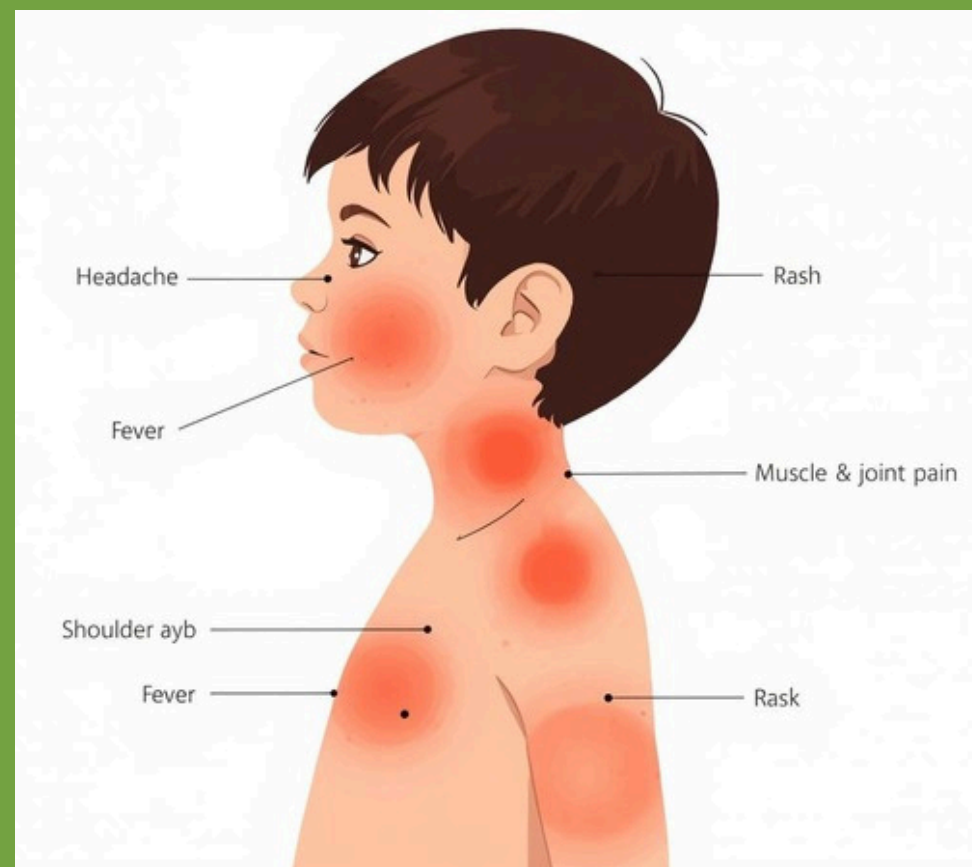
STEP 2 - Tablets (Wait 30 minutes after spray):

Take tablets every 8 hours for 2 days (3 times per day)



ACTRx

Act Rx works by specifically oxidizes iron which is a 1000 x's higher in plasmodium and 15 x's higher in breast cancer and turns +2 iron into +4 that releases the ROS in mitochondria to kill cell and initiate autophagy and programmed cell death that does not cause inflammation called apoptosis to benefit the organism- and; thus, works on all viruses and cancers



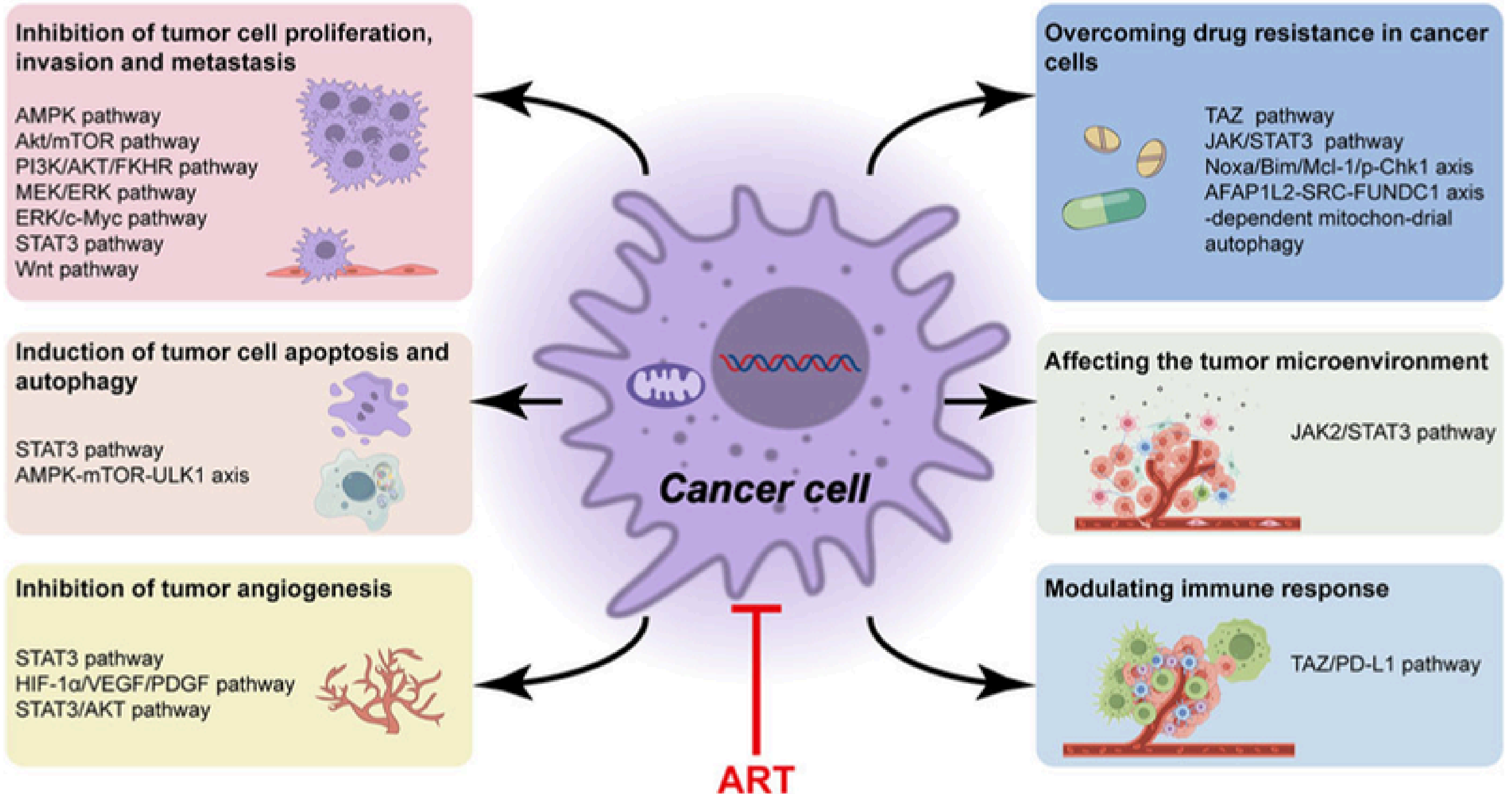
Taken in easy sublingual drops and pill

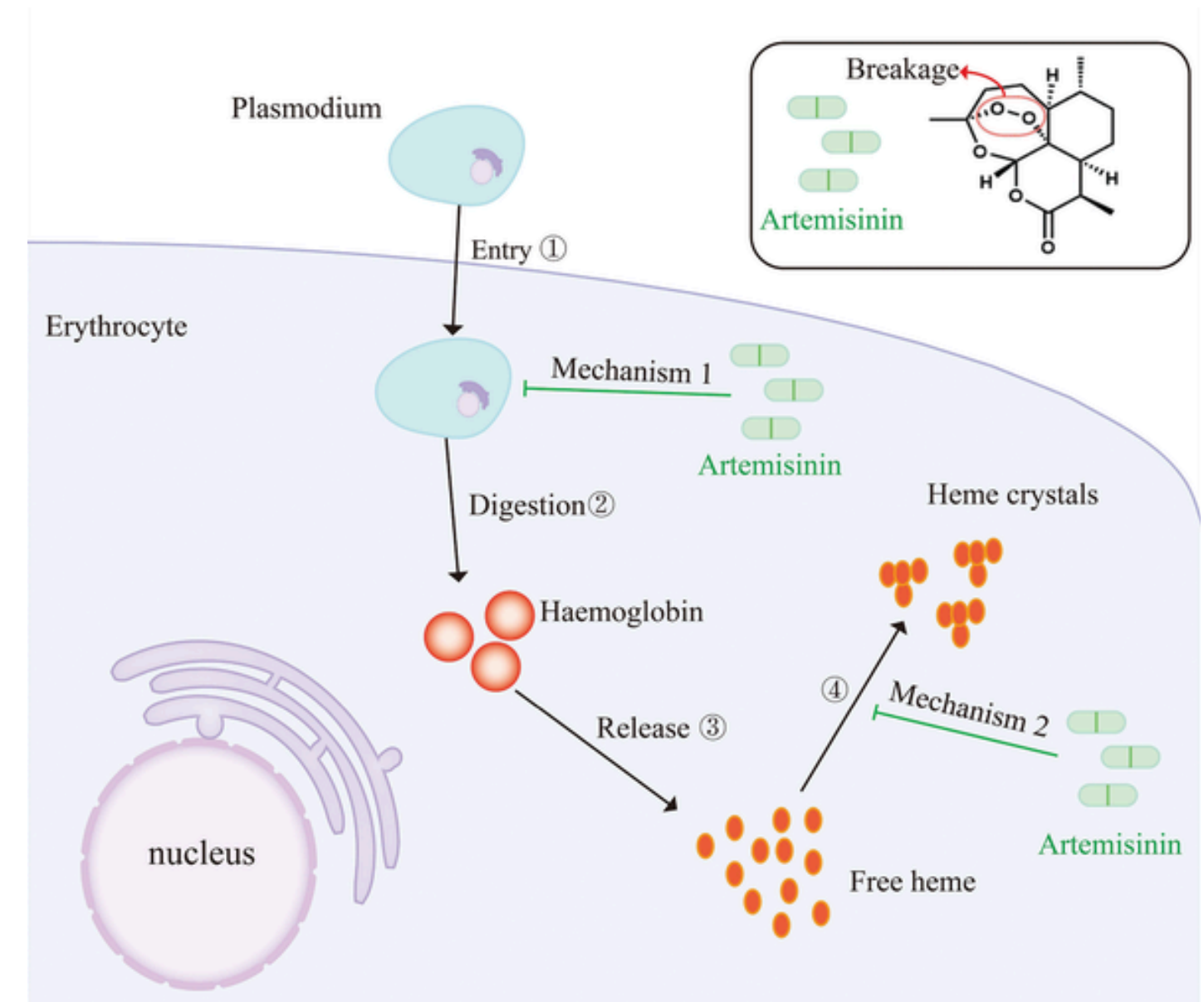
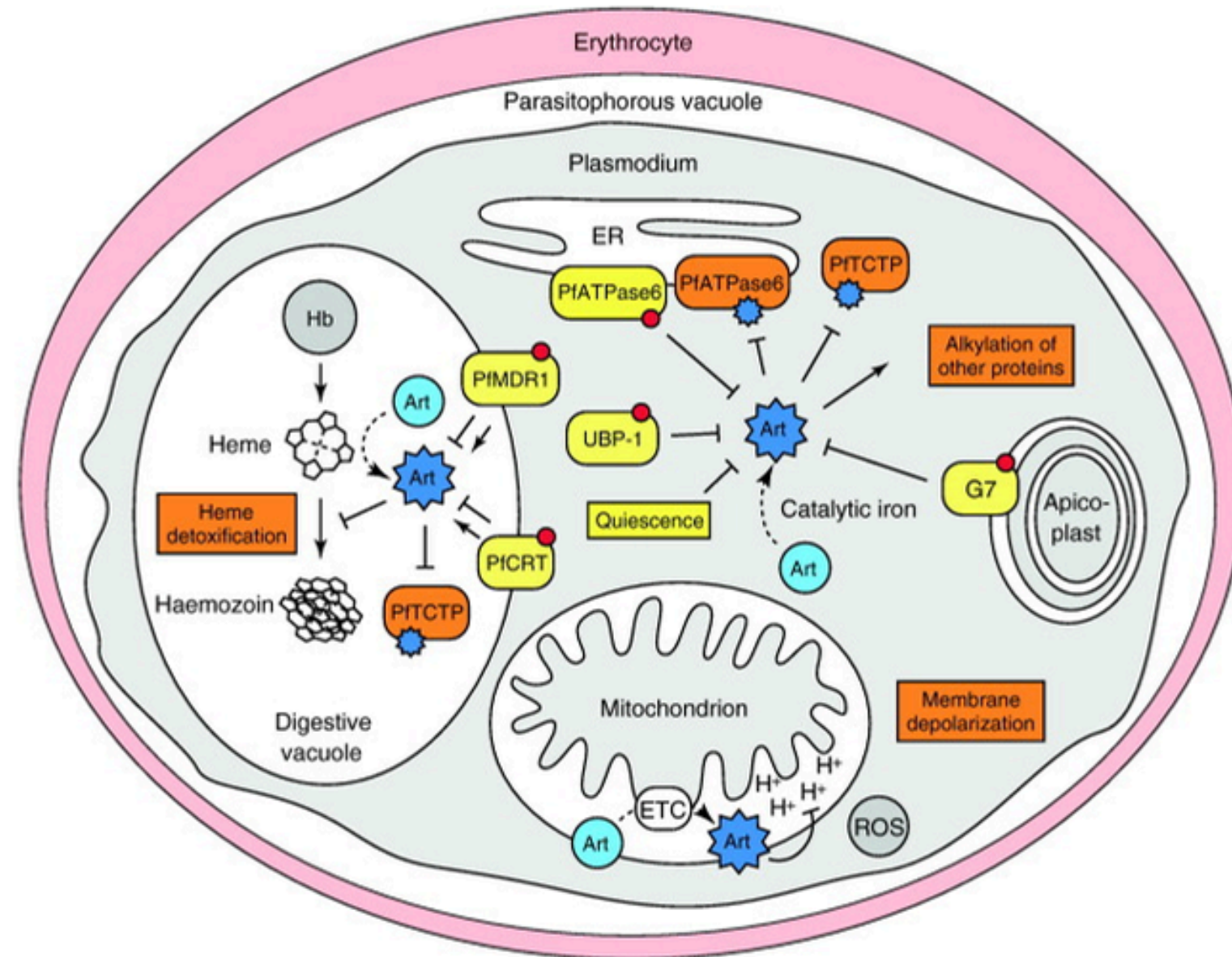


Properties of Act RX

- Anti-viral
- Anticarcinogenic
- Antibacterial
- Anti-fibrotic
- Anti- inflammation
- Anti-Alzheimer's
- Anti-malarial
- Anti-fungal
- Anti-pain
- Immune- suppressant
- Pain reducing
- Reduces interleukin 6 to calm immune system
- Protects kidney
- Has a dozen polyphenols very effective in fighting cancer:
- Prostate
- Inhibits osteosarcoma
- And effective on breast cancer
- Anti-obesity
- Kills worms, plasmodium eggs
- 6 methods of action:
- Blocks transport proteins
- Prevents intake of virus into cell
- Binds to spike Protein and prevents virus entering cell
- Blocks Calcium transport in plasmodium
- Creates Reactive Oxygen species (ROS)

Anti-tumor Mechanism of Artesunate





How it Works for Malaria & Covid19

In malaria, the medicine disrupts the Plasmodium parasite's energy system (its mitochondria and plasma) by changing its electric balance. In COVID-19, it blocks the virus's spike protein from attaching to the ACE2 receptor on human cells, stopping the virus from entering through endocytosis.

The spike proteins normally attach to blood vessel cells, allowing the virus to enter and release its genetic material. During infection, billions of these spike proteins move through the body every day, reaching many organs, including the brain. The medicine also creates reactive oxygen species (ROS) — highly active molecules that damage the parasite's vital parts.

Another way it works is by producing free radicals that make the parasite's cell environment too basic (alkaline), damaging important proteins like TCTP, ATP6, and PI3K, which the parasite needs to survive.

Also includes activated ART alkylates heme, forming heme drug adducts that inhibit the formation of heme crystals and cause the death of the parasite.

Artemisinin in Cancer

Attenuates Inflammatory Pathways in models of inflammation

- ↓ IL-6
- ↓ IL-1 β
- ↓ TNF- α
- ↓ TGF- β 1
- ↓ NF- κ B
- ↓ MIP-2, PGE2, NO

Blocks Cancer Cell Proliferation

Arrest of Growth & Cell Cycle Division at various phases:

- G₀/G₁ into M phase
- G₀/G₁ into S phase
- G₁ and G₂/M
- ↓ Cyclin D, Cyclin E, CDK2, CDK4, CDK6
- ↑ p16, p27

Blocks Angiogenesis, Invasion & Metastases

- ↓ HIF-1 α , VEGF, KDR/fik-1
- ↓ MMP2 and TIMP-2
- ↑ Integrin β 1, NCAM

Promotes Cancer Cell Death

- Apoptosis
- Autophagy
- Oncosis
- Ferroptosis

DNA damage response (DDR)

- Phosphorylation of ATM, ATR, Chk1 and Chk2 proteins
- Induces oxidative stress, DNA double-strand breaks (DSBs)
- Down regulates RAD51 foci and homologous recombination repair (HRR)
- Impairs DSB repair

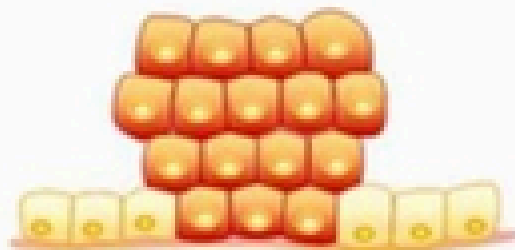
Blocks critical Cancer Cell Signaling Pathways

- ↓ Wnt/ β -catenin
- ↓ PI3K/Akt/ERK γ
- ↓ c-MYC/MYX, mTOR, survivin, c-Met, EGFR
- ↓ Cyclin D, Cyclin E, CDK2, CDK4, CDK6
- ↑ p16, p27

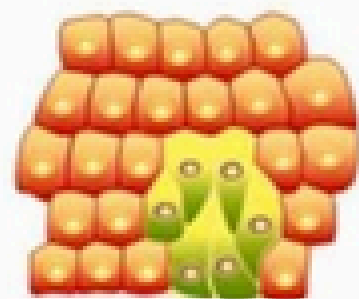
Anticancer properties



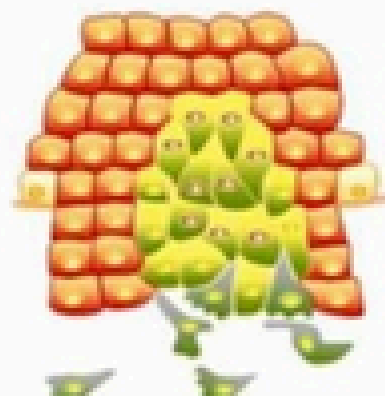
↓carcinogenesis



↓cancer growth



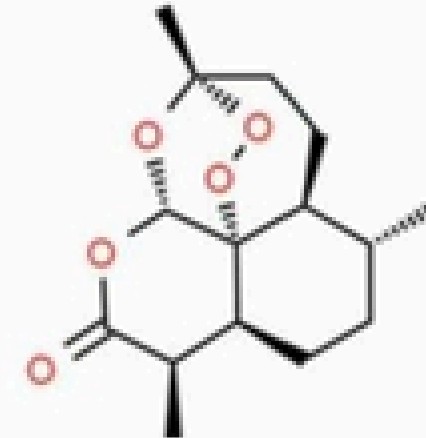
↓progression



↓metastasis



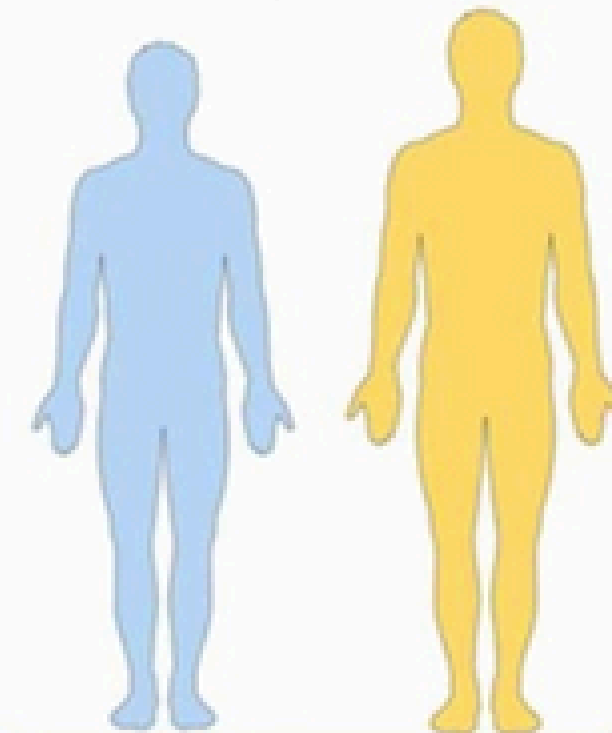
Artemisia annua



Artemisinin

Other Pharmacological activities

- Antioxidant
- Antiviral
- Antibacterial
- Antifungal
- Antiparasitic
- Immunomodulatory
- Cardioprotective



Side effects and toxicity

- Side effects: nausea
abdominal pain
allergic reactions
- Safety as first line treatment in uncomplicated malaria
- Teratogenic

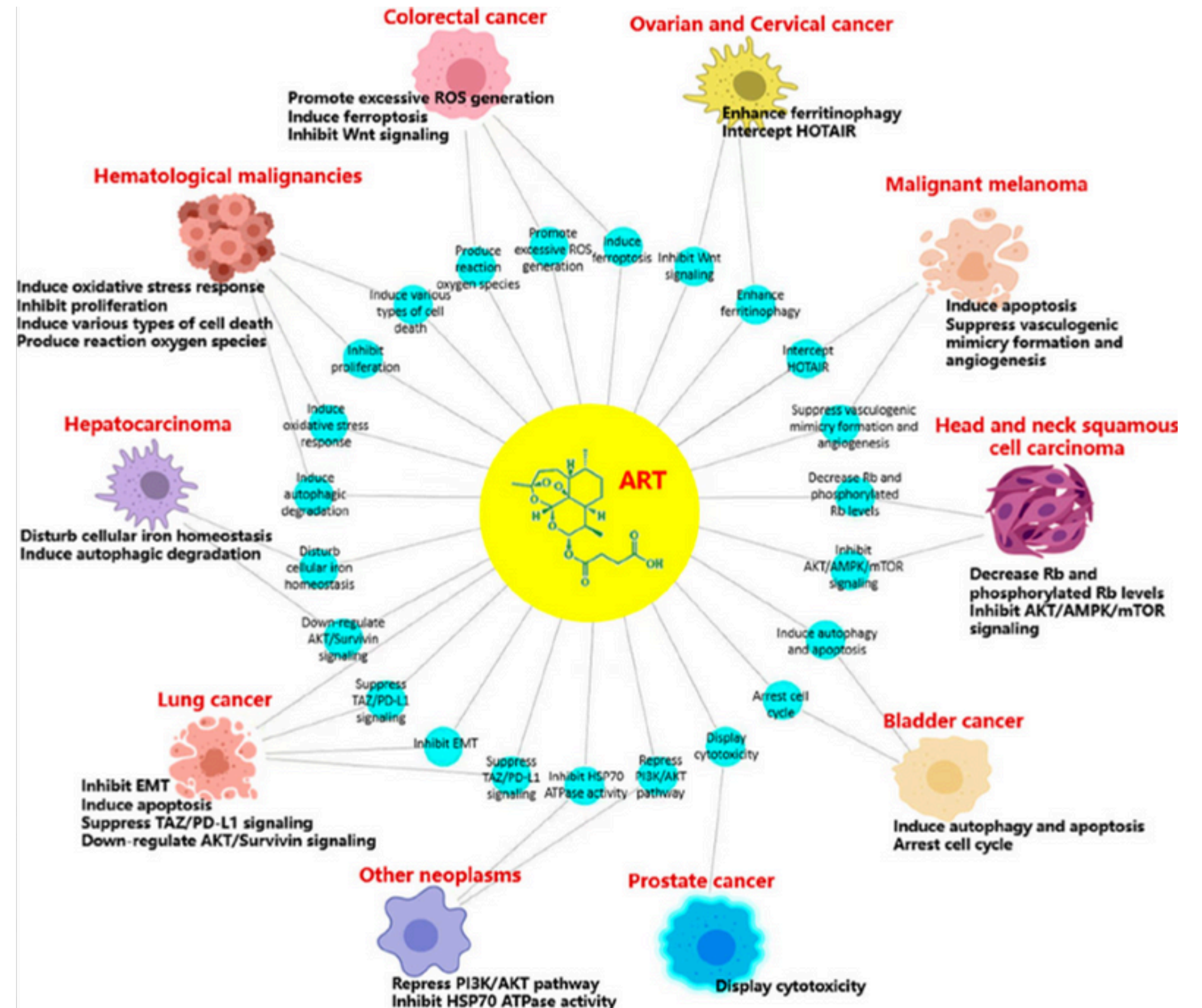
Artemisin

The Ultimate Cancer Fighter

Many cancer treatments cause strong side effects, so scientists are looking for safer options. Artemisin (ART), a natural medicine first used for malaria, might also help fight cancer.

Some studies show that Artemisin can stop cancer cells from growing, spreading, and can even make them self-destruct. But tests on animals found that it might harm the brain and heart.

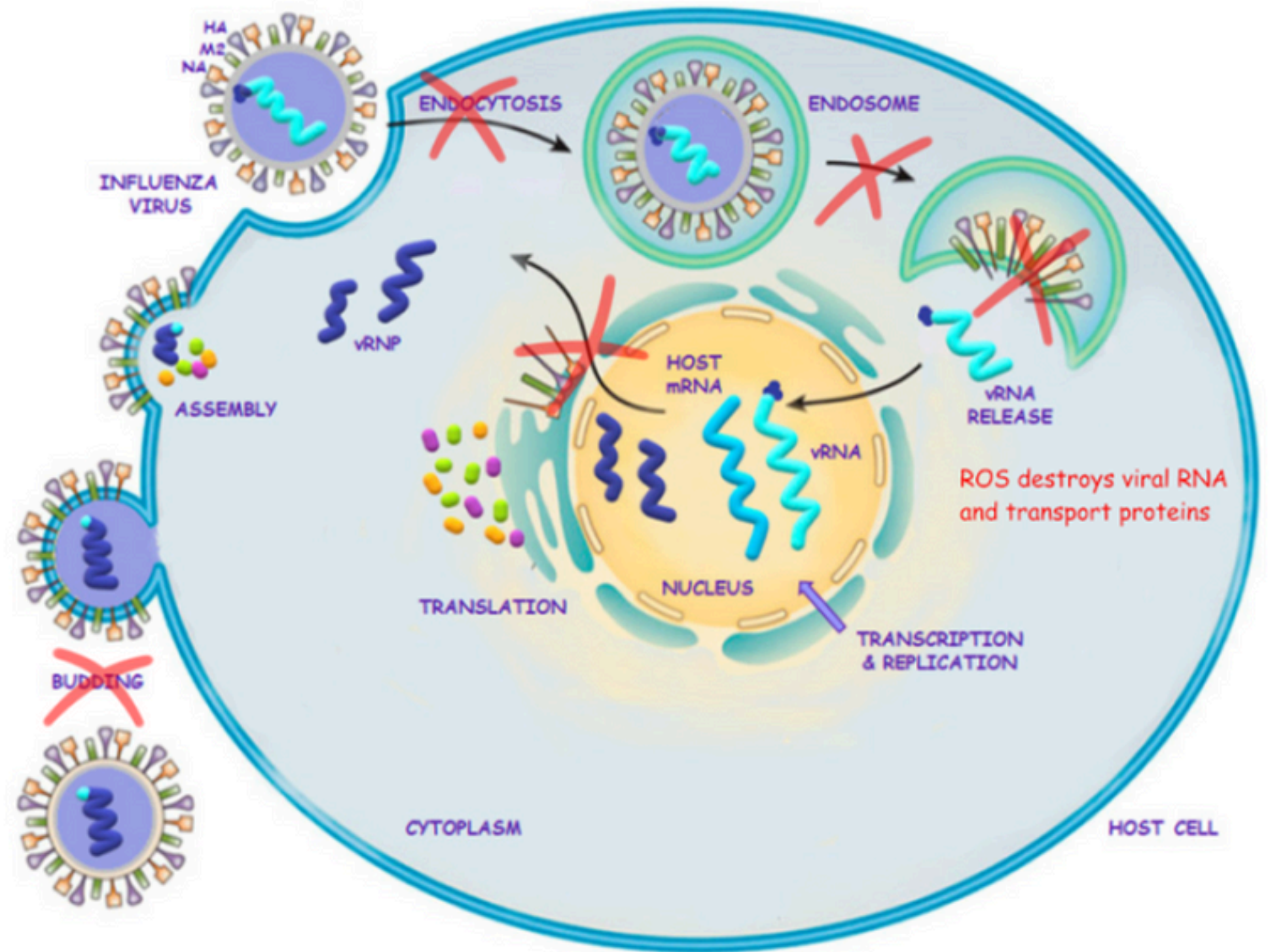
To make it safer, researchers are using new “nanotech” systems that help deliver the medicine more precisely. Scientists are still studying how Artemisin works inside the body and how it targets cancer cells.



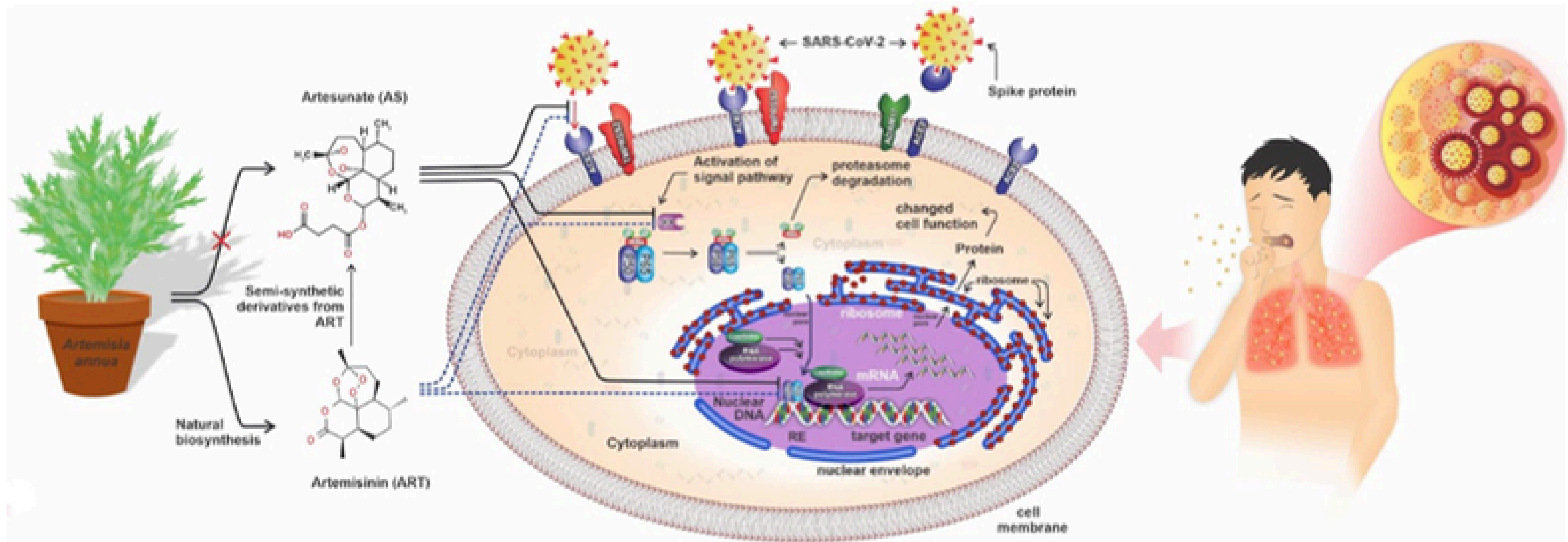
How it Works for Influenza

Artemisinin fights Influenza A by blocking the virus's ability to copy itself and protecting cells from virus-induced damage. It works by targeting the virus's nucleoprotein (NP)—a key component needed for replication—and stopping it from entering the cell's nucleus, where the virus normally multiplies. Artemisinin also prevents the virus from triggering mitochondrial apoptosis, a type of programmed cell death that helps the virus spread.

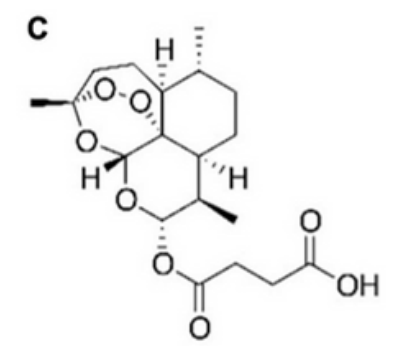
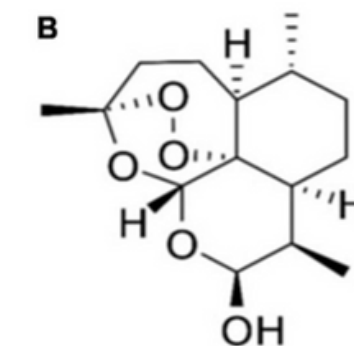
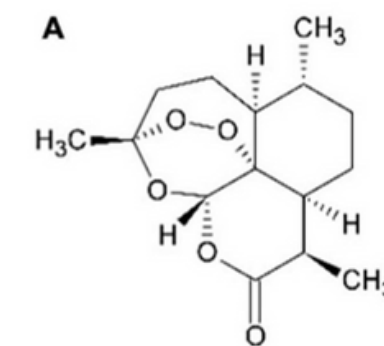
In addition, artemisinin and its derivative artesunate interfere with several cell pathways the virus depends on. Artesunate inhibits the enzyme PDE4, raising cAMP levels and blocking the ERK/MAPK pathway—steps that prevent the virus from exporting its genetic material. Artemisinin may also boost the body's defense by stimulating type I interferons, natural antiviral proteins that strengthen immune response. Overall, extracts from *Artemisia annua* L. suppress influenza by targeting the viral nucleoprotein and blocking mitochondria-related cell damage.



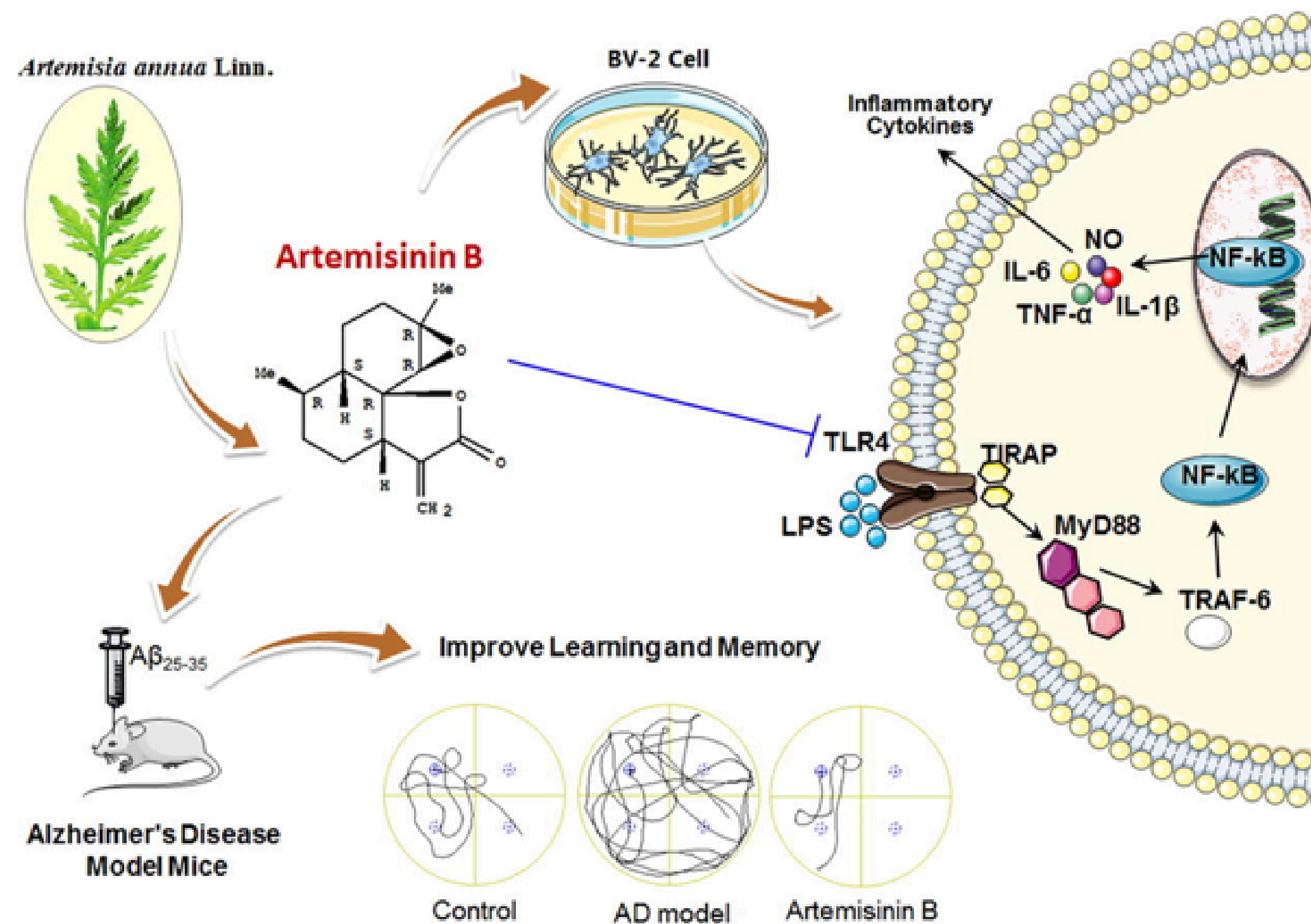
ActRx blocks Spike Protein, preventing viral uptake in Covid19



Artemisinin Blocks spike protein from attaching to ACE2 receptors and blocking endocytosis and activation of NF- κ B signalling pathway, or letting the virus into the cell.

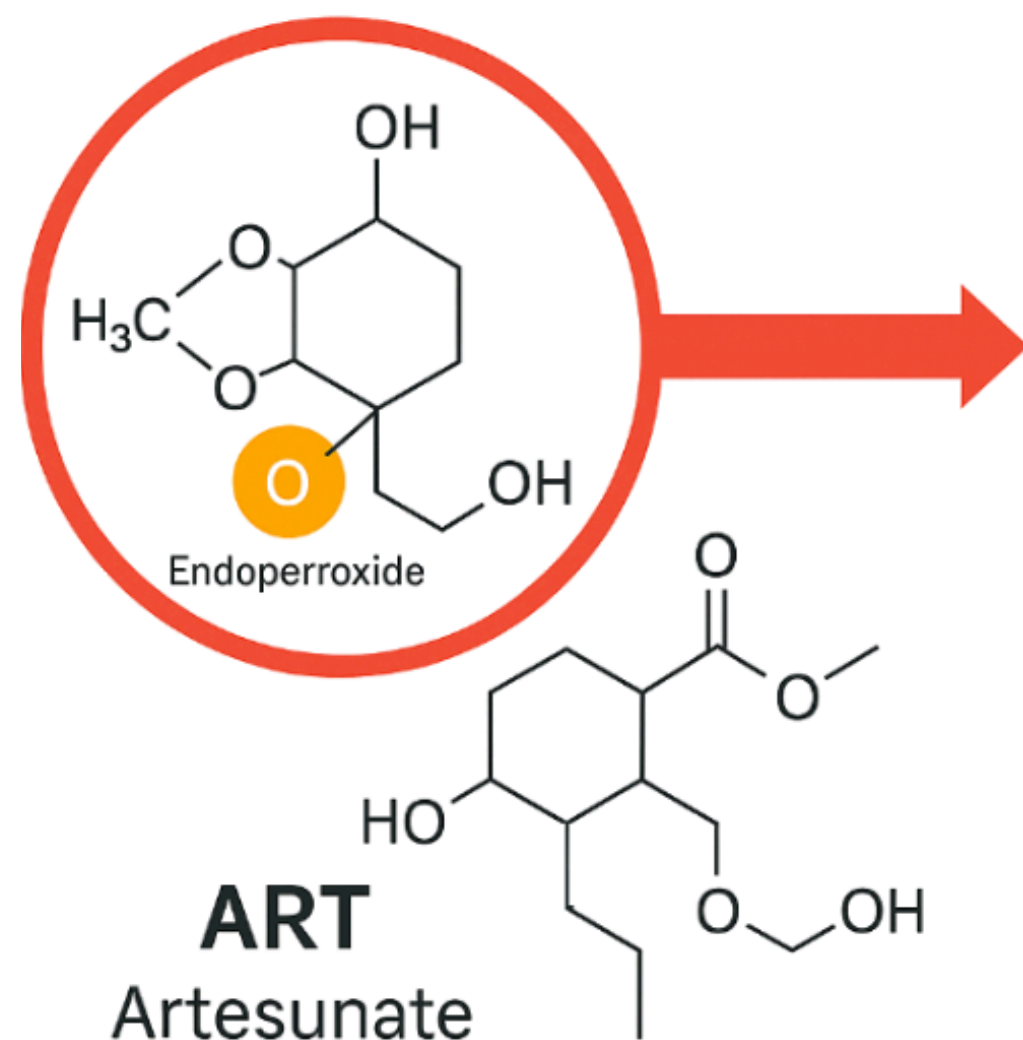


How it Works for Alzheimer's



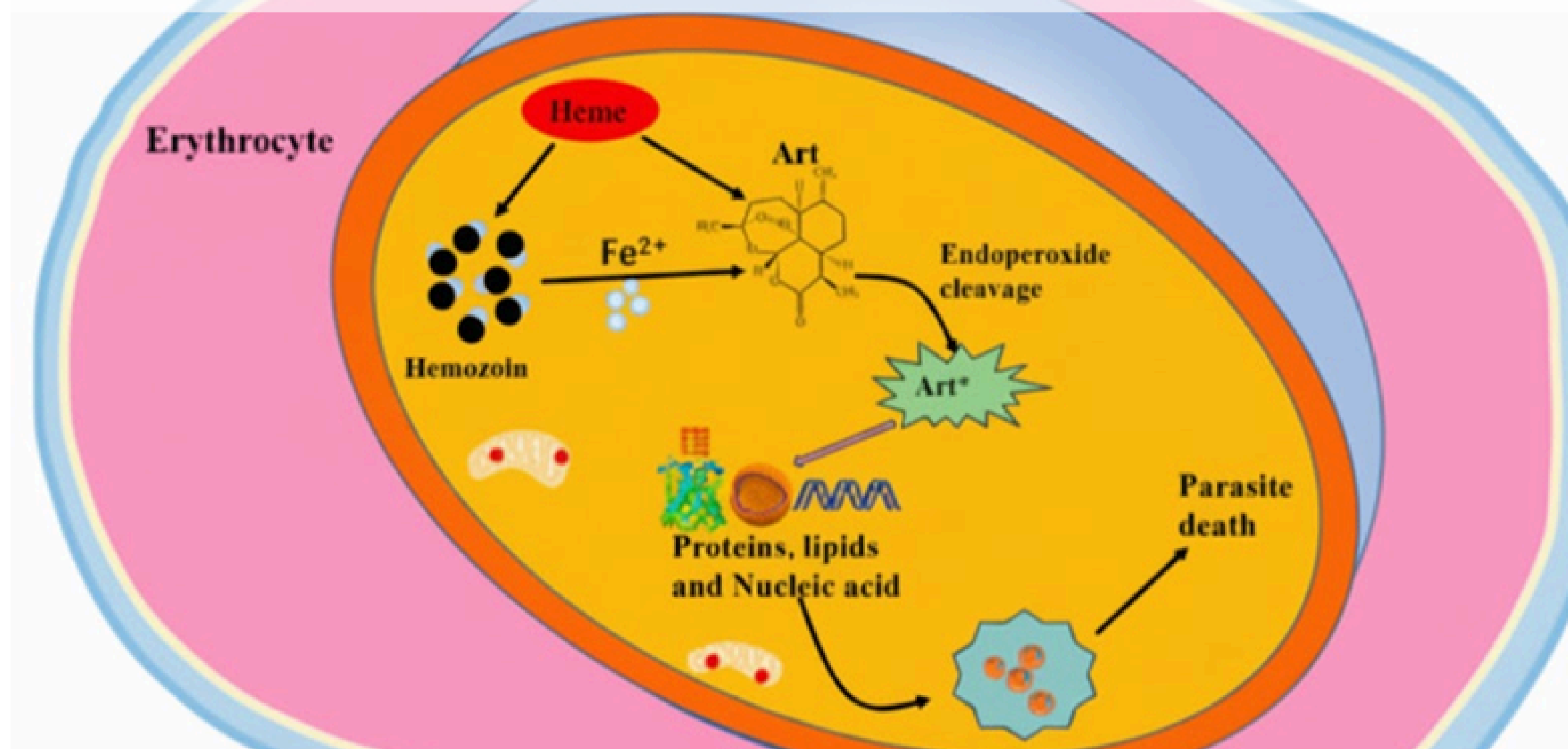
Artemisinin B acts on BV-2 cells (a type of brain immune cell) to reduce the release of inflammatory cytokines like IL-6, TNF- α , and IL-1 β . It does this by blocking the TLR4/MyD88/NF- κ B pathway, a chain reaction inside cells that normally triggers inflammation. In mouse models of Alzheimer's disease, this anti-inflammatory effect improved learning and memory.

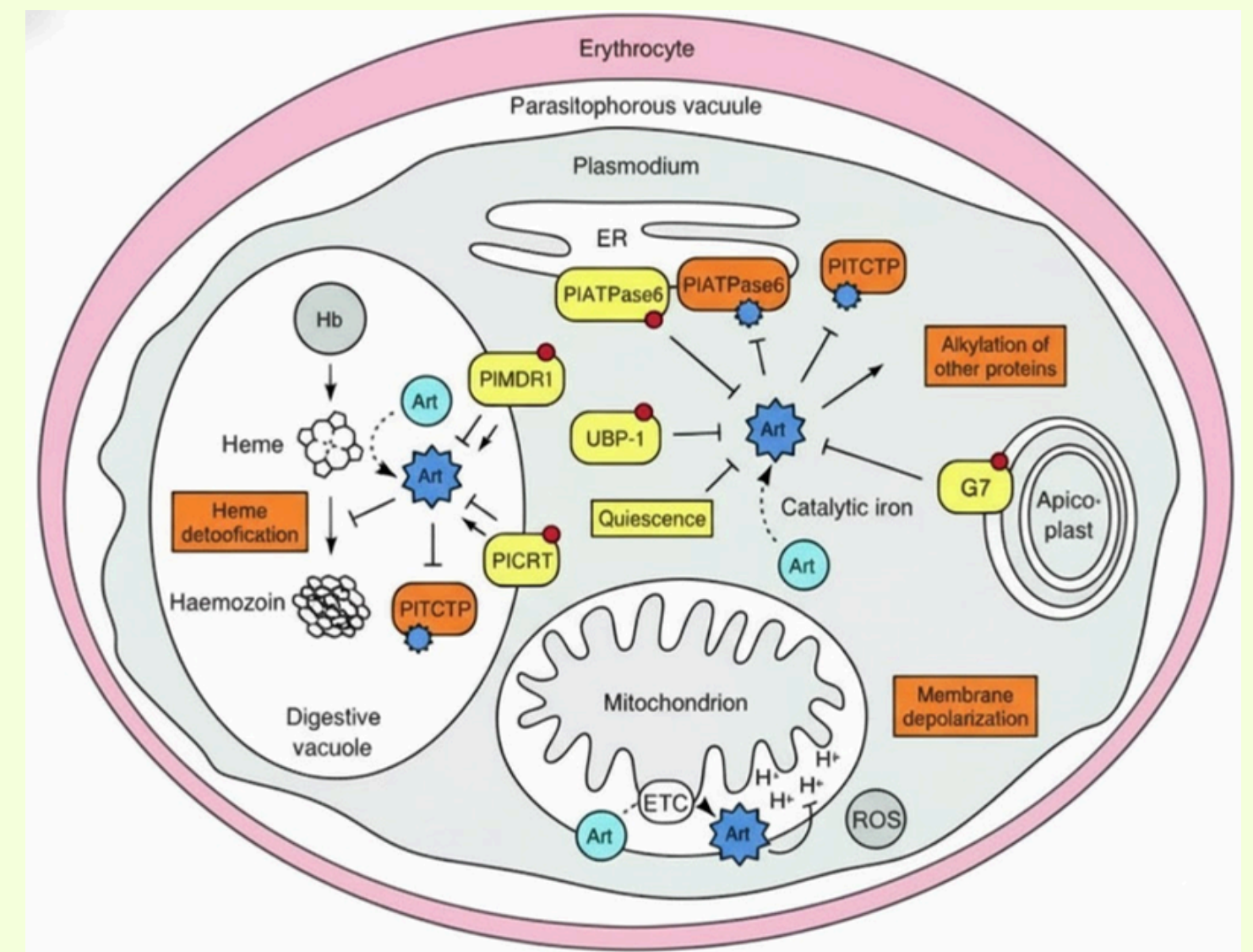
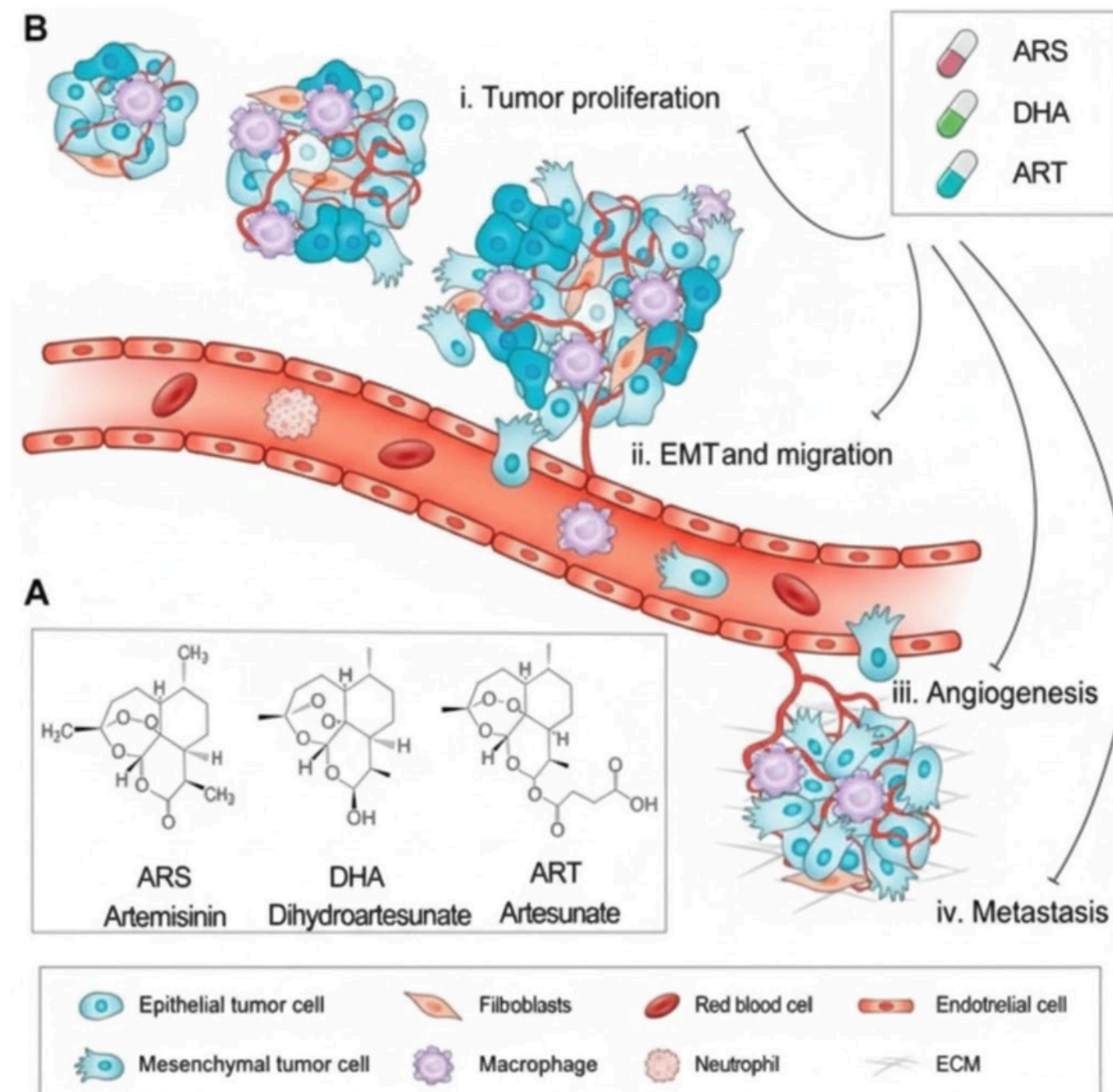
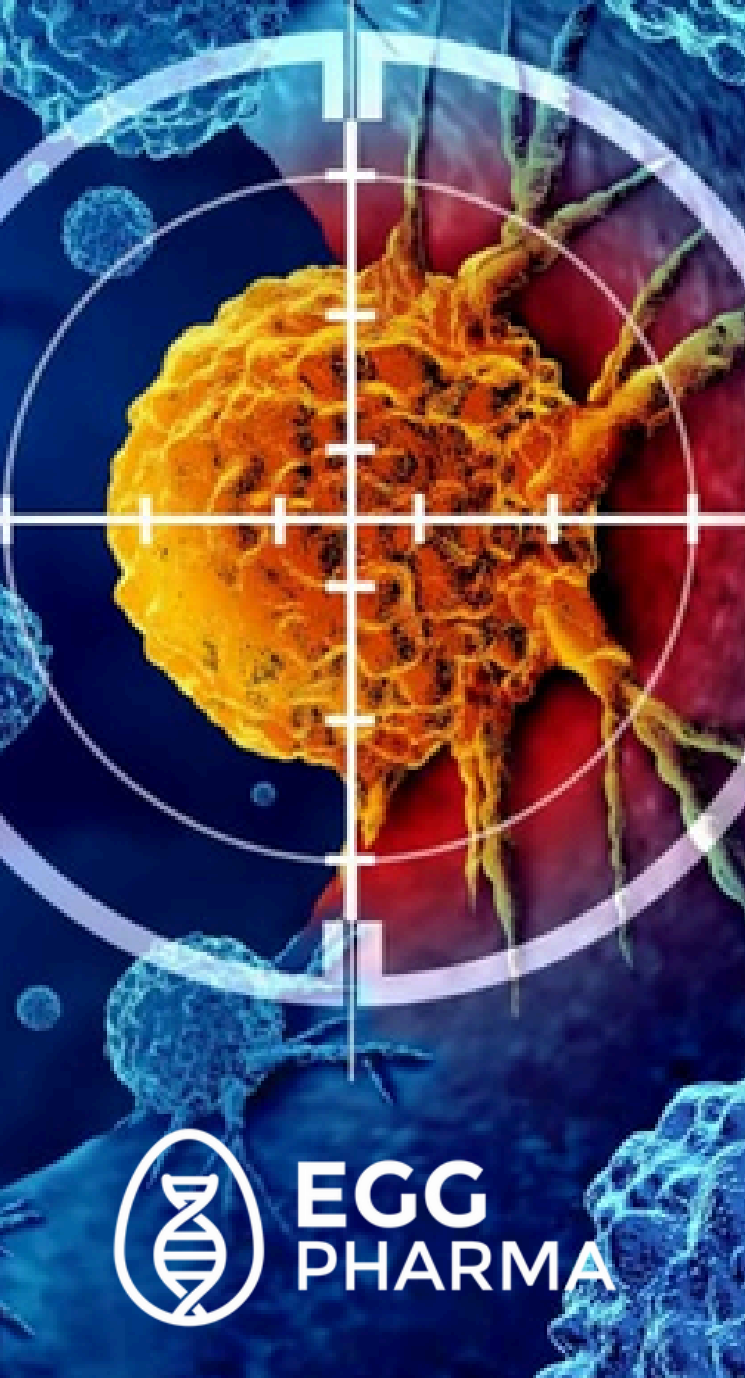
In short, it controls inflammation and restore cellular balance during viral infections, Artemisinin B here shows how the same compound family can reduce brain inflammation and protect neurons — suggesting a broader therapeutic action for both immune and nervous system health.



Key Mechanisms of Action

1. **Block heme polymerization** – trap toxic heme, poisoning the parasite.
2. **Generate reactive oxygen species (ROS)** – via the endoperoxide bridge reacting with iron.
3. **Damage parasite membranes** – oxidative stress disrupts lipid integrity.
4. **Alkylate essential proteins** – deactivate enzymes critical for survival.
5. **Inhibit PfATP6 calcium pump** – cause calcium imbalance and cell death.
6. **Disrupt mitochondrial function** – collapse ATP production.
7. **Overwhelm antioxidant defenses** – induce oxidative stress and redox failure.





Antiviral Effects

1. **Targets viral proteins** – blocks influenza A virus (IAV) nucleoprotein (NP) accumulation in the cell nucleus.
2. **Inhibits viral replication** – prevents viral reproduction by blocking NP nuclear transport.
3. **Regulates apoptosis** – suppresses virus-induced, mitochondria-mediated cell death.
4. **Interferes with host transcription** – disrupts cellular transcription factors the virus needs for replication.
5. **Blocks viral entry** – prevents viral proteins from binding to host cell receptors.
6. **Binds to Spike Protein** – in Sars Covid.

Neurological & Psychiatric:

- Alzheimer's disease
- Mild psychosis or schizophrenia

Bacterial & Parasitic:

- Leptospirosis
- Malaria
- Worms
- Sepsis

Potential Combined Therapy:

- *Possibly effective against Lyme disease when used with Ivermectin or Fenbendazole*

Viral Infections:

- Influenza A
- Intestinal flu
- Chikungunya
- Yellow fever
- Rubella
- Zika
- Ebola
- Measles and Chickenpox
- AIDS (HIV)
- Herpes
- Hepatitis C
- Rabies

Thank You!





EGG
PHARMA

