



HYPERICIN: Drug Development for 3-5 Indications

Principal Investigators

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Scientists at New York University's School of Medicine and the Weizmann Institute in Israel have performed extensive research on the pharmacological properties, uses, formulations (topical & oral) and mechanisms of action of a perihydroxylated dianthraquinone known as Hypericin. A combination of lipophilic and photodynamic properties together with a low red/ox potential and high stability endow hypericin with unique biological properties that render it effective in the treatment of numerous diseases in a light independent manner. These scientists were first to identify hypericin as a potential drug for:

1. Inhibiting viral infections from lipid enveloped viruses, (labial herpes, topically).
2. Inhibition of T cell mediated diseases (psoriasis, topically)
3. Induction of photodynamically mediated regression of superficial tumors (topical, in combination with visible light).
4. Inhibition of angiogenesis with two main indications being explored:
 - A. Preventing spread of metastases from surgically removed invasive tumors.
 - B. Treating ocular manifestations that result in pathological angiogenesis.

The toxicological, teratological and carcinogenic profiles have been performed the pharmacokinetic properties identified and an IND was issued.

FDA approved phase I/II clinical trials of hypericin have been ongoing as treatments for:

1. Malignant glioma (glioblastoma) (systemic, orally administered) (due to potent irreversible protein kinase C inhibition by hypericin).
2. Psoriasis due to down regulation of T cell mediated cytotoxicity reactions that play a role in this disease (topical application).
3. Cutaneous T- cell lymphoma, based on the photodynamic properties of hypericin (topical application in conjunction with visible light).

NYU has several issued and pending patents concerning the use of Hypericin. Some of the issued patent numbers are listed below:

US 4,898,893 – Antiviral Compositions containing Hypericin
US 6,150,414- Composition and method for treating viral infections.
US 5,506,271- Method for treating Papilloma virus infection using Hypericin
US 5, 514, 714 Methods and polycyclic aromatic compounds containing compositions for treating T cell mediated diseases.

US 6,001,882- Photoactivated Hypericin.
US 5,120,412- Preparation of Hypericin.
US 5,047,435- Antiviral compositions containing aro matic polycyclic diones.
US 6,229,048 B1 (issued May 8, 2001).

NYU is looking for a partner to develop hypericin as a drug for the various indications that have been initiated above and for the novel ones.

Patent Status: U.S. issued and pending.

For further information please contact

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