

Press Release

Cytochroma Announces Selection Of Compound For Treatment Of Psoriasis

Markham, Ontario, Canada — September 23, 2003 — Cytochroma Inc. announced today it has selected CTA018 as a drug candidate for the treatment of mild to moderate psoriasis.

“We are very excited to announce the advancement of CTA018 as a pre-IND candidate,” stated Dr. Robert Foldes, President & CEO. “Our goal is to file an Investigational New Drug application with the FDA in late 2004 for initiation of clinical development for the treatment of mild to moderate psoriasis.”

CTA018 is a potent inhibitor of CYP24 and an activator of the vitamin D signaling pathway. CYP24 is the key cytochrome P450 enzyme involved in the breakdown of the active form of vitamin D called calcitriol. Calcitriol, on its own, has been shown to inhibit proliferation and increase differentiation of skin cells and is currently used for the treatment of psoriasis. Unfortunately, calcitriol also induces CYP24 in the skin thus accelerating its own breakdown leading to potential drug resistance. Therefore, inhibiting the action of CYP24 is a desirable property in new generations of vitamin D analogues, such as CTA018, for the treatment of psoriasis.

In pre-clinical studies, Cytochroma has demonstrated that CTA018 does not cause skin irritation, even when administered at high doses. In contrast, the leading marketed vitamin D analogue, calcipotriol, is known to induce skin irritation at clinical doses in experimental models and in a significant percentage of patients.

Further studies have shown that CTA018 inhibits the proliferation of rapidly dividing cells such as human epidermal keratinocytes (i.e. skin cells). CTA018 also activates the vitamin D signaling pathway in *in vitro* and *in vivo* model systems. Overall, Cytochroma anticipates that CTA018 will be more potent than marketed vitamin D analogues such as calcitriol and calcipotriol and is expected to have a greater safety index.

“One of the problems with current vitamin D-based therapies is that they can cause hypercalcemia or elevated levels of calcium in the blood,” explained Dr. Bozena Korczak, Vice-President, Research and Development. “This potentially life-threatening side-effect limits the amount of drug that can be used to treat patients, even when applied topically. Based on pre-clinical studies,

we do not expect that topical application of therapeutically-effective doses of CTA018 will be limited by hypercalcemia.”

CTA018 is protected under patent and patent applications exclusively licensed to Cytochroma Inc. from Johns Hopkins University. Cytochroma, in collaboration with the research group of Prof. Gary H. Posner at Johns Hopkins University, has discovered proprietary vitamin D analogues that are specific and potent CYP24 inhibitors.

About Psoriasis

Psoriasis is a common immune-mediated chronic skin disease often characterized by red, scaly plaques that itch, burn, sting, and bleed easily. It afflicts approximately 80-100 million people worldwide; more than 70% of patients have the mild to moderate form. Psoriasis is found in all age groups and often seriously compromises the quality of life of those affected. Current methods of treatment are either inconvenient, show poor remission rates, and/or have serious side effects. Cytochroma has recognized that there is a great need for improved therapies.

About Cytochroma Inc.

Cytochroma Inc. is a small-molecule drug discovery and development company focused on treating skin disorders and cancer with enhanced safety and efficacy by targeting a family of proteins termed cytochrome P450s. To date, Cytochroma’s drug discovery program has identified modulators of retinoic acid and calcitriol metabolism as drug candidates for the treatment of skin diseases and cancer. For more information please visit <http://www.cytochroma.com>.

