Rich AKBBA Boswellin and Psoriasis

A new study on one of the most famous and powerful anti-inflammatory. Boswellic acids - and especially AKBBA - have been found to inhibit 5-lipoxygenase by one of two ways on 5-LO as well as (HLE) and psoriasis

Mean scores of arthritic symptoms as evaluated in an open field study of boswellic acids-containing topical analgesic Chilisin® (TM of Sabinsa Corp). In addition, a four week study as well as a three month toxicity study showed that administration of boswellic acids at 5 to 10 times the ED50 value did not cause side effects.

Inhibition of Leukotriene Synthesis

The presence of a specific AKBBA-binding site on 5-LO that is distinct from the arachidonate substrate-binding site was determined using photo affinity labeling. Among the several compounds classified as leukotriene synthesis inhibitors, nonredox inhibitors, such as boswellic acids, are preferred. Unlike redox type inhibitors they do not interact with other biological redox systems, lessening the likelihood of side-effects like methaemoglobin formation. AKBBA has been identified as the only leukotriene synthesis inhibitor so far that inhibits 5-LO activity by noncompetitive, nonredox mechanisms (3-5% of topical formulation as cream, lotion or gel)

Management of psoriasis

A study on Sabinsa's Boswellia cream for treatment of psoriasis, Clinical Evaluation of AKBBA in the management of psoriasis, was published in Clinical Dermatology 2014; 2 (1): 17---24. US clinical trials, intended to have AKBBA eventually approved as a drug by FDA for treatment of psoriasis, will begin in the near future. This will be a significant step for a nutraceutical company in USA.

The cream of *Boswellia serrata* Roxb extract standardized for 5% of 95% 3-O-Acetyl-11-Keto Beta Boswellic Acid (AKBBA) was studied in an open label, multi centered phase III clinical trial, evaluating 200 psoriatic patients with application of AKBBA cream three times daily for a period of 12 weeks. The researchers observed significant changes in LTB4 ($p<0.001$) & TNF alpha ($p<0.01$) values from the baseline along with significant changes ($p<0.05$) in VEGF & PGE2. Reduction in 'modified' PASI score from the baseline visit was in consensus with the global evaluations by physician and patients. The evidence shows superior anti-inflammatory responses rates, demonstrating that this non-toxic treatment is beneficial for those suffering from this condition.

Although far from the scope of a dietary supplement, the exploratory process that has gone into such a traditional ingredient showcases Sabinsa's passion for applying modern day technology to traditional botanicals to help create natural solutions for health.

"Our understanding of this ingredient, originating from one of the earliest compounds released by Sabinsa, called Boswellin®, is growing, and we want the world to know the positive research and the impact it has on human health," said Sabinsa founder Dr. Muhammed Majeed. "Such indications prevalent in Ayurvedic texts are now being proven by modern research, in terms of correctly standardizing, isolating the unique compound(s) and ultimately formulating safe and effective products." The cream product is sold and marketed as a drug in India. Sabinsa holds several patents for this and other uses of Boswellia.

Clinical evaluation of AKBBA in the management of psoriasis, Muhammed M., Nagabhushanam K., Sankaran N., Sood R., Karri S.K.