

C.P. 354, CH 1217 MEYRIN SWITZERLAND

Tel.: + 41 22 930 00 43 Toll Free France 0805 360 854 International +33 805 360 854

info@irelia.org www.irelia.org

COMPOUNDS - VITAMINS PRODUCT RANGE

Boswellia Serrata

Box of 120 Tablets

Botanical name: Boswellia serrata

Part used: The gum

Used for a very long time in the Ayurveda traditional Indian medicine as well as the traditional Chinese medicine as an anti-inflammatory especially in rheumatic problem. This gum has been increasingly studied over the past fifteen years due to its very broad scope of therapeutic action and its excellent tolerance.

The boswelline is a gum extract that contains, among other components, different boswellic acids considered as the main active ingredients. These acids have a powerful anti- inflammatory action which strongly inhibit the activity of the enzyme 5-lipoxygenase ⁽¹⁾, involved in the generation of leukotrienes (substances which increase the permeability and the contraction of the vessel walls, which stimulate the secretion mucus and the contraction of smooth muscle in the bronchi, those actions being involved in the inflammatory response).

The AKBA (Acetyl-11-keto-b-boswellic acid), considered the most powerful of the boswellic acids present in the gum would also have the following properties:

- Antioxidative and antiplatelet effects ⁽²⁾.
- Anti-infectious, especially against Staphylococcus aureus⁽³⁾ and Streptococcus mutans ⁽⁴⁾: by inhibiting its ability to secrete a biofilm that protects it from the action of antibiotics, the AKBA makes it more vulnerable. A large number of nosocomial infections could thus be avoided.
- Anticancer, particularly in regards to the prostate ⁽⁷⁾ and colorectal cancers ^(5,6).
- Anti-oedematous, even in severe cases as a result of irradiation of the brain due to cerebral cancer (8).
- Antirheumatic, particularly in the case of osteoarthritis of the knee ⁽⁹⁾, it competes for its therapeutic effects with the celecoxib, one of the most sold allopathic anti-inflammatory in the world.

Indications:

Many studies have been conducted to test the benefits of boswelline. Not only its effectiveness but also its very good tolerability have been demonstrated in the following affections:

- Chronic Inflammatory Intestines Diseases (10) (ulcerative colitis, Crohn's disease (11, 12)) and by extension, leaky intestine syndrome.
- Rheumatoid arthritis (13).
 - Osteoarthritis, particularly of the knee (14).
 - Asthma ⁽¹⁵⁾. As for the other properties of Boswellia demonstrated in animals, it is still too early to extrapolate for humans.

Instructions:

From 1 g to 1.5 g per day, or 4-6 tablets per day of Boswellia, 5 minutes before meals:

- 1g Boswellia is equivalent to 2 tablets in the morning and 2 tablets in the evening
- 1.5 g Boswellia is equivalent to 3 tablets in the morning and 3 tablets in the evening.

Composition:

Standardized extract of Boswellia Serrata standardized to 90% boswellic acid. Each tablet contains 250 mg of boswellic acids.

Other ingredients: corn starch, silica, cellulose, of magnesium stearate.

Precautions:

Some cases of spontaneous abortion have been reported in women using Boswellia serrata. Although the link between the cause and effect has not been formally established, it is recommended that pregnant women should not take this type of dietary supplement during the whole time of their pregnancy.

Counter indications:

None known despite the plant has been used for thousands of years.

Side effects:

Some cases of allergic cutaneous phenomena and mild intestinal disorders have been reported in the literature.

References:

- 1) H. P. Ammon, H. Safayyhi, T. Mack, and J. Sabieraj: «Mechanism of antiinflammatory actions of curcumine and boswellic acids» dans «Journal of Ethnopharmacology», 1993 March; 38(2-3), pp. 113-119.
- 2) P. K. Kokkiripati, L. M. Bhakshu, S. Marri, and coll.: «Gum resin of Boswellia serrata inhibited human monocytic (THP-1) cell activation and platelet aggregation» dans «Journal of Ethnopharmacology», 2011 September 1; 137(1), pp. 893-901.
- 3) Alsaba F Raja, Furqan Ali, Inshad A Khan, and coll «Antistaphylococcal and biofilm inhibitory activities of acetyl-11-keto-b-boswellic acid from Boswellia serrata» dans « BMC Microbiology », 2011; 11(54). www.biomedcentral.com/1471-2180/11/54.
- 4)AlsabaFRaja, FurqanAli, InshadAKhan, andcoll: «Acetyl-11-keto-b-boswellic acid (AKBA); targeting oral cavity pathogens» dans «BMC Microbiology», 2011; 4(406). www.biomedcentral.com/1756-0500/4/406
- 5) V. R. Yadav, S. Prasad, B. Sung, and coll.: «Boswellic acid inhibits growth and metastasis of human colorectal cancer in orthotopic mouse model by downregulating inflammatory, proliferative, invasive and angiogenic biomarkers» dans «International Journal of Cancer», 2011 June 23. DOI: 10.1002/ijc.26251. [Epub ahead of print]
- 6) Y. Shen, M. Takahashi, A. Goel and coll.: «Boswellic acid induces epigenetic alterations by modulating DNA methylation in colorectal cancer cells» in «Cancer Biolgy and Therapy», 2012 May, 13(7), pp: 542-552.

- 7) Hui-Qing Yuan, Feng Kong, Xiao-Ling Wang, and coll.: «Inhibitory effect of acetyl-11-keto-β-boswellic acid on androgen receptor by interference of Sp1 binding activity in prostate cancer cells» dans «Biochemical Pharmacology», 1 June 2008; 75(1), pp. 2112-2121.
- 8) S. Kirste, M. Treier, S. J. Wehrle, and coll.: «Boswellia serrata acts on cerebral edema in patients irradiated for brain tumors: a prospective, randomized, placebo-controlled, double-blind pilot trial» dans «Cancer», 2011 August 15; 117(16), pp. 3788-3795.
- 9) A. Chopra, M. Saluja, G. Tillu, and coll.: «Ayurvedic medicine offers a good alternative to glucosamine and celecoxib in the treatment of symptomatic knee osteoarthritis: a randomized, doubleblind, controlled equivalence drug trial» dans «Rheumatology (Oxford)», 2013 August; 52(8), pp. 1408-1417.
- 10) L. Gupta, A. Parihar, P. Malhotra, and coll. : «Effects of gum resin of Boswellia serrata with chronic colitis» dans «Planta Medicines», 2001 July; 67(5), pp. 391-395.
- 11) H. Gerhardt, F. Seifert, P. Buvari, and coll.: «Therapy of active Crohn disease with Boswellia serrata extract (H 15)» dans «Z Gastroenterology», January 2001; 39(1), pp. 11-17. 12)W.HoltmeieR,S. Zeuzem,J.Preiss,and coll.: «Randomized, placebo-controlled, doubleblind trial of Boswellia serrata in maintaining remission of Crohn's disease: good safety profile but lack of efficacy» dans «Inflammatory Bowel Diseases», 2011 February; 17(2), pp. 573-582.
- 13) R. Etzel : «Special extract of BOSWELLIA serrata (H 15) in the treatment of rheumatoid arthirtis» dans «Phytomedecine», May 1996 ; 3(1), pp. 91-94.

© IRELIA 2023