



Next Generation Food Supplements

Our Core-Business

bioXtract is a B to B/private label developer and manufacturer of innovative **food supplements** or **active ingredients** for pharmaceutical and food supplement industries for Belgian and export Markets.

These active ingredients are presented in the form of **formulated extracts** that can be used as ingredients for the manufacture of food supplements, but also as **ready-to-use finished dosage forms** in private label (capsules or tablets, in bulk or in blister and complete packaging under our customers' brand).

The elaborate extracts are **standardized** in natural active ingredients rigorously selected for their activities in **specific pathologies** (arthritis, metabolic syndrome, allergic rhinitis, IBS and gastrointestinal disorders, inflammatory diseases ...).

Based on his know-how in the field of quality systems, industrial scale-up and registration processes, **bioXtract** design food supplements or active formulated ingredients from the selection of raw materials until the industrial manufacture of finished products.

Our Quality

The logistic/manufacture facility of **bioXtract** is **registered and approved by the AFSCA** (Federal Agency for the Food Chain Safety) for food supplement production under the Registration Number AER/NAM/004889 since 2006.

bioXtract disposes of a validated **Self-Inspection System** (SIS) which ensures the respect of requirements linked to the food safety.

bioXtract is **FSSC22000 certified**, which is a certification scheme for food safety systems including ISO 22000:2005, ISO 22002-1:2009 and additional FSSC 22000 requirements

bioXtract is **GMP certified** according to NSF/ANSI Standard 173, Section 8 dedicated to dietary supplements for both our laboratory and logistic/manufacture premises.

A global Quality Manual is available upon request for more complete information

Our Products

bioXtract has acquired a particular know-how of over 10 years in the development and management of products based on the active ingredient "**curcumin**" and is the leader in Belgium for this asset, having developed several innovative and highly bioavailable curcumin formulations (patented).

Finished dosage form (capsules):

- **Arantal®** a remedy for chronic treatment of **osteoarthritis** and **inflammatory diseases**
- **Nasaler®** a natural remedy for the symptoms of **allergic rhinitis**, offering symptomatic relief with long term immunomodulating activity
- **Rifencin®** a natural remedy for the relief of gastrointestinal disorders like Irritable **Bowel Disease (IBD)** or **Irritable Bowel Syndrome (IBS)**

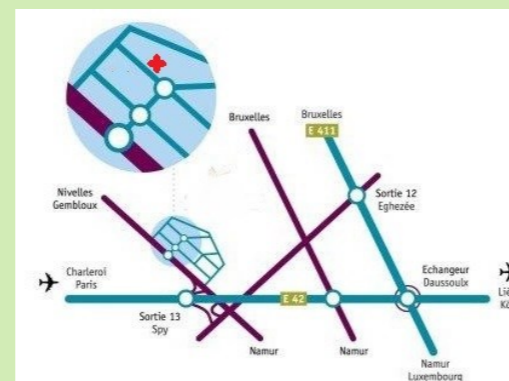
Bulk ingredient:

Cursol®, a pre-formulated powdered ingredient for the manufacture of food supplements with **anti-inflammatory actions**.

bioXtract's innovative range of dietary supplements also includes:

- **Regulid Plus** acting on the **weight stabilization** in yo-yo dieting syndrome as well as on blood HDL and triglyceride level management, acting as a natural treatment of the **metabolic syndrome**
- **Cognityl**, associating theobromin from cocoa and caffeine from tea for **concentration and mental energy**

Both are available in the form of bulk formulated ingredient or in the form of finished dosage forms.



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ARANTAL® HIGHLY BIOAVAILABLE CURCUMIN

Innovative Formulation

- ✓ Patented Proprietary Formulation of Highly Bioavailable Curcumin
- ✓ Best source of Bioavailable Curcumin on the market
- ✓ Safety well-documented and suitable for Chronic Use
- ✓ Efficacy proven through numerous Clinical Studies performed on humans

ARANTAL® AN ALTERNATIVE THERAPY FOR OSTEOARTHRITIS

ARANTAL® is a natural remedy designed for the fast relief of pain in rheumatology (for moderate articular pain on waking up as well as for moderate to severe persistent articular pain).

Its patented formula, based on a bio-optimized extract of turmeric, considerably improves joint comfort by acting on 2 levels:

- on the complaints, by quickly relieving joint discomfort.
- on wear and tear, by slowing down the damage to the cartilage.

ARANTAL® is a gelatin soft capsule of 920 mg containing a highly bioavailable turmeric rhizome dry extract (Curcuma longa L.) in the form of oily gel formulation.

Each soft capsule contains a quantity of turmeric extract corresponding to 42 mg of curcumin.

The suggested use is:

- Start dose of 2 capsules twice a day before a meal for one month
- Maintenance dose of 2 capsules once a day before a meal.

ARANTAL®

Arantal is an **EFFECTIVE & SAFE** solution

- ▶ On **acute pain**
- ▶ On **chronic pain** : comparable efficacy to NSAIDs without side effects
- ▶ **Improves patients mobility**
- ▶ **Protects cartilage**
- ▶ **Improves healing** of muscle and ligament lesions
- ▶ **High rate of patients' satisfaction**

▶ **No severe adverse effects** : either gastrointestinal, cardiovascular, renal or hepatic.

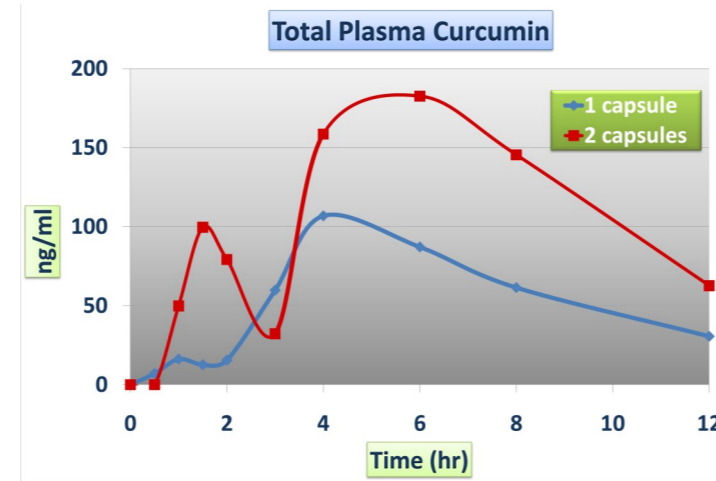


ARANTAL® Pre-clinical acute oral toxicity

ARANTAL® acute oral toxic trial in rats showed no particular effect and classified the product in the danger 5 category DL50 superior 5,000 mg/kg.

ARANTAL® 's Bioavailability

A pharmacokinetics study on ARANTAL® demonstrated the high bioavailability of its active principals. The trial was run on 2 groups of 12 healthy individuals, each group being orally administered 1 or 2 capsules of ARANTAL® respectively.



ARANTAL® Clinical Trial on 280 patients suffering from gonarthrosis

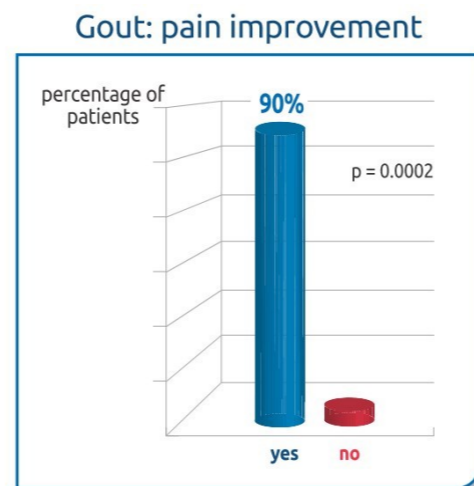
A randomised, double-blind, multicenter clinical trial evaluated the analgesic efficacy of ARANTAL® in patients suffering from gonarthrosis, on a short term period (2 weeks) and the results showed :

- ARANTAL® is an innovative food supplement offering a short term analgesic effect at a same level than acetaminophen.
- ARANTAL® is a safe product dedicated to the relief of pain in osteoarthritis, leading to a relief of pain between 30 to 35% in 2-weeks.

ARANTAL® Gout Attack Observational Study

Gout Attack Study on 54 patients showed :

- A fast improvement in acute pain within 24 to 48 hours for 90% of the patients
- 65% of the patients continued therapy to prevent attacks with 2 caps/day during 3-6 months
- 91% of the patients were completely satisfied



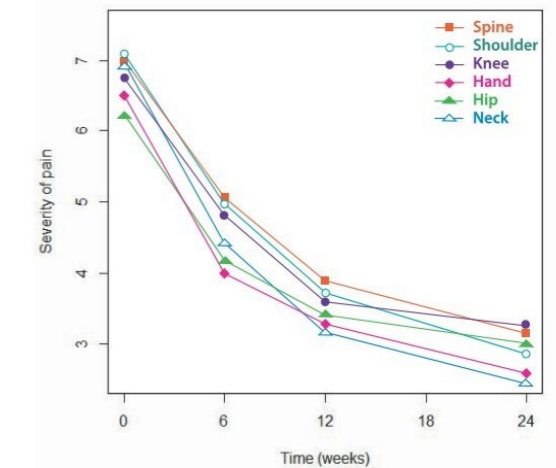
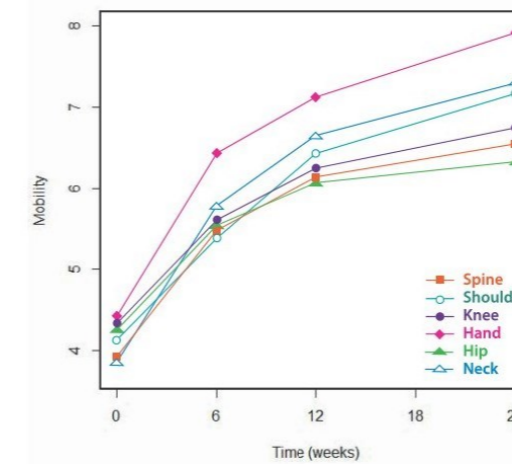
ARANTAL® Safety Evaluation on aged patients

A Safety Evaluation was conducted on aged patients with osteoarthritis and comorbidity showing that ARANTAL® :

- can be used with anticoagulants (no effect reported on coagulation)
- can be used in case of renal insufficiency (no effect on urea, on creatinine or on uric acid)
- presents no interaction with hepatic functions (no action on hepatic parameters like GOT, GPT, GammaGT and Alkaline phosphatase)
- can be used in case of diabetes (no effect on blood glucose nor on glycosylated hemoglobin HbA1c)

ARANTAL® Clinical Trial on osteoarthritis joint pain

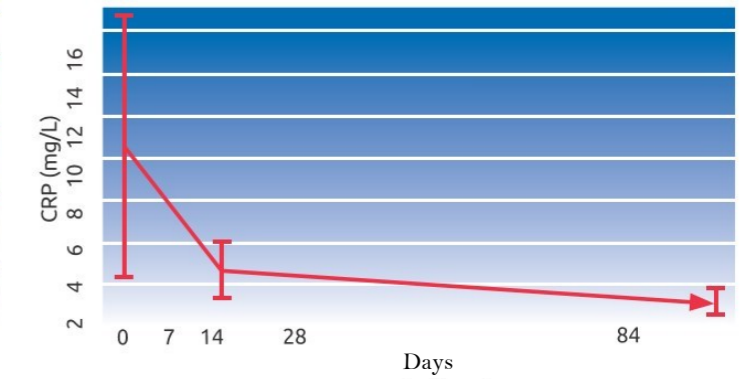
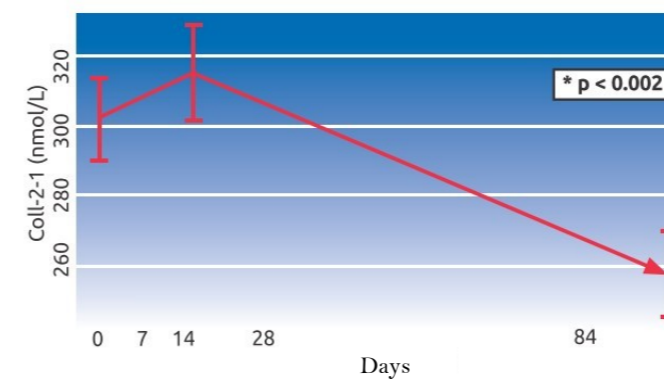
- 54% reduction of pain (P<0.0001)
- Significant improvement of Flexibility : (P<0.0001)
- Excellent tolerance
- Increased satisfaction of 98% of the patients compared to their previous treatment
- 53% decrease of initial medications (Painkillers, NSAIDs, Chondroprotectives) (P<0.0001)



ARANTAL® Study on some Biomarkers of Osteoarthritis of the knee

The clinical efficacy of ARANTAL® was evaluated on pain, side effects and effects on some biomarkers of osteoarthritis at 84 days in 22 patients with femorotibial osteoarthritis of the knee. Studied biomarkers were Coll2-1, Coll2-1NO2, Fib3-1, Fib3-2, Cartilaps, MPO, ultrasensitive CRP .

A significant change over time was observed for the biomarker Coll2-1 (p = 0.0020) and for the patient's assessment of the global evolution of the disease (p = 0.0047). A significant decrease of 77% of the inflammatory state of biomarker hsCRP was also observed.



ARANTAL® Cohort study on patients suffering from osteoarthritis

An observational cohort study (OFKO survey) was conducted during 3 months on 1077 patients suffering from osteoarthritis.

ARANTAL® decreased pain with or without a concomitant treatment. MCII (Minimum Clinical Important Improvement corresponding to a decrease of 19.6mm on the VAS scale) was obtained for 89% of patients at the end of the study and the number of patients reaching MCII increased with the duration. Moreover, ARANTAL® additive effect was to decrease the concomitant treatment intake (paracetamol & NSAID).