

# EFFICIENCY OF BCL-EXTRACT\* IN OSTEOARTHRITIS OF THE KNEE

data from **COPRA** study

Henrotin et al. *Bio-optimized Curcuma longa extract is efficient on knee osteoarthritis pain: a double-blind multicenter randomized placebo controlled three-arm study.* Arthritis Research & Therapy volume 21, Article number: 179 (2019)



## 150 PATIENTS WITH SYMPTOMATIC KNEE OSTEOARTHRITIS



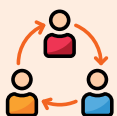
### STUDY

Prospective ▪ Randomised  
Comparative ▪ Multicentric

#### DOUBLE BLIND VERSUS PLACEBO

Treatment of 3 months

### 3 PARALLEL GROUPS

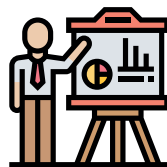


- BCL-extract\* high-dose  
n=49, 3 caps. Flexofytol® 2x/day
- BCL-extract\* low-dose  
n=47, 2 caps. Flexofytol® + 1 caps. placebo 2x/day
- Placebo  
n= 45, 3 caps. placebo (sunflower seed oil) 2x/day

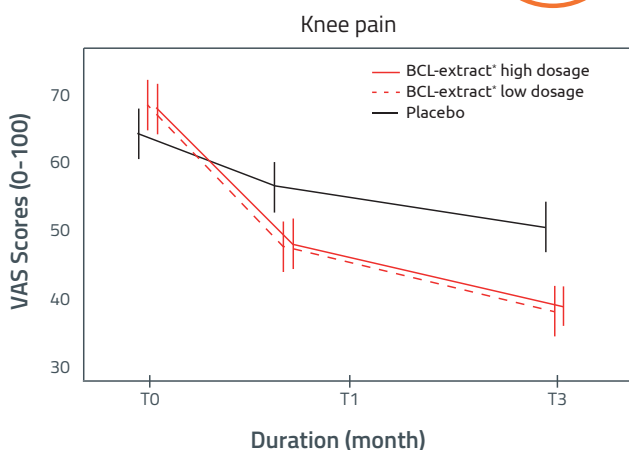
## GOAL:

Evaluate the efficacy and tolerance of BCL-extract\* on knee osteoarthritis patients taking analgesics or anti-inflammatory drugs

Study presented in  
**EULAR 2018** (extract FRI0527),  
**SFR 2018, OARSI 2019**  
and **ICRS 2019**

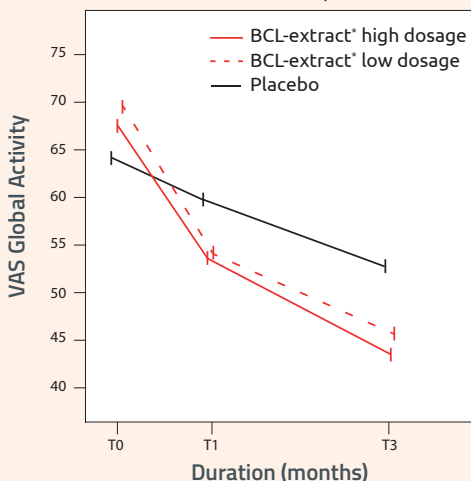


# RESULTS



**-40% of pain** with 2 dosages of BCL-extract\* ( $p < 0.001$ )

Evolution of Patients Global Assessment of Disease Activity (PGADA)



**-36%**  
the impact of the disease on daily activities

with 2 dosages of BCL-extract\* ( $p < 0.001$ )



# BCL-extract\* decreases cartilage degradation within 3 months



	BCL-extract*	Placebo
Average decrease in Q3	<b>-23,9 nM</b> (p=0.031)	<b>-2,3 nM</b> (p=0.572)

**significant decrease  
in biomarker Coll2-1**

*Coll2-1 is a biomarker for the degradation of type II collagen*

## Significant decrease in the consumption of paracetamol and NSAIDs

- BCL-extract\* high dose decreases the intake of paracetamol (p=0.031 à T1, p=0.0016 à T3).
- BCL-extract\* low dose decreases the intake of NSAIDs (p=0.038 à T1, p=0.029 à T3).



**The number of patients who experienced adverse events was identical in the 3 groups**

## CONCLUSION

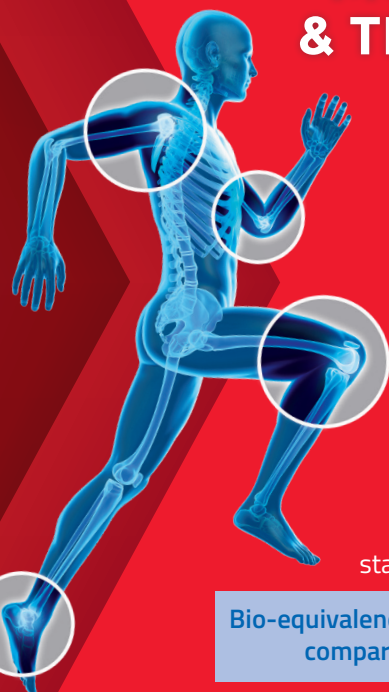
**In case of knee osteoarthritis, BCL-extract\* allows to:**

- ✓ **Rapidly reduce pain**
- ✓ **Improve patient's quality of life**
- ✓ **Reduce the consumption of paracetamol and NSAIDs**
- ✓ **With an excellent tolerance level**

\*The BCL extract is marketed by the Tilman laboratory under the name Flexofytol®. • 1. Unité de Recherche sur l'Os et le Cartilage, Arthropole Liège, Université de Liège, Institut de Pathologie, CHU Sart-Tilman, Liège, Belgique • 2. Service de rhumatologie - CHU Sart-Tilman, Liège, Belgique • 3. Service de rhumatologie - UZ Gent - Gand, Belgique • 4. Service de rhumatologie - ZNA Jan Palfijn - Merksem, Belgique • 5. Service de rhumatologie - CHU UCL Namur - Site de Godinne, Yvoir, Belgique • 6. Service de rhumatologie - UZ Leuven - Louvain, Belgique • 7. Service de rhumatologie et de médecine physique - Hôpitaux Iris Sud - Site Etterbeek-Ixelles, Bruxelles, Belgique • 8. Service de rhumatologie - Algemeen Stedelijk Ziekenhuis - Alost, Belgique • 9. Service de médecine physique et de rééducation - Centre Hospitalier du Bois de l'Abbaye - CHBAH Seraing, Belgique • 10. Service de rhumatologie - CHU Brugmann, Bruxelles, Belgique • 11. Médecine physique - UZA - Anvers, Belgique • 12. Médecine générale - Anthistes, Belgique • 13. Tilman S.A. - Baillonville, Belgique

# Flexofytol<sup>®</sup> PLUS

## JOINTS, MUSCLES & TENDONS



### REINFORCED ACTION for

- Maintaining the flexibility of **JOINTS, MUSCLES & TENDONS**
- Limiting the ageing of cartilage

### SYNERGY OF 3 ACTIVES<sup>1</sup>

Bioactive turmeric extract standardised to **72 mg curcumin**

Bio-equivalence in curcumin demonstrated compared to the Flexofytol formula<sup>2</sup>





+ **Boswellia serrata** oleoresin  
120 mg standardised to 65% boswellic acids

+ **Vitamin D** 1,8 µg

## HOW TO USE

To be taken **WITHIN** meals to improve the assimilation of Boswellia



	Children from 6 to 12 years	Adults and children older than 12 years
<b>START</b>	2  in the morning during minimum 1 month	2  in the morning and in the evening during minimum 1 month
<b>MAINTENANCE</b>	1  in the morning	2  in the morning

**Flexofytol<sup>®</sup> Plus** may be used for long periods without gastric complications.

Precautions:

- Do not use during pregnancy and breastfeeding.
- Consult your doctor or pharmacist in case of concomitant use of anticoagulants.

56 tablets : 20,90€  
CNK 3738-218

182 tablets : 56,40€  
CNK 3738-200




**Tilman<sup>®</sup>**

<sup>1</sup> Composition per tablet

<sup>2</sup> Phase 1 clinical study: evaluation of the bioavailability of Flexofytol PLUS<sup>®</sup>. Catholic University of Louvain (UCL), June 2018