



GET BACK
TO AN
ACTIVE LIFE



VISCALGIC[®]
ORAL VISCOSUPPLEMENTATION




VISCALGIC[®]
ORAL VISCOSUPPLEMENTATION

RELIEVING
JOINT DISCOMFORT

WHAT IS OSTEOARTHRITIS ?

Osteoarthritis (OA) is the most frequent joint disorder and one of the most common chronic diseases. Characterized by a cartilage erosion, OA gradually worsens over time and can become rapidly painful and incapacitating.

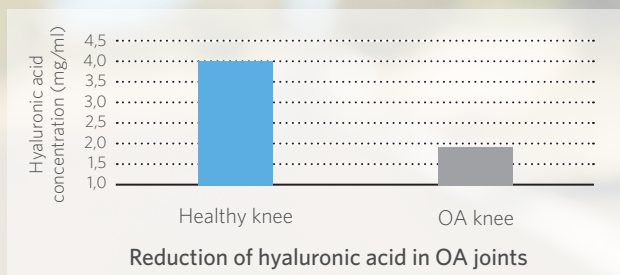
OA can develop in any joint in the body, but most commonly affects knees, hips, hands, neck and lower back.

The main symptoms are chronic pain, stiffness and loss of mobility.

WHAT IS HYALURONIC ACID ?

Hyaluronic acid (HA) is a major component of the synovial fluid and cartilage, and is responsible for the lubrication and cushioning in joints.

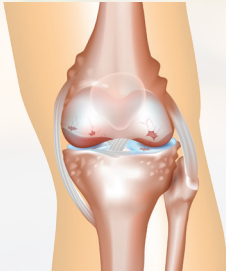
It decreases friction between joint surfaces and protects soft tissue from trauma by acting as a shock absorbant. HA also have analgesic, anti-inflammatory, antioxidant and chondroprotective effects.



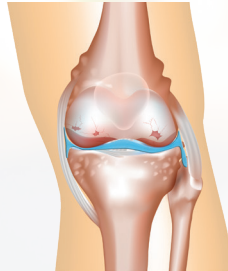
In OA joints, the quality and quantity of HA are diminished. As a result, the synovial fluid has lower viscosity and elasticity, decreasing its ability to lubricate the joint and absorb shocks. The articular surfaces are therefore altered and the cartilage degraded by the forces of friction and compression, leading to significant pain and function loss

WHAT IS VISCOSUPPLEMENTATION ?

At present, restoring the viscoelasticity of the synovial fluid by intra-articular administration of HA, called viscosupplementation (VS), is the treatment of choice for OA patients. Compared with NSAIDs and corticosteroids, VS avoids the adverse events linked to these drugs, provides longer effects, treats not only pain but also stiffness and loss of motion, and protects cartilage.



In OA knee, the HA concentration of the synovial fluid is low. As a result, the cartilage is exposed to frictional and compressional damage.



The supplementation of HA in the synovial fluid improves lubrication and cushioning in the knee.

WHAT IS ORAL VISCOSUPPLEMENTATION ?

According to the current protocol, HA should be administered repeatedly into the joint cavity (1 to 5 injections every 6 months). This necessity for multiple injections and sessions is a major drawback of the therapy. To be treated with HA, patients must visit clinics repeatedly and must undergo the discomfort and risk of complication associated with the repetition of injections. Considering these disadvantages, it is far more desirable to supplement the joint in HA by non-invasive delivery. VISCALGIC® follows this strategy and provides an oral viscosupplementation.

Contrary to theoretical predictions, clinical studies have shown that the symptoms of OA are alleviated by HA ingestion. Orally administered HA is absorbed without substantial degradation, distributed to synovial joints while preserving its biological activities, and is retained in the tissues for prolonged periods.



**VISCALGIC**[®]
ORAL VISCOSUPPLEMENTATION

ENJOYING
**COMFORTABLE
MOVEMENTS**



VISCALGIC®
ORAL VISCOSUPPLEMENTATION

MAKE
THE RIGHT MOVE



WHAT IS **VISCALGIC®** ?

VISCALGIC® is a range of orally administered products for viscosupplementation indicated to support joint comfort, cartilage health and articular mobility. VISCALGIC® products deliver a substantial quantity of hyaluronic acid (HA) inside the joint tissues to reduce stiffness and improve joint function.

HOW DOES IT **WORK** ?

The oral HA is absorbed and distributed to bone, cartilage and synovial fluid and is retained in those tissues for prolonged periods. As a result, the quantity and quality of HA are restored, thus ensuring a good lubrication and shock absorption in the joint.

WHAT ARE **THE BENEFICIAL EFFECTS** ?

VISCALGIC® products improve joint function, reduce stiffness and increase the range of motion.

- ▶ JOINT COMFORT
- ▶ CARTILAGE HEALTH
- ▶ ARTICULAR MOBILITY

CLINICAL RESULTS

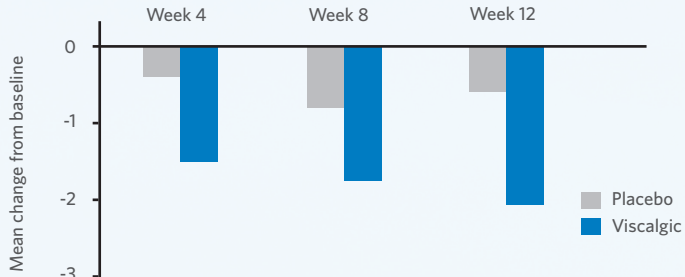


Fig. 1 Improvements in stiffness ($P < 0.001$).

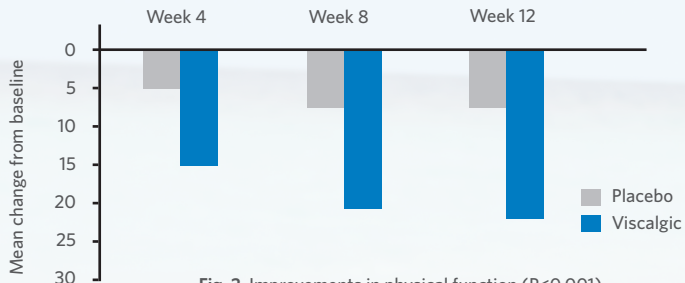
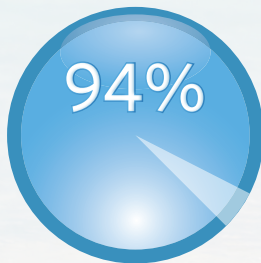


Fig. 2 Improvements in physical function ($P < 0.001$).



PATIENT
SATISFACTION*





* Patient satisfaction at 3 months - Viscalgic -108 patients - September 2023



VISCALGIC[®]
ORAL VISCOSUPPLEMENTATION

CLINICALLY
PROVEN EFFICACY

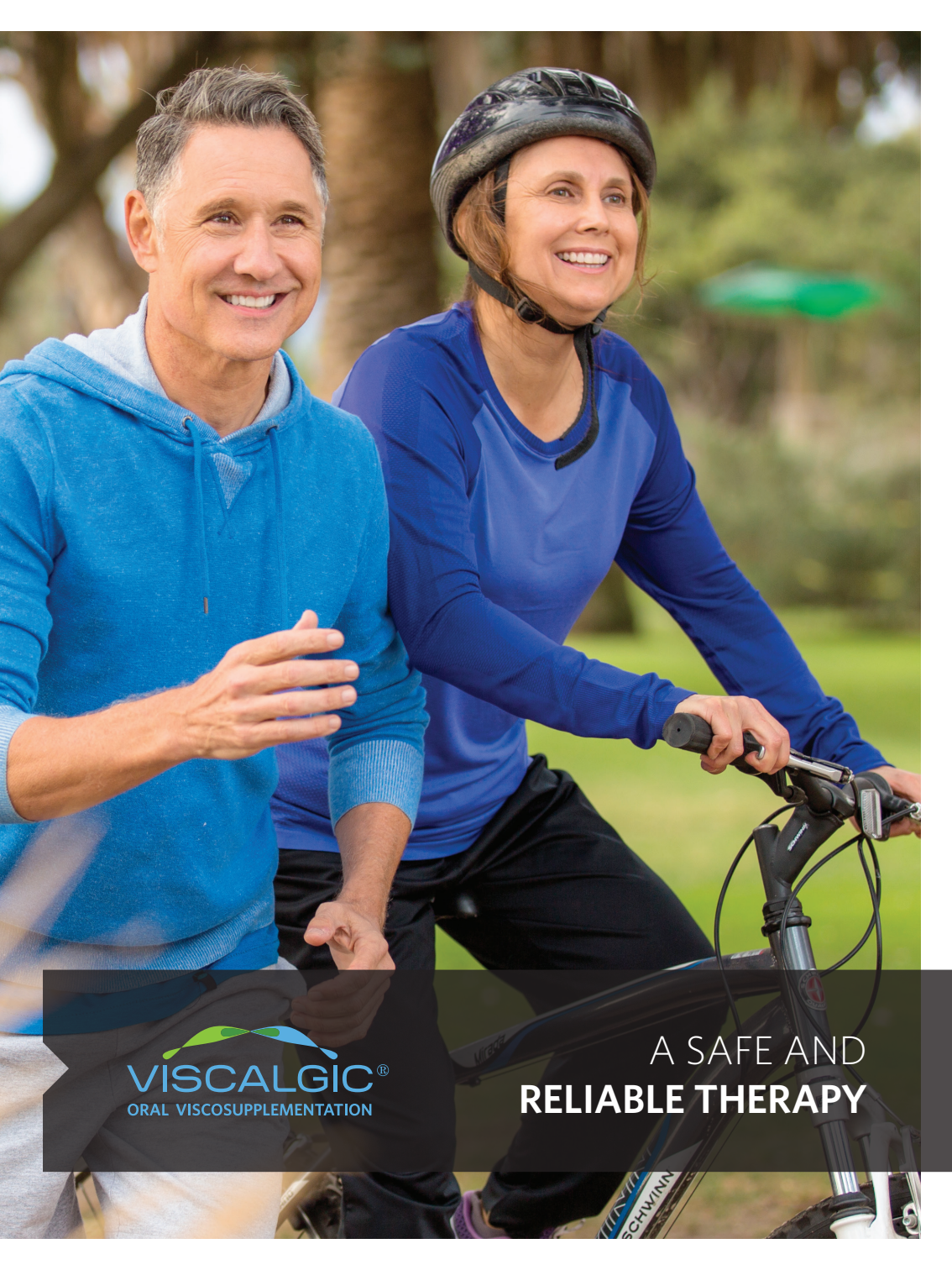
SPECIFICATIONS

	 VISCALGIC® (hyaluronic acid) capsules	 VISCALGIC® (hyaluronic acid and glucosamine) capsules GS	 VISCALGIC® (hyaluronic acid) capsules 300	 VISCALGIC® (methylsulfonylmethane and hyaluronic acid) capsules MSM
COMPOSITION	Hyaluronic acid	Hyaluronic acid + glucosamine	Hyaluronic acid	Hyaluronic acid + Methylsulfonylmethane
CONCENTRATIONS	120 mg per capsule	120 mg + 1500 mg per 3 capsules	300 mg per capsule	120 mg + 450 mg per 2 capsules
HA MOLECULAR WEIGHT	1 MILLION DALTON			
EFFECTS	Joint comfort, mobility improvement, cartilage health			
ADMINISTRATION	ORAL			
DOSAGE	1 Capsule Daily	3 Capsules Daily	1 Capsule Daily	2 Capsules Daily
ONSET OF EFFECTS	A couple of weeks of regular intake			
DURATION OF EFFECTS	Up to 3 months after the last intake			
PACKAGING	Bottle of 120 capsules			
STORAGE	At a room temperature in a dry environment			

VISCALGIC® products are composed of pharmaceutical-grade ingredients of non-animal origin manufactured through a biofermentation process. As a result, VISCALGIC® products have a high purity, an improved biological activity and are free from animal proteins potentially responsible for allergenic reactions as well as from transmissible infectious agents (viruses and prions).

VISCALGIC® products are suitable for halal, kosher, vegan and vegetarian diets.

VISCALGIC® products are manufactured in the United Kingdom under strict quality control and in small batches in order to provide only fresh products.



**VISCALGIC**[®]
ORAL VISCOSUPPLEMENTATION

A SAFE AND
RELIABLE THERAPY

For more information, visit
www.viscalgic.com



manufactured by:
ASTAGEN THERAPEUTICS LTD.
Novatex Bioengineering division
MK44 1LQ Sharnbrook
United Kingdom
www.novatex-bioeng.com