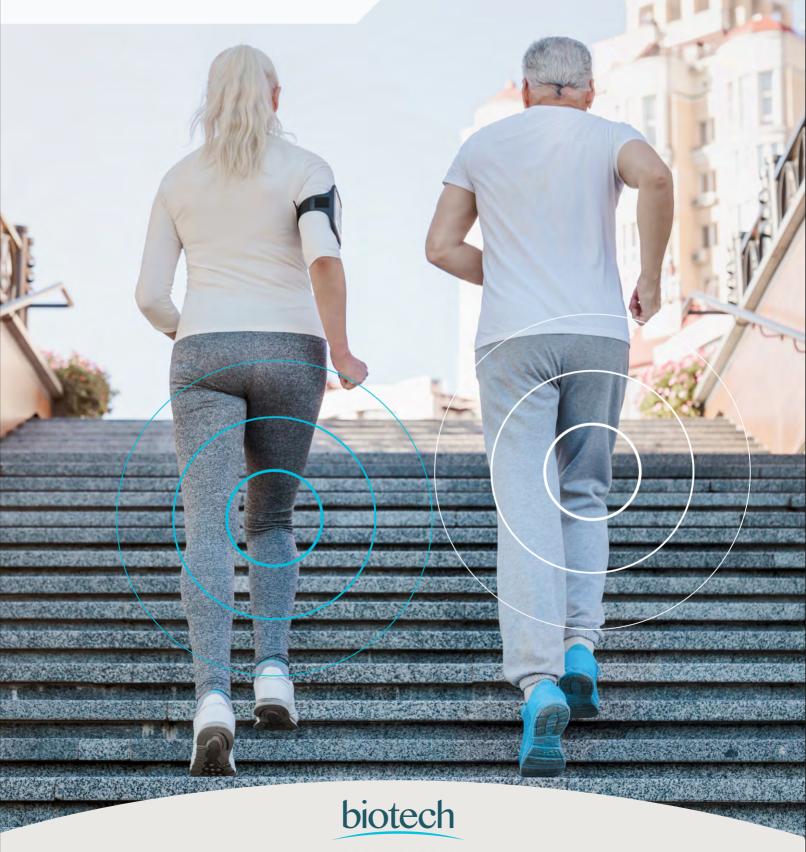
#### **BIOVISC**

For Smooth Joint Activity

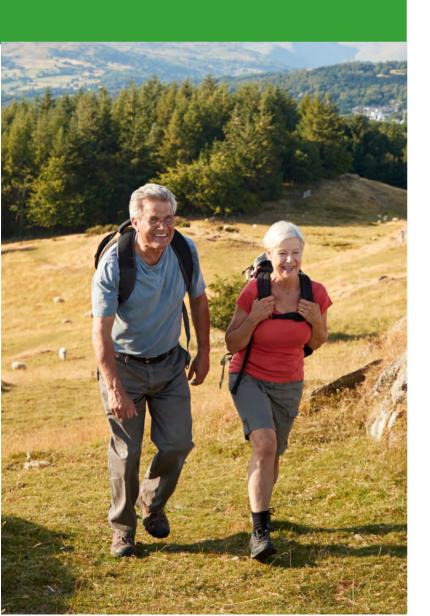
Through
Anti-inflammatory,
Anabolic, Analgesic,
and Chondro-Protective
mechanisms!



## What are the causes and symptoms of knee OA?<sup>2</sup>

Symptoms of osteoarthritis (OA) present as pain in and around the joints, morning stiffness, restricted joint movements associated with muscle weakness.

Knee OA is associated with disrupted sleep, depression, increased sedentary behavior, less physical activity, obesity and decreased the quality of life.



**Biovisc** reduces pain by

**36.9**%<sup>3</sup>



**Biovisc** reduces stiffness by

48.9%3



**Biovisc** improves mobility

(physical function) by

**39.7**%<sup>3</sup>



#### **WHY BIOVISC?**

# Most Comprehensive Portfolio in Intra-articular Injection Segment

- 20 mg. & 40 mg. for Multiple Injection regime
- → 60 mg. & 90 mg. for Single Injection Treatment



#### **Superior** Formulation

High Molecular Weight
Formulation with
Higher Viscosity
and HA concentration
as per requirement

## **Quality Certification**

(CE) available for entire range

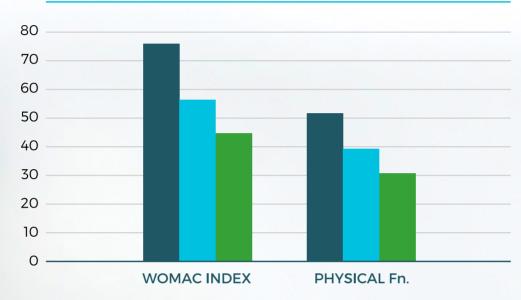
### Superior Patient Results

in pain, stiffness & mobility for comfort of those suffering from OA

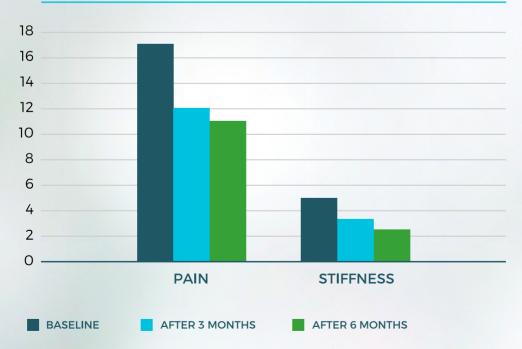


#### **SUPERIOR PATIENT RESULT**

	Base Line	3 Months	6 Months <sup>3</sup>	
WOMAC INDEX	75	53	45	
PHYSICAL Fn.	52	38	31	



	Base Line	3 Months	6 Months <sup>3</sup>	
PAIN	17	12	11	
STIFFNESS	5.3	3.3	2.7	



<sup>&</sup>lt;sup>1</sup> Axe JM, Snyder-Mackler L, Axe MJ. The role of viscosupplementation. Sports Med Arthrosc 2013; 21: 18-22 [PMID: 23314264 DOI: 10.1097/JSA.0b013e3182673241

<sup>&</sup>lt;sup>2</sup> www.ncbi.nlm.nih.gov > pmc > articles > PMC5952125

<sup>&</sup>lt;sup>3</sup> Data on File. WOMAC Score at the end of 6 months after Injection with Optivisc Single Shot (90Mg.)



#### COMPREHENSIVE PORTFOLIO OF HIGH MOLECULAR WEIGHT HA FORMULATIONS

	BIOVISC ORTHO	BIOVISC ORTHO PLUS	BIOVISC ORTHO SINGLE 60	BIOVISC ORTHO SINGLE 90
Sodium Hyaluronate concentration	Sodium Hyaluronate 1% (20 mg)	Sodium Hyaluronate 2% (40 mg)	Cross-linked Sodium Hyaluronate 3% (60 mg)	Cross-linked Sodium Hyaluronate 3% (90 mg)
Origin	Bacterial	Bacterial	Bacterial	Bacterial
	Fermentation	Fermentation	Fermentation	Fermentation
Volume	2ml.	2ml.	2ml.	3ml.
Frequency	3-5 injection with weekly interval	3-5 injection with weekly interval	Single injection	Single injection
Molecular Weight	2.8 to 3.2 million	2.8 to 3.2 million	2.8 to 3.2 million	2.8 to 3.2 million
	dalton	dalton	dalton	dalton
Osmolarity	270-400	270-400	270-400	270-400
	mOsm/Kg	mOsm/Kg	mOsm/Kg	mOsm/Kg
Shear Viscosity at 25°C	3,00,000 mPaS	4,00,000 mPaS	5,00,000 mPaS	5,00,000 mPaS
	to 4,50,000 mPaS	to 7,00,000 mPaS	to 8,50,000 mPaS	to 8,50,000 mPaS







