

## Effect of a Monoshot Injection of a High-Density mucopolysaccharide Gel in Patients with Primary Knee degenerative joint disease. Preliminary Results of the “No-Dolor” Study

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### ABSTRACT

Pronolis® HD Mono two.5% (4.8 mL) could be a sterile elastic resolution of mucopolysaccharide (HA) that has been recently commercial (medical device category III). It contains the best concentration of angular distance (2.5%: one hundred twenty mg angular distance in four.8 mL) and is presently accessible in European country for intraarticular injection within the knee. the most objective of the study is to judge the evolution of pain in patients diagnosed with primary knee degenerative joint disease treated with Pronolis® HD Mono two.5% (4.8 mL).

Osteoarthritis (OA) is that the commonest kind of joint illness, and its impact is ready to grow because the prevalence of blubber rises and our senior population will increase. several clinicians regard OA as merely a illness of ‘wear and tear’, and by implication one within which illness modification isn't doable. additionally, OA is related to the breakdown of a joint's animal tissue. animal tissue could be a firm, rubbery material that covers and cushions the ends of bones in traditional joints. Its main operate is to scale back friction within the joints and function a “shock absorber”

Osteoarthritis causes the animal tissue during a joint to become stiff and lose its snap, creating it a lot of liable to harm. Over time, the animal tissue could wear away in some areas, greatly decreasing

its ability to act as a shock. because the animal tissue wears away, tendons and ligaments stretch, inflicting pain. If the condition worsens, the bones may rub against one another, inflicting even a lot of pain and loss of movement.

Recently a study has shown that the lubrication of the joint depends on the synergism between totally different molecules. 2 of the foremost concerned molecules during this method square measure angular distance and Proteoglycan four (PRG4). The study confirms that the capability of natural action between each molecules will increase once the angular distance concentration will increase Associate in Nursing empirical , real-life, multicentric (60 specialised care centers), prospective, open study planned to incorporate three hundred patients diagnosed with primary knee degenerative joint disease (according to ACR criteria, pain at inclusion equal or superior to four out of 10) so as to judge the pain evolution, lived by the Visual Analogue Scale (VAS)- Associate in Nursing one-dimensional measure of pain intensity- that has been wide employed in numerous adult populations. degenerative joint disease. it's a self-administered form consisting of twenty four things divided into three subscales.

WOMAC Index was developed in 1982 at Western Ontario and historical Universities. WOMAC is

obtainable in over sixty five languages and has been linguistically valid. After one dose of Pronolis® HD Mono two.5% (4.8 mL), patients square measure followed for six months. Preliminary results square measure conferred to look at the primary trends of modification, three months vs. basal: - within the pain domain score of the WOMAC-A form (main criteria). - within the score of the domain of joint stiffness, practical capability and pain in movement (WOMAC-B and C and 1st question of WOMAC-A) (secondary criteria).

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After three months of the intra-articular injection of a mono-shot, high-density angular distance gel (Pronolis® HD Mono-Shot two.5%) patients with primary knee degenerative joint disease show a very important tendency to enhance pain, joint stiffness, practical capability and quality of life. These preliminary results ought to be confirmed upon study completion.

**Keywords:** High-density Hyaluronic Acid; high concentration viscosupplementation; mono-shot HA; Primary knee Osteoarthritis; Pain; WOMAC

