



MEDICAL DEVICES

Alternative arthropathy treatment

Applicant	Università degli Studi Padova
Inventors	Leonardo Punzi, Anna Scanu, Roberto Luisetto
Priority Data	27/09/2017
Protection	IT102017000108102 IT 102018000003756

TRL scale

Discovery

Lead Optimization

Preclinical

Clinical Phases

What's needed for?

The combined effect of the BPI protein (bactericidal/permeability-increasing protein) and hyaluronic acid has proven effective for the treatment of arthropathies. It may integrate or replace current anti-inflammatory therapies that at times have serious side effects

This pharmaceutical combination that contains bactericidal/permeability-increasing protein (BPI) and hyaluronic acid (HA), was created to treat different kinds of arthropathies, which are common causes of disability in Europe and in the United States. Hence the interest in new drug treatments that combine therapeutic efficacy and lack of side effects. BPI is a powerful antimicrobial protein that is produced naturally by different human cells, and is released in extra cellular fluids. It has anti-infective properties and demonstrated anti-inflammatory and anti-angiogenic effects. Hyaluronic acid is a polysaccharide that has anti-inflammatory, analgesic and chondroprotective properties. In vivo and in vitro studies have demonstrated better results of the combination of the two, compared to their use separately.

Advantages

- Greater effectiveness in the treatment of arthropathies;
- Excellent tolerability;
- Non-toxic;
- Alternative to anti-inflammatory drugs currently available, without severe side-effects

Applications

Treatment of degenerative, post-traumatic, metabolic, microcrystal and inflammatory arthropathies.