

Your personal treatment plan.



Recosyn®

Your advantage in the treatment of arthrosis.

- +** Noticeably improved mobility
- +** Markedly less joint pain
- +** Comprehensive care by your doctor
- +** Many years of experience

Please do not hesitate to contact your doctor in case of further questions.

Doctor's stamp

1	Date	Time
2	Date	Time
3	Date	Time
4	Date	Time
5	Date	Time

Please remember to:

Recosyn®

Your advantage in the treatment of arthrosis.



Recosyn®. Your advantage for a higher quality of life.

- + Noticeably improved mobility
- + Markedly less joint pain
- + Comprehensive care by your doctor
- + Many years of experience



Dear Patient,

Recosyn®, a medicinal product which noticeably reduces your joint pains and helps you achieve greater mobility in everyday life and during sports, has been recommended to you. However, Recosyn® offers you more than just support in fighting arthrosis: the security of many years of experience as well as comprehensive medical care by the doctor of your choice.

This brochure contains information about

- The function of your joints
- The clinical characteristics of arthrosis (incl. development and typical symptoms)
- The treatment with Recosyn® (hyaluronic acid)
- Tips on how you can prevent further deterioration of the joints and support the function of your joints with a Recosyn® treatment.

Please do not hesitate to contact your specialist in case of further questions.



A closer look at our joints.

1. The function of our joints

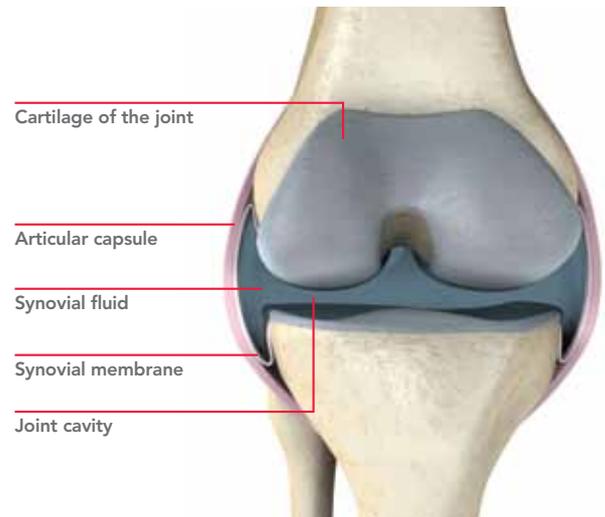
The function of the joints is to connect different bones with one another while maintaining mobility. Our joints ensure our mobility throughout the entire day, at work, in our free time and while doing sports. To ensure that movements can be performed smoothly, a number of mechanisms have to work together:



- Muscles, ligaments, tendons and joint capsules ensure that bones are kept in place and remain mobile.
- In healthy joints, the ends of the bones are covered with a layer of cartilage. The smooth cartilage means that we are able to move our joints with the least amount of friction.
- In between the layers of cartilage is the so-called synovial fluid; which
 - "lubricates" the joint to allow it to move more easily
 - protects the surface of the cartilage from being worn away
 - cushions blows to the joint
 - supplies nutrients to the cartilage of the joint.

Together with the cartilage, the synovial fluid acts as a type of shock absorber.

Healthy knee joint



Arthrosis – causes and symptoms.

2. The clinical characteristics of arthrosis

Arthrosis is a typical sign of wear and tear of the cartilage of the joint. The abrasion of the cartilage in the joint leads to repeated inflammation of the joint capsule in case of increased pressure.

The synovial fluid also changes: it becomes “thinner” and loses some of its lubricating properties. This development can be accompanied by pains or other forms of discomfort. Arthrosis develops slowly and gradually. It does not occur only in older people, but can also develop in younger people due to certain

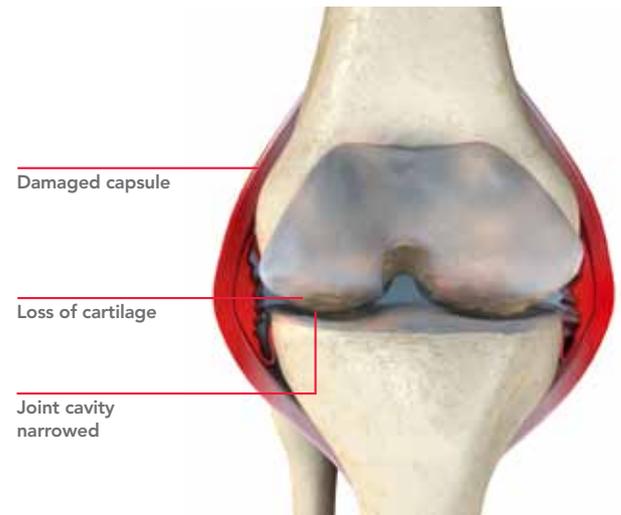
risk factors. Causes may include: one-sided pressure, insufficient physical activity, being overweight, congenital or acquired malposition of the joints (e.g. cross legs and bow legs or dysplasia of the hips). Arthrosis can occur in all joints and develops predominantly in joints that are over-exerted. In addition to the knee, hip or shoulder joints, the smaller joints such as the finger, saddle of the thumb, toe or vertebral joints, also referred to as facet joints, are also frequently affected.

At an advanced stage of arthrosis, the cartilage may be completely worn away, until the bones rub against one another. Once the cartilage has been eroded away, it cannot be built up again. The only option at this stage is an artificial joint replacement. Therefore it is important to stop the process of abrasion at an early stage. In a treatment

with hyaluronic acid, artificial synovial fluid is injected into the joint from outside and supports the lubrication of the joint with natural synovial fluid.



Degenerated knee joint



What symptoms point towards arthrosis?

- “Start-up” problems (morning stiffness)
- Sensitivity of the joints to weather
- Pain during exertion
- Restricted mobility
- Swelling
- Overheating of the joint
- Pain at rest and at night
- Grating in the joints

Our treatment – prevent wear and tear.

3. Treatment with Recosyn® (hyaluronic acid)

Hyaluronic acid is a natural substance that performs important physiological tasks in many organs of the body, including e.g. the skin, the eyes and the joints. Inside the joints hyaluronic acid gives the synovial fluid its viscous consistency, thus ensuring lubrication and low friction. As the cartilage in the joint gets worn away in the scope of arthrosis, the synovial fluid is "contaminated and used up". Figuratively speaking, the hyaluronic acid which is injected into the joint provides a new source of 'lubrication' for the joint, similar to changing the oil of a car.



The doctor injects Recosyn® directly into the joint cavity. Such an injection is usually not more painful than an injection into the buttocks.

Very often, the effect – pain relief and increased mobility of the joint – can already be felt after the first treatments and continues to increase during the course of the treatment. Recosyn® is produced

using biotechnology and has a high degree of purity. It does not contain animal protein and thus has a low potential for allergic reactions. The tolerability is very high. The effect

of Recosyn® unfolds nearly only inside the joint and the substance spreads throughout the joint cavity by itself. In the joint Recosyn® supports or replaces the pathologically changed synovial fluid. The treatment can be repeated multiple times if necessary.

Our products – a modern solution for every joint

Recosyn® can be used for any and all joints that are commonly affected by arthrosis, such as the knees, hips, shoulders, fingers, toes, ankles or vertebral joints.

Recosyn®



The Recosyn® treatment

The best tips against degeneration of the joints.

4. General tips

- Loss of weight by dietary changes
- Avoid sudden turning movements or positions that exert high amounts of pressure

Important!

- Moderate but regular exercise: sports that are gentle on the joints, such as swimming, cycling, hiking, (Nordic) Walking, cross-country skiing and dancing are ideal candidates. Underwater massages and exercises are often very beneficial for the joints as the weight is taken off the joint when in water.

Special tips for arthrosis

- Heat treatments, e.g. with fango packs (promotes circulation and stimulates the metabolism)
- Bathing fingers and toes in warm water (offers pain relief)
- In case of activated (inflammatory) arthrosis: cool compresses (offers pain relief)



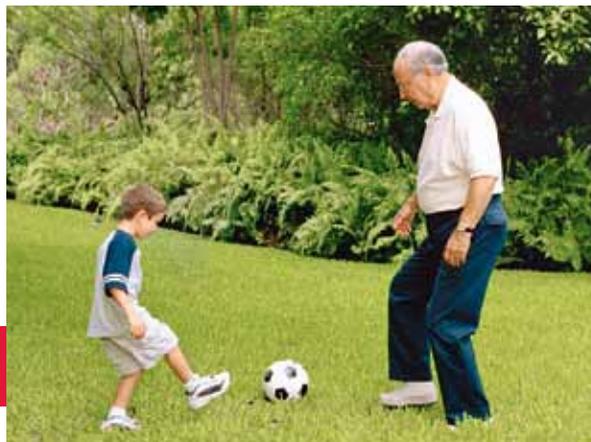
When practising sports

Ask your specialist! Some arthrosis patients believe that they now have to rest their joint. This is not entirely true! The basic principle says: **"Move a lot – relieve a lot"**. The load on the joint should be reduced by around 30%. If the joint is not moved, the degenerative processes continue and even spread out. The muscles also wither away. Moderate but regular physical exercise is very important. Ask an expert for some advice: physiotherapy under instruction of a physiotherapist; ultrasonic or heat treatments (e.g. with fango). These are some of the classical measures for offering pain relief from arthrosis.



Important!

Avoid standing or sitting for long periods of time – change your sitting or your standing position frequently and make sure you use ergonomic seats.



Recosyn® | Recosyn® forte | Recosyn® Uno Recosyn® m.d



Recosyn®, Recosyn® forte, Recosyn® m.d. and Recosyn® Uno (Medicinal product, CE 0120) for intra-articular injection. 1 mL Recosyn® and Recosyn® m.d. contains 10.0 mg sodium hyaluronate, as well as NaCl, sodium monohydrogen phosphate, citric acid and water for injection. 1 mL Recosyn® forte contains 20.0 mg stabilised sodium hyaluronate, as well as NaCl, sodium monohydrogen phosphate, sodium dihydrogen phosphate, sodium carbonate and water for injection. 1 mL Recosyn® Uno contains 20.0 mg (2 %) stab. sodium hyaluronate from biofermentation of non-animal origin as well as NaCl, sodium monohydrogen phosphate, sodium dihydrogen phosphate, sodium carbonate and water for injection. **Areas of indication:** Pain and restricted mobility as a result of degenerative or traumatic changes in the synovial parts of the joint. **Recosyn® Uno:** For the treatment of pain due to gonarthrosis. **Dosage:** Recosyn® is administered 3 to 5 times (Recosyn® forte: 3 times; Recosyn® m.d.: 1 to 5 times) in weekly intervals by intra-articular injection. Concomitant treatment of multiple joints as well as repeated treatment cycles are possible. **Recosyn® Uno:** Intra-articular injection of up to 4 mL depending on size of the knee. The injection can be repeated after 26 weeks. **Contraindications:** Do not use in case of known hypersensitivity to any of the ingredients. Bacteria-induced arthritis. The attending physician should be familiar with all immunol. and other pot. risks in connection with the use of biological material. **Recosyn® Uno:** Any other serious infection. **Side effects:** Local concomitant effects. (pain, warm sensation, reddening and swelling, for Recosyn® Uno also: arthralgia, effusions). for Recosyn® forte a. Recosyn® Uno also: prevention of such effects: Apply an icepack onto the treated joint for 5-10 Min. In case of an effusion with severe pain it is necessary to remove the fluid from the affected joint. After treatment with similar preparations: Itching, headaches, pain in the calves, an intermittent heavy feeling which lasts 2-4 days on average, persistent swelling and, in rare cases, intermittent pain, chondrocalcinosis (pseudogout) and pseudosepsis (severe, acute inflammatory reaction, SAIR). Recosyn® u. Recosyn® m.d. also: The following undesired adverse events in connection with similar products: mild to moderate arthralgia; in rare cases skin rashes, aseptic effusion of the joint, pruritus and muscular cramps. In very rare cases: allergic reaction, anaphylactic shock, haemarthrosis, phlebitis, pseudosepsis, nasopharyngitis, stiffness of the joints, tendinitis, bursitis, fever and myalgia. Recosyn® Uno also: Stiffness of the joints, effusion of the joints, synovitis, joint crepitation, blocking of the joints, arthritis, gait disturbances, muscular cramps, haemarthrosis, myalgia, fever, nervousness, anxiety, depression. **Storage:** Store at room temperature (approx. 25°C/77°F) and protect from frost (for Recosyn® Uno also: moisture). **Date of last revision:** January 2012.

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