ROCKETING INIO THE FUTURE OF MOBILITY. **OBILITY.** 

RENT. SHARE. RIDE.

COUNTRY SPECIAL

SIXT PICKS THE BEST INSIDER TIPS.

## THE FUTURE OF ORTHOPAEDICS

Do you have joint pain in your knees or hands? Do you suffer from back, tendon or muscle pain? Then you feel like 8 million people in Germany who suffer from osteoarthritis in their joints. Osteoarthritis is often part of the natural ageing process that every person goes through, as it is normal for our joints to wear out over the years. However, osteoarthritis can also be triggered by a variety of factors, such as overwork, incorrect body posture, incorrect load-bearing or sports accidents. In addition to these mechanical processes, inflammatory processes can also play a role. These inflammatory processes mean that the cartilage is no longer sufficiently nourished, further accelerating the disease pro-

cess. And an operation might seem necessary. But there are doctors who take the critical view that many operations are unnecessary. This is the mantra of renowned spinal-column specialist and expert in bioregenerative medicine Dr. med. Martin Marianowicz: "Maximum healing effect with minimal intervention. We need to move away from operations and toward activating the body's self-healing powers to heal the body in the widest sense. The future of orthopaedics is bioregenerative medicine," says Dr. Marianowicz confidently. The orthopaedist from Munich specialises in non-surgical treatment. He and his team of physicians have a variety of state-of-the-art conservative methods at their disposal, such as autohemotheraphy therapy and therapy with hyaluronic acid. New innovative methods such as stem-cell therapy are also used in their facilities in Munich and Bad Wiessee. These bioregenerative processes suppress inflammatory reactions and stimulate processes in order to counteract natural wear. There are two main methods in the foreground in bioregenerative orthopaedics: Autohemotherapy aims to disrupt inflammatory and pain processes by activating the body's own repair mechanisms. It is anti-inflammatory, growth-promoting and improves blood circulation. The formation of blood vessels is stimulated and the injured tissue better supplied. Cartilage degradation can be delayed, and the healing of muscle and tendon injuries can be



accelerated. But how do you activate these mechanisms? The body's own anti-inflammatory agents are obtained by taking a few millilitres of blood and then enriched. "We have had very good experiences with this treatment method," says Dr. Marianowicz. Autohemotherapy is used for knees, hips, smaller joints, spine and tendon and muscle injuries. Another innovative process is stem-cell therapy which is used for signs of wear and pain in the knees. The body's own substances are also injected into the joint in this process in order to be able counteract the inflammatory reactions that are the main cause of the pain. The endogenous substances required for this bioregenerative therapy are so-called progenitor cells. They are taken from belly fat. "As with autohemotherapy, the body's own repair mechanisms are activated in stem-cell therapy," says Dr. Mathias Schettle, orthopaedist and specialist for stem-cell therapy at the Marianowicz Center. Other joints, such as the hip, shoulder and even the spine, are already being treated worldwide using stem-cell therapy. The benefit: Thanks to these gentle treatment methods, degenerative processes can be delayed in many cases, and the use of an artificial joint can be significantly delayed or even completely avoided. Thanks to bioregenerative medicine, the body can heal itself without surgery. If this is not the future of orthopaedics, then what is?