

COMBINING
TECHNOLOGIES.
EMPOWERING
ARTHROSCOPY.

A MID-INFRARED SYSTEM TO PROMOTE PATIENT WELL-BEING

www.miracleproject.eu



ARTHROSCOPY

We are developing and assembling multiple technologies in the first mid-infrared attenuated total reflection (MIR-ATR) instrument for arthroscopic use.

The novel **MIR-ATR** probe allows real-time mapping of the cartilage during minimally invasive arthroscopy, providing an accurate assessment of the articular cartilage surface.

Alongside visual inspection, this novel technology supports surgeons' intraoperative decision-making process and a precise follow-up of emergent regenerative therapies.

By exploring photonics technologies, we are empowering surgery practice and promoting patient well-being.



Miniaturized MIR-ATR probe with an innovative hook-like design for cartilage assessment

Minimally invasive arthroscopy allowing an accurate assessment of cartilage in the joint



Clear and simple user interface that ensures real-time interpretation of cartilage quality



































