

Patient Specific Velys Robotic Assisted Total Knee Joint Replacement



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The Velys Robotic Assisted Solution is a technique which enables a surgeon to use a robot, computer navigation and specialized instruments to improve the alignment, stability and function of your total knee replacement.

The system utilizes a touchscreen-based planning computer with navigation software specially designed for use in knee replacement surgery. Reflective markers and an infrared camera tracks real time positioning of your knee so the surgeon can execute the optimal accurate implantation of your knee replacement to match your bony anatomy and your soft tissue envelope. This way your knee replacement is individualized to fit you.

I was one of a small number of global surgeons who developed this Velys Robot with Johnson and Johnson. The Velys robot uses a patient specific surgical technique that I pioneered in 2014 and continue to develop. We performed the first Velys Robotic Total Knee Replacement in the world in November 2020

Studies have shown that advanced navigation gives greater accuracy in implanting your knee replacement. Our recent clinical studies have shown this patient specific technique results in high outcome, low pain scores and excellent satisfaction. It is envisaged that implanting the knee more accurately and in the optimal position will enable the knee to last longer. However it will take time to determine this.

