



 **VELYS™**
Digital Surgery

GET TO KNOW VELYS™ ROBOTICS

DESIGNED FOR DIGITAL PRECISION
IN KNEE REPLACEMENT

Your guide to understanding how
the VELYS™ Robotic-Assisted Solution
can help you start moving again.



 **DePuy Synthes**
THE ORTHOPAEDICS COMPANY OF *Johnson & Johnson*

The knee featured is a visual representation
of the ATTUNE® Knee System implant position.

Understanding your knee replacement with the VELYS™ Robotic-Assisted Solution

A total knee replacement is a procedure performed to fix the damaged parts of a knee with different types of implants.¹ Advanced technology like robotic-assisted devices can help your surgeon perform a precise knee replacement surgery personalized for your specific anatomy.²

What is the VELYS Robotic-Assisted Solution?

This technology is a robotic-assisted device that helps assist the surgeon to perform a knee replacement surgery. **The VELYS™ Robotic-Assisted Solution is designed for digital precision.**²

- Helps the surgeon optimize the outcome with the use of data that's unique to your anatomy
- Keeps your surgeon in control during your procedure and doesn't move or operate on its own

How does the VELYS Robotic-Assisted Solution work?

The VELYS Robotic-Assisted Solution uses a variety of advanced technologies to ensure the surgeon has the information and tools they need to perform a highly accurate and precise knee replacement.²



- Aids the surgeon by accessing state-of-the-art technology to provide insights for real-time decision making
- Helps your surgeon remove the damaged bone with accuracy
- Uses an infrared camera and optical trackers to help your surgeon achieve the highest possible precision level
- Works exclusively with the ATTUNE® Knee System, an innovative implant system



With the VELYS™ Patient Path app, you can stay connected with your healthcare team before and after surgery. Ask your healthcare team how to get started.

How is robotic-assisted technology different?

Robotic-assisted procedures compared to traditional methods*



Robotic-assisted²⁻⁵

- Technology controlled by the surgeon
- May experience less pain and a faster recovery
- More consistent outcomes (inconsistencies can affect recovery)



Traditional⁵⁻⁹

- Hand-held tool
- May experience a longer recovery time
- Outcomes may change based on surgeon processes and performance

What are the benefits of using robotic-assisted technology?

With robotic-assisted technology, your surgeon can:*



- Perform a knee replacement tailored to you
- Provide precision and accuracy²
- Gather details and data related to your knee to help find a favorable implant fit

*Findings based on studies conducted across multiple robotic-assisted total knee replacement systems.



Move forward with robotic-assisted technology

Robotic-assisted technology may deliver*:



A greater range of motion (how well you can bend and flex your knee after surgery)⁵



Less pain compared to traditional methods⁵



Faster recovery times (reduced length of hospital stay, hospital readmissions, and health visits)⁹



*Findings based on studies conducted across multiple robotic-assisted total knee replacement systems.

Take the next step and ask your healthcare team what recovery looks like with the VELYS™ Robotic-Assisted Solution.

To learn more, visit VELYSPatient.com

References: **1.** Johns Hopkins Medicine. Knee replacement surgery procedure. Accessed April 27, 2021. <https://www.hopkinsmedicine.org/health/treatment-tests-and-therapies/knee-replacement-surgery-procedure>. **2.** Doan et al. Resection Accuracy Improved Using A Novel Concept For Robotic-assisted Total Knee Arthroplasty; ORS 2021 Annual Meeting Paper No. 0333. **3.** Ren Y, Cao S, Wu J, Weng X, Feng B. Efficacy and reliability of active robotic-assisted total knee arthroplasty compared with conventional total knee arthroplasty: a systematic review and meta-analysis. *Postgrad Med J.* 2019;95(1121):125-133. **4.** User experience evaluation of the VELYS Robotic-Assisted Solution for total knee (July 2020). Internal Report 103744839. **5.** Agarwal N, To K, McDonnell S, Khan W. Clinical and radiological outcomes in robotic-assisted total knee arthroplasty: a systematic review and meta-analysis. *J Arthroplasty.* 2020;35(11):3393-3409. **6.** Shah RP, Lauthen D, Geller JA, Cooper HJ. Average operative times for 1,313 primary total hip arthroplasty and 1,300 primary total knee arthroplasty over 39 months are roughly equal to Medicare attributed operative times. *J Arthroplasty.* 2019;34(8):1553-1556. **7.** George J, Mahmood B, Sultan AA, et al. How fast should a total knee arthroplasty be performed? An analysis of 140,199 surgeries. *J Arthroplasty.* 2018;33(8):2616-2622. **8.** Katz JN, Mahomed NN, Baron JA, et al. Association of hospital and surgeon procedure volume with patient centered outcomes of total knee replacement in a population-based cohort of patients age 65 years and older. *Arthritis Rheum.* 2007;56(2):568-574. **9.** Cool CL, Jacofsky DJ, Seeger KA, Sodhi N, Mont MA. A 90-day episode-of-care cost analysis of robotic-arm assisted total knee arthroplasty. *J Comp Eff Res.* 2019;8(5):327-336.

Please refer to the instructions for use for a complete list of indications, contraindications, warnings, and precautions.

Every patient is different, and individual results vary. Not all patients are candidates for joint replacement. All surgeries carry risks.

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