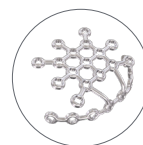
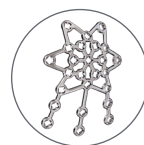
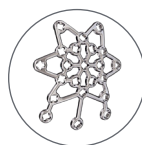
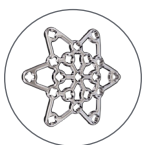
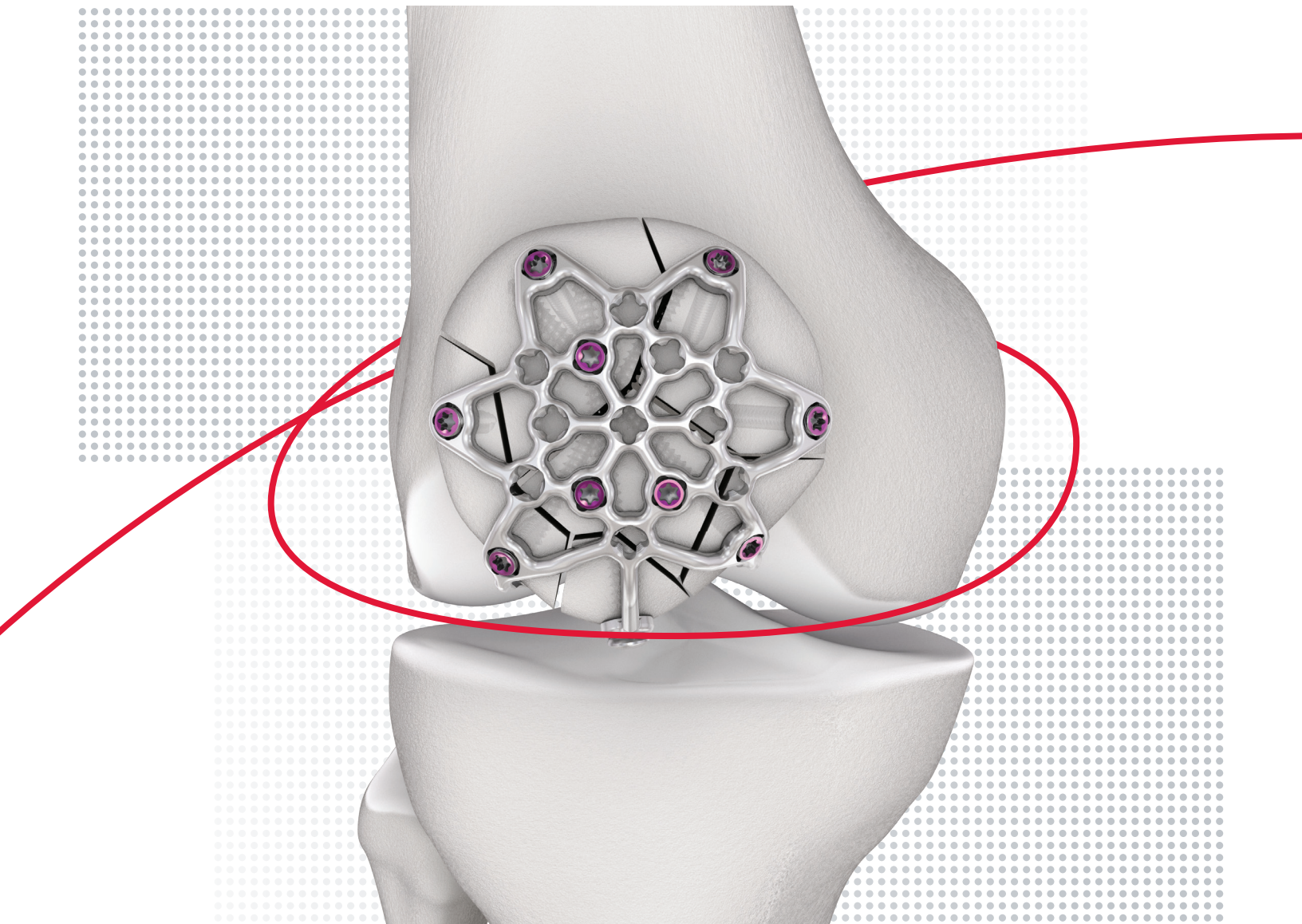
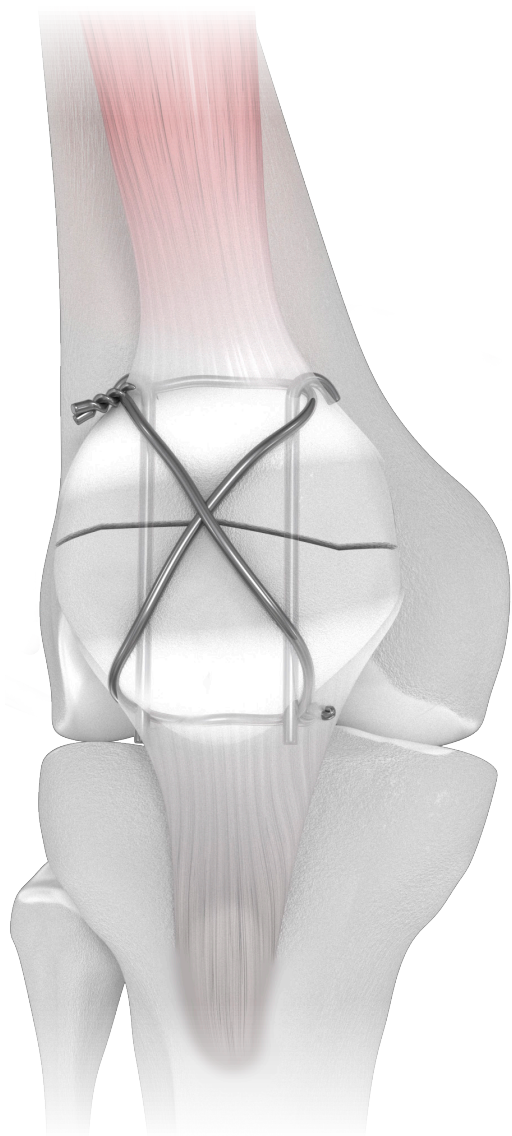


Variable Angle Locking Patella Plating System

For a diverse range of fractures





Challenges With Current Fixation of Patellar Fractures

The most common method of fixation is tension band wiring¹:

- Prominent wires lead to tissue irritation, resulting in patient dissatisfaction and unplanned re-operations^{2,3}
- Wiring may loosen over time, leading to migration of hardware and soft tissue irritation/loss of reduction^{2,3}

Operative treatment with alternative therapies such as tension band wiring is associated with high complication rates, functional impairment, and reduced quality of life.^{4,5}

Osteopenic bone often lacks the strength to support a tension band wiring construct, resulting in failure prior to healing.⁶

Historically, surgically-treated patella fractures have a reoperation rate up to **50.5%**⁷

The pain rate treated with alternative therapies such as tension banding was reported as high as **82%**⁸

Removal of hardware in up to **60%** of patients⁷

Plating as a Solution for Patella Fractures

The use of a low-profile plating system has the potential to eliminate or significantly reduce the need for re-operation.⁹ DePuy Synthes delivers a dedicated solution to help eliminate the challenges and problems associated with traditional fixation methods. The Variable Angle (VA) Locking Patella Plating System offers a full suite of patella plates to address simple, wedge, and complex fractures for large and small patellae and is built for:

Adaptability








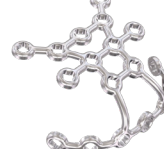
The 2.7 mm VA Locking Patella Plating System is designed to treat simple, wedge, and complex fractures. Patella Plate design facilitates cutting, bending, and contouring to meet patient-specific needs.^{10,11}

Increased stability

The DePuy Synthes 2.7 mm VA Locking Patella Plating provides a stable construct with up to 25 fixation points.¹² Comparatively, the tension band wiring technique has no points of fixation and relies on tensile forces to promote fracture healing.¹³

Versatility for challenging cases

VA Mesh Patella Plating is a capable solution to address patella fractures with osteopenic or comminuted bone.⁶

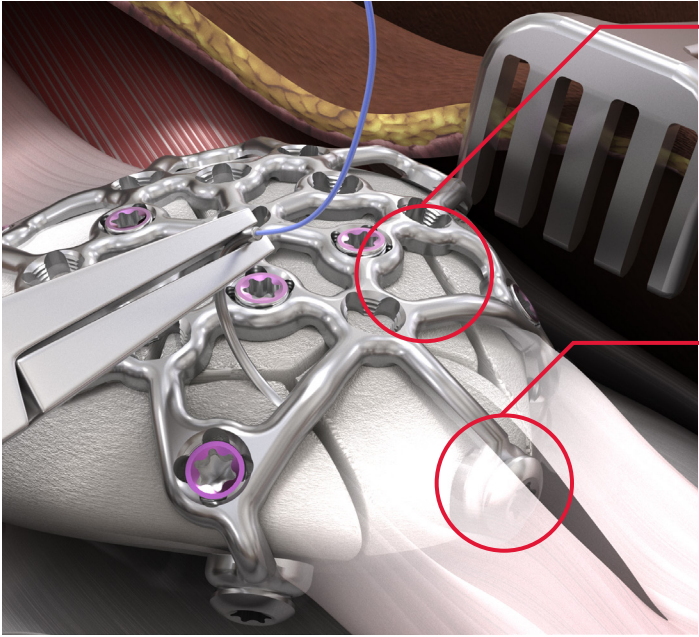
	Core	3-Hole	6-Hole	Lateral
Standard				
Small				



VA Locking Patella Plating System

The VA Locking Patella Plates are universal for either left or right use and are available in Stainless Steel and Titanium. The plates are pre-contoured and come in two sizes, small and standard, and are provided sterile packed.

VA Locking Anterior Patella Plate



Open architecture

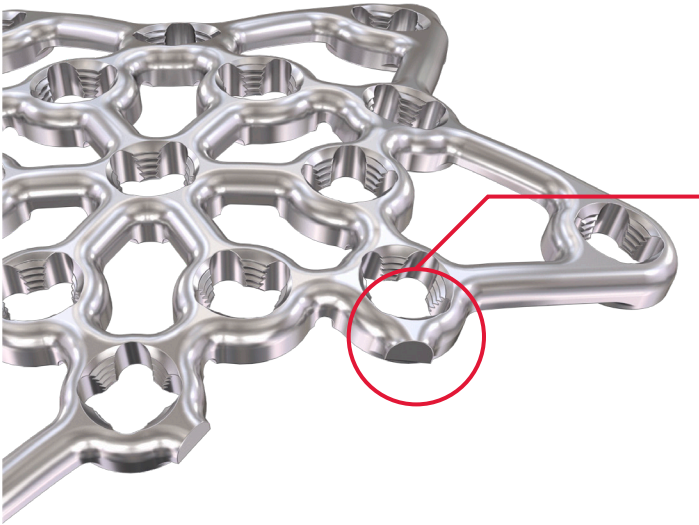
Plate design allows bending and contouring to meet patient-specific needs.¹⁰ Windows can be used to attach soft tissue with sutures.

Low profile

- SSt = 1.8-mm thickness
- Ti = 2.0-mm thickness

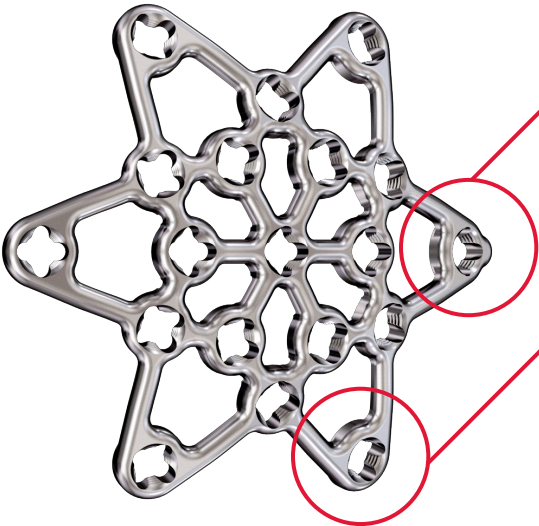
Leg benefits

- Secure distal pole
- Can be oriented as needed on the patella surface
- Allow bicortical polar (apex to base) screws to be placed for interfragmentary fixation¹⁰



Cutting

Plates can be cut to meet the needs of the specific fracture pattern and patient anatomy.¹⁰



Tab

Orient the plate when bending ex situ.

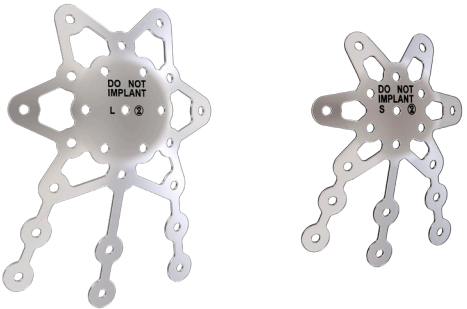
VA locking holes

Screw holes accept 2.4 mm* and 2.7 mm VA locking and cortex screws. VA locking holes enable up to 15° of screw angulation to target small bone fragments, avoiding fracture lines and other hardware.¹⁰



Dedicated bending instruments

Bending instrument with special cloverleaf tip design to maintain integrity of VA locking holes and allows for appropriate in situ and ex situ bending.



Template kit

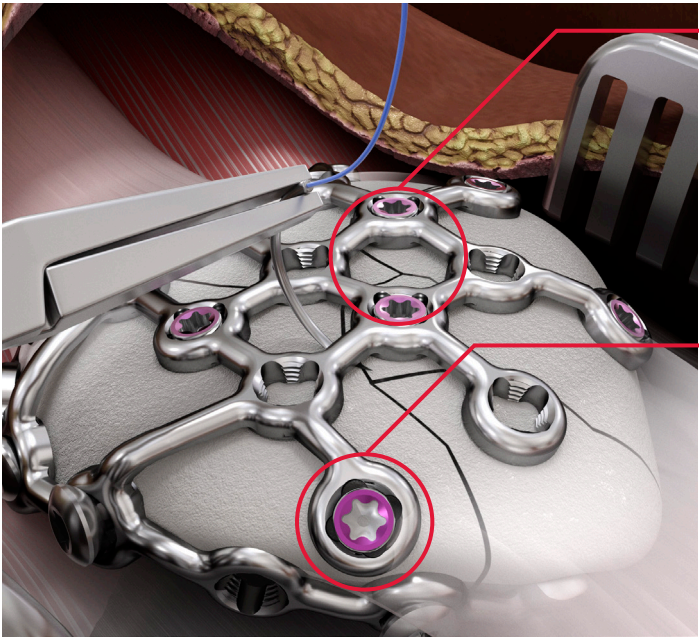
Assists in identifying the most suitable plate shape to match patient's anatomy and accommodate the fracture pattern:

- Pre-contoured and malleable
- K-wire holes support provisional fixation
- 2 sizes available in the kit (small and standard)

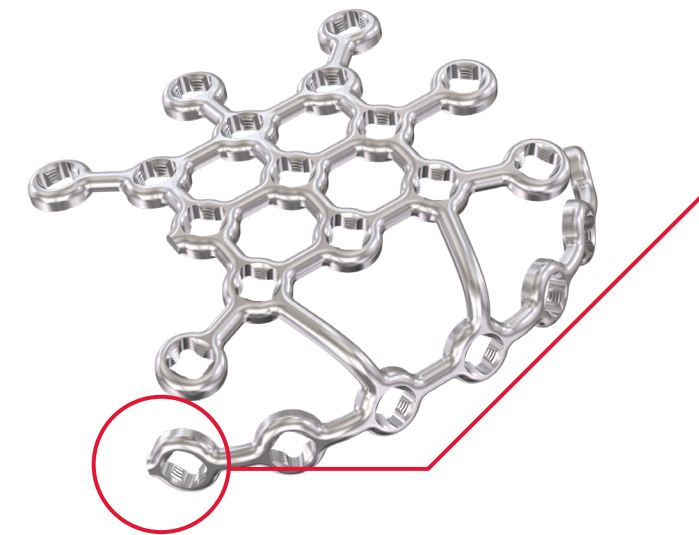
*2.4 mm screws for small, non-load-bearing fragments only.

VA Locking Lateral Rim Patella Plate 2.4/2.7

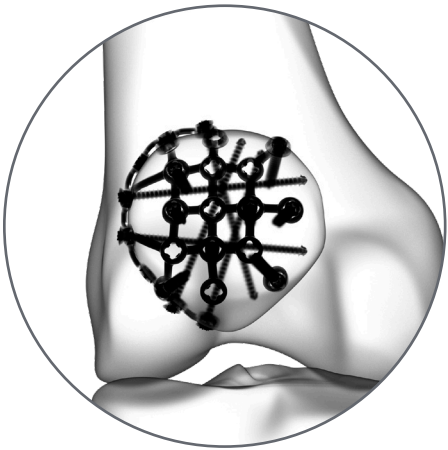
The VA Locking Lateral Rim Patella Plates are specifically targeted to customers who prefer the inversion of the patella to directly visualize the articular surface. An advantage of the VA Locking Lateral Rim Patella Plate is the possibility of placing bicortical rim screws from lateral to medial, superior to inferior, and inferior to superior to achieve interfragmentary compression.¹⁴



- Open architecture**
- Plate design allows bending and contouring to meet patient-specific needs.¹¹ Windows can be used to attach soft tissue with sutures.
- Low profile**
- SSt = 1.8-mm thickness
 - Ti = 2.0-mm thickness
- VA locking holes**
- Screw holes accept 2.4 mm and 2.7 mm VA locking and cortex screws. VA locking holes enable up to 15° of screw angulation to target small bone fragments, avoiding fracture lines and other hardware.^{11,12}



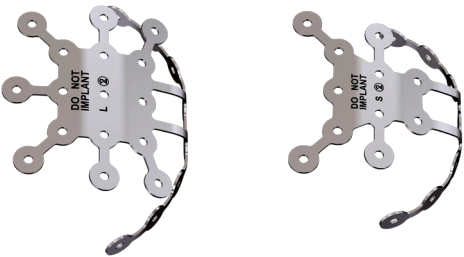
- Cutting**
- Plates can be cut to meet the needs of the specific fracture pattern and patient anatomy.¹¹



- Bicortical rim screws**
- Possibility of placing bicortical rim screws from lateral to medial, superior to inferior, and inferior to superior to achieve interfragmentary compression.



- Dedicated bending instruments**
- Bending instrument with special cloverleaf tip design to maintain integrity of VA locking holes and allows for appropriate in situ and ex situ bending.



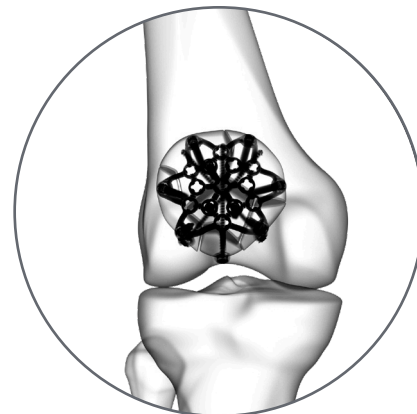
- Template kit**
- Assists in identifying the most suitable plate shape to match patient's anatomy and accommodate the fracture pattern:
- Pre-contoured and malleable
 - K-wire holes support provisional fixation
 - 2 sizes available in the kit (small and standard)

A Sophisticated Design

That goes beyond the band

Setting a new standard in patella plating procedures

- Offers orthopaedic surgeons an adaptable VA locking mesh plating technology for fixation of a wide range of patella fracture types^{10,11}
- Designed with options and flexibility to treat even complex fracture types, including comminuted fractures with poor bone quality^{6,10,11}
- An open architecture that allows the plate to be cut and contoured to fit specific patient anatomy and fracture pattern^{10,11}



VA Patella Plate item numbers

Stainless steel	Titanium	Description
02.137.000S	04.137.000S	2.7 mm VA Locking Anterior Patella Plate, core, small, sterile
02.137.001S	04.137.001S	2.7 mm VA Locking Anterior Patella Plate, 3-hole, small, sterile
02.137.002S	04.137.002S	2.7 mm VA Locking Anterior Patella Plate, 6-hole, small, sterile
02.137.003S	04.137.003S	2.7 mm VA Locking Anterior Patella Plate, core, sterile
02.137.004S	04.137.004S	2.7 mm VA Locking Anterior Patella Plate, 3-hole, sterile
02.137.005S	04.137.005S	2.7 mm VA Locking Anterior Patella Plate, 6-hole, sterile
02.137.006S	04.137.006S	2.4/2.7 mm VA Locking Lateral Rim Patella Plate, small, sterile
02.137.007S	04.137.007S	2.4/2.7 mm VA Locking Lateral Rim Patella Plate, sterile

Instrument item numbers

Instrument	Description
03.137.002S	Patella Template Kit, Anterior, sterile
03.137.005S	Patella Template Kit, Lateral Rim, sterile
03.137.000	Plate Bending Instrument, Straight
03.137.001	Plate Bending Instrument, Curved

References: 1. Yang T-Y, Huang T-W, Chuang P-Y, Huang K-C. Treatment of displaced transverse fractures of the patella: modified tension band wiring technique with or without augmented circumferential cerclage wire fixation. *BMC Musculoskelet Disord.* 2018;19(1):167-167. 2. Tan H, Dai P, Yuan Y. Clinical results of treatment using a modified K-wire tension band versus a cannulated screw tension band in transverse patella fractures: a stroke-compliant retrospective observational study. *Medicine (Baltimore).* 2016;95(40):e4992. 3. Lin T, Liu J, Xiao B, Fu D, Yang S. Comparison of the outcomes of cannulated screws vs modified tension band wiring fixation techniques in the management of mildly displaced patellar fractures. *BMC Musculoskelet Disord.* 2015;16:282. 4. Reul M, Verschaeve M, Mennes T, Nijs S, Hoekstra H. Functional outcome and economic burden of operative management of patellar fractures: the pivotal role of onerous implants. *Eur J Trauma Emerg Surg.* 2018;44(5):697-706. 5. Gwinner C, Märdian S, Schwabe P, Schaser K-D, Krapohl BD, Jung TM. Current concepts review: fractures of the patella. *GMS Interdiscip Plast Reconstr Surg DGPW.* 2016;5:Doc01. 6. Matthews B, Hazratwala K, Barroso-Rosa S. Comminuted patella fracture in elderly patients: a systematic review and case report. *Geriatr Orthop Surg Rehabil.* 2017;8(3):135-144. 7. Dy C, Little M, Berkes M, et al. Meta analysis of re-operation, nonunion, and infection after open reduction and internal fixation of patella fractures. *J Trauma Acute Care Surg.* 2012;73(4):928-932. 8. Lorch DG, Fabricant PD, Sauro G, et al. Superior outcomes after operative fixation of patella fractures using a novel plating technique: a prospective cohort study. *J Orthop Trauma.* 2017;31(5):241-247. 9. Siljander M, Kousier DM, Gandhi S, Wiater BP, Wiater PJ. Outcomes following low-profile mesh plate osteosynthesis of patella fractures. *J Knee Surg.* 2018;31(9):919-926. 10. DePuy Synthes. Validation Lab Report. October 2020. Windchill # 0000307351. 11. DePuy Synthes Validation Lab Report. Lateral Patella Plates. May 2021. Windchill #0000308557. 12. DePuy Synthes. Drawing. August 2020. Windchill # 02_137_000.DRW. 13. Blum L, Hake M. ORIF patella fracture with a tension band construct. *J Orthop Trauma.* 2017;31:(S8-S9). 14. Lorch DG, Warner SJ, Schottel PC, Shaffer AD, Lazaro LE, Helfet DL. Multiplanar fixation for patella fractures using a low-profile mesh plate. *J Orthop Trauma.* 2015;29(12):e501-e510.

Manufactured by:
Synthes USA, LLC
1101 Synthes Avenue
Monument, CO 80132

Synthes GmbH
Luzernstrasse 21
4528 Zuchwil, Switzerland

jnjmedicaldevices.com

Please refer to the instructions for use for a complete list of indications, contraindications, warnings, and precautions.
The third-party trademarks used herein are the trademarks of their respective owners.
Not all products may currently be available in all markets.
Note: For recognized manufacturer, refer to the product label.
©DePuy Synthes 2021. All rights reserved. 181997-210702 DSUS

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