# ottobock.

# Patella Pro

Dynamic realignment for anterior knee pain





# Combat knee pain effectively

# Causes and treatment

The term "anterior knee pain" (patellofemoral pain syndrome) covers a variety of symptoms that are not assigned to any specific structure. In particular, small flexion angles increase the risk of patella maltracking.

Causes for anterior knee pain include malformations of the patella, deviations in the leg axis, and muscle-related issues. These symptoms result in the tilting or shifting of the patella.

## Treatments showed little promise - until now

Usual treatment is often prolonged and can cause more harm. Muscle development is impaired when patients are unable to enjoy activities involving movement and assume compensating postures, which can result in more severe pain.

## Pain relief that lasts

The unique dynamic realignment mechanism of the Patella Pro relieves pain and makes movement patterns possible again.

# Innovative solution combats pain Dynamic patella tracking

Anterior knee pain is one of the most frequently occurring orthopedic indications.

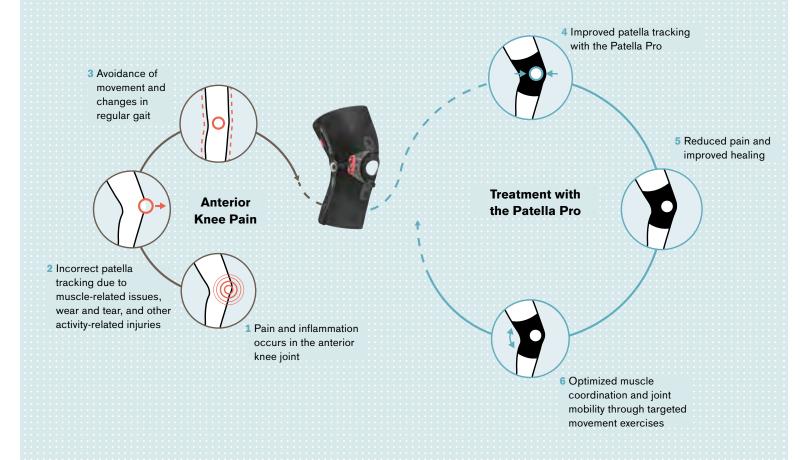
However, most treatment measures last for a few years, rarely leading to lasting success.

We've illustrated the progression of anterior knee pain from the point of inflammation (due to patella maltracking) to the lasting pain relief provided by targeted treatment with the Patella Pro brace.





# Breaking the anterior knee pain cycle



# Patella Pro

# Proper tracking makes all the difference

## The formula that combats knee pain

Ottobock's team of experts, comprised of physicians, therapists, biomechanics, and engineers, developed the technology that dynamically realigns the patella. The Patella Pro secures the patella in all relevant flexion angles, enabling pain-free movement.

The graphic below demonstrates the effectiveness of the targeted realignment mechanism in three stages, from a painful knee caused by lateralization of the patella (left) to the correct positioning of the patella, even with a large flexion angle (right).

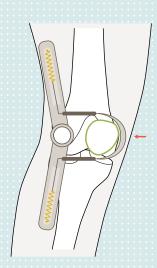
## 1. High risk

There is an initial high risk of patella maltracking (shifting outward).



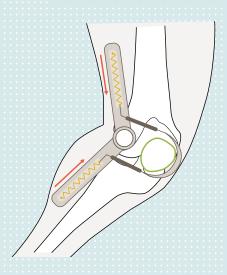
## 2. Precise tracking

The Patella Pro tracks and corrects the positioning of the patella.



# 3. Optimal, sustained tracking

Optimal tracking of the patella is sustained, even at larger flexion angles.

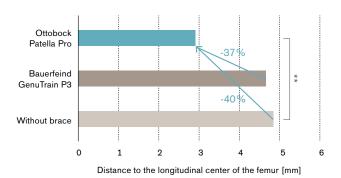


# Studies verify lasting pain relief

# Innovative technology realigns patella

Ottobock's clinical research examined the Patella Pro with regards to biomechanics, functionality, and pain reduction to confirm its effectiveness. Both short and long-term studies reveal a clear improvement in symptoms.

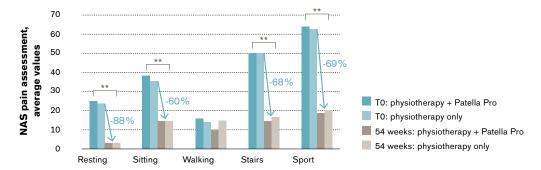
## The Patella Pro reduces lateralization



The lateralization of the patella was analyzed using video fluoroscopy; significant group difference with \*\* = p < 0.05 [1]

# Ottobock Clinical Research Institute of Biomechanics and Orthopaedics, Cologne Biomechanical efficacy Multicenter Study Clinical effectiveness Orthopaedics Department at Hannover University Hospital, Annastift Clinical efficacy

## Lasting pain relief with Patella Pro



Pain assessment following a one-year intervention period.

<sup>\*\*</sup> significant differences with p < 0.001 [2]

<sup>[1]</sup> Brüggemann G-P, Heinrich K, Liebau C, Ellermann A, Potthast W, Rembitzki I. Patella-Re-Zentrierungs-Orthese Patella Pro Biomechanische Evaluation: ex vivo und in vivo. (Biomechanical evaluation of the Patella Pro patella re-alignment brace: ex vivo and in vivo.) Proceedings of the ISPO World Congress, Leipzig, 2010.

<sup>[2]</sup> Petersen W, Ellermann A, Rembitzki IV, Scheffler S, Herbort M, Brüggemann GP, Best R, Zantop T, Liebau C. Evaluating the potential synergistic benefit of a realignment brace on patients receiving exercise therapy for patellofemoral pain syndrome: a randomized clinical trial. Archives of Orthopaedic and Trauma Surgery. 2016; 136(7): 975-82. DOI 10.1007/s00402-016-2464-2

# Emily resumes her active lifestyle





Due to severe knee pain, 12-year-old Emily experienced significant limitations in her everyday activities. An avid basketball player, giving up her sport was simply unimaginable.

Whether she walked normally, crouched down, or climbed up stairs, Emily increasingly felt pain in both knees.

Her parents also grew concerned about their athletic daughter's future. Would Emily continue to be able to play basketball and ride her skateboard?

The family decided to try a therapy approach involving treatment with a brace that had already proven effective in numerous cases. A solution developed by Ottobock and recognized experts, the Patella Pro would dynamically realign Emily's patellas and, ultimately, relieve her knee pain.

No sooner said than done. After six weeks of wearing the Patella Pro on both knees, Emily is actively involved in sports again. Walking, climbing stairs, and playing basketball – it's all possible, without any pain. One small wish still remains unfulfilled for young Emily: a Patella Pro suitable for swimming in the pool.







# Patella Pro

# Benefits at a glance



## Realignment lock

Easy fitting of the brace in a few steps.

## Simple ratchet adjustment

Support easily adjusts to fit the individual patient.

# Auto-adaptive medial and lateral splints

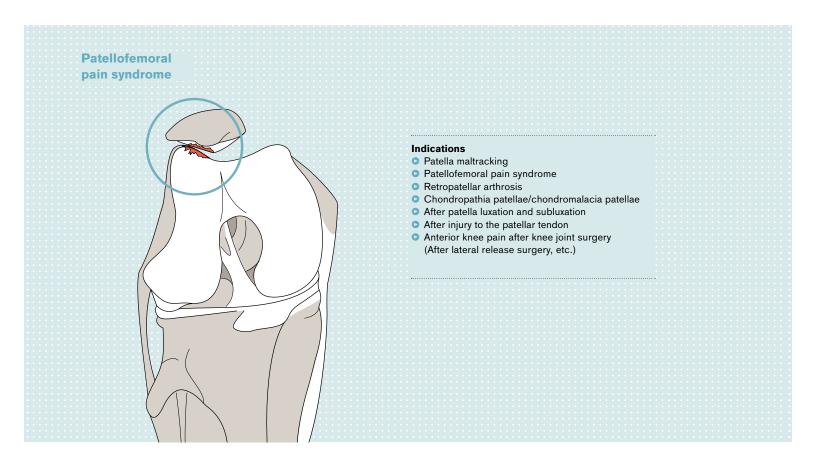
Auto-adaptive splints fit a range of leg shapes and sizes.

## Easy to don and doff

The loops make the brace easy for patients to put on and take off by themselves.



Patella Pro users report greater anterior knee pain relief, enhanced safety during everyday activities, and a substantial increase in their quality of life.



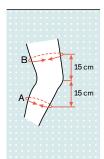
# Provide your patients with anterior knee pain relief

Our proven method of pain relief backed by clinical studies helps you help your patients benefit from our unique realignment mechanism. Provide your patients with the anterior knee pain relief they need to improve their quality of life.

## **Key Benefits**

- Innovative product
- Easy-to-fit brace
- Lasting effect
- Satisfied patients

## **Ordering information**



Article number	Side	Size	Circum A (cm)	ference B (cm)
8320N=	L/R	-XXS	29–32	36–40
8320N=	L/R	-XS	32–35	40–44
8320N=	L/R	-S	35–38	44–48
8320N=	L/R	-M	38–41	48–52
8320N=	L/R	-L	41–44	52–56
8320N=	L/R	-XL	44–48	56–61
8320N=	L/R	-XXL	48–52	61–65

## Interested in learning more?

Please don't hesitate to contact us if you have further questions or would like more information.

For more information, visit professionals.ottobockus.com

## Accessories for avid athletes

We recommend wearing the sports cover with the Patella Pro for active sports such as soccer, basketball, tennis, etc. to shield the brace adjustments from impact. The protective cover slips over the fasteners and brace adjustments for additional coverage.

## Patella Pro sports cover

	Size	
Article number		
29K129	XXS/XS	
	S/M	
	L/XL/XXL	



Please select the size of the sports cover to match the brace

