

# ÖSSUR®

LIFE WITHOUT LIMITATIONS

## OSTEOARTHRITIS AND INJURY BRACING SOLUTIONS

---

Bracing to assist orthopaedic specialists  
manage patients preoperatively,  
postoperatively and conservatively







# HOW TO REFER FOR AN ÖSSUR BRACE

Follow these 3 simple steps

- 1 Complete the referral form


- 2 Contact Össur via the number on the form


- 3 Össur will coordinate an appointment via our national network of qualified clinical fitters



We can also assist with arranging funding via DVA, transport/work place accident, private health insurance and other funding schemes.



CALL US FOR FURTHER INFORMATION OR TO ARRANGE A VISIT FROM  
YOUR ÖSSUR REPRESENTATIVE

CALL 1300 123 286 / +61 3 8761 6408

# ABOUT ÖSSUR

Pioneers of advanced technology, our mission is to improve people's mobility. For years we have nurtured an innovative mind-set, continuously pushing the boundaries to create the best products and services in the fields of Prosthetic, Osteoarthritis and Injury Solutions.

True advocates of 'Life Without Limitations', we work with individuals, clinicians and diverse communities to support a better quality of life for millions of people around the world.

## ÖSSUR BRACING SOLUTIONS

These product solutions have been built on decades of experience. They are designed to enhance the quality of life for people living with osteoarthritis by reducing pain and improving mobility, and to enhance the healing process of bone and soft tissue injuries.

Össur Bracing Solutions are globally recognised, primarily under the brand names CTi®, Rebound®, Miami® and Innovator®, all of which have been developed to assist healing and improve people's quality of life. Our expertise in this field has driven us a step further, developing indication-specific products that are designed to optimise healing while maintaining function and mobility. These Functional Healing products incorporate Össur's proprietary technology and are designed to enhance clinically relevant outcomes.

# ÖSSUR AUSTRALIA

Össur Australia offers specialised technical and clinical training programs, as well as direct customer service and clinical and technical support for customers across Australia and New Zealand.

OA and Injury Solutions are managed out of our office in Melbourne, Victoria, which is an ISO 9001:2015 certified business, while our prosthetic office is located in Sydney, New South Wales.



The Unloader® brand name has become synonymous with osteoarthritis bracing and its technology recognised as the industry standard. Its efficacy is demonstrated by more than 15 clinical studies. Össur strives to maintain its position as the innovation leader for OA Solutions by continuing to develop simple, yet effective and clinically proven treatment solutions that improve people's quality of life.

Through innovation, leadership, proven biomechanical approaches, and partnerships with leading medical professionals, Össur strives to offer comprehensive and effective treatment options for a range of injuries.



# KNEE BRACES

REBOUND® PCL	REBOUND® ACL	REBOUND® DUAL	CTI®
REBOUND POST-OP KNEE	REBOUND® CARTILAGE	UNLOADER ONE®	UNLOADER ONE® X
FORMFIT® PRO KNEE OA	FORM FIT® OA EASE	FORMFIT® TRACKER	

## KNEE OA TREATMENT GUIDE

FORMFIT® PRO KNEE OA	FORMFIT® OA EASE	UNLOADER ONE® X	REBOUND® DUAL
			
EARLY TO MILD OA (GRADE 0-I)	MILD TO MODERATE OA (GRADE I-III)	SEVERE OA (GRADE III-IV)	

# REBOUND® PCL

The world's first Dynamic  
Force PCL brace





# REBOUND® PCL

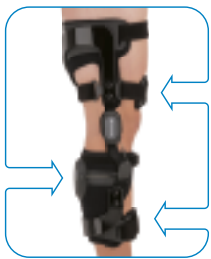
## The world's first Dynamic Force PCL brace

The Rebound PCL brace is designed to apply a physiologically correct, dynamic force, optimum for rehabilitation of posterior cruciate ligament (PCL) ruptures, whether during functional (non-surgical) treatment or post-surgical reconstruction.

### INDICATION

- Rehabilitation of Posterior Cruciate Ligament (PCL) ruptures, whether during functional (non-surgical) treatment or post-surgical reconstruction.

### FEATURES AND BENEFITS



#### Dynamic force

The dynamic load of the Rebound PCL on the tibia is generated by applying an anterior directed dynamic force on the calf area, and opposing counter forces on the anterior aspect of the leg.



#### Specific load adaptation

The Rebound PCL allows for specific load adaptation according to the patient's individual anatomy and rehabilitation related requirements.



#### Reduced load on the PCL

The Dynamic Tension System™ (DTS) increases the load on the tibia as the knee goes through flexion, providing an Anterior Draw force.

NOTE: Minimum inseam requirement from mid-joint to the perineum apex is 28cm.



### FUNCTIONAL HEALING™ – WHERE MOBILITY MEANS RECOVERY

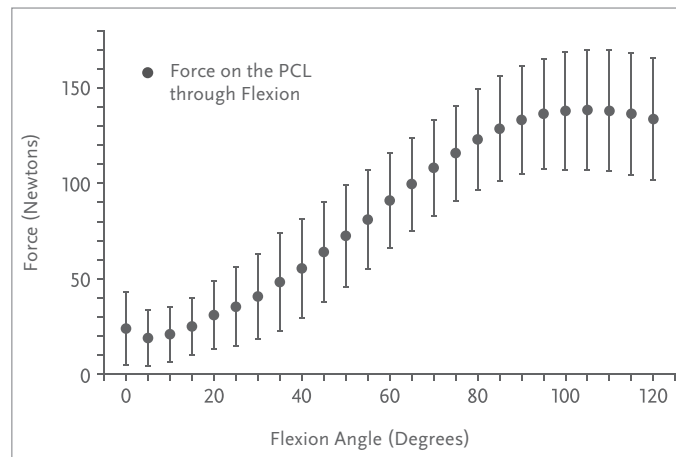
Our expertise in Injury Solutions has driven us to take the next step forward by developing indication-specific products which are designed to optimise healing while maintaining function and mobility.

The Functional Healing icon is Össur's seal of approval for more effective, less painful healing, accompanied by improved mobility.



# PCL INJURIES & THE IMPORTANCE OF DYNAMIC LOADING

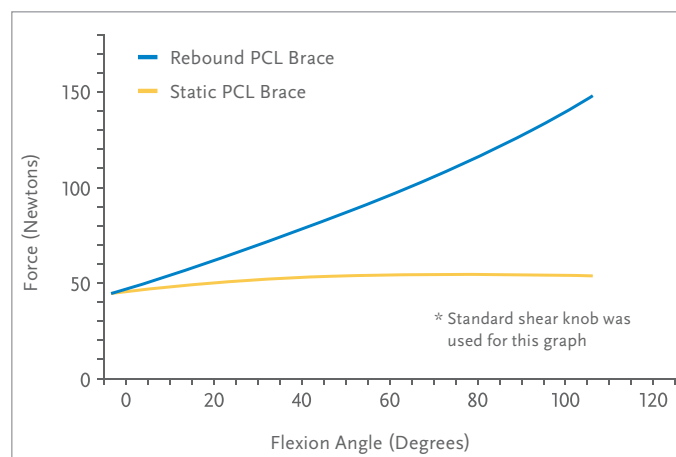
The posterior cruciate ligament (PCL), compared to the anterior cruciate ligament (ACL), has the intrinsic ability to heal and regain continuity after an injury<sup>1</sup>. The PCL experiences variable tensile forces during knee flexion<sup>2</sup>. Insufficient healing after a PCL rupture can lead to significant pathologies, such as chronic knee pain or knee OA<sup>2</sup>.



Graph adapted from Marklof et al<sup>3</sup> and Jansson et al<sup>4</sup>

In a PCL deficient knee, gravity and the forces on the joint from the hamstring muscles can potentially cause the tibia to be positioned in a posterior subluxed location relative to the femur (posterior sag)<sup>1</sup>. Healing of the PCL in this elongated position can lead to chronic instability and disability.

Current PCL braces either act as a barrier to normal motion or apply a static load. Therefore we developed the custom made Rebound PCL brace to apply a physiologically correct dynamic force to the PCL during rehabilitation to support it's healing and improve post-healing outcomes.



Comparison of the posterior tibial load provided by a static PCL brace and the dynamic force of the Rebound PCL brace. Graph adapted from LaPrade et al<sup>5</sup>.



## THE DATA

1. Pierce CM, O'Brien L, Griffin LW, Laprade RF. Posterior cruciate ligament tears: functional and postoperative rehabilitation. *Knee Surg Sports Traumatol Arthrosc* [Internet]. 2013 May [cited 2014 Dec 9];21(5):1071–84. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/22484415>
2. Strobel MJ, Weiler A, Schulz MS, Russe K, Eichhorn HJ. Arthroscopic evaluation of articular cartilage lesions in posterior-cruciate-ligament-deficient knees. *Arthroscopy* [Internet]. 2003 Mar [cited 2014 Dec 11];19(3):262–8. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/12627150>
3. Markolf KL, Feeley BT, Tejawani SG, Martin DE, McAllister DR. Changes in knee laxity and ligament force after sectioning the posteromedial bundle of the posterior cruciate ligament. *Arthroscopy*. 2006 Oct; 22(10):1100–1106. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/17027408>
4. Jansson KS, Costello KE, O'Brien L, Wijdicks CA, Laprade RF. A historical perspective of PCL bracing. *Knee Surg Sports Traumatol Arthrosc* [Internet]. 2013 May [cited 2014 Dec 11];21(5):1064–70. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/22622778>
5. LaPrade RF, Smith SD, Wilson KJ, Wijdicks CA. Quantification of functional brace forces for posterior cruciate ligament injuries on the knee joint: an in vivo investigation. *Knee Surg Sports Traumatol Arthrosc* [Internet]. 2014 Aug 22 [cited 2014 Dec 11]; Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25145947>

REBOUND® ACL

An evolution in bracing



# REBOUND® ACL

## An evolution in bracing

The Rebound ACL brace is an evolution in bracing, designed to comfortably apply an anatomically correct, dynamic load to the anterior cruciate ligament (ACL). Whether during conservative or surgical management, the Rebound ACL compliments protocols and supports an optimal biomechanical joint environment as a foundation for long-term successful patient outcomes. Innovative technology in the Rebound® Dynamic Tension System (DTS) allows individualised, adjustable settings to reduce strain on the healing ACL.

### FEATURES AND BENEFITS

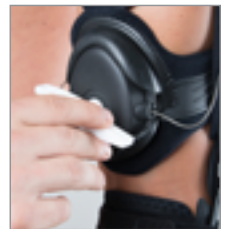
---

#### Dynamic technology for knee stability

The Rebound ACL is the only brace that provides an agonistic, dynamic force<sup>1</sup> to the ACL that is flexion-angle dependent and designed to reduce anterior-drawer. The posteriorly directed force on the tibia is significantly larger compared to a static brace<sup>1</sup>, promoting knee stability.

#### Specific load adaptation

The Rebound ACL allows for specific load adaptation according to the patient's individual anatomy and rehabilitation related requirements.



#### Supported by clinical & biomechanical studies

The Rebound ACL is shown to reduce strain on the ACL during activity and significantly reduce strain on the meniscus in ACL-deficient knees.<sup>2</sup>

#### Clinically-tested comfort

Validated by end-users<sup>3</sup> and with load mapping data collected during rehabilitation activities<sup>4</sup>, the Rebound® Dynamic Tension System (DTS) provides a comfortable load to the posterior thigh & anterior tibia

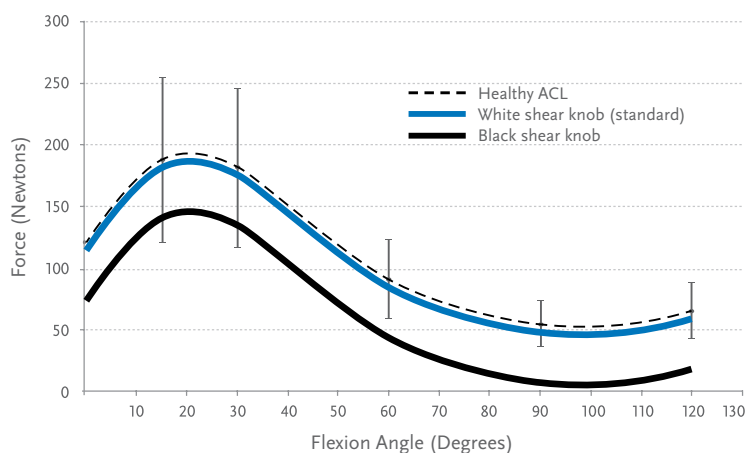
#### Biocompatible Hi-Tech materials

- Activegrip™ liners with the added advantage of Össur's anti-migration strap (AMS) system strapping
- Blue is You™ patient touch points
- Lightweight aircraft aluminum frame



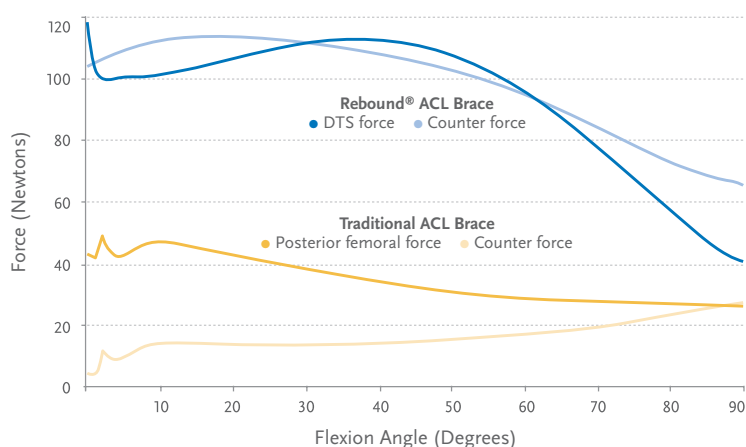


## Force-flexion relationship of ACL in vivo



Shear knob recommendations and graph adapted from: Smith SD, LaPrade RF, Jansson KS, Asbjørn A, Wijdicks CA. Functional bracing of ACL injuries: current state and future directions. *Knee Surg Sports Traumatol Arthrosc* 2014; 22: 1131–1141.

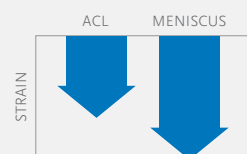
## Average anterior-posterior force on the ACL through knee flexion<sup>1</sup>



The dynamic load of the Rebound ACL on the femur is generated by applying a anterior directed dynamic force on the thigh area, and opposing counter forces on the anterior aspect of the tibia.



Rebound ACL is shown to reduce ACL strain & **SIGNIFICANTLY** reduce meniscus strain<sup>2</sup>



1. LaPrade RF, Venderley MB, Dahl KD, Dornan GJ. Functional brace in ACL surgery: Force quantification in an in vivo study. *Orthopaedic journal of sports medicine* 2017; 5(7). doi: 10.1177/2325967117714242.2. 2. Tornescu, S, Bakker, R, Wasserstein, D. Dynamically tensioned ACL functional knee braces reduce ACL and meniscal strain. *Knee Surg, Sports Traumatol Arthrosc* 2017; 26: 526–533. 3. Results of a representative end-user survey post brace wear during rehabilitation activities. Data on file at Össur. 4. Clinical Testing / Biomechanical study using force transducers to measure the force between the Rebound ACL and the lower limb, and load mapping data collected during squats. Data on file at Össur.

# REBOUND® DUAL

Versatility and stability delivered





# REBOUND® DUAL

## Versatility and stability delivered

The Rebound DUAL knee brace delivers functional support for ligament instabilities, including ligament instability with osteoarthritis, in a single, versatile brace. Suitable for low-to-moderate impact activities as well as sliding sports, Rebound DUAL is the new, go-to knee brace.

## INDICATIONS

---

- Supports ACL, MCL, LCL, PCL or combined instabilities
- Ligament instabilities with osteoarthritis

## FEATURES AND BENEFITS

---



### Slide-to-size

The multi-purpose upper frame can be adjusted from 33cm to 37cm to suit the patient's height and help ensure the perfect fit. It can also be adjusted for varus/valgus alignment.



### Comfort plus

The lightweight aluminum frame allows for easy adjustability by the clinician, as well as optimal comfort for the patient. Doeskin thigh liners and easy-on, easy-off strapping are designed to increase patient satisfaction.



### No-slip ActiveGrip™

The breathable ActiveGrip calf liner has anti-migration capabilities. Once in place, it stays in place. Even the most active users can go all out with confidence.



### Adjustable SmartDosing®

The optional SmartDosing system offers dynamic tension controls, allowing fine-tuned adjustments for osteoarthritis pain relief as needed by the user.





## REBOUND DUAL

Flexible, comfortable and reliable support for improved ligament stability.

### Adjustable frames means fewer parts to order

- Pre-fabricated version comes in 7 sizes and right or left configurations
- Custom options also available



#### FEATURES AND BENEFITS

- 1 Slide-to-size adjustable upper frame**  
Adjustable from 33-37cm
- 2 Cold-malleable aluminium frame**  
Easy to contour to patient's unique anatomy
- 3 Simple strapping system**  
Easy-on, easy-of for the patient
- 4 Field-serviceable D-rings**  
Can be adjusted to reduce pressure on the patient
- 5 ActiveGrip™ calf liner**  
Breatheable with anti-migration capabilities
- 6 Doeskin thigh liner**  
Increased comfort on the thigh
- 7 Cut-to-fit strap pads**  
Trim to optimise patient comfort

**CTI**<sup>®</sup>  
KNEEBRACES



Stability and  
protection

# CTi® KNEE BRACE

## Stabilise and protect

CTi's claim to fame and superiority over alternative dynamic systems is borne out of thousands of satisfied sports people, as well as top surgeons and associated knee specialists. The CTi has a rock-solid, carbon fibre frame. The CTi brace provides the ultimate combination of stability and protection for knees post-surgery or for patients looking to protect the knee from potential ligament injury.

## INDICATIONS

---

- ACL, MCL, LCL, PCL, rotary and combined instabilities
- All activity levels
- Standard model for medium to high impact levels
- Pro Sport model for highest impact levels

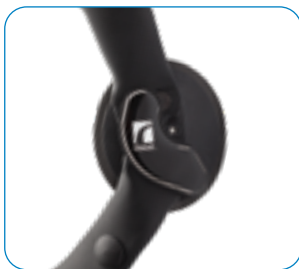
## FEATURES AND BENEFITS

---



### A rigid frame and non elastic straps for top performance

Together they create maximum stabilisation for the knee and prevent those excessive movements that can lead to ligament injury



### Accutrac® hinge for natural motion

In-depth analysis of natural leg motion led to a patented four-bar linkage system, which means the CTi accurately mimics the natural (brace-free) movement of the leg and allows a wide range of motion.



### Sensil® silicone for air flow and performance

An aerospace base mesh fabric coated with super skin-friendly Sensil silicone creates a breathable padding system for the CTi, which virtually eliminates migration keeping the brace firmly in position.



### Total support

No matter which ligaments you may have injured, or want to protect from injury, the CTi can help.

Properly fitted, the brace can help prevent the small twisting movements in the knee and prevent the ligaments from moving excessively.



# THE CHOICE OF PROFESSIONALS

CTI OFF-THE-SHELF

CTI CUSTOM



MARC JACOBS  
KITEBOARDER

# REBOUND® CARTILAGE

Protective support solution





# REBOUND® CARTILAGE

## Protective support solution

### INDICATION

---

- Knee conditions that could benefit from unicompartmental load reduction or range of motion restriction: articular cartilage defect repair, cartilage knee trauma, meniscal repair, avascular necrosis and condylar bone marrow lesions (i.e. bone bruises)

### FEATURES AND BENEFITS

---



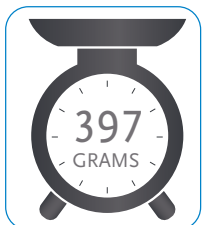
#### Effectively unloads the knee joint

Based on the clinically-proven 3-Point Leverage System<sup>8</sup>, the patented Cartilage Protection Straps™ maintain joint unloading in flexion for protection of the cartilage during the healing process.



#### Secure, yet comfortable

The breathable, wraparound sleeve features an integrated Sensil® silicone calf liner and a doeskin thigh liner to prevent migration while ensuring ultimate comfort.



#### A lightweight, low-profile solution

At just 397 grams, the Rebound Cartilage brace offers a lightweight, low-profile option that is barely noticeable to the user and fits securely underneath clothing.



#### Color-coding for ease-of-use

With color-coding on both the wraparound sleeve and Quick-Fit™ buckles, Rebound Cartilage is easy and intuitive to apply and reassemble after cleaning.



#### Range-of-motion control

The brace features a ROM adjustable hinge allowing locked, restricted or free-range settings. One brace can be used throughout the rehabilitation process.



### FUNCTIONAL HEALING™ – WHERE MOBILITY MEANS RECOVERY

Our expertise in Injury Solutions has driven us to take the next step forward by developing indication-specific products, designed to optimise healing while maintaining function and improving mobility.

The Functional Healing icon is our seal of approval, identifying innovative solutions with high adoption in evidence-based & emerging clinical protocols.



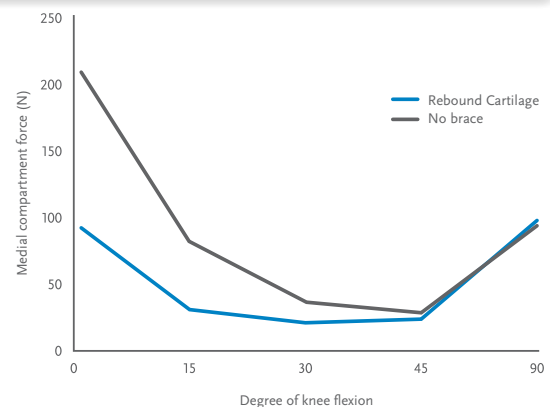
# REHABILITATION PHASES AFTER CARTILAGE REPAIR

The success of an articular cartilage repair is dependent upon patient compliance during the rehabilitation process and the protocol is based on restricted cartilage load combined with gradual increase in activity. Many rehabilitation protocols suggest partial weight-bearing as the standard of care for successful outcomes<sup>1,2,3</sup>. However, patient compliance to partial weight-bearing instructions with crutches has been shown to be inconsistent<sup>4,5</sup>.

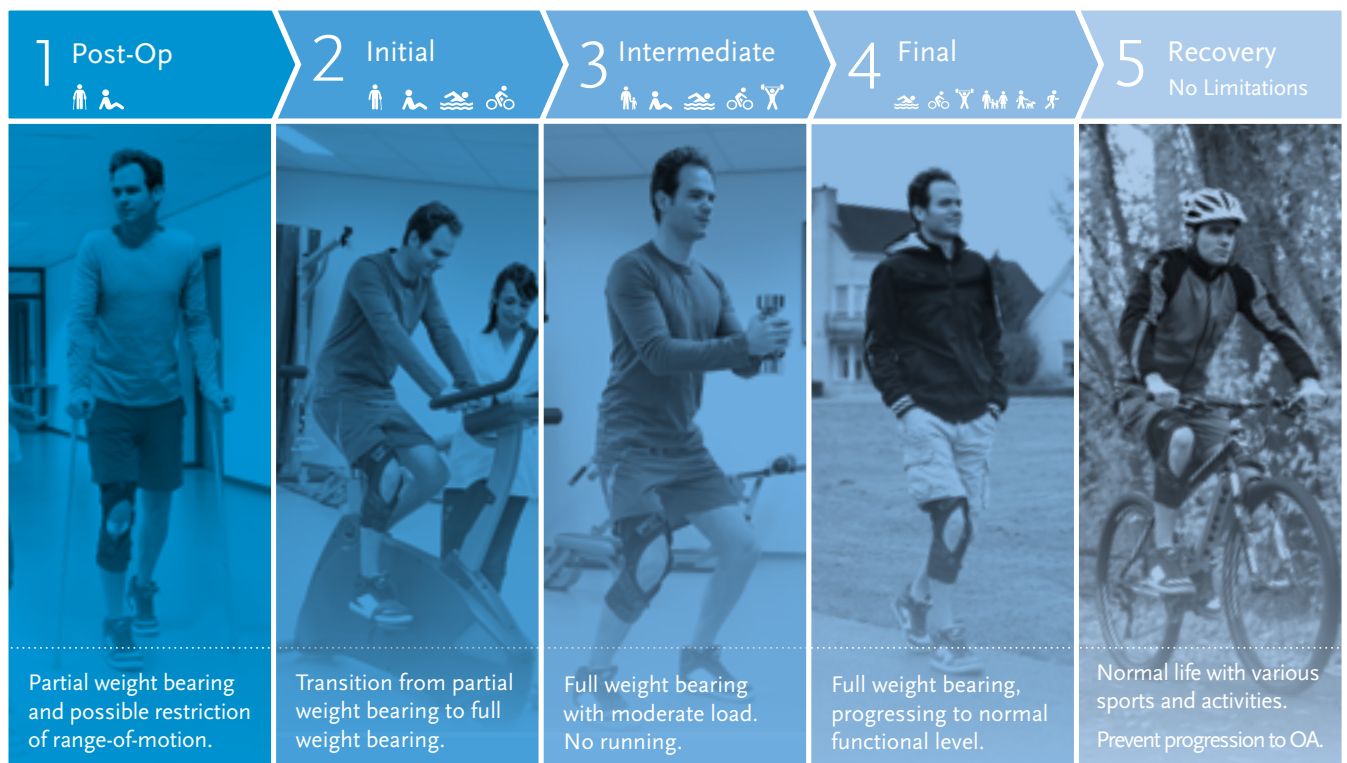
Rebound Cartilage is a protective functional solution with patented Cartilage Protection Straps™ designed to maintain joint unloading into flexion to support knee cartilage healing after cartilage repair such as Microfracture, OATS and (M)ACI<sup>6</sup>.



## REDUCED COMPARTMENTAL FORCE



Rebound Cartilage effectively unloads the addressed knee compartment.



Articular cartilage needs up to 24 months to regenerate post repair procedures<sup>7</sup> and includes 5 important phases for recovery.



## THE DATA

1. Tyler TF, Lung JY "Rehabilitation following osteochondral injury to the knee" Curr Rev Musculoskelet Med. (2012) March; 5(1): 72-81.
2. Reinold MM, Wilk KE, Macrina LC, Dugas JR, Cain EL. "Current concepts in the rehabilitation following articular cartilage repair procedures in the knee." J Orthop Sports Phys Ther. (2006) 36(10):774-94.
3. Edwards PK, Ackland TR, Ebert JR. "Accelerated Weightbearing Rehabilitation After Matrix-Induced Autologous Chondrocyte Implantation in the Tibiofemoral Joint: Early Clinical and Radiological Outcomes." Am J Sports Med. (2013) Oct;41(10):2314-24.
4. Ebert JR, Ackland TR, Lloyd DG, Wood DJ. "Accuracy of partial weight bearing after autologous chondrocyte implantation." Arch Phys Med Rehabil. (2008) Aug;89(8):1528-34.
5. Dabke HV, Gupta SK, Holt CA, O'Callaghan P, Dent CM. How accurate is partial weightbearing? Clin Orthop Relat Res. (2004) Apr;(421):282-6.
6. Biomechanical data from surrogate leg based on internal testing. Data on Össur File.
7. Marlovits S, Aldrian S, Wondrasch B, Zak L, Albrecht C, Welsch G, Trattnig S "Clinical and radiological outcomes 5 years after matrix-induced autologous chondrocyte implantation in patients with symptomatic, traumatic chondral defects." Am J Sports Med. (2012) Oct;40(10):2273-80.
8. Pollo FE, Otis JC, Backus SI, Warren RF and Wickiewicz TL "Reduction of Medial Compartment Loads with Valgus Bracing of the Osteoarthritic Knee." Am J Sports Med. 2002 30: 414



REBOUND® POST-OP KNEE

Injury solutions



# REBOUND® POST-OP KNEE

## Injury solutions

### INDICATION

---

- The Rebound® Post-Op Knee brace is designed to stabilise the knee and limit ROM as required following knee surgery.

### FEATURES

---

1. Alligator Velcro strap tabs for easy trimming
2. Buckles: Grip friendly ridges and secure hooks
3. Telescoping frame: easy to depress OneTouch with secure locking feature
4. Blue is You: Color-coded buckles and drop lock for easy patient education
5. Lock-out ROM pull tabs offer -10° to -120° of ROM control, with drop lock from -10° to 30°
6. Foam pads and AMS for breathability and superior anti-migration
7. Quick-fit buckle: optimal tension for suspension
8. Numbered frame for easy strap donning







## BENEFITS

---

### Intuitive design with practitioners and patients in mind

Multi-purpose Smart-Fit™ packaging & tool-free design makes fitting fast for the practitioner. Patient education has never been easier with color-coded patient touch points and a numbered frame; “Blue is You™”.

### Secure fit & superior suspension

Integrated anti-migration system, and optimal range of motion control with the OneTouch™ hinge with lock-out capability.

### Comfortable

Up to 30% lighter than the competition, with anatomical paddles and contouring struts that hug the anatomy.

### Everything you need

Find an anatomical fit with the Left / Right Contoured offering. Also available in a Universal and a Paediatric version; the most contemporary post-op brace of its kind on the market.

## INTUITIVE FITTING

---

### Easy to fit

The Rebound Post-Op Knee brace is set up for application right out of the box and features the “brace expander” to assist with proper positioning and fit while increasing staff efficiency.



### Easy to adjust

Whether setting the drop lock, adjusting ROM or altering the brace length, all the OneTouch™ settings are easy to adjust on the Rebound Post-Op knee brace.



### Easy refitting

The grip friendly shaped buckles help the patient remove and refit the brace. While the numbered frame ensures the right order for an optimum fit.



PERFECT FIT FOR ADULT AND  
PAEDIATRIC PATIENTS





# UNLOADER ONE<sup>®</sup>

OA Knee Solution



# UNLOADER ONE®

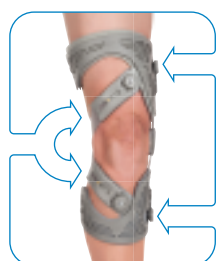
## OA Knee Solution

The Unloader One® is designed to be a comfortable, lightweight, low-profile brace that provides excellent suspension and unloading leverage. Multiple peer-reviewed clinical and bio-mechanical studies have investigated Össur's unique 3-Point Leverage System and Dynamic Force Straps, which are easily fine-tuned using the SmartDosing® system.

### INDICATION

- Moderate to severe unicompartmental knee osteoarthritis

### FEATURES AND BENEFITS



#### 3-points of leverage

The efficacy of our 3-Point Leverage System has been clinically studied by multiple peer-reviews.



#### Adjustable SmartDosing®

SmartDosing, powered by Boa® Technology, provides patients with a simplified, single-hand dosing dial for on-the-fly adjustability, helping them better manage their unicompartmental OA knee pain.



#### Low-profile

As a lightweight and low-profile OA knee brace weighing a mere 453 grams, Unloader One fits discreetly and comfortably underneath clothing.



#### Anti-migration

While other OA knee braces often migrate, our patented Sensil® silicone liners are specially-designed to comfortably secure Unloader One in place, maximising effectiveness.



**30** Day Patient Satisfaction Guarantee

### HOW IT WORKS

The Unloader One uses dual Dynamic Force Straps (DFS) to apply a gentle force designed to reduce pressure on the sensitive bony surfaces of the knee, resulting in a reduction in pain and an increase in the wearer's mobility.



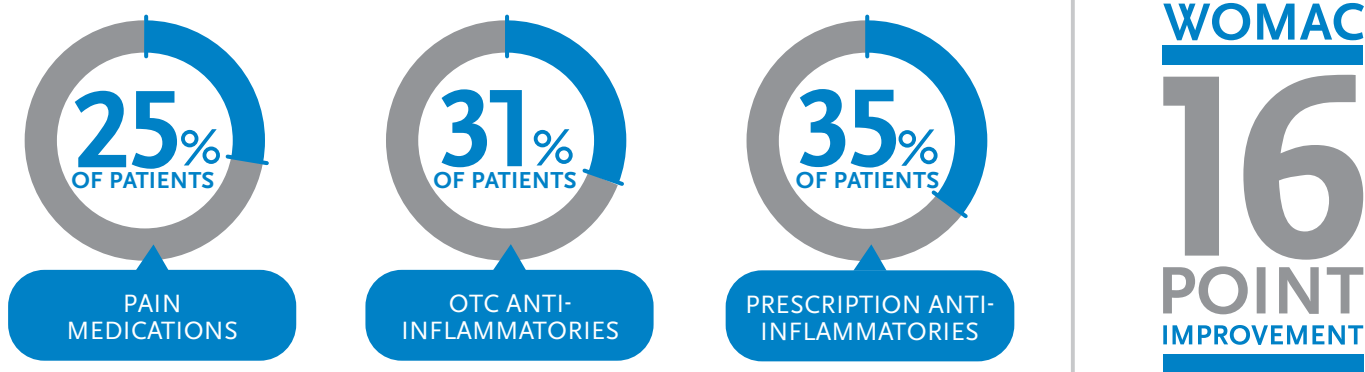


## UNLOADER ONE WITH SMARTDOSING

The Unloader One 'unloads' painful knee joints by redistributing joint pressure. Clinical research by Steadman Philippon Research Institute demonstrated that the Unloader One decreases pain, improves function and reduces the usage of pain medication<sup>1</sup>.

### Steadman Philippon research results

At 6 months, the below percentages of patients reported a reduction in medication use:



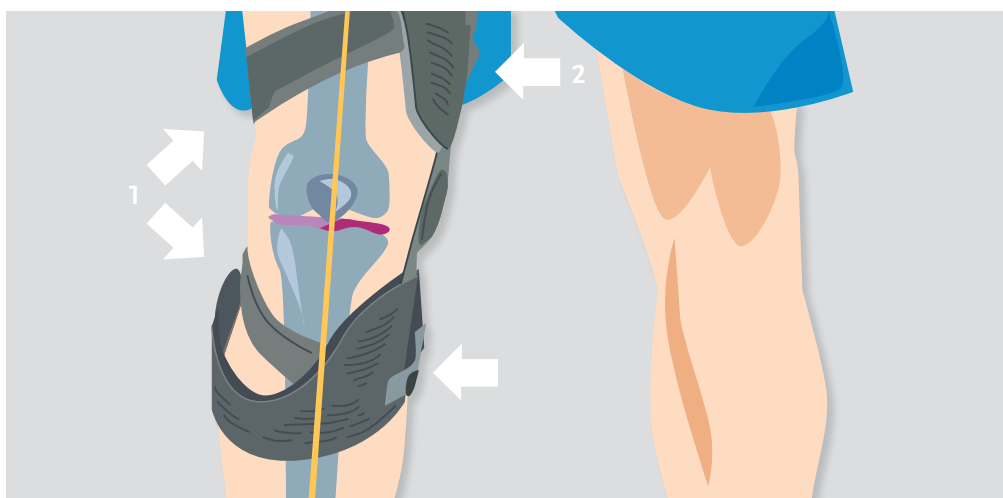
*A clinically studied<sup>1</sup> treatment option for unicompartmental osteoarthritis of the knee and its associated pain.*

## 3 POINTS OF LEVERAGE

The fundamental component of every Unloader<sup>®</sup> knee brace is the clinically studied<sup>2</sup> 3-Point Leverage System, which consists of a single upright plus one or more Dynamic Force Straps<sup>™</sup> (DFS).

The patented DFS apply traction closely above and below the condyles, opening-up and unloading the effected compartment.

### Clinically and biomechanically studied 3-Point Leverage System<sup>2</sup>



### THE DATA

1. Briggs KK, Matheny LM, Steadman JR. Improvement in quality of life with use of an Unloader knee brace in active patients with OA: prospective cohort study. J Knee Surg 2012; Advance online publication. Retrieved 23rd August 2012. doi:10.1055/s-0032-1313748
2. Fabian E. Pollo PhD, James C. Otis PhD et al., REDUCING MEDIAL COMPARTMENT LOADS WITH VALGUS BRACING IN THE OSTEOARTHRITIC KNEE, American Journal of Sports Medicine (AJSM), Vol. 30, No. 3, 2002.

# UNLOADER ONE® X

There's only one Unloader®





# UNLOADER ONE® X

There's only one Unloader®

With more than 15 clinical studies\* demonstrating their efficacy, Unloader OA knee braces have been the industry standard for close to 4 decades.

Designed with patient compliance in mind, the Unloader One X features the Össur 3-Point Leverage System. This patented system is designed to improve mobility by unloading the pressure from unicompartmental knee OA or degenerative meniscal tears while being worn.

## PRODUCT HIGHLIGHTS

- Stylish, low-profile frame with soft edges
- Breathable and skin friendly soft goods
- Machine washable for easy cleaning
- Streamlined, integrated SmartDosing® system for easy self-dosing of pain relief
- Color-coded patient touch points for intuitive use
- Redesigned Quick-Fit buckles with lever arms for easy closure, even by users with limited strength



**Sundial** (for easier grip on SmartDosing dial)



**Finger Loops** (for an even easier opening of buckles)

The Unloader One X is easily adaptable to individual needs and anatomical shapes, with the help of various accessories and replacement parts. For ordering information, consult the Unloader One X catalogue page or visit [ossur.com.au/unloader-one-x](https://ossur.com.au/unloader-one-x)



**PROKNEE** OA  
OSTEOARTHRITIS

Knee OA Solution



THE CHOICE OF A **PRO**

# PROKNEE OA

## Knee OA Solution

Össur Formfit® Pro Knee OA is a unique, compressive knee sleeve with a Dynamic Force Strap system, designed to provide pain relief from the early stages of osteoarthritis (OA). The dynamic, 3-D MotionTech™ knit is supportive and meets certified medical grade compression requirements, and has been proven to be superior to the leading brands at moisture wicking and breathability, keeping your knee cool during wear. CoolVent™ technology in the popliteal area enhances breathability and comfort, while the distinct patella graphics help with intuitive placing of the sleeve. The integrated StayBilizer™ hinge, constructed from lightweight, flexible EVA material, is suitable for sports, such as football.



MOTIONTECH



COOLVENT



STABILISER



FOLDLOCK

## INDICATIONS

---

- Medial or lateral knee pain
- Early or mild unicompartmental osteoarthritis of the knee
- Symptomatic, unicompartmental meniscus degeneration

## FEATURES AND BENEFITS

---

- Clinically studied 3-point leverage system with Dual DFS straps
- Certified medical grade compression (20-30 mmHg)
- Lightweight CoolVent™ knit in popliteal area for added breathability and comfort
- Patented FoldLock™ system for easier and more secure application
- Sports-compatible StayBilizer™ hinge made from light, flexible EVA material for optimum shape and fit
- Patella graphics for intuitive placement
- Available in 5 standard sizes





# KNEE OA TREATMENT GOALS: CONTROL PAIN & DELAY PROGRESSION

Knee OA has commonly been regarded as a condition affecting the elderly. However, it can start developing quite early. Preventive care should be considered at an early stage for individuals who are at risk, and for patients already presenting signs of minor impairment<sup>1</sup>.

As recommended by OARSI, various methods may be used in an effort to delay OA progression, such as neuromuscular or proprioceptive training, body weight optimisation, education and biomechanical interventions<sup>1,2</sup>.



## DRIVERS OF KNEE OA

### INDIVIDUAL RISK FACTORS

- Genetics & gender
- Age
- Inactivity

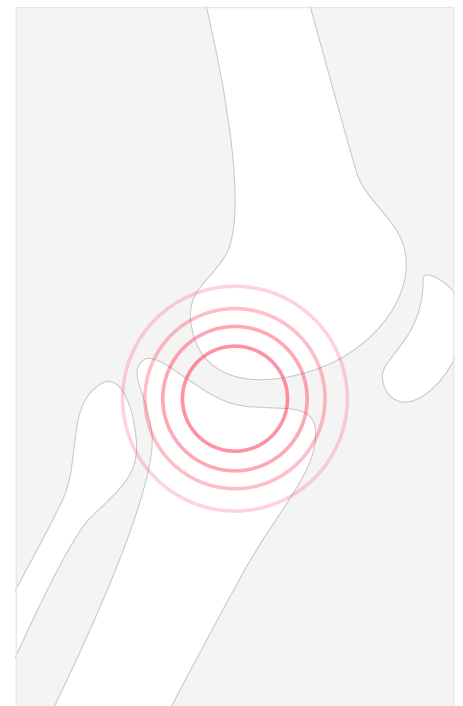
### MECHANICAL RISK FACTORS

- Joint loading
- Alignment
- Muscular weakness & Injury

## WHO IS AT RISK?

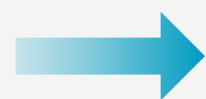
### PATIENTS WITH

- Previous trauma
- Impaired muscle function
- Meniscal injury / degeneration
- Obesity



## TREATMENT GOALS

- Improve alignment
  - optimise joint load
- Keep patients active without knee pain
  - Strengthen muscles
  - Control body-weight



MAINTAIN ACTIVITY



# FORMFIT PRO KNEE OA - DESIGNED TO MAINTAIN ACTIVITY



**FOLDLOCK**  
Patented FoldLock™ System  
- Fold Edge  
- Grip Pattern

**COOLVENT**  
CoolVent™ Technology  
Superior breathability

**STAYBILIZER**  
Sports compatible EVA upright\*  
Integrated into sleeve

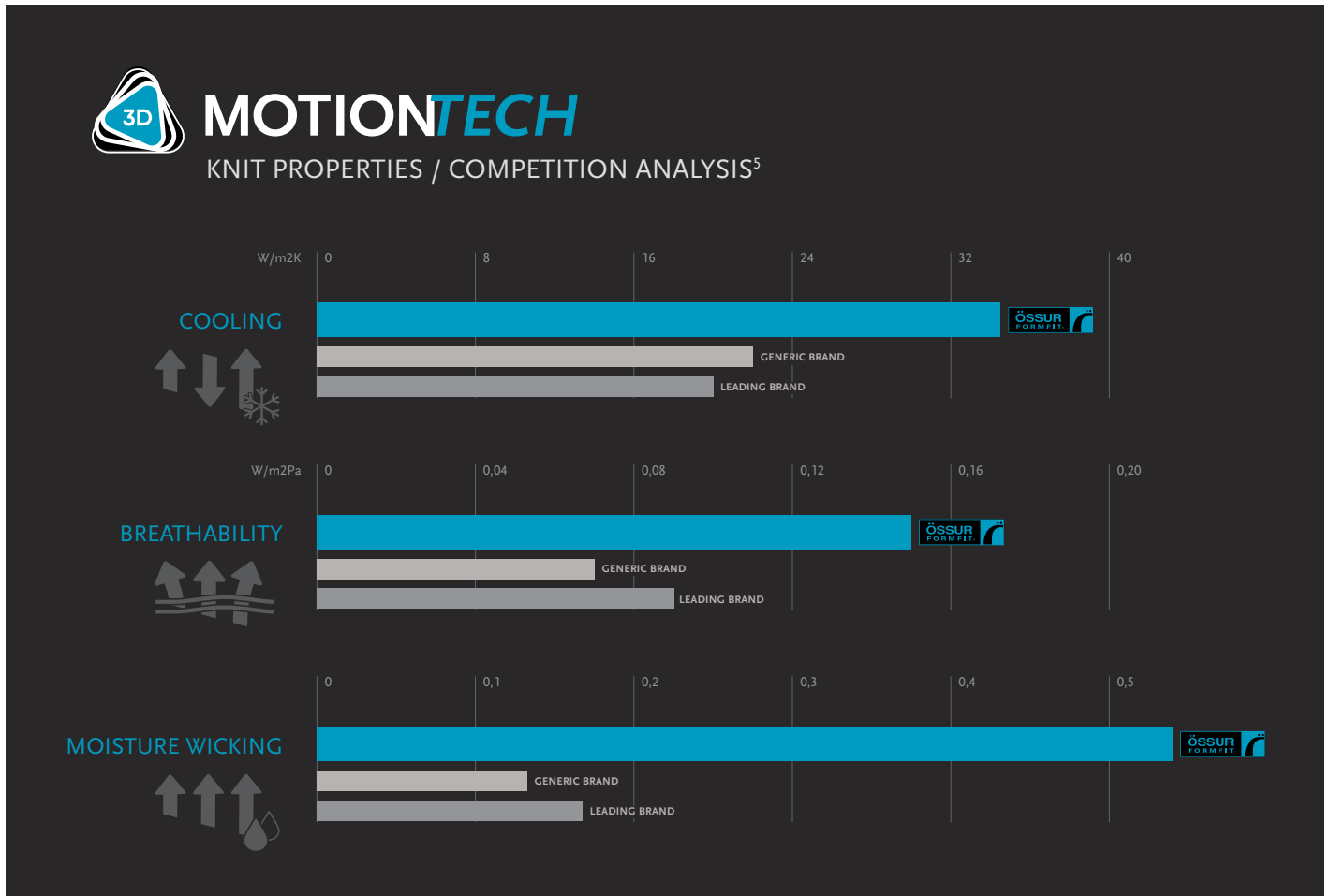
**MOTIONTECH**  
3D Knitted Sleeve Design

CERTIFIED MEDICAL GRADE COMPRESSION

ENHANCED PROPRIOCEPTION

BIOMECHANICAL PROVEN UNLOADING<sup>3</sup>  
powered by double DFS straps

**OA** **DFSSTRAP**  
OSTEOARTHRITIS For added support when needed



ÖSSUR®

FORMFIT®

THE CHOICE OF EXPERTS



### Formfit® OA Ease

Sometimes, our bodies need assistance. For decades, specialists have trusted Form Fit supports, a complete range of quality products by Össur. A global leader in innovative orthopaedic products, Össur's biomechanical expertise has helped millions live Life Without Limitations.

That's why Form Fit is the Choice of Experts.



# FORMFIT® OA EASE

## Lightweight, comfortable and discreet

The Formfit OA Ease is a single upright brace with a Dynamic Force System™ strap that may help relieve pain from mild-to-moderate unicompartmental knee osteoarthritis (OA). Its wraparound design is easy to apply and remove using simple rubber pull-tabs, colour-coded guide dots, and strap tension indicator lines. This low-profile knee brace is comfortable, easy to use, and adapts to a variety of leg anatomies. The Formfit OA Ease can also be machine washed for effortless care.

### INDICATIONS

---

- Mild-to-moderate unicompartmental knee osteoarthritis and/or degenerative meniscal tears
- Other conditions that may benefit from unicompartmental unloading

### FEATURES AND BENEFITS

---

- Easy Wraparound Design – Simple rubber pull-tabs, colour-coded guide dots and a convenient hinge alignment guide make application and removal simple
- Clinically Studied Dynamic Force System™ – 3-Point Leverage System with Dynamic Force System™ strap and shells unload the affected knee compartment
- Comfortable – Lightweight and breathable fabric feels great against the skin and can be machine washed for effortless care
- Discreet – Low-profile brace with a slim hinge can be worn under clothes
- Control – Fine-tune strap tension for individual pain relief, with marked dosing indicator lines
- Extension kits and liners are available to further enhance fit and comfort

# FORMFIT<sup>®</sup> TRACKER

---

Patella Stabiliser





# FORMFIT® TRACKER

## Patella Stabiliser

The Formfit Tracker with micro-adjustable ReflexWing™ buttress realigns the patella, providing dynamic lateral support for common patella conditions. Its FlyWeight™ fabric delivers lightweight breathability and a low-profile design that feels great against the skin and minimises migration. PowerLock™ straps work in tandem with heat moldable CustomFit™ hinges to provide a customisable fit for your patient.

### INDICATIONS

---

For knee conditions that may benefit from realignment of the patella and/or patients that would benefit from an added lateral support of the patella, such as:

- Lateral patellar subluxation and dislocations
- Lateral maltracking

### FEATURES AND BENEFITS

---

- CustomFit hinges for customised fit and support
- Anti-Migration Tech™ minimises migration
- PowerLock straps for secure lateral support
- ReflexWing buttress for comfortable patella realignment
- FlyWeight fabric for soft feel and breathability
- Durable and machine washable



# HIP BRACES

---



# SHOULDER BRACE

---





# UNLOADER® HIP

Unique solution for hip OA



# UNLOADER<sup>®</sup> HIP

Unique solution for Hip OA



## INDICATION

- Mild to moderate hip osteoarthritis

## HIP OA

Hip OA has been shown to be a contributing factor in 72.5% of total hip replacements performed in Australia<sup>2</sup>.

## Pathology

- Wear and tear of cartilage in areas of maximum load
- Instability of the hip due to changes in proprioception

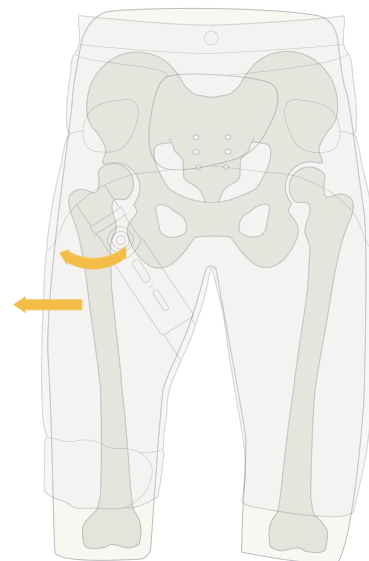
## THE UNLOADER HIP – HOW IT WORKS

The Unloader Hip alters the position of the femoral head within the acetabulum through rotation and abduction.

External Rotation ↑

Abduction ↑

The adjustment occurs during swing phase, providing adapted positioning at heel strike.



### THE DATA

1. Nérot A and Nicholls M. "Clinical study on the unloading effect of hip bracing on gait in patients with hip osteoarthritis." Prosthet Orthot Int. 2016 Apr. Advance online publication.
2. Australian Orthopaedic Association. "There were 43,183 hip replacements reported to the registry in 2014. Primary total hips account for 72.5%." 'Lay Summary 2015, Annual Report, Hip and Knee Replacement - Supplementary Report 2015'. 2015;2-5
3. Internal data (unpublished)
4. Pistors MF et al. "The course of limitations in activities over 5 years in patients with knee and hip osteoarthritis with moderate functional limitations: risk factors for future functional decline." Osteoarthritis Cartilage. 2012 Jun;20(6):503-10.



## UNLOADER HIP – RELIEF FOR PATIENTS WITH HIP OA

The Unloader Hip is designed to optimise Hip OA treatment in order to improve mobility and decrease pain.



### Easy-To-Use

The pocket wrap closure system and simple-to-tighten pulley system makes the Unloader Hip easy to use and adjust.

### Optimum Comfort

With its breathable materials and integrated elastic sections, the Unloader Hip provides a comfortable and snug fit – allowing a discreet fit under clothing.

### Improved Mobility

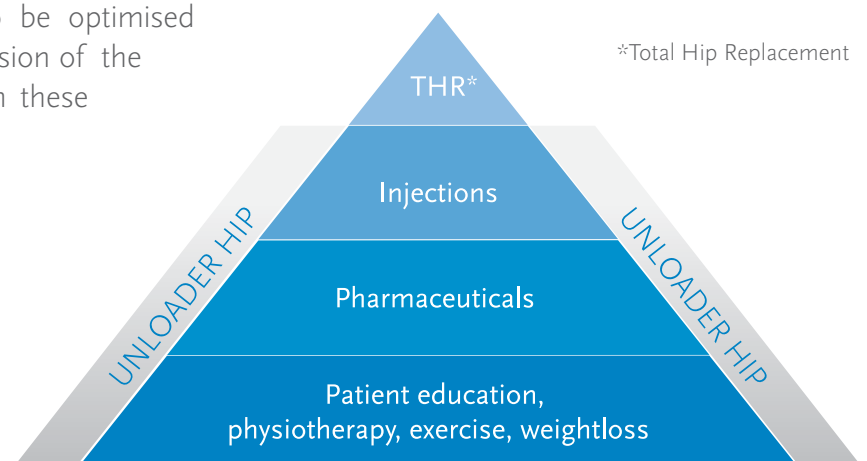
The Unloader Hip provides proprioceptive support through compression of the affected area. The Rotation Control Strap then allows individual adjustment of hip abduction and the external rotation force, resulting in improved mobility for users.

**30** Day Patient Satisfaction Guarantee

A significant improvement in activities of daily living as a result of using the brace was seen over 4 weeks in patients with symptomatic hip OA<sup>3</sup>. Increased activities have been associated with less hip limitations at later disease stages<sup>4</sup>.

## OPTIMISING HIP OA MANAGEMENT

Treatment of Hip OA is believed to be optimised through a multi-modal approach. Inclusion of the Unloader Hip brace is consistent with these recommendations.



Adapted from Creamer P<sup>5</sup>.



# REBOUND<sup>®</sup> HIP

Keep a low profile



# REBOUND® HIP

## Keep a low profile

The Rebound Hip brace features a low-profile, lightweight design that promotes user comfort and compliance. It delivers gentle controlling forces and effective functional ROM restriction in extension/flexion and abduction/adduction to help ensure optimal post-surgical outcomes. The universal frame and softgoods are easy to stock, assemble and fit.

## INDICATIONS

---

Hip conditions that could benefit from motion restriction following surgery:

- Femoral Acetabular Impingement (FAI) arthroscopic surgery
- Gluteus medius repair surgery
- Hamstring repair surgery

## FEATURES AND BENEFITS

---



### Low-profile and lightweight

Rebound Hip was engineered with patient comfort and compliance in mind. Your patients will appreciate this low-profile and lightweight alternative to bulkier options.



### Put ROM on restriction

Flexion/extension stops restrict ROM to help prevent users from exceeding a safe and comfortable range-of-motion. Select the appropriate stops to best fit your protocol.



### Now universal to reduce inventory

With a universal left/right, telescoping strut and a universal belt, Rebound Hip simplifies stocking and ordering by providing a one-size-fits-most solution.



### The choice is yours!

Whether you select our adjustable (pictured) or constant force hinge, Rebound Hip is designed to support your protocol and promote optimal post-surgical outcomes.





# REBOUND HIP



## FEATURES AND BENEFITS

- 1 Universal**  
Fits the right or left leg
- 2 Slide-to-size adjustable frame**  
Height adjustability provides the best fit for each patient's unique anatomy
- 3 Universal belt**  
Fits up to 122cm waist, with optional extension up to 170cm waist
- 4 Easy-release pegs**  
Easily adjust desired flexion/ext
- 5 Adjustable ROM hinge (optional)**  
Enables adduction/ abduction from 0° to 10°, 20° or 30°



# REHABILITATION PHASES AFTER FAI HIP ARTHROSCOPY

Rehabilitation following FAI hip arthroscopy has long been recognised as an integral component of the clinical outcome of the procedure<sup>1</sup>. The Rebound Hip brace is designed to help optimise post-surgical rehabilitation following FAI hip arthroscopy. Typically, a specific rehabilitation plan with 4 phases is developed for the treated patient.

WEEKS 0–4	WEEKS 5–7	WEEKS 8–12	WEEKS 12+
50% WB for 7-10 days	Emphasis shifts from motion to strength	Integrated functional strengthening	Safe, effective return to sports
Brace wear – ROM limitation in Flexion/Extension + Abduction/Adduction based on surgeon’s individual recommendation	Continue brace wear if indicated by surgeon	If full ROM not achieved by week 10, terminal stretches should be initiated	Careful, frequent re-assessment to prevent loss of mobility as strengthening continues to advance
Manual therapy	Continue manual and aquatic therapy	Manual therapy as needed	
Prone lying 1-2h/day	Kneeling hip flexor stretch once tolerated	Multi-planar muscle strengthening	
Stationary bike without resistance	Passive ROM should become more aggressive, especially rotation	Core strengthening	
Isometrics abductors, adductors, extensors, transverse abdominals	Hip, core and pelvis strengthening	Plyometrics in water	
	Add resistance to bike	Running at end of phase	
	Build cardiovascular endurance	Agility drills	

\*This is a sample post-operative FAI protocol. It is up to the treating physician for a patient's individual rehab protocol.



## THE DATA

1. Bedi, A., Chen, N., Robertson, W., Kelly, BT. The management of labral tears and femoroacetabular impingement of the hip in the young, active patient. *Arthroscopy* (2008) 24(10):1135–45

ÖSSUR®

FORMFIT®

THE CHOICE OF EXPERTS



## Form Fit Shoulder Brace with Abduction

Sometimes, our bodies need assistance. For decades, specialists have trusted Form Fit supports, a complete range of quality products by Össur. A global leader in innovative orthopaedic products, Össur's biomechanical expertise has helped millions live Life Without Limitations.

That's why Form Fit is the Choice of Experts.

# FORM FIT® SHOULDER BRACE WITH ABDUCTION

The Form Fit Shoulder Brace is designed to provide immobilisation following shoulder injury/surgery. With its streamlined fit, sporty look and breathability it offers excellent comfort and ease of use. The Form Fit Shoulder Brace also provides abduction of the shoulder (when the abduction pillow is attached), or external rotation of the shoulder (when the external rotation pillow is attached).

The versatile shoulder brace is also available with a customizable airplane kit for patients that require precise positioning following shoulder surgery.

## INDICATIONS

---

For shoulder conditions that may benefit from shoulder immobilisation and/or abduction and/or external rotation, such as:

- Post-operative
- Soft tissue repairs/strains
- Shoulder instabilities/injuries

## FEATURES AND BENEFITS

---

- Breathable material
- Quick-release buckles
- Offloading strap
- Extra padding
- Universal thumb loop
- 30° external rotation (when external rotation pillow is attached)



FORM FIT SHOULDER BRACE  
WITH ABDUCTION



FORM FIT SHOULDER BRACE  
WITH EXTERNAL ROTATION



FORM FIT SHOULDER BRACE  
WITH AIRPLANE







FOLLOW ÖSSUR ON



[WWW.OSSUR.COM.AU](http://WWW.OSSUR.COM.AU)

Össur Australia

TEL 1300 123 268

FAX +61 3 9923 6866

[infomelbourne@ossur.com](mailto:infomelbourne@ossur.com)

