

## **DONJOY®**

# Orthopedic Report on the ROAM™ OA Knee Brace

Summary of the results of a patient feedback study by Dr. R. Berg (Jan 2024, Germany)\*

## **PURPOSE & METHODS**

A clinical evaluation of the user-friendliness and functional suitability of the ROAM™ OA knee brace was conducted over six weeks on 10 patients (6 men and 4 women, aged 19 to 68). Patients with moderate-to-severe knee OA (Grades 2-3 on the Kellgren-Lawrence scale) were selected and fitted, and their feedback on the device was recorded. At the end of the 6-week treatment period, the patients answered a questionnaire concerning the brace's comfort, ease of use, and functionality.

## **PRODUCT SPECIFICATIONS**

### **Indications**

The ROAM OA knee brace was indicated for the following conditions:

- Moderate to severe unicompartmental knee osteoarthritis
- Post-operative meniscal repair only where unicompartmental unloading is indicated
- Varus-valgus conditions that may benefit from unicompartmental unloading

## **PRODUCT DESCRIPTION**

The ROAM OA knee brace is a functional framed orthosis manufactured by Enovis™ under its DonJoy® brand. It is designed to stabilize the knee joint while allowing for adjustable relief of the medial or lateral compartment. Key features include:

- Anatomically shaped, low-profile aluminum upright for stability and comfort
- BOA®\*\* adjustment dial for varus/valgus angle customization
- Three adjustable straps for secure fit
- Breathable, skin-friendly liners for comfort
- Available in six sizes for both knees and for varus/valgus pressure relief
- Range of motion (ROM) hinge for customizable flexion and extension angles

## TECHNICAL DESIGN

- Low-profile aluminum upright for anatomical adjustment.
- Adjustable straps and magnetic fasteners for secure fit.
- Light, modern materials (aluminum) ensure rigidity and minimal weight.
- Breathable, skin-friendly liners are easy to clean and maintain.

## MECHANISM OF ACTION

The orthosis employs a 3-point system to counteract varus and valgus forces, stabilizing the knee joint. Its aluminum upright is adjustable to match the joint's anatomical shape, minimizing constraining forces.

## RESULTS

### Patient Feedback

Patients reported ease of use and high comfort levels. Key points included:

- Easy application and adjustment of varus/valgus settings.
- Secure fit due to strap design.
- Pleasant wearing sensation from breathable liners.
- Minimal interference with daily activities due to the slim design.
- High acceptance level throughout treatment.

### Side Effects

- No adverse effects or complications reported during the study. Potential side effects are outlined in the user manual.

## SUMMARY AND CONCLUSION

The newly designed ROAM™ OA knee brace with simplified adjustment process was able to improve the ease of use and comfort, leading to a high patient acceptance. This makes the brace a useful aid to physiotherapeutic treatment while also enhancing patient reintegration into daily activities and work.

**Based on the positive results of this study, the ROAM OA knee brace can be recommended as a suitable therapeutic aid for continued use and broader application in post-surgical and conservative knee joint treatments.**

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