

COBLATION[®] is cost-effective for knee chondroplasty

COBLATION projected to result in net savings of €2,310 per patient, due to a significantly lower revision rate at four years after surgery, compared with mechanical debridement (MD)



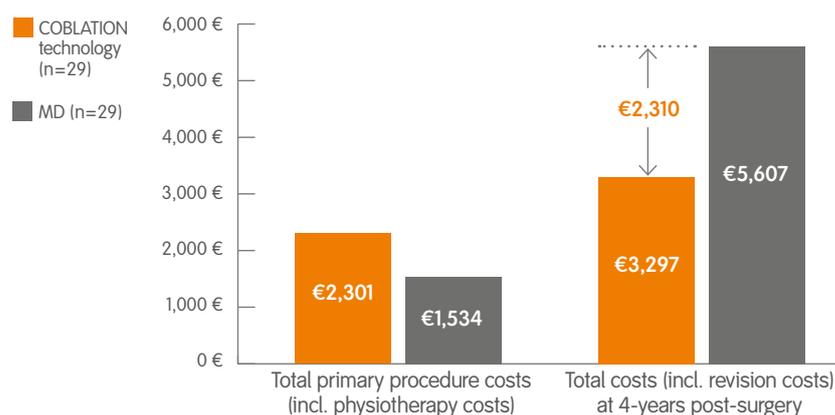
Study design

- A decision-analytic model compared projected surgical and post-surgical costs from a German payer perspective (expressed in 2016 euros) between COBLATION and MD
- Projected costs were estimated from clinical outcomes (physiotherapy [PT] use and revision rates) derived from a randomized controlled trial (RCT) conducted over a four-year period following surgery for medial meniscus tears and idiopathic International Cartilage Repair Society (ICRS) grade III focal lesions of the medial femoral condyle^{1,2}



Key results

- COBLATION compared with MD demonstrates meaningful reductions in PT service use at 6 weeks (6.4 units vs 9.8 units)¹ and overall revision rates at 4 years (14% vs 48%)²
- This leads to average total cost savings of €2,310 per patient (Figure)



Conclusion

COBLATION chondroplasty improved clinical outcomes and lowered overall costs, when compared with MD, in the treatment of patients with a medial meniscus tear and idiopathic ICRS grade III defect of the medial femoral condyle.



Considerations

- Outcomes data were derived from a single-centre RCT, while costs were based on the German healthcare system



Study citation

¹Adeyemi A, Nherera L, Trueman P, Emmermann A. Cost-Effectiveness analysis of the use of COBLATION[®] knee chondroplasty versus mechanical debridement in German patients. Poster presented at: International Conference on Osteoporosis, Osteoarthritis and Musculoskeletal Diseases; May 25-26, 2017; London, UK

References

1. Spahn G, Kahl E, Mückley T, Hofmann GO, Klinger HM. Arthroscopic knee chondroplasty using a bipolar radiofrequency-based device compared to mechanical shaver: results of a prospective, randomized, controlled study. *Knee Surg Sports Traumatol Arthrosc.* 2008;16:565-573.
2. Spahn G, Klinger HM, Mückley T, Hofmann GO. Four-year results from a randomized controlled study of knee chondroplasty with concomitant medial meniscectomy: mechanical debridement versus radiofrequency chondroplasty. *Arthroscopy.* 2010;26(9 Suppl):S73-80.