

Home-Based vs Supervised Inpatient and/or Outpatient Rehabilitation Following Knee Meniscectomy: A Systematic Review and Meta-analysis

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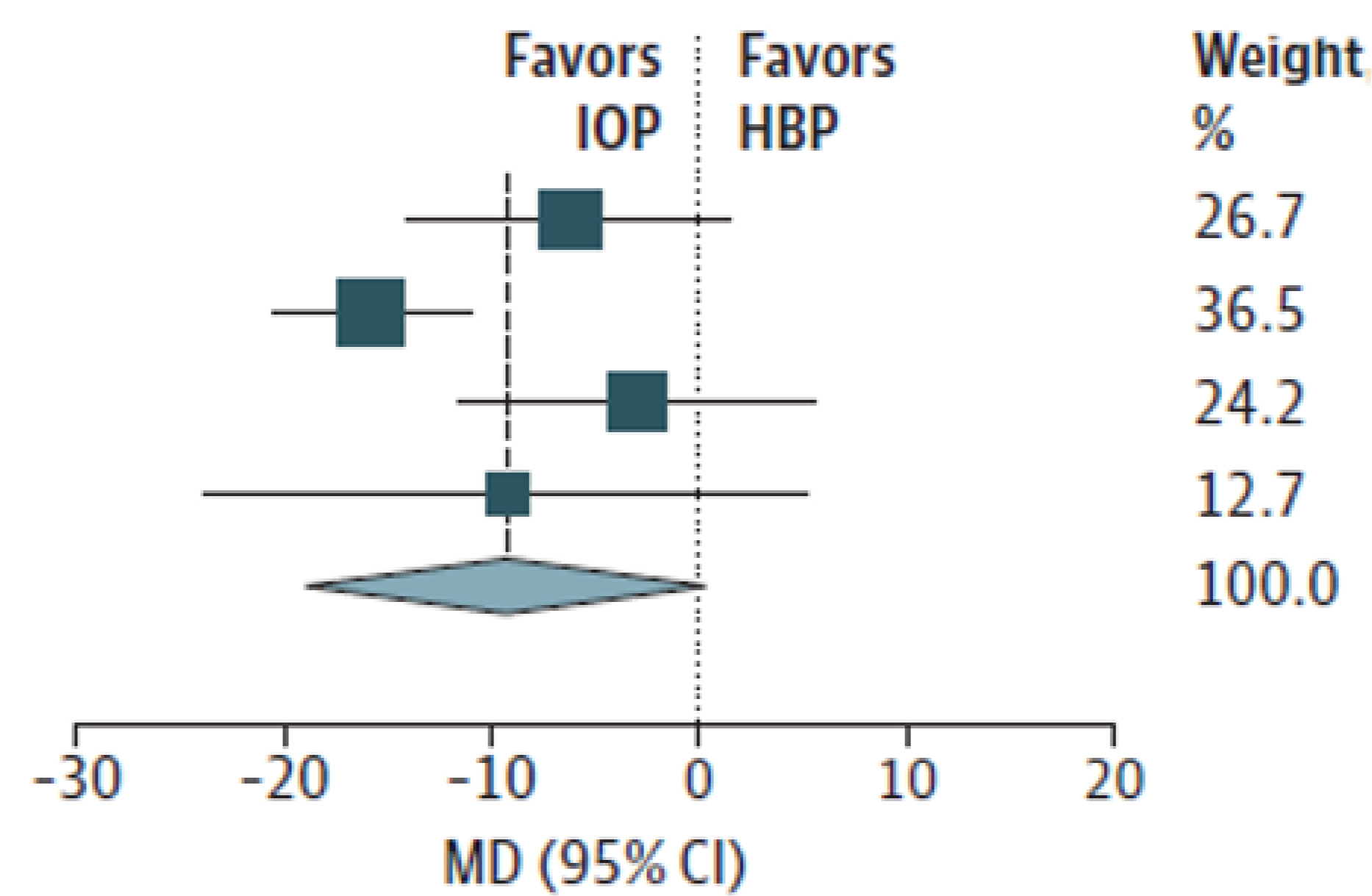


Objective: TO COMPARE OUTCOMES ASSOCIATED WITH HOME-BASED REHABILITATION PROGRAMS (HBP) VS STANDARD INPATIENT AND/OR OUTPATIENT SUPERVISED PHYSICAL THERAPY (IOP) FOLLOWING ARTHROSCOPIC ISOLATED MENISCECTOMY (AM)

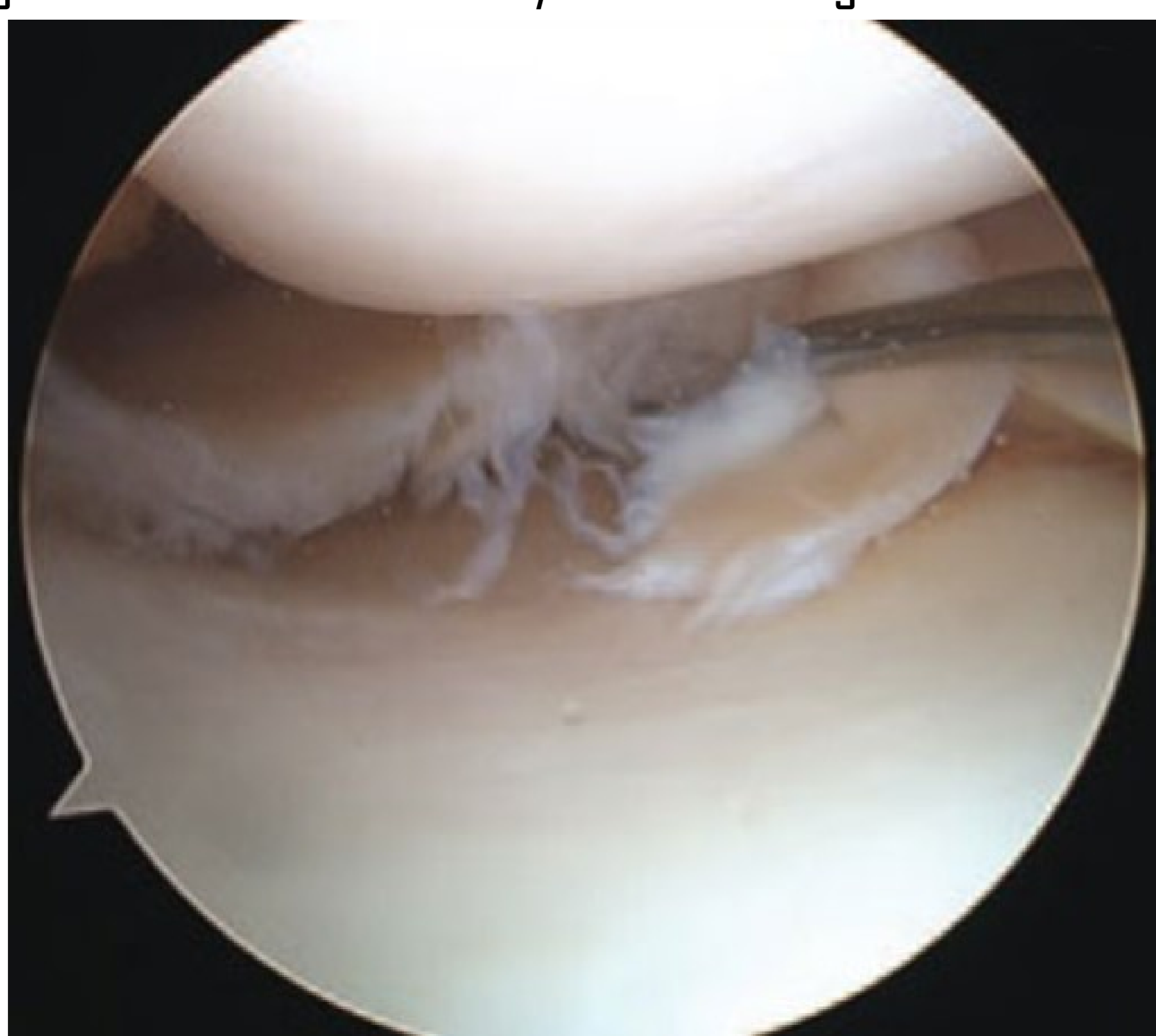
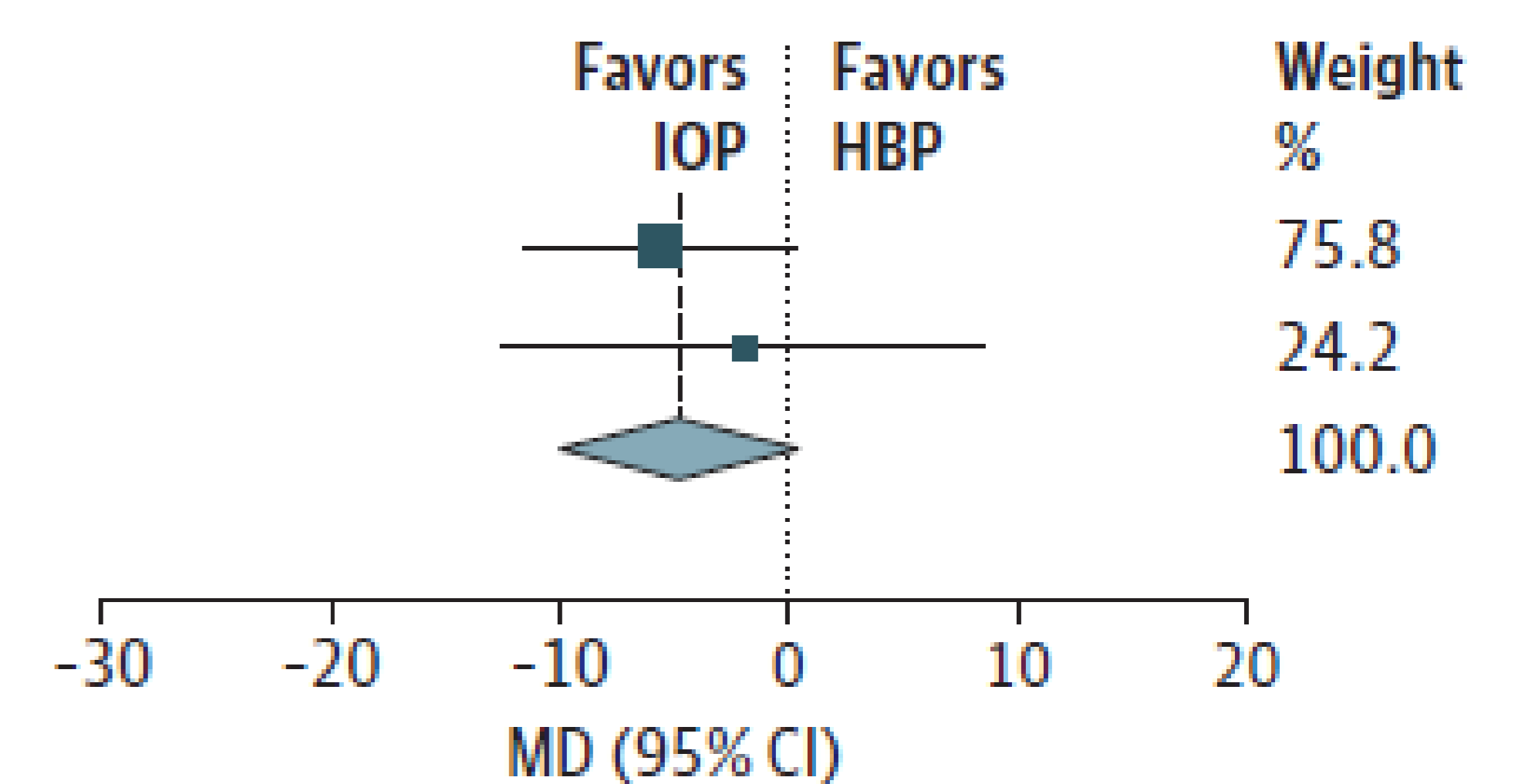
Methods:

All RCTs comparing patients that underwent isolated AM and were treated with HBP versus IOP were retrieved from PubMed, Web of Science, Cochrane Library, and Scopus databases. The primary outcome was the Lysholm score. The secondary outcomes were subjective International Knee Documentation Committee (IKDC) score, knee extension/flexion, thigh girth, horizontal and vertical hop test, and days to return to work. Outcomes were measured in the short-term (from 28 to 50 days) and the midterm (6 months). Risk of bias was assessed using the RoB 2.0 tool. Quality of evidence graded following GRADE guidelines.

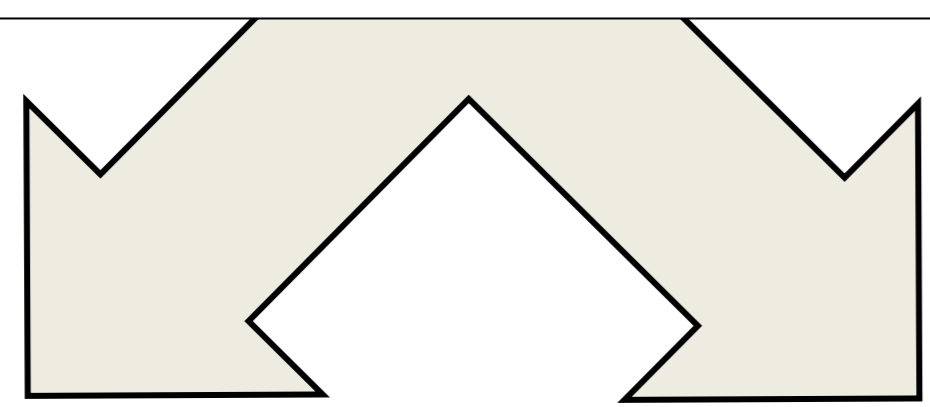
Sensitivity analysis of 4 studies of the **Lysholm score** (short-term)



Meta-analysis of 2 studies of the **Lysholm score** (mid-term)



RANDOMIZATION



HOME-BASED REHABILITATION PROGRAMS (HBP)



IN/OUT-PATIENT SUPERVISED PHYSICAL THERAPY (IOP)



Results:

Out of the 1,914 records retrieved, 8 randomized clinical trials with a total of 434 participants were included. The meta-analysis showed:

- ✓ **LYSHOLM** short-term: -8.64 pp. (P=.02) **favours IOP** / **LYSHOLM** short-term sensitivity **NO DIFF.**
- ✓ **LYSHOLM** mid-term: -4.78 pp. (P=.07) **NO DIFF.**
- ✓ **IKDC** short-term: -6.73 pp. (P=.22) **NO DIFF.**
- ✓ **KNEE FLEX** short-term: -7.4° (P=.55) **NO DIFF.** / **KNEE EXT** short-term: 0.55° (P=.08) **NO DIFF.**
- ✓ **THIGH GIRTH** short-term: 1.38 cm (P=.01) **favours HBP**
- ✓ **SINGLE HOP TEST** short-term: -13.88 cm (P=.10) **NO DIFF.**
- ✓ **VERTICAL HOP TEST** short-term: -3.25 cm (P=.03) **favours IOP**
- ✓ **DAYS TO RETURN TO WORK**: 4.53 days (P=.07) **NO DIFF.**

The GRADE evidence profile for all the plotted outcomes resulted in low to very low.

Conclusions:

- **NO INTERVENTION WAS FOUND TO BE SUPERIOR IN TERMS OF PHYSICAL, FUNCTIONAL, WORK-RELATED AND PATIENT-REPORTED OUTCOMES, BOTH AT SHORT-TERM AND MID-TERM FOLLOW-UPS**
- **FINDINGS SUGGEST THAT HOME-BASED REHABILITATION PROGRAMS MAY BE AN EFFECTIVE MANAGEMENT AFTER ARTHROSCOPIC MENISCECTOMY IN THE GENERAL POPULATION**

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References:

Nutarelli, S., Delahunt, E., Cuzzolin, M., Delcogliano, M., Candrian, C., & Filardo, G. (2021). Home-Based vs Supervised Inpatient and/or Outpatient Rehabilitation Following Knee Meniscectomy: A Systematic Review and Meta-analysis. *JAMA network open*, 4(5), e211582.

