**WHY?**

Muscle strength is the primary parameter of sarcopenia according to European Working Group on Sarcopenia in Older People (EWGSOP).

Muscle strength can be assessed by various measurement methods and on various parameters. To assess general muscle strength in a clinical setting, to date best evidence is available for using maximum handgrip strength of the dominant hand. The proposed recommendation is aimed at the need to drive clinical action.

**HOW?**

A systematic search on reference values for muscle mass was performed:

- **Population**: young/healthy men & women (20-39)
- **Exposure**: grip strength
- **Outcome**: reference values
- **Study design**: observational / RCT (baseline)
- **Quality assessment**: COSMIN checklist

**DATA HANDLING**

Initial umbrella review revealed no relevant systematic reviews. Subsequently, a systematic search was performed and revealed 912 eligible reviews of which 14 were finally included.

Mean, standard deviation and number of participants were retrieved. Subsequently, standard error, pooled degrees of freedom and pooled standard deviation was calculated.

Finally, overall T-scores were calculated.

**RECOMMENDATION**

- **We recommend maximum handgrip strength** of the dominant hand to assess general muscle strength. We recommend categorising patients according to the **normative values for healthy young people**.