



PHYSICAL PERFORMANCE

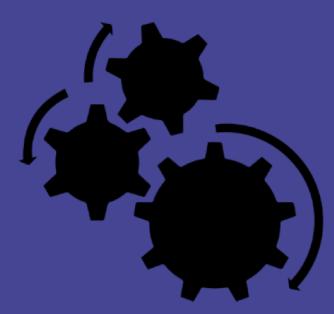
Sarcopenia Guideline 2018-2019 - Assessment

BVGG - SBGG



WHY?

Physical performance is a measurable parameter to determine the severity of sarcopenia according to the European Working Group on Sarcopenia in Older People (EWGSOP). To assess physical performance in a clinical setting, to date best evidence is available for using gait speed. The proposed recommendation is aimed at the need to drive clinical action.



HOW?

An umbrella review on reference values for gait speed was performed.

- **Population:** young/healthy men and women (20-39 year)
- **Exposure:** gait speed
- **Outcome:** reference values
- **Study design:** systematic review, meta-analysis
- **Quality assessment:** AMSTAR checklist



DATA HANDLING

Initial search yielded 60 eligible reviews of which 2 were finally included.

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

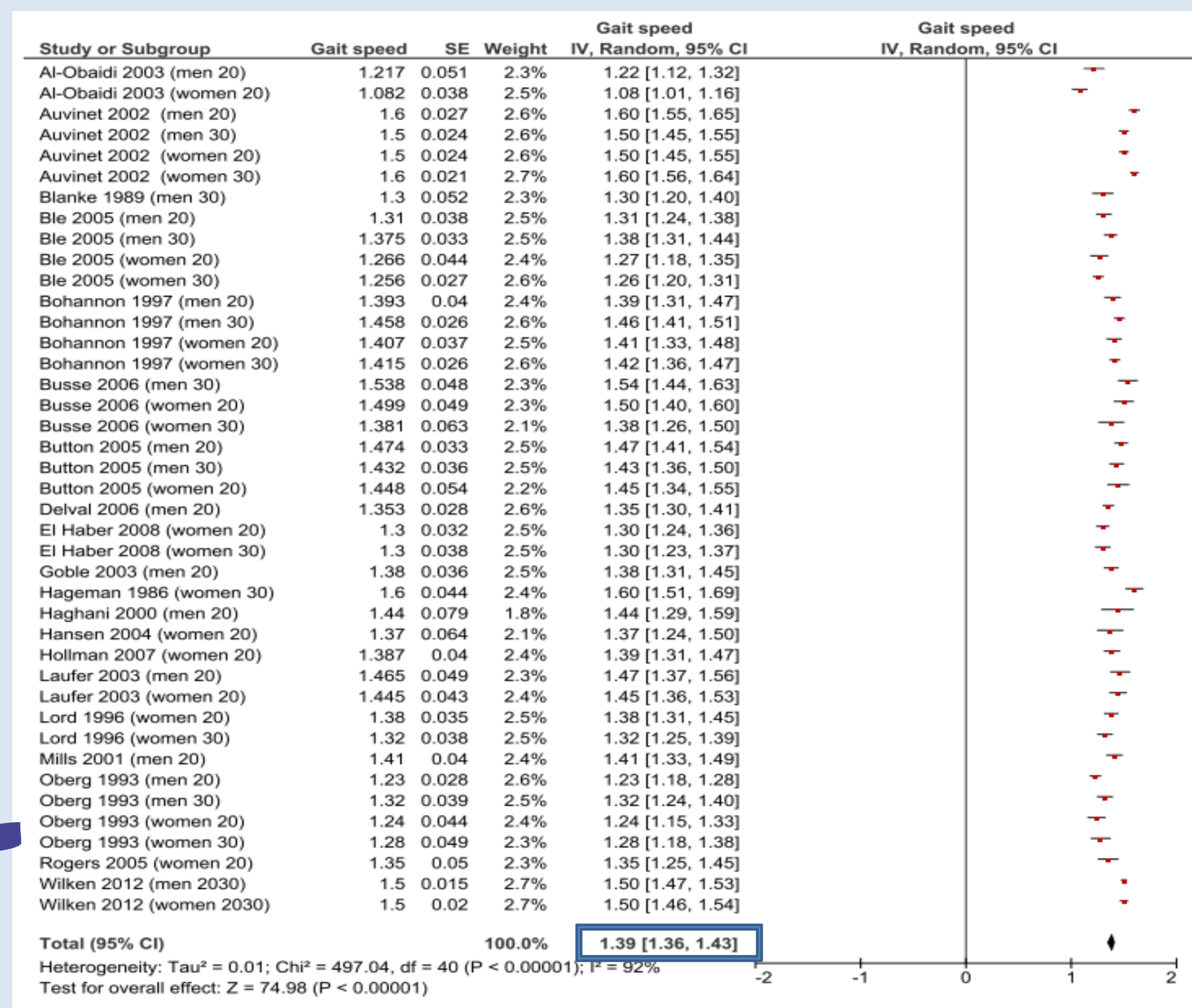
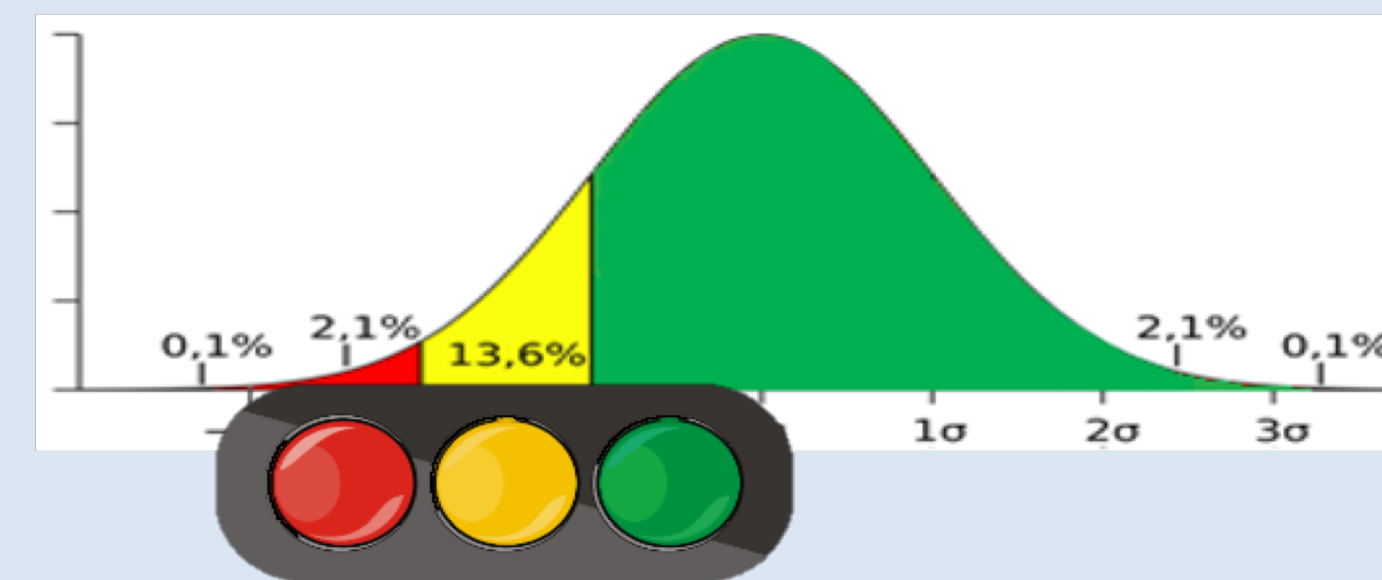
Finally, T-scores for both genders together were calculated.

➤ **N = 882**

➤ **Gait speed**

➤ **T-scores**

T-SCORE	
< -2	Out of the norm
-2 < X < -1	Action should be undertaken to prevent worsening
> -1	Healthy, within the norm



MEN & WOMEN	VERY LOW	AT RISK	NORMAL
Reference data			
	0.8	1.1	1.4
Cut-off consensus statements			
EWGSOP 1 & 2 (m/s)	0.8		
IWGS (m/s)	1.1		
FNIH (m/s)	0.8		

VERY LOW	< 0.8 m/s	➤ treatment
AT RISK	0.8 m/s < X < 1.1 m/s	➤ secondary prevention
NORMAL	> 1.1 m/s	➤ primary prevention

Legend: EWGSOP: European Working Group on Sarcopenia in Older People; IWGS: International Working Group on Sarcopenia; FNIH: Foundation for the National Institutes of Health Sarcopenia



RECOMMENDATION

- At this moment, best evidence is available for using **gait speed** to appraise physical performance in a clinical setting. Since for gait speed, robust normative values are available, we recommend the use of gait speed to assess physical performance.
- Different protocols exist to assess gait speed and we recommend the **4m usual gait speed** protocol since this is considered most feasible in a clinical setting.
- We recommend categorizing subjects according to the **normative values for healthy young people as presented above.**