

## RISK FACTORS

Sarcopenia Guideline 2018-2019 - Assessment

**BVGG - SBGG** 



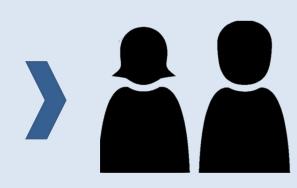
### WHY?

Identifying possible risk factors for the development of sarcopenia\* can provide insights into the origination of sarcopenia. These insights can be used in the prevention or treatment of sarcopenia.

\*Sarcopenia was investigated as a construct, no search was done on specific subdimensions.





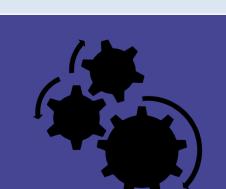


N = 22515



Odds ratios

Overall	1.12 (95% CI 1.03-1.21)
Male	1.20 (95% CI 1.06-1.35)
Female	1.21 (95% CI 0.92-1.59)



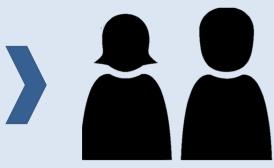
#### HOW?

An umbrella review on risk factors for sarcopenia was performed with the following specifications:

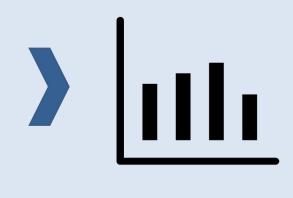
- Population: adults aged 65 or more
- Exposure: possible risk factors
- Outcome: sarcopenia
- *Study design*: systematic review, meta-analysis
- Quality assessment: AMSTAR checklist



Alcohol



N = 13155



Odds ratios

Overall	0.77 (95% CI 0.67-0.88)
Male	0.67 (95% CI 0.54-0.83)
Female	0.89 (95% CI 0.73-1.08)



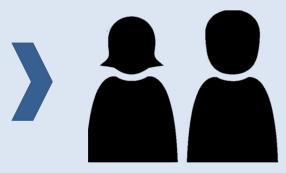
# DATA HANDLING

Initial search yielded 1054 eligible reviews of which 3 were finally included.

If possible odds ratios were retrieved, if not, narrative conclusions were retrieved.



Osteoarthritis



N = 4231

of a direct effect of sarcopenia on OA development nor the opposite relation, because the up-to-date literature lacks basic science studies concerning these topics." (Papalia et al. 2014)

"We cannot support neither the thesis



Narrative conclusion



## RECOMMENDATION

- Cigarette smoking as an isolated factor may contribute to the development of sarcopenia and can be identified as a possible risk factor.
- Alcohol consumption and osteoarthritis are not considered as a possible risk factor.
- Various expected risk factors such as physical inactivity, sedentary lifestyle, underweight or malnutrition were not reported in the included studies. This can be due to the fact that only systematic reviews and not primary longitudinal studies were included or due the fact that sarcopenia was searched as a construct and no search on specific subdimensions was performed.

**REFERENCES:** Relation between cigarette smoking and sarcopenia: meta-analysis. Steffl M, Bohannon RW, Petr M, Kohlikova E, Holmerova I. Physiol Res. 2015;64(3):419-26. Epub 2014 Dec 22.; Steffl M, Bohannon RW, Petr M, Kohlikova E, Holmerova I. Alcohol consumption as a risk factor for sarcopenia - a meta-analysis. BMC Geriatr. 2016 May 11;16:99.; Papalia R, Zampogna B, Torre G, Lanotte A, Vasta S, Albo E, Tecame A, Denaro V. Sarcopenia and its relationship with osteoarthritis: risk factor or direct consequence? Musculoskelet Surg. 2014 Jun;98(1):9-14.; icons from thenounproject.com.