Conclusion: These data suggest that knowledge of prior falls and/or quadriceps strength are likely to capture the impact of PD in future iterations of fracture risk models such as FRAX.

Model (adj. for age, BMI and treatment)	HR	95%CI	P-value
Parkinson's Disease	2.22	1.22–4.04	0.009
+ FN-BMD	2.03	1.12–3.70	0.02
+ Maximum R Quads Strength	1.62	0.77–3.42	0.21
+ Falls	1.71	0.94–3.12	0.079
+ All 3 of above	1.38	0.65–2.92	0.399

OC5
PREVALENCE AND AGREEMENT BETWEEN RECENT SARCOPENIA DEFINITIONS: FINDINGS FROM FOUR POPULATION-BASED COHORTS

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Objectives: The study aim was to assess, within each of four different population-based cohorts, prevalence of, and agreement between, two recent sarcopenia definitions, among older white men and women.
Material and Methods: Participants in the Health, Aging and Body Composition Study (Health ABC) (n = 1734, 52% men), Hertfordshire Cohort Study (HCS) (n = 304, 52% men), Osteoporotic Fractures in Men Sweden Study (MrOS Sweden) (n = 2852, 100% men) and the Osteoporotic Fractures in Men US Study (MrOS US) (n = 5189, 100% men) were analysed. Appendicular lean mass was ascertained using DXA; muscle strength by grip dynamometry; and usual gait speed was measured as a marker of mobility.
The sarcopenia definitions of interest were proposed by the Sarcopenia Definitions and Outcomes Consortium (SDOC) and the 2018 European Working Group on Sarcopenia in Older People (EWGSOP2). SDOC defines sarcopenia as having weak grip strength (< 35.5 kg [men], < 20 kg [women]) and slow gait speed (< 0.8 m/s). EWGSOP2 defines sarcopenia as having weak grip strength (< 27 kg [men], < 16 kg [women]) and low appendicular lean mass index (< 7.0 kg/m^2 [men], < 5.5 kg/m^2 [women]). Cohen's kappa (κ) statistic was used to assess agreement between the definitions.
Results: Mean (SD) ages of participants were: Health ABC [74.3 (2.8) years]; HCS [75.4 (2.5)]; MrOS Sweden [74.9 (3.1)]; and MrOS US [73.8 (5.9)]. Prevalence of sarcopenia according to SDOC vs EWGSOP2 was as follows: Health ABC (men: 0.3% vs 1.5%, women: 1.0% vs 2.1%); HCS (men: 15.3% vs 0.0%, women: 19.0% vs 0.7%); MrOS Sweden (men: 1.0% vs 0.5%); and MrOS US (men: 1.5% vs 1.3%). Agreement was low between SDOC and EWGSOP2 (κ < 0.2 within each cohort).
Conclusions: Sarcopenia prevalence varied and agreement was low between SDOC and EWGSOP2. SDOC sarcopenia was more common in HCS than in Health ABC, perhaps due to the latter cohort's requirement for participants to have no mobility disability at enrolment. A consensus definition for sarcopenia is required.

OC6
GLUCOSAMINE SULPHATE: AN UMBRELLA REVIEW OF HEALTH OUTCOMES

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Objectives: Glucosamine sulphate (GS) can be used as background therapy in people affected by knee osteoarthritis (OA). Knowledge regarding the efficacy and safety of GS is of importance since its use worldwide is increasing. Therefore, the present study aimed to map and grade the diverse health outcomes associated with GS using an umbrella review approach.
Methods: Medline, Cinahl and Embase databases were searched until 1 April 2020. An umbrella review of systematic reviews and meta-analyses of randomized controlled trials (RCTs) was carried out. The evidence from the RCTs was graded using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) tool.
Results: From 140 articles returned, 11 systematic reviews, for a total of 21 outcomes (37 RCTs; 3949 participants; almost all using 1500 mg/day), were included. No systematic reviews/meta-analyses of observational studies were included. Regarding the findings of the meta-analyses, 9/17 outcomes were statistically significant, indicating that GS is more effective than placebo. A high certainty of evidence, as assessed by GRADE, supported the use of GS (*versus* placebo) in improving the Lequesne Index, joint space width change, joint space width change after 3 years of follow up, joint space narrowing and OA progression. No difference in terms of adverse effects was found between GS and placebo. In systematic reviews, GS was associated with a better glucose profile and a better physical function performance than placebo.
Conclusion: GS, when used as a prescription drug (i.e. crystalline glucosamine sulphate) at 1500 mg daily dosage, can positively affect the cartilage structure, reduce pain, improve function and glucose metabolism in people with knee OA, without having a greater incidence of adverse effects than placebo.

OC7
THE ASSOCIATIONS BETWEEN DISEASE MODIFYING ANTIRHEUMATIC DRUGS AND INCIDENT AS WELL A PROGRESSION OF RADIOGRAPHIC HAND OSTEOARTHRITIS IN RHEUMATOID ARTHRITIS PATIENTS

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