

Supplementary Table S1. Literature review search details (accessed 08.03.2020).

Search term 1	[AND]	Search term 2
trans [AND] sex [OR] gender [OR] gender identity [OR] (gender [AND] identity) transgender [OR] transgender persons [OR](transgender [AND] persons) transwoman [OR] (trans [AND] woman) transwomen [OR] (trans [AND] women) transsexual [OR] transsexuals		muscle [OR] muscles [OR] strength bone [OR] bones [OR] height body composition [OR] (body [AND] composition) sport [OR] sports [OR] performance exercise [OR] physical activity [OR] (physical [AND] activity) athlete [OR] athletes

Basic sorting:

Unique papers: 1225

English language: 1150

First filter:

Removal of non-target studies (e.g. studies of 'trans fatty acid', 'trans-tibial amputation', female-to-male studies)

183 remaining

Second filter:

Surgical practice (e.g. reassignment procedures) 26; discarded

Endocrinology practice (e.g. hormone delivery methods, dose guidelines) 23; discarded

General health (e.g. managing weight, trans-sensitive consultation guidelines) 29; discarded

Sexual health (e.g. HIV programmes) 3; discarded

Mental health (e.g. coping with dysphoria, eating disorders, bullying) 37; discarded

65 remaining

Third filter:

Technical sex testing 3; discarded,

Social inclusion 24; discarded

38 remaining

Included:

Bone density only: 24 (including 8 reviews and 1 clinical guidance document)

Body composition: 14 (lean body mass only [6], and/or muscle measurements [2], and/or strength measurements [6]).