

Background

**Athlete's heart: Sex differences in cardiac remodelling increase during adolescence**

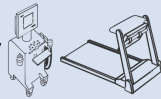
**Longitudinal cohort study**

Cross-country skiers  
 Age 12 (n=78, F 37%)  
 Age 15 (n=48, F 29%)  
 Age 18 (n=34, F 32%)



**Consecutive examinations**

Age 12, 15, 18  
 Echocardiography  
 Exercise test  
 Exercise data



**Males display greater left ventricular remodelling compared to females with similar exercise exposure**



**Figure**

Blue area: Male reference values  
 Purple area: Common reference values  
 Pink area: Female reference values  
 Lang et al (2015), ASE

\*: Significant difference male vs female group,  $P \leq 0.01$ .

Graphical illustrations: smart.servier.com, thenounproject.com

