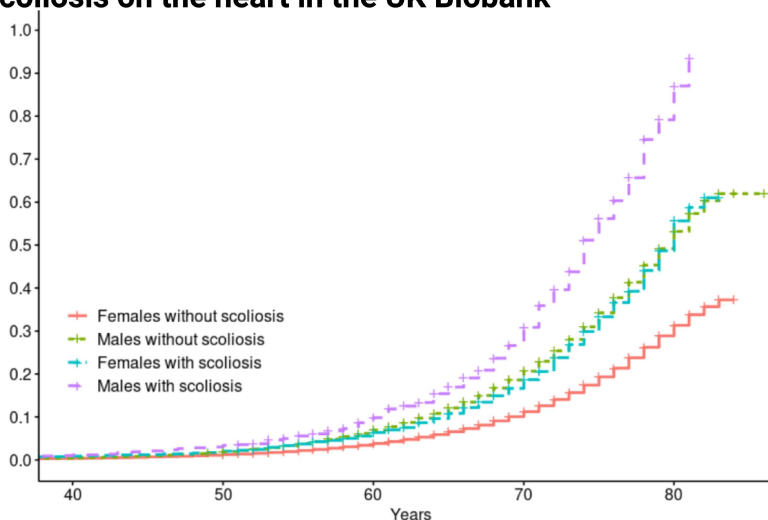
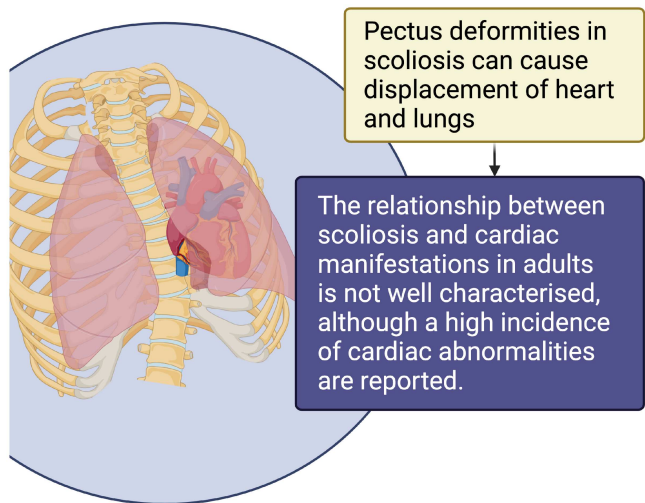


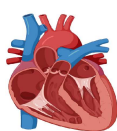
Exploration of the impact of scoliosis on the heart in the UK Biobank



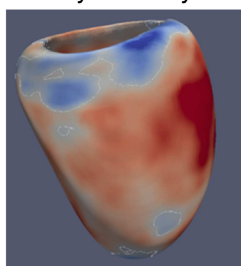
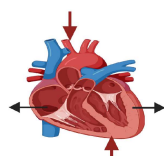
4,095 (1 in 120) participants have scoliosis in the UK Biobank with:
 Increased risk of major adverse cardiovascular events (HR=1.63)
 Mainly driven by heart failure (HR=1.58) and atrial fibrillation (HR=1.54)

Cardiac magnetic resonance imaging Diastole

No spinal curvature



Scoliosis



Surface to surface analysis

Identification of increased cardiac compression on the top and bottom of the heart, and radial cardiac decompression (sides of the heart) in scoliosis patients.

Conclusion:

This work identifies, in an adult population, the evidence for altered cardiac function and increased lifetime risk of MACE in participants with scoliosis.