Arterial Revascularisation Trial

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Patient Summary for the Arterial Revascularisation Trial (ART) 15-year follow-up study

UK Clinical Studies Registry: https://www.isrctn.com/ISRCTN46552265

Thank you very much for participating in the ART study.

We would like to provide you with a summary of the findings from the study.

ART is one of the longest and most complete randomised clinical trials in Coronary Artery Bypass Graft (CABG) surgery recruiting over 3000 participants and following them for at least 15 years. The primary question in ART was whether using bilateral internal thoracic artery (BITA) grafts during CABG surgery would reduce mortality compared with using a single internal thoracic artery (SITA) graft. Participants were allocated to receive BITA or SITA grafts.

The 15-year analysis confirms the findings from the earlier 10-year analysis. It found no difference in the risk of death, heart attack or stroke between participants who received a single graft (SITA) and those who received double grafts (BITA). This suggests that, over 15 years, both approaches are equally safe in terms of these outcomes.

An additional analysis was carried out to look specifically at participants who received two or more arterial grafts and compared their survival with those who received only one arterial graft. The results suggest that receiving multiple arterial grafts may improve long-term survival. However, further studies are needed to confirm this finding.

The findings from ART have demonstrated that in a wide range of surgical centres throughout the world, BITA grafting is safe. The findings also suggest that there may be important operative, centre, patient and surgeon effects that could lead to improved outcomes with a more selective approach to the use of multiple arterial grafts.

The findings have been published in the medical journal: JAMA Cardiology *(doi: 10.1001/jamacardio.2026.3232).* The ART study is registered on the UK's Clinical Studies Registry: *https://www.isrctn.com/ISRCTN46552265.*

Thank you once again, on behalf of all the ART team, for taking part in this landmark trial in cardiac surgery.

Version 2, 11th September 2026