Response to correspondence regarding 5-year follow up of the Amaze Randomized Controlled trial of ablation treatment for arrhythmia as an adjunct to cardiac surgery.

Samer A M Nashef[1]

Linda D Sharples[2]

1. Royal Papworth Hospital, Cambridge, CB2 0AY, UK

2. London School of Hygiene and Tropical Medicine, London, WC1E 7HT, UK

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Correspondence to: Professor Linda D Sharples, London School of Hygiene and Tropical Medicine, Keppel Street, London, WC1E 7HT, UK

Linda.sharples@lshtm.ac.uk

+44 207 636 8636

We thank Dr García-Villarreal[1] for his comment on our article in which he questions the rate of return to stable sinus rhythm in the Amaze trial[2]. We should like to point out that the Amaze trial[3] was not an evaluation of the complete Cox-maze procedure, but an evaluation of concomitant atrial fibrillation surgery as it is done in the real world. Amongst our findings, we discovered that a large variety of lesion sets were being used and that many surgeons did not complete the full biatrial lesion set in their practice. We also found that there appears to be an ablation 'dose-response' in achieving return to sinus rhythm, with the greatest step-up achieved when the left atrial lesion set includes the mitral isthmus lesion.

We therefore agree with Dr García-Villarreal that concomitant atrial fibrillation surgery should ideally be as complete as possible, and there may be an argument for concentrating such surgery in the hands of interested and experienced surgeons. Despite this, over 5 years later, we have anecdotal evidence that less complete choices of lesion sets continue to be made. We agree that the experience of surgeons devoted to atrial fibrillation should help in maximising return to sinus rhythm, and may also aid in achieving better atrial function after surgery, which is at least as important for clinical patient outcomes as electrical sinus rhythm restoration[4].

Samer A M Nashef, MB ChB FRCS PhD, Consultant Cardiac Surgeon, Papworth NHS Foundation Trust, Cambridge, UK and

Linda D Sharples, PhD, Professor of Medical Statistics, London School of Hygiene and Tropical Medicain, London, UK

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