



Zakkar, M., George, S. J., & Ascione, R. (2016). Response to Weintraub and Garratt. *Circulation*, 133(18), 1826. DOI: 10.1161/CIR.0000000000000423

Peer reviewed version

Link to published version (if available):

[10.1161/CIR.0000000000000423](https://doi.org/10.1161/CIR.0000000000000423)

[Link to publication record in Explore Bristol Research](#)

PDF-document

This is the author accepted manuscript (AAM). The final published version (version of record) is available online via American Heart Association at <http://circ.ahajournals.org/content/133/18/1826>. Please refer to any applicable terms of use of the publisher.

University of Bristol - Explore Bristol Research

General rights

This document is made available in accordance with publisher policies. Please cite only the published version using the reference above. Full terms of use are available: <http://www.bristol.ac.uk/pure/about/ebr-terms.html>

Rebuttal

Key messages in Dr Weintraub's article are: 1. The use of CABG to treat CTOs is limited; 2. The use of PCI to treat CTOs is extensive; 3. CABG-CTOs can be justified in the setting of multivessel disease; 4. The concluding remark is: "While carrying out studies concerning CABG for CTOs will be difficult, a research agenda in this space is clearly needed".

The article omits the following facts: 1. CTOs represent a technical challenge only for interventional cardiologists; 2. Surgeons do not make a fuss over CTOs, simply bypassing them if viability and coronary size >1mm are confirmed; 3. CTO has never been an exclusion criterion since the advent of CABG, with millions of CTOs bypassed; 4. Surgeons only treat patients referred by cardiologists; 5. The SINTAX trial confirms the disproportionate inferiority of PCI vs CABG for large cohorts of CTOs.

In addition, the article fails to note that the presumed efficacy of CTO-PCI is only based on comfortable comparisons between successful vs. failed procedures, with no controls. The fact that failed CTO-PCI procedures are causing severe iatrogenic injury to thousands of patients, with many deaths, is not represented. This is of concern. Choosing of not reporting these safety issues may contribute to the disproportionate emphasis on the efficacy CTO-PCI, which appears to be defined, on no clinical grounds, as on-table recanalization only.

In this scenario, the call by Dr Weintraub for research on the efficacy of CABG-CTO appears misplaced. Clearly, the research focus should be on the safety of CTO-PCI as a potential alternative to medical therapy alone.