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TARGET IN RANGE— REPAIR OF ACUTE TYPE A AORTIC DISSECTION

Reply to the Editor:

Poon and Field¹ provide insight and perspective on the article by McClure and colleagues, which presented a population-based study on the management of thoracic aortic dissections and thoracic aortic aneurysms and whose authors included members of the Canadian Thoracic Aortic Collaborative.² Poon and Field's Letter to the Editor focuses on the acute type A aortic dissection component of the Canadian analysis. The letter beautifully and ethically describes the variation in the results of acute type A aortic dissection by presenting a histogram of operative mortality.¹ Here, disparity is a consequence of the complexity involved, including establishing a timely diagnosis, effective initial medical management, the availability of skilled surgical intervention, regional transportation capabilities and distance traversed, and access to advanced imaging technologies, medical devices, and critical care management. Justifiably, it is pointed out that during the 12-year period of the Canadian study, mortality remained unchanged at 20%, despite general improvement in the medical management and surgical care of these patients. It appears that the essential point of the letter is that you have to recognize and focus on location-specific limitations and move toward targeted local solutions and resolutions—including any disparity in access to care. They rightfully suggest that, although an uncommon occurrence, acute type A aortic dissection is as lethal as it is complex. However, the cardiovascular and thoracic surgeon is uniquely positioned to direct, if not also implement, care and management. Surgical treatment of acute type A aortic dissection, and its typical need for immediate intervention, should be a basic component of our thoracic surgery training programs. Inherent and critical to the care of these patients is the recognition of clearly delineated circumstances that necessitate transfer to a greater level of care, and, at times, the simple recognition of the futility of treatment. I believe the authors set a very reasonable bar for expected results, with a reasonable benchmark of 10% to 15% mortality after repair of acute type A aortic dissection; moreover, one recognizes that dedicated aortic centers, those with extensive resources, may do much better, and smaller facilities,

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although bringing access to isolated regions, may not fare as well because of limited resources.

Joseph S. Coselli, MD
Division of Cardiothoracic Surgery
Michael E. DeBakey Department of Surgery
Baylor College of Medicine
Department of Cardiovascular Surgery
Texas Heart Institute
CHI St Luke's Health–Baylor St Luke's Medical Center
Houston, Tex

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LUCK FAVORS THOSE WHO ARE PREPARED IN AORTIC DISSECTION

Reply to the Editor:

We thank Poon and Field for their interesting letter and provocative question regarding a reasonable benchmark for mortality in the repair of type A aortic dissection. They are correct in stating that the dataset used by McClure and colleagues¹ lacks the granularity to address details such as the reason for surgical turnaround in type A aortic dissections, highlighting an intrinsic limitation of using large clinical administrative databases (eg, large sample size but lack of data granularity). Although not conducted, the CorHealth Ontario Registry coupled with hospitalization data from the Canadian Institute for Health Information Discharge Abstract Database generates report cards for various cardiac procedures, including coronary artery bypass grafting and valvular surgery.² Certainly, this concept can be applied to aortic dissection to further determine the temporal trends in operative mortality amongst institutions to confirm the authors' suggested operative mortality benchmark of 10% to 15%. Potential limitations of this approach are the exclusion of institutions that perform very low volumes of any particular procedure to prevent unintended identification of any individual patient per privacy laws that govern the use of personal

health data, and that risk adjustment has not yet been validated in this cohort.

Type A aortic dissection continues to be a challenging disease to diagnose and manage promptly. In the best of circumstances, patients can expect a reasonable probability of a good outcome. Yet, with aortic dissection, there remains an element of chance that influences early diagnosis and management; for example, a patient's place of residence, the astuteness of the diagnosing physician, and the availability of expert care to treat the disease. Various models of care for type A aortic dissection have been implemented. In Ontario, a centralized system is used to refer these critically ill patients to the nearest cardiac surgical center—this leaves the decision to operate to an individual surgeon. In greater Toronto, a metropolitan area of more than 5.5 million people, dedicated thoracic aortic surgery teams take turns in accepting referrals for aortic pathology disease. Whether the triage system has improved patient outcomes is uncertain, although the transfer of patients more efficiently should directly lead to better patient outcomes in a disease where delay in surgical treatment is deadly. It highlights the difficulty in assessing complex interventions for uncommon diseases, with widely heterogeneous patients, and where outcomes are dependent on careful patient selection, surgeon skill, and circumstance.³ We wholeheartedly agree that for complex problems there is no 1-size-fits-all solution and depends on the context and geography of the locale. Although care should not be standardized, we should strive to achieve uniform outcomes for this disease, whatever that target should be. We need to reduce the role of chance and luck in the treatment of this devastating disease.

Derrick Y. Tam, MD
Stephen E. Fremes, MD, MSc
Division of Cardiac Surgery
Department of Surgery
Schulich Heart Centre
Sunnybrook Health Sciences Centre
University of Toronto
Toronto, Ontario, Canada

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