

- and Intervention Registry). Am J Cardiol 1996;78:9-14.
- Woods KL, for the European Secondary Prevention Study Group. Translation of clinical trials into practice: a European population based study of the use of thrombolysis for acute myocardial infarction. Lancet 1996;347:1203-7.
- Cox JL, Lee E, Langer A, Armstrong PW, Naylor CD, Canadian GUSTO Investigators. Time to treatment with thrombolytic therapy: determinants and effect on shortterm nonfatal outcomes of acute myocardial infarction. CMAT 1997;156:497-505.
- 6. Jackson RE, Anderson W, Peacock WF, Vaught L, et al. Effect of a patient's sex on the timing of thrombolytic therapy. *Ann Emerg Med* 1996;27:8-15.

[One of the authors responds:]

Our registry was undertaken to identify possible impediments to the prompt administration of thrombolysis. As stated in the article, individual and overall performance results — the specific data Dr. Socransky suggests — were supplied to the participating centres, in the hope of encouraging them to implement any necessary corrective measures. The questions asked by Socransky are precisely the type of questions we believe are important.

Dr. Schull raises the possibility of underutilization of thrombolysis in the study cohort. Also of concern may be overutilization in situations where there are limited or no chances of improved survival but where the risks of thrombolysis remain. Unfortunately, our method does not permit comment on these important issues. Schull also notes the delay in treatment associated with a cardiology consultation. Although some of the delay was due to complexity of the cases, at the 75th percentile level an additional 12 minutes was required for diagnostic ECG in cases in which a cardiologist made the decision to administer thrombolytics. Dr. Schull appropriately cautions against needless delays caused by routine consultation. We share this opinion and support his proposed solution.

Dr. Yusuf suggests that there might have been an age or sex bias in our cohort of patients and states that criteria for thrombolysis are "fairly straightforward." We do not agree. With respect to sex, Table 3 shows only a 5-minute in-hospital difference (at the 75th percentile level) between men and women to the time of thrombolysis, a difference that appears to be due to an increase in decision time. However, the women in this cohort were significantly older than the men, and in the multivariate analysis sex was not predictive of

greater delays. Furthermore, unpublished data from this registry failed to show a bias on the basis of sex in the use of the more expensive thrombolytic agent, tissue plasminogen activator. Neither the benefits nor the risks of thrombolysis are independent of age. The utility of thrombolysis requires an appreciation of the probability of benefit as a function of not only time from presentation but also size and infarct location as well as the risk of serious bleeding complications. The complexity of this decision process is obviously greater in elderly patients and, in our opinion, the additional delay of 8 minutes for patients over 65 years of age (75th percentile level) is more a reflection of appropriate clinical judgement than of hidden biases.

James Brophy, MD

Cardiology Service Centre hospitalier de l'Université de Montréal Montreal, Que.

Reference

 Selker HP, Griffith JL, Beshansky JR, Schmid CH, Califf RM, D'Agostino RB, et al. Patient-specific predictions of outcomes in myocardial infarction for realtime emergency use: a thrombolytic predictive instrument. *Ann Intern Med* 1997; 127-538-56

Submitting letters

Letters must be submitted by mail, courier or email, not by fax. They must be signed by all authors and limited to 300 words in length. Letters that refer to articles must be received within 2 months of the publication of the article. *CMAJ* corresponds only with the authors of accepted letters. Letters are subject to editing and abridgement.

Note to email users

Email should be addressed to **pubs@cma.ca** and should indicate "Letter to the editor of *CMAJ*" in the subject line. A signed copy must be sent subsequently to *CMAJ* by fax or regular mail. Accepted letters sent by email appear in the Readers' Forum of *CMA Online* (**www.cma.ca**) promptly, as well as being published in a subsequent issue of the journal.

Pour écrire à la rédaction

Prière de faire parvenir vos lettres par la poste, par messager ou par courrier électronique, et non par télécopieur. Chaque lettre doit porter la signature de tous ses auteurs et avoir au maximum 300 mots. Les lettres se rapportant à un article doivent nous parvenir dans les 2 mois de la publication de l'article en question. Le *JAMC* ne correspond qu'avec les auteurs des lettres acceptées pour publication. Les lettres acceptées seront révisées et pourront être raccourcies.

Aux usagers du courrier électronique

Les messages électroniques doivent être envoyés à l'adresse **pubs@cma.ca**. Veuillez écrire «Lettre à la rédaction du *JAMC*» à la ligne «Subject». Il faut envoyer ensuite, par télécopieur ou par la poste, une lettre signée pour confirmer le message électronique. Une fois une lettre reçue par courrier électronique acceptée pour publication, elle paraîtra dans la chronique «Tribune des lecteurs du *JAMC*» d'*AMC* En direct (**www.cma.ca**) tout de suite, ainsi que dans un numéro prochain du journal.