

the analysis were age and sex adjusted. Formal testing does not reveal any evidence of a plateau in the detection of high-risk coronary disease, within the range of data points studied. We would strongly encourage other investigators in countries with higher cardiac catheterization rates to conduct similar work in search of a plateau at these higher rates. This may be difficult to do in many areas of the United States. Given the hybrid American health care system, there is a potential lack of population-based data such as those used in Alberta.

**Michelle M. Graham**

University of Alberta  
Edmonton, Alta.

**William A. Ghali**

University of Calgary  
Calgary, Alta.

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## Controlled-release opioids and alcohol

Interpretation of the article by Sally Murray and Eric Woollorton<sup>1</sup> on alcohol-associated rapid release of a long-acting opioid will be facilitated by the following information: 1. The opioid formulation in question (Palladone XL, once-daily hydromorphone) is not available in Canada. 2. Information on the composition of the capsule shell is not relevant to the effect of alcohol, since control of release of hydromorphone from Palladone XL does not depend on the capsule shell itself. 3. The controlled-release technology employed in Palladone XL is not the same as that of the other controlled-release opioid formulations distributed by Purdue Pharma in Canada. In response to the request from Health Canada, noted in the article, Purdue Pharma recently submitted information for their review, indicating that an effect of alcohol of the type seen with Palladone XL does not occur with MS Contin, Codeine Contin, Hydromorph Contin or OxyContin. 4. Because of the potential for interaction between the pharmacologic effects of alcohol and any CNS depres-

sant drug, such as opioid analgesics, co-ingestion of alcohol and such drugs is never advisable.

**Andrew C. Darke**

Vice President Scientific Affairs  
Purdue Pharma Canada  
Mississauga, Ont.

### REFERENCE

1. Murray S, Woollorton E. Alcohol-associated rapid release of a long-acting opioid. *CMAJ* 2005;173(7):756.

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## Ethics and investment funds

It was with great interest that we read the *CMAJ* news piece on MD Management Ltd. and ethical investments.<sup>1</sup> We met with an MD Management advisor regarding this very issue just a few months ago and were surprised by the lack of any consideration of the arms trade by MD Management.

In the article, Robert Hewett, MD Management's president and chief executive officer, explains that "each investor may have a personal definition of what they consider ethical," and yet his company has taken a stance on the tobacco industry. We would like MD Management to offer investment packages that exclude investments in the arms industry. Smoking guns and smoking cigarettes both have devastating effects on health.

**Paul Olszynski**

Family Medicine Resident  
University of Saskatchewan  
**Cody Swerhone**  
Saskatoon, Sask.

### REFERENCE

1. Eggertson L. MDs call for socially responsible investments. *CMAJ* 2005;173(4):349.

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In September 2005 Reed Elsevier, publisher of *The Lancet*, sponsored the Defence Systems and Equipment international (DSEi) exhibition, one of the largest military exhibitions in the

world. The editors of *The Lancet* were dismayed. The publisher's presence in the arms industry, they argued, "self-evidently damages its reputation as a health-science publisher" and they "respectfully ask[ed] Reed Elsevier to divest itself of all business interests that threaten human, and especially civilian, health and well-being."<sup>1</sup>

In the same vein, MD Management Ltd., a wholly owned subsidiary of the CMA, is apparently investing in the armaments industry, according to Physicians for Global Survival.<sup>2</sup> In a written response to a request from Physicians for Global Survival that MD Management provide its physician clients with alternative investment options, Robert Hewett, MD Management's president and chief executive officer, stated that the company "has not observed any demand for a restriction on investments in the armaments industry."<sup>2</sup> Really? One would presume that the need for such a restriction would be as obvious to the CMA as it was to the editors of *The Lancet*.

In any case, let me spell it out for MD Management. Please do not invest my money in corporations that profit from the sale of instruments of war.

**Alban C. Goddard-Hill**

Physician  
Belleville, Ont.

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2. Eggertson L. MDs call for socially responsible investments. *CMAJ* 2005;173(4):349.

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## Measuring frailty in geriatric patients

The new tool to measure frailty in the elderly recently promoted by Kenneth Rockwood and colleagues<sup>1</sup> is one of many produced in what appears to be a never-ending search for a Holy Grail: a precise and useful measure of frailty in the geriatric population.

The care of geriatric patients is difficult and complex. It involves managing

chronic disease, accommodating for cognitive and functional decline and collaborating with families and other informal caregivers, the goal being a reasonable preservation of an individual's independence balanced against their care and safety needs. Teams of health care workers must recognize the unique features of each case and bring flexibility and a degree of realistic optimism to the job.

A potential danger in the use of tools (such as the Canadian Study of Health and Aging Clinical Frailty Scale) is that a patient might be assigned to a category from which he or she cannot escape: although the health of an elderly person can improve, it is potentially time-consuming and inconvenient for a health care system to reassess him or her. There is a significant risk that expediency might override fairness.

Perhaps efforts would be best focused on developing collaborative and effective health care delivery systems for elderly people in need that accentuate realistic optimism and flexibility. This might be of more use than the ongoing efforts to define a condition that in most instances is self-evident.

**Doug Duke**  
Family Physician  
Edmonton, Alta.

#### REFERENCE

1. Rockwood K, Song X, MacKnight C, et al. A global clinical measure of fitness and frailty in elderly people. *CMAJ* 2005;173(5):489-95.

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#### [The authors respond:]

In his comments on our article,<sup>1</sup> Doug Duke usefully reminds us that the care of elderly people is complex and commonly requires a multidisciplinary approach. He cautions that, if we use tools to assign patients to a frailty category, "expediency might override fairness." This is, of course, a concern. However, older people who are reasonably fit derive little additional benefit from complex, multidisciplinary care compared with usual care, whereas elderly people who are frail benefit

greatly.<sup>2-4</sup> A pragmatic, nonarbitrary way is thus needed to classify relative degrees of fitness and frailty. In addition to being useful for research purposes, the scale we described aims to meet this need.

**Kenneth Rockwood**  
**Chris MacKnight**  
Division of Geriatric Medicine  
Dalhousie University  
Halifax, NS  
**Howard Bergman**  
Division of Geriatric Medicine  
McGill University  
Montréal, Que.

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1. Rockwood K, Song X, MacKnight C, et al. A global clinical measure of fitness and frailty in elderly people. *CMAJ* 2005;173(5):489-95.
2. Maly RC, Hirsch SH, Reuben DH. The performance of simple instruments in detecting geriatric conditions and selecting community-dwelling older people for geriatric assessment. *Age Ageing* 1997;26:223-31.
3. Rockwood K, Stadnyk K, Carver D, et al. A clinimetric evaluation of specialized geriatric care for rural dwelling, frail older people. *J Am Geriatr Soc* 2000;48:1080-5.
4. Gill TM, Baker DI, Gottschalk M, et al. A program to prevent functional decline in physically frail, elderly persons who live at home. *N Engl J Med* 2002;347:1068-74.

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## Corrections

An assay was incorrectly listed in Table 1 of a recent review article on troponin.<sup>1</sup> The fourth assay from the bottom of the table should have read RAMP, Response Biomedical. The corrected table appears below (Table 1).

#### REFERENCE

1. Babuin L, Jaffe AS. Troponin: the biomarker of choice for the detection of cardiac injury. *CMAJ* 2005;173(10):1191-202.

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The estimated capital costs in the US over 5 years to achieve a National Health Network were determined by an expert panel to be US\$156 billion and not US\$400 billion as reported in a recent lead editorial.<sup>1,2</sup> We thank Stephen Chris, from Toronto, for bringing this matter to our attention.

#### REFERENCES

1. Have paper records passed their expiry date? [editorial]. *CMAJ* 2005;173(7):725.
2. Les dossiers papiers sont-ils périmés? [éditorial]. *JAMC* 2005;173(7):727.

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**Table 1:** Cut-off values of cardiac troponin assays

Assay	LLD	99th percentile	10% CV*	ROC curve
ARCH STAT Troponin-I, Abbott Diagnostics	0.009	0.012	0.032	0.3
AxSYM Troponin-I ADV, Abbott Diagnostics	0.02	0.04	0.16	0.4
i-STAT,† Abbott Laboratories	0.02	0.08 (WB)	0.1	ND
Centaur, Bayer Diagnostics	0.02	0.1	0.35	1.0
Access AccuTnI Troponin I, Beckman Coulter	0.01	0.04	0.06	0.5
Triage Cardiac Panel,† Biosite	0.19	< 0.19	0.5	0.4
Dimension RxL, Dade Behring	0.04	0.07	0.14	0.6-1.5
Stratus CS,† Dade Behring	0.03	0.07	0.06	0.6-1.5
Immolute, Diagnostic Products Corporation	0.1	0.2	0.6	1.0
Vitros, Ortho-Clinical Diagnostics	0.02	0.08	0.12	0.4
RAMP,† Response Biomedical	0.03	< 0.03 (WB)	0.21	ND
Elecsys, Roche Diagnostics	0.01	< 0.01	0.03	0.1
Reader,† Roche Diagnostics	0.05	< 0.05 (WB)	ND	0.1
Tosoh AIA, Global Medical Instrumentation Inc.	0.06	< 0.06	0.06	0.31-0.64

Note: LLD = lower limit of detection, CV = coefficient of variation, ROC = receiver operating characteristic, ND = not determined, WB = whole blood. \*Per manufacturer. †Point-of-care assay FDA-cleared as high-sensitivity assay 2004 (CS). Source: Apple et al.<sup>57</sup>