should be required to treat the postmenopausal lack of estrogen.

Baumgartner's offer to discuss Premarin provides the opportunity to pose the following questions: Are precise figures currently available on the number of steroid components in Premarin? To what extent has their spectrum of effects been elucidated? Has it been established that all of the metabolites produce only beneficial effects?

According to our estimates, Premarin must contain considerably more steroid metabolites than have been reported in the literature. A report recently appeared on the occurrence of hitherto unknown metabolites such as δ-8-estrone.[2] It is particularly important in the case of long-term treatment with the preparation to know the effects of components that do not predominate quantitatively in the extract. We now know that estrogenic metabolites can produce a number of different effects;[3] some metabolites are thought to increase the risk of breast cancer.[4]

Competing interests: None declared.

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[The author responds:]

Premarin is a complex natural product comprised of multiple components. It has been the subject of more than 3500 citations and over 57 years of clinical use in Canada, the US and around the world. All of the estrogenic components that have been tested for biological activity have been found to be biologically active. As Theodor Lippert and Alfred Mueck state, different estrogens can produce different effects. An estrogen can be an agonist in one tissue and an antagonist in another; we know that these effects are tissue and cell dependent. Furthermore, we know that the effect of an estrogen can be different when administered acutely versus chronically and, perhaps most important, that its effect can be different, in fact opposite, when administered in conjunction with other estrogens.[1–4] Thus, the effects of Premarin cannot be ascribed to an individual metabolite or component or group of components. Effects are all too frequently ascribed to estrogens as a class by individuals whose knowledge in the area is limited; in any event the data are more often than not based on studies with Premarin. On the basis of current scientific and clinical knowledge of the mechanisms of estrogen action, an assumption that Premarin's effects apply or can be extrapolated to all estrogens is inappropriate.

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It's always a g'day to immunize, mate

Considering the recent adverse publicity that immunization has received in both the scientific and the lay press, I found a recent *CMAJ* piece on immunization by Barbara Sibbald[1] to be quite useful and timely. Your readers may also find an excellent brochure produced by the Australian government to be useful.[2] It can be downloaded in PDF format from the Web.

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Caring for patients with Alzheimer's disease in Italy

We read with interest the article by Margaret Hux and colleagues on the association between cognitive function and the cost of caring for patients with Alzheimer's disease.[1] We conducted a similar study in Italy.

We sampled 10 patients at each of 9 Italian centres for the care of patients with Alzheimer's disease. At each centre we collected information on the patients' degree of cognitive impairment, as indicated by the Mini-Mental State Examination,[2] and the levels of care associated with different levels of impairment. We also surveyed sociodemographic characteristics of family caregivers and asked them to estimate the time and money the family devoted to caring for the family member with Alzheimer's disease. Italian National Health Service tariffs[3,4] were used to estimate the cost of medical services and the replacement approach[5] was applied to estimate the costs of informal care provided.

We analysed the association between cognitive function (using the classification system used by Hux and colleagues) and costs using multiple linear regression. Cost was logarithmically transformed to better fit a Gaussian distribution.

Seventy-six (84%) of the patients and their caregivers agreed to participate. The patients had a mean Mini-

Mental State Examination score of 12.6 (standard deviation [SD] 5.8). Their mean age was 70.8 years (SD 8.7); 23% were men, 7.9% were living in an institution and a further 7.9% had been admitted to an institution in the previous 12 months. The mean age of the caregivers was 58.5 years (SD 13.2), and 44% were men. The yearly cost of care was estimated to be Can$61 852 (SD Can$34 375). Similar findings have been reported in other studies in Italy.[6,7]

The level of cognitive function was significantly associated with the cost of caring for patients with Alzheimer's disease (p = 0.005). Costs were higher for older (p = 0.027) and wealthier (p = 0.094) caregivers and younger patients (p = 0.024).

In contrast to the findings of Hux and colleagues, the care of patients living in an institution cost significantly less than that of patients living at home (p = 0.039). One possible explanation is that nurses in institutions care for several patients simultaneously, decreasing the time devoted to each patient and thereby lowering costs.

Other than the relatively lower cost of caring for patients in institutions, our findings confirm those of Hux and colleagues.

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Cheers and jeers for the Charter for Physicians

It appears that Nuala Kenny and her colleagues are still operating in the Dark Ages.[1] I read the CMA Charter for Physicians[2] and I see nothing in it that the ordinary Canadian citizen would not demand. Most Canadians would like a work environment that is conducive to good productivity and to providing the best possible service to customers and society at large — an environment free of harassment, discrimination, intimidation and violence. Canada's Charter of Rights gives us freedom of association and speech, and the CMA charter demands nothing more.

Society has changed, as has the medical profession. Once medicine was a vocation in which people sacrificed and dedicated their lives to the care of the sick and injured. No longer is medicine a vocation of that type. It is now a profession, just like any other.

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When it comes to the CMA's new Charter for Physicians, I must support Dan MacCarthy.[1] The critique of it offered by Nuala Kenny and colleagues[2] is way off the mark in equating professional rights with the needs so succinctly expressed in the charter. When I first read the charter, it gave me the feeling that some collective support was at hand to help with the day-to-day effort required to serve patients. It is also a useful adjunct to the CMA Code of Ethics.[3] MacCarthy's eloquent rebuttal stands on its own merit. I would add that the alternatives provided by the authors of the critique are completely at ease with the charter's overall focus.

Most physicians I know practise medicine for altruistic reasons, and I certainly strive in that direction. However, my colleagues and I have needs, many of which are unmet in the current divisive climate within our health care system. Yes, we are a privileged group, but please, less destructive criticism, and more encouragement. In my view, the charter achieves the latter goal.

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It is really terribly unfair how governments have treated doctors over the past 2 decades. At least, that is the official line the CMA board uses to justify its recently proclaimed Charter for Physicians.[1] It is not about "rights," the board hastens to add. It is about our "needs," a sort of chicken soup for the demoralized professional ego.

With respect, this is becoming just a little precious. The CMA is, of course, a creature of its provincial satellites. This might, in part, explain why the majority of the CMA board members do not seem to have noticed certain critical facts, such as the fact that politicians have not actually done anything to us, save perhaps for the GST, without permission and consent from our provincial associations.

So mark me down with Nuala Kenny[2] and the embarrassed ethicists, for I do not think doctors need special privileges not enjoyed by other citizens. What we do need is a national association prepared to defend our civil liberties, not one that substitutes hypocrisy