Press Statement

ISSUED ON BEHALF OF THE INTERNATIONAL MENOPAUSE SOCIETY BY
Amos Pines, *President*, David Sturdee, *General Secretary* and
Martin Birkhäuser, *Treasurer*

A response to recent publications from the Women's Health Initiative and the Nurses' Health Study

February 13, 2006

More data on hormone therapy and coronary heart disease: Comments on recent publications from the WHI and Nurses' Health Study

Almost 2 years after the first publication of the results of the estrogen-alone arm of the WHI study¹, a more detailed analysis of the coronary data has been published². The aim of the study was to investigate the possibility that conjugated estrogen at a standard dose is cardioprotective. The mean age for the participants was 63.6 years, with 70% of them above the age of 60 years. Although the exact numbers of adverse coronary events in the current paper are a little different from those published initially, there is no change in basic interpretation. There were slightly more coronary events, statistically insignificant, only in women who were older than 70 years at the beginning of the study, and in those who had been menopausal for at least 20 years. These formed a unique group of very late starters of hormone therapy. However, in the younger women, there were **less** coronary heart disease (CHD) events in the hormone users compared to women in the placebo arm, although these data were also not statistically significant due to a relatively small sample size and the low incidence of CHD in this age group anyway. In the Discussion section of the article, the authors say "the challenges of designing an appropriate trial to address the issues of safety

and efficacy in perimenopausal and early menopausal women are considerable, since the coronary event rate in the 50- to 54-year-old women in the estrogen-alone trial was 0.21% per year." This should be the main message of the new article: the WHI study was not designed, and therefore was not powered, to investigate the consequences of hormone therapy (HT) in women below 60 years of age. Therefore, any attempt to present the results of the study as indicating that HT may inflict damage to the heart in general – a message that was accepted by many medical societies and regulatory authorities – is simply wrong and must be amended. The estrogen plus progestogen arm of the WHI and the estrogen-alone arm actually showed that HT does not increase the risk of coronary heart disease in the peri- and early menopause, and may even carry beneficial effects. Additional evidence has just come from the most recent analysis of the Nurses' Health Study³, which with larger numbers was able to demonstrate that for women starting HT near the menopause there was a significantly reduced risk of CHD (RR = 0.66, 95% CI 0.54-0.80 for estrogen alone; RR = 0.72, 95% CI 0.56–0.92 for estrogen with progestogen). Also, in a subgroup of women demographically similar to those in the WHI, there was no significant relation between HT and CHD among women who initiated therapy at least 10 years after the menopause (RR = 0.87, 95% CI 0.69–1.10 for estrogen alone; RR = 0.90, 95% CI 0.62-1.29 for estrogen with progestogen).

Initiating hormone therapy in older women with established atherosclerosis is not likely to produce any cardiac or neuroprotection and therefore should not be recommended for those indications; but, for the younger age groups, these recent results of the WHI and Nurses' Health Study are in line with the "window of opportunity" theory, which is based on the assumption that estrogen is cardioprotective when the arterial endothelium is still intact.

References

- 1. The Women' Health Initiative Steering Committee. Effects of conjugated estrogen on postmenopausal women with hysterectomy: the Women' Health Initiative randomized controlled trial. *JAMA* 2004;291:1701–12
- 2. Hsia J, Langer RD, Manson JE, *et al.* Conjugated equine estrogens and coronary heart disease. The Women's Health Initiative. *Arch Intern Med* 2006:166:357–65
- 3. Grodstein F, Manson JE, Stampfer MJ. Hormone therapy and coronary heart disease: the role of time since menopause and age at hormone initiation. *J Women's Health* 2006;15:35–44