

**INTERNATIONAL MENOPAUSE SOCIETY** THE SOCIETY FOR THE STUDY OF ALL ASPECTS OF THE CLIMACTERIC IN MEN AND WOMEN

## Comment on recent paper on risk of myocardial infarction and use of hormone therapy

ISSUED ON BEHALF OF THE INTERNATIONAL MENOPAUSE SOCIETY BY Roger Lobo, *IMS Board* 

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Løkkegaard and colleagues report in the latest issue of the *European Heart Journal* that, overall, current use of hormonal therapy was not associated with an increased risk of myocardial infarction. Their further analyses suggest that there was some small risk associated with oral combined (estrogen/progestogen) therapy, but not with cyclic therapy, or any particular estrogen or progestogen. They found the risk to be greatest in the *youngest* of their studied population (51–54-year olds), and with *longer* duration of use, but with *less* risk in the *older* population; and a significant reduction in risk of myocardial infarction with 'dermal' as well as vaginal estrogen use.

Although suggested to be similar to data from the Women's Health Initiative (WHI), these data are very different indeed. First of all, let us recognize that this report is from a Danish prescription registry which carries with it several shortcomings that do not allow for validation of what these women were really like and what preparations they really were taking. The hormones used were common to Danish women, which were predominantly estradiol and norethisterone; and there was no use of conjugated estrogens and only a little use of medroxyprogesterone acetate, used cyclically. Very different from other studies is the fact that the risk was the greatest in the youngest group, with a trend to more harm with longer duration of use, and less of an effect in older women. These results are exactly opposite to what the WHI and many other observational cohorts have shown, and are in sharp contrast to the 'timing' hypothesis which is now supported by clinical and animal data. Of interest is that the use of

'dermal' or transdermal products was associated with decreased risk. However, that vaginal products also were found to decrease the risk of myocardial infarction (which is not expected to produce systemic effects) suggests that there was something unusual about ascertainment of hormone use and events.

## Reference

1. Løkkegaard E, Andreasen AH, Jacobsen RK, *et al.* Hormone therapy and risk of myocardial infarction: a national register study. *Eur Heart J* 2008; Sep 30[Epub ahead of print]