

## LETTERS

## STATINS AND DIABETES

## Risk of diabetes from statins may be higher in women

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In their editorial Byrne and Wild grapple with the “paradox that arises” when statins, targeted to lower cardiovascular risk, increase diabetes, one of the most potent cardiovascular risk factors.<sup>1</sup> They suggest that statins reduce all cause mortality by citing a statistical exercise with questionable assumptions from which no long term effect (or numbers needed to treat) can be calculated for women.<sup>2</sup>

Indeed, no study or meta-analysis has shown that statins have a beneficial effect on all cause mortality in women.<sup>3</sup>

The pleiotropic effect of statins seems to underlie their diabetogenic action, while other pleiotropic actions also explain their benefit, primarily by promoting the nitric oxide-endothelial nitric oxide synthase pathway (mimicked by glyceryl trinitrate).<sup>4</sup>

In the JUPITER study, for example, which showed a 25% increase in the incidence of type 2 diabetes,<sup>5</sup> the only benefit for women was the need for fewer revascularisation operations.<sup>6</sup> Statins’ known effects on nitric oxide-endothelial nitric oxide synthase are likely to reduce angina symptoms and could explain the reduced need for revascularisation.

In women, therefore, the main or only cardiovascular benefit of statins may be a reduction in the symptoms of angina, while

increasing diabetes by 25%. If so, the long term diabetogenic effects of statins do not support Byrne and Wild’s suggestion that the benefit for those at “moderate” risk outweighs potential harm.

Competing interests: None declared.

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