relevant in a population of poor-responder women whose inter-cycle variability in the ovarian response to FSH is huge.

(ii) Second, the duration of DHEA administration was different between individuals. Therefore, no clear relationship between DHEA intake and improvement in the number of retrieved oocytes could be eventually demonstrated.

As regards the choice of androgen, it has been well established that DHEA has a weak androgenic activity as compared with testosterone, when assessed on peripheral tissues. To our knowledge, no informative data are yet available on the intraovarian conversion of DHEA to testosterone. It is therefore speculative to conclude that DHEA may be a potential precursor of active androgen within the ovary. Further studies are required to conclude on this issue.

Although we strongly believe that intraovarian androgens play a critical role in the process of folliculogenesis in primates, our study could not demonstrate the clinical relevance of adding androgen in a selected population of poor responders with ovarian deficiency. These data do not exclude any positive effect in patients with a less-severe ovarian deficiency. However, this potential effect of androgen supplementation, clearly demonstrated in monkeys, is strictly limited to an improvement in the number of follicles in relation to a strong reduction in granulosa cell apoptosis. To our knowledge, there is no evidence so far that aneuploidy, a hallmark of oocyte quality in elderly women, might be improved by androgen supplementation.

Consequently, additional well-designed, randomized, placebo-controlled clinical trials are needed to validate our hypothesis that androgen supplementation might be effective at stimulating follicular recruitment in humans. These studies should be performed in a selected population whose both oocyte quantity and quality are likely to be improved. One of the most challenging issues for clinicians is to identify predictive factors of response to androgen. Further work-up of theca cell function might be helpful to better identify the subgroup of women responsive to androgen supplementation. We do believe that this new approach is promising for some women who are often excluded from any assisted reproduction technique (ART) programmes.

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Development of a novel home sperm test - temperature range

Sir,

I have read with great interest the publication of Björndahl *et al*. (2006) dealing with a device which would afford a home fertility-sperm test to the man who questions his own fertility. The device seemed to be rather complicated, and the usefulness and marketability will remain to be seen. I would like to make one comment. It looks like the regulation of temperature has quite a bit of variability. The article quotes '37 ± 3°C'. I would be rather concerned that a high temperature around 40°C may have a significant effect on the survival and motility of the sperm. It has been well documented that even occasional exposure of the testicles to high temperatures may significantly affect the quality of sperm produced. Thus, a variation from 34 to 40°C could have a significant effect on the motility of the sperm, even realizing that it is not meant to be used for insemination or any other non-laboratory purposes. The authors may be well advised to compare the parameters of a sample left at well-controlled temperatures of 34, 37 and 40°C.

Reference

Björndahl L, Rattle S, Hart G, Kirkman-Brown JC and Barratt CLR (2006) Development of a home sperm test. Hum Reprod 21,145–149.

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Reply: Development of a novel home sperm test - temperature range

Sir,

We are very grateful for the comments from Dr Marik regarding our publication on the home sperm test (see Björndahl *et al*., 2006). We are pleased to see the considerable interest generated by our experiments.

First, we agree that the test offers the man an opportunity to assess his potential fertility in the comfort of his own home. Second, the device is very simple to use. As a separate evaluation to the one we have reported, the ease of use of the device was assessed on 433 subjects across three study sites (two in the US, the other in the UK). Feedback from the users demonstrated that the device is easy to use. The device has been cleared for OTC home use by the FDA. We cannot comment on the market sales.

With regard to the main point—temperature control. Sperm motility is dependent on temperature (see Ford *et al*., 1992). As the device detects the presence of motile sperm that have penetrated hyaluronate, it is very important to regulate temperature. In a series of preliminary experiments, we noted a marked variation in the penetration into an artificial cervical mucus substitute (methylcellulose; see Ivic *et al*., 2002), especially over the temperature ranges 17–30°C. However, we did not detect significant differences in the numbers of spermatozoa penetrating methylcellulose when incubated at 30 or 37°C.

We clearly state in our publication that the temperature of the semen sample does not rise above 32°C. To date, our clinical trials have used a number of different batches of devices to verify batch to batch consistency and have shown a high degree of accuracy (>95% when compared with the Hamilton Thorn and modified Kremer testing). Thus, we