

## Ovarian reserve and oocyte maturity in cancer patients

To the Editor:

With great interest we read the article by Moria et al. (1) on ovarian reserve and oocyte maturity in patients with cancer undergoing in vitro maturation treatment. Detailed information concerning this topic is of great value to physicians counseling cancer patients with regard to their wish to conceive in the (near) future.

The investigators studied ovarian reserve and oocyte maturity in patients with cancer, comparing them to infertile patients (1). We wonder whether it is correct to compare patients with cancer to infertile patients. Ideally, one would like to compare to healthy subjects to investigate the effect of cancer on fertility. We are aware that it would be ethically impossible to acquire these parameters on a group of fertile individuals as they would have to undergo unnecessary in vitro maturation treatment. However, a viable solution to this problem would be to compare cancer patients with couples who are infertile due to an andrological factor.

Furthermore, the investigators fail to further specify the infertile control group. Besides the described subgroup of patients with polycystic ovary syndrome (PCOS), the control group could contain infertile patients due to endometriosis or tubal factor infertility and it is known that these groups have different ovarian reserve (2).

A recent study by Anderson and Cameron (3) reported that measurement of anti-Müllerian hormone at cancer diagnosis predicts long-term ovarian function after chemotherapy. It would therefore have been interesting if the anti-Müllerian hormone level was measured in the investigators' study group of patients with breast cancer. This would make it possible to predict which patients would have to undergo in vitro maturation treatment before chemotherapy treatment.

We appreciate the investigators' 7-year effort on this study and we acknowledge that it is hard to collect a large group of patients with different cancers treated with in vitro maturation treatment. However, with the small number of patients in the subgroup of other cancers, it is impossible to draw solid conclusions on ovarian reserve and oocyte maturity in cancer patients other than in patients with breast cancer.

Lobke Bastings, M.D.

Angèle Oei, M.D., Ph.D.

Catharina C. M. Beerendonk, M.D., Ph.D.

*Department of Obstetrics and Gynaecology, Radboud University  
Nijmegen Medical Centre, Nijmegen, the Netherlands*

May 13, 2011

doi:10.1016/j.fertnstert.2011.05.043

## REFERENCES

1. Moria A, Das M, Shehata F, Holzer H, Son WY, Tulandi T. Ovarian reserve and oocyte maturity in women with malignancy undergoing in vitro maturation treatment. *Fertil Steril* 2011;95:1621–3.
2. Aboulghar MA, Mansour RT, Serour GI, Al-Inany HG, Aboulghar MM. The outcome of in vitro fertilization in advanced endometriosis with previous surgery: a case-controlled study. *Am J Obstet Gynecol* 2003;188:371–5.
3. Anderson RA, Cameron DA. Pretreatment serum anti-müllerian hormone predicts long-term ovarian function and bone mass after chemotherapy for early breast cancer. *J Clin Endocrinol Metab* 2011;96:1336–43.