Introduction: There are different conditions to cancer with high risk for early ovarian failure where Fertility Preservation can be considered, including age-related decline of fertility. Elective oocyte vitrification is being increasingly accepted as an option to postpone motherhood.

Material and Methods: A total of 560 non-oncological patients who vitrified oocytes for FP (n=725 cycles) from March 2007 to June 2012 were enrolled in this observational, multicenter study since we started the Fertility Preservation Program at our institution. The Cryotop method was employed for oocyte vitrification.

Results: 505 out of 560 patients (90.6%) (mean age 36.7 ± 4.2 years) decided to cryopreserve gametes due to their wish to delay motherhood. Endometriosis (38 patients, 6.8%); prior to adnexectomy (8 patients, 1.4%); genetic disease (X fragile and Rendu-Osler disease) (3 patients, 0.5%); presence of fibroids (2 patients, 0.4%) or rheumatological disease (1 patient, 0.2%) were other reasons. A total of 7225 oocytes were obtained (13.0 ± 24.0 per patient) and 5498 MII vitrified (9.9 ± 22.6 per patient). 26 patients returned to attempt pregnancy. Mean oocytes storage time was 20.5 ± 0.8 months. Ongoing pregnancy rate per warming cycle was 30.7% and 33.3% after cryotransfer. Cumulative ongoing pregnancy rate per patient was 70.9% considering both fresh and cryo-transfers. Five healthy babies have been born.

Conclusion: Oocyte vitrification is a simple, safe and efficient option to preserve gametes in women for different indications. Women should be informed about their individual chances of oocyte survival depending mainly on their age.