

PRESERVATION OF FERTILITY FOR NON-ONCOLOGICAL INDICATIONS: A TWO-YEAR EXPERIENCE AT THE FERTILITY PRESERVATION AND ART UNIT OF THE AOUI VERONA

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Introduction

Fertility preservation (FP) represents a cornerstone of reproductive medicine, with the latest Italian guidelines underscoring its relevance for benign conditions that may compromise fertility, such as endometriosis, autoimmune diseases, and BRCA mutations. This study aims to **assess FP outcomes** in this population, particularly emphasizing the **feasibility and efficacy of oocyte cryopreservation**.

Results

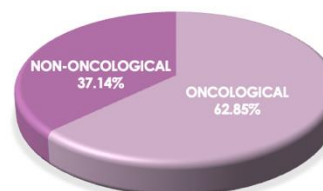
A total of **70 FP cycles** were performed, of which **26 (15 patients) for non-oncological indications: endometriosis (60%), BRCA mutations (13.3%), fibromatosis (13.3%), and autoimmune diseases (13.3%)**. Median age was 33 years (range 30–35), with a **mean AMH of 1.32 ± 1.23 ng/mL**. All cycles used Progesterin-Primed Ovarian Stimulation (PPOS), with GnRH analogs for oocyte maturation. Due to suboptimal oocyte yield (<10), nine patients (60%) underwent DuoStim. The average stimulation lasted 8.5 ± 4.4 days, requiring 2405.6 ± 1024.5 IU of gonadotropins. **Mean oocyte yield was 8.4 ± 4.4 , with 6.1 ± 4.1 mature oocytes** cryopreserved per patient. At last follow-up, 13.3% of patients had used their cryopreserved oocytes for IVF, while 86.7% had not yet done so due to ongoing treatments or lack of immediate reproductive desire.

Conclusions

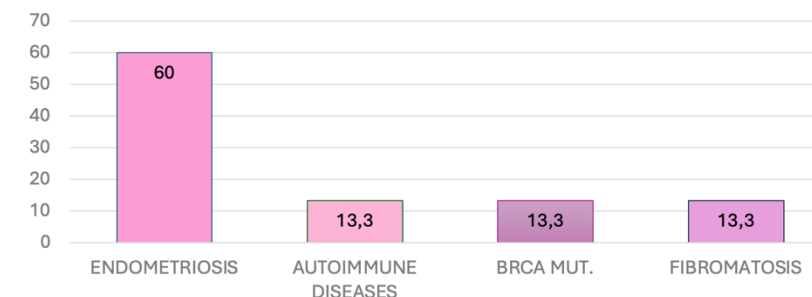
The number of subjects treated in two years supports the previous presence of an unmet need. We additionally showed the effectiveness of FP for benign conditions, with a good number of preserved oocytes in patients at high infertility risk. Advanced stimulation protocols, such as DuoStim, improved results in cases of diminished ovarian reserve. These findings underscore the utility and feasibility of FP even in challenging cases and highlight the importance of timely, multidisciplinary, and individualized FP even in non-oncological indications.

Methods

We retrospectively reviewed all FP cases performed at the ART Unit of AOUI Verona between January 2023 and December 2024. Data collection focused exclusively on cases involving non-oncological indications. At the study center, patients were eligible to FP for non-oncological indications based on **age ≤ 39 years, high risk of infertility, and diminished ovarian reserve**, using criteria such as AMH levels. Data on patient demographics, medical history, fertility risk factors, and ovarian reserve parameters were extracted from medical records. The analysis included controlled ovarian stimulation protocols, gonadotropin dosages, stimulation duration, and oocyte retrieval outcomes.



NON-ONCOLOGICAL INDICATIONS



INFORMAZIONI DI CONTATTO

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