



OVULATION INDUCTION FOR IUI AND IVF

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This review examines recent evidence (2024-2025) on ovulation induction (OI) protocols, focusing on optimizing strategies for Intrauterine Insemination (IUI) and In Vitro Fertilization (IVF) by tailoring treatments to specific patient profiles and etiologies of infertility.

A narrative synthesis of contemporary literature was conducted, drawing from key publications. Emerging data strongly supports the stratification of OI protocols based on precise patient diagnoses and biomarkers like AMH and AFC which were elaborated to the learned audience.

We also covered in brief about the basics of folliculogenesis and various factors governing the growth of the leading follicle including role of FSH and LH.

Regarding stimulation agents, letrozole is established as a primary oral medication for anovulatory disorders like PCOS, while gonadotropins are pivotal for IVF cycles and cases resistant to oral agents. The success of any OI protocol includes safety aspect which was reinforced to the audience.

We discussed about different protocols used in both IUI and IVF cycles and the nuances of tailoring doses and triggering options based on patient profiles.

Evidence from 2024-2025 solidifies that a one-size-fits-all approach to ovulation induction is obsolete. Success in both IUI and IVF is maximized through personalized protocols that consider specific patient etiologies, such as menstrual cycle regularity, infertility duration, and ovarian reserve. Tailoring the treatment strategy to the individual patient is paramount for optimizing reproductive outcomes.

References and Article Links

1. *Frontiers in Endocrinology* 2025: Link: Clinical pregnancy outcomes in young women with diminished ovarian reserve. Findings: This study directly supports your focus on ovarian reserve. It found that young women (<40 years) with Diminished Ovarian Reserve (DOR) had significantly lower clinical pregnancy rates (47.0% vs. 58.3%) after frozen thawed embryo transfer (FET) compared to those with normal ovarian reserve.
2. *Fertility and Sterility* 2024: Link: Evidence-based guideline: Premature Ovarian Insufficiency. Findings: This official guideline underscores the importance of accurate diagnosis and personalized management of ovarian insufficiency. It provides 145 recommendations on diagnosis and treatment, reinforcing the need for a tailored approach based on specific patient profiles.