



Tests Explained

Ovarian Reserve Panel (Advanced Age)

- **Anti-Mullerian Hormone**

Anti-Mullerian Hormone (AMH) is secreted by granulosa cells of the ovary, and controls the formation of primary follicles by inhibiting excessive follicle recruitment by FSH. It may be useful in assessing conditions such as polycystic ovary syndrome and premature ovarian failure. Contrary to FSH and Inhibin B whose levels fluctuate along the menstrual cycle; AMH is stable and can be measured at any phase. The level of AMH can guide the physician about the ovarian reserve and thus the dose and protocol for IVF stimulation.

- **Follicle Stimulating Hormone (FSH) (D3 of menstrual cycle)**

Follicle Stimulating Hormone is a hormone produced by the pituitary gland. It induces the development of early follicles into mature follicles/eggs. A normal FSH level on Day 3 indicates a woman has a good reserve of eggs (ovarian reserve) and is a good candidate for ovarian stimulation in IVF. As a woman grows older and the number of eggs she has remaining decreases, the pituitary secretes more FSH for egg production. High Day 3 FSH indicates a low or declining ovarian reserve. This hormone is in abundance in menopausal women's urine. Historically, ovulation induction was done using purified forms of menopausal women's urine. Recombinant FSH forms are used for ART more recently.

- **Estradiol (Estrogen)**

Estradiol is a hormone produced in the ovaries by the follicular cells that surround a developing egg. This hormone triggers the uterine endometrial lining to grow. This test is used to monitor ovulation induction in ART. Very high levels may lead

to ovarian hyper stimulation, and may be a life threatening condition. It is used also in conjunction with Day 3 FSH to assess the ovarian reserve. High estradiol level may mask what otherwise would be a higher FSH. It is also used for the diagnosis of amenorrhea.