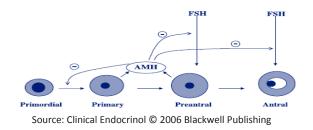


# **ANTI-MÜLLERIAN HORMONE**

#### BACKGROUND

AMH is involved in cell growth and differentiation. In males, it prevents the female reproductive system from developing during embryonic development<sup>1,2</sup>. In females, AMH is involved in the regulation of follicular development. It is produced in the ovaries by the granulose cells of early developing follicles. The mechanism behind the regulatory role of AMH is thought to be the inhibition of follicle recruitment<sup>1-3</sup> and FSH-stimulated growth<sup>4</sup>.



## Methodology

Human AMH enzyme-linked immunosorbent assay from Diagnostics Systems Laboratories, Inc. Assay sensitivity .017 ng/mL, Range .025-15 ng/mL.

### **Clinical Utility**

MENSTRUAL CYCLE INDEPENDENT—AMH levels do not vary significantly from day to day throughout the cycle<sup>55</sup>. Measurements can be taken at a time other than day 3.

OVARIAN RESERVE—Several studies have shown AMH to have a strong correlation relative to other markers<sup>7-10</sup>.

OVARIAN AGEING—AMH may more accurately reflect the decline in ovarian reserve over time. As a result it may be a leading indicator of ovarian ageing and the onset of menopause<sup>7,11-12</sup>.

PREDICTIVE CAPABILITY FOR OVARIAN STIMULATION—AMH may be a better marker for predicting cancelled cycles and optimizing stimulation protocols<sup>89,13-16</sup>.

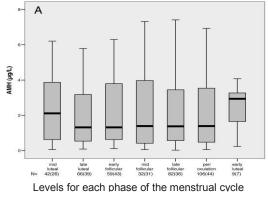
OVARIAN DYSFUNCTION—AMH may provide additional information for women with secondary amenorrhea<sup>17</sup>. It has also been well established AMH is highly correlated with PCOS<sup>18-21</sup>.

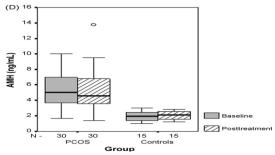
ONCOLOGY—AMH can be used to assess and monitor cancer patients to make informed decisions about their fertility. AMH has also been shown to be a granulose cell tumor marker for detection and for patients having undergone an ovariectomy<sup>2224</sup>.

CONTRACEPTIVE THERAPY—AMH levels are not significantly altered by the use of oral contraceptive therapy<sup>25</sup>.



Hehenkamp et al. • AMH Is Menstrual Cycle Independent. JCEM 2006.





Somunkiran A, et al., Anti-Müllerian hormone levels during hormonal contraception in women with polycystic ovary syndrome, Eur. J. Obstet. Gynecol 2007.

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