Anti-mullerian factor (AMF) is a paracrine factor that plays a key role in the regulation of ovarian function in the reproductive period. AMF production by granulosa cells depends on the stage of follicle development, i.e., changes in growing follicles and secretion of AMF depend in each other. In the initial stages of growth all follicles produce AMF. In what follows, the action of Follicle-stimulating hormone (FSH) causes increased activity of aromatase and estradiol synthesis by growing follicles, which presumably lowers the level of the AMF. In the pre-ovulatory follicles synthesis of estradiol peaks and completely inhibits the production of the AMF.

We conducted a study on the level of the AMF in healthy women, depending on the phase of the menstrual cycle. Analysis of the data showed that the level of the AMF was significantly higher in the proliferative phase. However, women with a Body mass index (BMI) > 25 have a tendency to increase the level of the AMF - 5.6 ± 0.03 pg / ml vs 4.3 ± 0.01 pg / ml. Secretory phase of the menstrual cycle, characterized by a low level of the AMF significantly (P <0.01).

Studies have been conducted to study the levels of the AMF in the age dependent groups. Production of androgens persists throughout the reproductive life of women. AMF level decreased with age. AMF concentration in the plasma of young women was significantly higher, and in women older than 40 years the level of the AMF was very low and in the majority of patients was not detected (<1.7 pg / ml). AMF level positively correlate with free androgen index (FAI) and testosterone, (r = +73) and negatively correlated with FSH (r = -69). No correlation was found between AMF and estrogen, LH (luteinizing hormone), BMI.