

## Canine (female) – Neuter Status or Ovarian Remnant Syndrome

### Indications

Determination of neuter status (e.g. stray or rescue dogs).  
Confirmation of the presence of functioning ovarian tissue in bitches suspected of having ovarian remnant syndrome.

### Notes

In females, the Anti-Müllerian hormone (AMH) is produced exclusively in the ovaries. In bitches, AMH is more reliably detected after puberty (>6 months), however, a decline in female dogs older than 4 years has been described. Detectable levels of AMH in serum indicate the presence of ovarian tissue. Progesterone is produced by a developing corpus luteum, and elevated values may indicate pregnancy, diestrus, an ovarian lesion, or an exogenous source, while undetectable or low values indicate that the bitch is in anoestrus/proestrus. Corpora lutea don't produce AMH, therefore, an ovarian remnant that consists mostly of functional luteal tissue might not secrete a sufficient amount of AMH to be detected. The determination of both AMH and progesterone concentrations in a single serum sample can be an effective diagnostic test for spayed dogs suspected to have an ovarian remnant. AMH measurement should be performed no sooner than 30 days after ovariohysterectomy.

### Protocol

- This test can be done at any point in the oestrus cycle.
- Collect a blood sample (1-2 ml of blood in plain/gel tube).
- Ensure the sample has clotted and centrifuge the samples 30-120 minutes after collection.
- For samples collected in plain tubes, please separate the serum into another plain tube (this step is not necessary for samples collected in gel tubes).
- Please label the tube with the patient's name and include the patient history, including drug history, on the request form.
- Submit the sample for **Progesterone and Anti-Mullerian Hormone (PGT+AMH)**.

