



A/Prof Tom Dodd

20 September 2021

Antimullerian Hormone Testing (AMH)

Effective Monday 27 September, SA Pathology will commence Antimullerian Hormone Testing (AMH) testing at the Royal Adelaide Hospital (RAH) Laboratory. Requests for AMH that form part of assisted reproductive technology (ART) services as defined by the MBS Schedule will be forwarded to Repromed for testing.

AMH is produced by the granulosa cells of the ovary, and Sertoli cells of the testis.

AMH is useful for:

- Assessment of ovarian reserve, including assessment of premature ovarian failure (such as in patients with Turner syndrome or treated with gonadotoxic cancer treatments)
- Prediction of ovarian responsiveness to assisted reproductive treatments
- A surrogate marker for antral follicle count in the assessment of polycystic ovarian syndrome (PCOS)
- Assessment of infants with disorders of sexual differentiation
- Evaluation of testicular function in infants/children
- Monitoring of granulosa cell tumours of the ovary

A serum sample (gold top) is suitable for AMH. Serum AMH levels do not fluctuate significantly according to stage of menstrual cycle or time of day so there are no timing requirements for specimen collection.

Oral contraceptives do not appear to have a significant effect on AMH levels and patients can continue with their normal regimen when having the AMH test. However, if a low AMH level is found in a woman who is taking an oral contraceptive, it is advisable to repeat the AMH test three months after stopping the medication to confirm that result.

Biotin can interfere with this assay causing a falsely low result. It is recommended that patients on doses >5mg/day refrain from taking Biotin for at least 36 hours prior to blood collection.

Reference Intervals:

Adults:				
Sex	Age	2.5 Percentile	97.5 Percentile	Units
Healthy Men	18 years - 110 years	5.5	103.0	pmol/L
Healthy Women	19 - <25	8.7	83.6	pmol/L
	25 - <30	6.4	70.3	
	30 - <35	4.1	58.0	
	35 - <40	1.1	53.5	
	40 - <45	0.2	39.1	
	45 - <51	0.1	19.3	
Children:				
Sex	Age	2.5 Percentile	97.5 Percentile	Units
Females	0 - 28 days	0.0	6.7	pmol/L
	29 - 364 days	0.0	31.2	
	1 - 4.99 years	1.3	43.7	
	5 - 7.99 years	1.4	39.5	
	8 - 11.99 years	2.9	52.8	
	12 - 14.99 years	3.0	46.6	
	15 - 18.99 years	2.1	84.1	
Males	Newborn (0 - 60 days)	108.0	1903.0	pmol/L
	Tanner Stage 1	35.0	1032.0	
	Tanner Stage 2	36.0	1000.0	
	Tanner Stage 3	19.0	542.0	
	Tanner Stage 4	3.0	144.0	
	Tanner Stage 5	14.0	151.0	

Currently there is no MBS item for AMH testing, as such, a non-MBS payment is required for testing. Patients referred by a LHN will not incur any out of pocket expenses, this will be sought from the LHN. For patients referred from outside a LHN, the patient will be required to accept a \$90 charge prior to blood collection.

SA Pathology will perform this assay twice a week. If results are required urgently, please contact the on-call Chemical Pathologist on 8222 3444.

Regards,

A/Prof Tom Dodd

Clinical Service Director

SA Pathology