



## CLINICAL PRACTICE CHANGE

### Anti-Mullerian Hormone (AMH) Reference Laboratory Change

**Date Effective: December 5, 2016**

#### Background Information:

- Anti-Mullerian Hormone (AMH) testing in our patient population is primarily used for assessment of ovarian reserve for infertility investigation. It is occasionally used for evaluation of infants with ambiguous genitalia and other intersex conditions.
- Specimens requiring Anti-Mullerian Hormone (AMH) testing are currently sent to Mayo Laboratories for analysis. They use a manual immunoenzymatic assay manufactured by Ansh Labs.

#### Change in or New Test Procedure:

- Specimens for AMH testing will be referred to Dynacare Labs Ontario commencing December 5, 2016.
- Analysis will be performed using the Roche Elecsys automated procedure. The method has been extensively validated and precision exceeds that of the current manual Ansh assay.
- The Elecsys reference ranges have been confirmed by Dynacare labs. Expanded age and sex specific reference ranges will be provided on the patient report.
- Reference ranges provided for the Roche method are based on both Roche sponsored and independent validation studies. This is an improvement over the reference ranges for the Ansh method that were historical and not validated for that method.
- Patient results will be about 20 - 25% lower with the new assay than with the current Ansh procedure.

#### Patient Impact:

- Specimens will be sent to Dynacare once per week (Wednesdays); results should be available within a week of arrival at Dynacare.
- Expanded method-specific reference values and use of an assay validated for the assessment of antral follicle count will improve test interpretation in infertility investigation.

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# Physician Alert



## References:

- Anckaert E, Oktem M et al. Multicenter Analytical Performance Evaluation of a Fully Automated Anti-Mullerian Hormone Assay and Reference Interval Determination. *Clinical Biochemistry* 2016; 49: 260 – 267.
- Anderson RA, Anckaert E et al. Prospective Study Into the Value of the Automated Elecsys Anti-Mullerian Hormone Assay for the Assessment of the Ovarian Growing Follicle Pool. *Reproductive Endocrinology* 2015; 103(4); 1074 – 1080.

## More information: DSM Lab Information Manual

<https://apps.sbgh.mb.ca/labmanual/test/view?seedId=1802>

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