Technical Note

Within-laboratory and between-laboratory variability in the measurement of anti-müllerian hormone determined within an external quality assurance scheme

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Abstract

Ten laboratories in an external quality assurance scheme used the same assay to measure anti-müllerian hormone concentration (Beckman Coulter Gen II) and received twenty serum samples distributed over a 15 month period. The mean bias for all results was only −0.089%, but there was large coefficient of repeatability of 38.8% (sample bias ranged from −37.9% to +54.7%). While each laboratory showed good reproducibility, there was a wide range of average values relative to the consensus value from −24.0% to +22.7%. This between-laboratory variability suggests clinicians should use the same laboratory to avoid problems with result interpretation.

Keywords

AMH; External quality assurance