

PROJECT REVIEW

"Application of High-Accuracy Reference Measurement Procedures for Target-Setting in WADA EQAS Programs for Longitudinal Steroid Profiling"

Dr. E.J. Murby, Dr. V. Vamathevan (National Measurement Institute, Australia)

The aim of this project is to utilise high-accuracy Reference Measurement Procedures (RMPs) developed at the National Measurement Institute of Australia (NMIA) to assign reference values with low measurement uncertainties for eight target analytes in World Anti-Doping Agency (WADA) External Quality Assessment Scheme (EQAS) samples. The target analytes are androsterone (A), etiocholanolone (E), testosterone (T), epitestosterone (epi-T), 5 α -androstane-3 α ,17 β -diol (5 α -Adiol) and 5 β -androstane-3 α ,17 β -diol (5 β -Adiol), 19-norandrosterone (19-NA) and the T/Epi-T ratio. Target setting using reference values in the WADA EQAS will enhance the value of the program permitting an objective evaluation of the performance of WADA-accredited laboratories. Accuracy-based grading provides a more robust and transparent indication of competency than consensus-group grading.