

## *Pathology and Laboratory Medicine Memorandum*

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**To:** NSH Physicians, Nurse Practitioners  
**From:** Program of Pathology and Laboratory Medicine  
**Date:** September 29, 2020  
**Subject:** Change of Thyroglobulin Testing from Standard Assay to a High-Sensitive Assay

**Effective October 15, 2020 the NSHA Central Zone Laboratory will be offering a high-sensitive thyroglobulin (HS-Tg) assay in place of the current standard thyroglobulin assay.**

Clinically, the main use of serum thyroglobulin (Tg) measurements is in the follow-up of Differentiated Thyroid Carcinoma (DTC). In this setting, serum Tg should be interpreted by thyroid cancer clinicians in conjunction with case-specific clinical information.

Tg is thyroid-specific. Serum Tg concentrations should be very low or undetectable after the thyroid gland is removed and effective radioiodine ablation has been done for localized thyroid cancer. The protocol for follow up of some of these patients has involved testing serum Tg after a Thyrogen Stimulation Test (TST) for increased sensitivity. TST is relatively expensive, cumbersome and inconvenient for patients.

Guidelines have indicated that in many clinical situations, the testing of serum Tg using the TST can be replaced by a HS-Tg assay. Following analytical and clinical validations of a HS-Tg assay performed by the NSHA CZ laboratory in conjunction with physicians from the Interdisciplinary Thyroid Oncology Clinic, this will now replace our current standard-Tg assay. The new HS-Tg assay can report values with high precision down to 0.06 µg/L and has ten fold higher sensitivity than the standard-Tg assay.

Since thyroglobulin testing does not have clinical value outside of monitoring of treated DTC, the utilization of this test should not extend to other thyroid conditions.

**For questions / concerns, please contact:**

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