MICHIGAN MEDICINE
UNIVERSITY OF MICHIGAN
LABORATORIES

Test Update 721

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Update Type Reference range changed
CPT Code 84432

Effective July 21, 2020, MLabs will change the reference range for Thyroglobulin Mass Spectrometry (TGMS) testing per Mayo Medical Laboratories.

Current Reference Range	New Reference Range

Healthy individuals with intact, functioning thyroid: ≤ 33 ng/mL	Healthy individuals with intact, functioning thyroid: ≤ 33 ng/mL
The reference ranges listed below, however, are for thyroid cancer follow up of athyrotic patients and apply to unstimulated and stimulated thyroglobulin measurements.	The reference ranges listed below, however, are for thyroid cancer follow up of athyrotic patients and apply to unstimulated and stimulated thyroglobulin (Tg) measurements.
Ranges are based on best practice guidelines and the literature, which includes Mayo Clinic studies, and represent clinical decision levels.	Ranges are based on best practice guidelines and the literature, which includes Mayo Clinic studies, and represent clinical decision levels.
Decision levels for thyroid cancer patients, who are not completely athyrotic (ie, patient has some remnant normal thyroid tissue), have not been established, but are likely to be somewhat higher: remnant normal thyroid tissue contributes to serum Tg concentrations 0.5-1.0 ng/mL per gram of remnant tissue, depending on the thyroid-stimulating hormone (TSH) level.	Decision levels for thyroid cancer patients, who are not completely athyrotic (ie, patient has some remnant normal thyroid tissue), have not been established, but are likely to be somewhat higher: remnant normal thyroid tissue contributes to serum Tg concentrations **0.2**-1.0 ng/mL per gram of remnant tissue, depending on the thyroid-stimulating hormone (TSH) level.
Tg <0.5 ng/mL: Thyroglobulin (Tg) levels must be interpreted in the context of TSH levels, serial Tg measurements, and radioiodine ablation status.	Tg **<0.2** ng/mL: Tg levels must be interpreted in the context of TSH levels, serial Tg measurements, and radioiodine ablation status.
Undetectable Tg levels in athyrotic individuals on suppression therapy indicate a minimal risk (<1%-2%) of clinically detectable recurrent papillary/follicular thyroid cancer.	Undetectable Tg levels in athyrotic individuals on suppression therapy indicate a minimal risk (<1%-2%) of clinically detectable recurrent papillary/follicular thyroid cancer.
Tg > or =0.5 ng/mL to 2.0 ng/mL: Thyroglobulin (Tg) levels must be interpreted in the context of TSH levels, serial Tg measurements, and radioiodine ablation status. Tg levels of 0.5-2.0 ng/mL in athyrotic individuals on suppressive therapy indicate a low risk of clinically detectable recurrent papillary/follicular thyroid cancer.	Tg > or =**0.2** ng/mL to 2.0 ng/mL: Tg levels must be interpreted in the context of TSH levels, serial Tg measurements, and radioiodine ablation status. Tg levels of **0.2**-2.0 ng/mL in athyrotic individuals on suppressive therapy indicate a low risk of clinically detectable recurrent papillary/follicular thyroid cancer.

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