Thyroid-Stimulating Hormone Receptor Antibody Assays: Recommendation for Correct Interpretation of Results in Graves Disease

To the Editor:

In Graves disease, the clinical uses of thyrotropin receptor [thyroid-stimulating hormone receptor (TSH-R)] antibody (TRAb) measurements have been reported in the Thyroid Guidelines of the American Thyroid Association (1). First, TRAb measurements are used to investigate the etiology of hyperthyroidism when the diagnosis is not clinically obvious; second, a declining TRAb concentration during long-term antithyroid drug therapy is suggestive of remission, although TRAb measurements can be misleading in 25% of such patients; third, TRAb is used in the follow-up of pregnant women with a history or current onset of Graves disease. A new WHO International Standard has been produced by NIBSC (coded 08/204) and has been evaluated by an international collaborative study. For these reasons, on behalf of the Thyroid Research Group of the French Society of Endocrinology, we recommend the use of the human second-generation TRAb assay in the exploration of Graves disease until the recalcification of all the different TRAb assays against the new WHO International Standard is complete.

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