



## Effective Health Care Thyroid Disease Therapies Nomination Summary Document

### Results of Topic Selection Process & Next Steps

- Thyroid disease therapies was found to be addressed by a 2010 systematic review and by 2011 clinical practice guidelines developed by the American Thyroid Association and American Association of Clinical Endocrinologists. Given that the existing systematic review and clinical guidelines cover this nomination, no further activity will be undertaken on this topic.
  - Nygaard B. Hyperthyroidism (primary). Clinical Evidence 2010;07:611-40.
  - Rebecca S. Bahn; Henry B. Burch; David S. Cooper; Jeffrey R. Garber; M. Carol Greenlee; Irwin Klein; Peter Laurberg; I. Ross McDougall; Victor M. Montori; Scott A. Rivkees; Douglas S. Ross; Julie Ann Sosa,; Marius N. Stan. Hyperthyroidism and Other Causes of Thyrotoxicosis: Management Guidelines of The American Thyroid Association and American Association of Clinical Endocrinologists. Endocrine Practice Vol 17 No. 3 May/June 2011.

### Topic Description

**Nominator:** Individual

**Nomination Summary:** The nominator is interested in understanding why hormone suppressive therapy is not currently a treatment option for mild to moderate Graves' disease until such time that the patient acquires hypothyroidism. The nominator would like a review on the comparative effectiveness of medication therapy compared to surgery or ablation therapy for Graves' disease.

**Staff-Generated PICO**

**Population(s):** Women ages 50-70 with mild to moderate hyperthyroidism (Graves' disease)

**Intervention(s):** Thyroid suppressant medication including methimazole, carbimazole, propylthiouracil (PTU)

**Comparator(s):** Surgery or ablation

**Outcome(s):** Avoidance of surgical risks; reduced costs of care for Graves' disease

**Key Questions from Nominator:**

1. What is the comparative effectiveness and comparative risk profile of medical therapy with antithyroid medications versus surgery or radioablation?

## Considerations

- The topic meets all EHC Program appropriateness and importance criteria. (For more information, see <http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/>.)
- The topic was found to be addressed by a 2010 systematic review and by 2011 clinical practice guidelines developed by the American Thyroid Association and American Association of Clinical Endocrinologists.
  - The 2010 systematic review by Nygaard investigated the effectiveness of antithyroid drugs, radioactive iodine ablation, and surgery for primary hyperthyroidism.
  - In 2011, the American Thyroid Association and the American Association of Clinical Endocrinologists published evidence-based guidelines and graded recommendations for treatment of hyperthyroidism. The guidelines cover a wide range of topics, including the initial evaluation and management of thyrotoxicosis; management of Graves' hyperthyroidism using radioactive iodine, antithyroid drugs, or surgery; and management of toxic multinodular goiter or toxic adenoma using radioactive iodine or surgery. The guidelines highlight differences in the use of the three treatment options; the US approach compared to other countries; and factors that would result in different choices and possible strategies for different populations.