Objective: The incidence of thyroid cancer, the most common endocrine malignancy, has increased dramatically in the last fifty years. This article will review the standard approach to thyroid cancer treatment as well as novel therapies under investigation. We will also address potential cost considerations in the management of thyroid cancer.

Study Design: A comprehensive literature search was performed.

Methods: Review article.

Results: The high prevalence of thyroid cancer and the availability of novel therapies for patients with metastatic disease have potential economic implications that have not been well-studied. Because many patients likely have very low morbidity from their cancers, better tools to identify the lowest risk patients are needed in order to prevent overtreatment. Improved risk stratification should include recognizing patients who are unlikely to benefit from radioactive iodine therapy after initial surgery and identifying those with indolent and asymptomatic metastatic disease that are unlikely to benefit from novel therapies. In patients with advanced incurable disease, randomized-controlled studies to assess the efficacy of novel agents are needed to determine if the costs associated with new agents are warranted.

Conclusions: Health care costs associated with the increased diagnosis of thyroid cancer remain unknown but are worthy of further research.

Key Word: differentiated thyroid cancer, radioactive iodine, targeted therapy, clinical trials, pharmacoeconomics

Volume 2, Number 1, - 2011 , ISSN 1837-9664