

## EGFR polysomy in squamous cell carcinoma of the thyroid. Report of two cases and review of the literature

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### ABSTRACT

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**Aims and background.** Primary squamous cell carcinoma of the thyroid gland (PSCCT) is an uncommon malignancy characterized by a poor prognosis. A radical surgical approach combined with radiotherapy or chemotherapy is the generally accepted treatment for this tumor. The epidermal growth factor receptor (EGFR) is a transmembrane tyrosine kinase receptor modulating the cell proliferation and biological progression of many human epithelial tumors. The EGFR overexpression in PSCCT suggests an additional therapeutic option for the treatment of this tumor.

**Methods and study design.** The clinicopathological features and immunohistochemical profiles of two cases of primary squamous cell carcinoma of the thyroid in a 66-year-old and an 83-year-old woman are presented. EGFR status was valued in both cases.

**Results.** Overexpression of EGFR protein was detected in 50% and 75% of the tumor cell membranes. EGRF gene polysomy was detected in both tumors.

**Conclusions.** Pharmaceuticals targeting EGFR may help to provide the rationale for an additional, novel therapeutic option for this rare tumor, especially when other therapeutic options have been exhausted. Free full text available at [www.tumorionline.it](http://www.tumorionline.it)

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**Key words:** squamous cell carcinoma, thyroid, EGFR, polysomy.

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