

**Methods for literature search.**

We conducted a comprehensive, critical, and objective analysis of the current knowledge on a topic. Although a systematic strategy was not followed, a literature search was carried out in the main databases (PubMed, EMBASE, SCOPUS, and Cochrane Library). The following words were used for the research: "squamous cell carcinoma of the head and neck", "translational research", "intracellular pathways", "targeted therapy", "immunotherapy", "oncogenes", and "tumor suppressor genes".