Background Based on KEYNOTE-048 results, pembrolizumab was approved for use as monotherapy and in combination with platinum+5FU in the first-line (1L) treatment of patients with recurrent or metastatic head and neck squamous cell carcinoma (R/M HNSCC). Taxanes can help expand the available treatment options in the 1L R/M HNSCC, in place of 5-FU. NCCN guidelines recommend pembrolizumab + platinum + taxane as another treatment option for R/M HNSC patients. This study assessed the real-world treatment patterns of patients receiving pembrolizumab combination regimens in 1L R/M HNSC.

Methods This retrospective cohort study assessed data from a US based de-identified EHR-derived database (Flatiron Health Advanced H&N database) of patients initiating pembrolizumab + platinum + taxane or platinum + 5-FU regimens between 07/01/19 – 6/30/21 with follow-up until 12/31/21. Real-world time on treatment (rwToT) was defined as length of time between first and last documented administration date pembrolizumab and assessed using Kaplan-Meier method.

Results A total of 225 patients received pembrolizumab combination therapy (Platinum+5-FU:176, Platinum+Taxane:49). Patient characteristics (age, gender, ECOG PS) were similar; differences were noted in oropharyngeal HPV+ cancer (50.0% vs 75.0%), and% treated at an academic center (6.3% vs 34.7%) between pembrolizumab with platinum + 5-FU and platinum + taxane, respectively (table 1). Carboplatin use was similar among pembrolizumab + platinum + 5-FU (84.8%) and platinum + taxane (87.8%) patients, where paclitaxel was the most used taxane (87.8%). Patients remained on treatment longer with pembrolizumab + platinum + taxane compared to pembrolizumab + platinum + 5-FU.

Conclusions Substituting 5-FU with a taxane resulted in a longer median rwToT of 2.4 months. These results support guideline recommendations for the pembrolizumab + platinum + taxane combination as another treatment option for 1L R/M HNSC patients.