Background US regulatory approvals of immunotherapy (IO) for upper gastrointestinal (GI) cancers have notably increased treatment (tx) options. It is unknown which txs are often used in real-world practice. IO rechallenge shows potential efficacy in some cancers, although data are limited for upper GI cancers. We assessed tx patterns and use of IO rechallenge in patients (pts) with upper GI cancers in the US.

Methods This retrospective study evaluated pts aged ≥18 years with locally advanced or metastatic esophageal cancer (EC), gastric cancer (GC), or gastroesophageal junction cancer (GEJC) diagnosed on or after January 1, 2011. This study used the electronic health record–derived, de-identified Flatiron Health database (data cutoff: May 31, 2021). Eligible pts received ≥1 line of tx for advanced/metastatic disease and had tx data (or record of death) within 90 days of diagnosis. IO rechallenge was defined as IO given in any line after a prior IO-based regimen.

Results In total, 7672 pts with EC (46%), GC (30%), and GEJC (24%) were included (93% in community practices). Median follow-up after first-line (1L) tx start date was 8.8 mo. Median age was 69 years. Most pts had an Eastern Cooperative Oncology Group performance status of ≤1 (59%) and metastases (58%). The most common 1L chemotherapy was carboplatin + paclitaxel (2133/7672 [28%]) and IO was pembrolizumab alone (73/7672 [1%]). The most common 1L chemotherapy + IO regimen was fluorouracil + leucovorin + oxaliplatin + nivolumab (28/7672 [0.4%]). At the time of analysis, 3399 of 7672 pts (44%) had any second-line (2L) tx. The most common 2L chemotherapy was FOLFOX (458/3399 [13%]) and IO was pembrolizumab alone (286/3399 [8%]). A higher proportion of pts received IO in the post–IO approval period (2019; table 1). Overall, 1028 of 7672 (13%) had IO during any point on tx, most frequently first received in 2L (1028/3399 [42%]); 75 of 1028 (7%) had IO rechallenge. The descriptive median time to rechallenge was 0.7 (IQR, 0.5-3.5) mo. Most pts (63/75 [84%]) had IO rechallenge in the immediate subsequent line of tx, with 2L to third line (3L) the most common setting (29/75 [39%]). Data from additional ongoing analyses will be presented.

Conclusions Analysis of tx patterns for upper GI cancers showed that few pts received 1L IO in the community setting. However, IO use and IO rechallenge are evolving in clinical practice. Further follow-up is warranted, including assessment of rechallenge effect on pt outcomes.