Novel therapies for gastroesophageal adenocarcinoma: A personalized treatment approach

Daniel Catenacci
University of Chicago, USA

Gastroesophageal adenocarcinoma (GEC) remains a challenging problem in oncology. In 2010, there were 21,000 new cases of GC and 10,570 deaths in the US. Additionally, there is an estimated 350% increase in esophageal/gastroesophageal junction (GEJ) adenocarcinoma in the US in the last decades. Taken together, GEC is the third most frequent cancer world-wide, accounting for more than 1 million deaths per year. Overall 5-year survival is poor (<20% for all patients) and tumors treated with curative resection have a high risk of recurrence despite neoadjuvant and/or adjuvant treatment. Patients with metastases have a median overall survival of 9-12 months. Clearly, more efficacious therapies are desperately needed to improve these outcomes.

Recently, novel targeted agents have resulted in improved outcomes in cancers, including GEC. Because HER2 is amplified and an oncogenic ‘driver’ in approximately 10-20% of GEC, trastuzumab antibody treatment was evaluated in a large randomized phase III trial (ToGA) in combination with chemotherapy. It was reported to have a modest improvement in overall median survival versus chemotherapy alone (13.8 vs 11.1 months, respectively) in a select HER2+ subgroup of GEC patients. Other receptor tyrosine kinases have also been implicated as putative oncogenic drivers and therefore therapeutic targets in GEC, including VEGFR2, EGFR, FGFR2, IGF1R, and the MET family of tyrosine kinases, MET and RON (MST1R). A personalized approach to the treatment of GEC is on the horizon. This approach will molecularly profile patients’ tumors and then select therapy from a menu of novel targeting inhibitors that inhibit the particular molecular drivers of an individual’s tumor.

Biography

Daniel Catenacci completed his MD at the age of 27 years from Wayne State University School of Medicine, Detroit Michigan. He completed an Internal Medicine Residency at UCLA Medical Center, Westwood, Los Angeles. He completed his Hematology/Oncology Fellowship at the University of Chicago Medical Center. As an adult medical oncologist, Dr. Catenacci, specializes in the treatment of gastrointestinal malignancies. An active basic and clinical researcher, Dr. Catenacci is involved in bench-to-bedside translational research. He conducts basic investigations on normal and cancer cell signaling with the ultimate goal of developing new inhibitory drugs for the treatment of gastroesophageal cancer.