Real world prevalence of biomarkers for treatment of advanced gastric cancer or gastroesophageal junction cancer in a cohort of Colombian patients.

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Background: Gastric cancer (GC) is the leading cause of cancer-related deaths in Colombia, GLOBOCAN estimated 6.451 deaths in 2022. Development of immune checkpoint inhibitors and HER2 target therapy with chemotherapy had improved overall survival in advanced setting, but we do not have data about the prevalence of biomarkers used for selection of these patients in Colombia or Latin-America. Our aim is to describe the prevalence of biomarkers used currently for selection of treatment in a real-world multicenter cohort of advanced gastric and gastro-esophageal junction (GEJ) cancer. **Methods:** We did a retrospective observational multicenter study of patients with advanced GC/GEJ cancer treated at three reference cancer centers in Bogota, Colombia between January 1, 2023 and July 31, 2023. We reviewed medical history and pathology reports looking for the prevalence of biomarkers used for selection of first line systemic therapy. Ventana 4B5 for HER2 IHQ evaluation and Dako 22C3 for PDL1 expression by CPS were used. MMR proteins were evaluated by IHQ nuclear expression. **Results:** 101 patients with advanced GC/GEJ were included. The median age was 61 years (range 18-83), 53,5% of patients were men, 92.1% were gastric cancer and 87,1% were de novo stage IV. Signet ring cells were found in 40%, peritoneal carcinomatosis was documented in 59% and 75,2% were distal tumors (no cardias or GEJ involvement). PDL1 positivity, defined as CPS ≥1 was found in 30.6%, using CPS ≥ 5 cutoff just 22.7% of them were positive. HER2 positivity and MMR deficiency were found in the same proportion of patients 5%. Among young patients (< 50 years) 80% had diffuse histology, 30% were CPS ≥5. HER2 status and PDL1 testing was unknown in 21% and 29% respectively. **Conclusions:** Among these real-world patients, both HER2 and PDL1 positivity was lower than reported in other regions. Higher incidence of distal tumors, signet ring cells and diffuse histology could explain this difference. Correlation of PDL1 positivity between 22C3 and 28.8 was unknown in our population. Our study remarks the high medical need for investigation of biomarkers and developing of prospective studies for correlation and other targets like Claudins and FGFR2b. Research Sponsor: None.

Demographics and disease characteristics.

Characteristic	All Patients	101
Age — yr, median (range)	61 (18-83)	
Male — no. (%)	54	53,5
Primary site:	96	92,1
Gastric, — no. (%)	5	5
GEJ, — no. (%)		
Stage IV novo — no. (%)	88	87,1
Histological	41	40,6
Diffuse, — no. (%)	38	37,6
Intestinal, — no. (%)	6	5,9
Mixed, — no. (%)		
Location	76	75,2
Distal, — no. (%)	25	24,8
No distal, — no. (%)		
dMMR — no. (%)	5	5
HER2, — no. (%)	5	5
Positive, — no. (%)	74	73,2
Negative, — no. (%)	22	21,8
Unknown, — no. (%)		
PD L1 ≥1, — no. (%)	31	30,6
PD L1 ≥5, — no. (%)	23	22,7
Unknown, — no. (%)	30	29,7