

# Epidemiology and Treatment Patterns of Colombian Patients with Metastatic Colorectal

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## BACKGROUND

Colorectal cancer (CRC) is the third most common cancer in adults. In 2020, the age-standardized incidence rate was 19.5 cases per 100000 inhabitants worldwide<sup>1</sup>.

Specifically in Colombia, colorectal cancer has an age-standardized incidence rate of 16.9 cases per 100.000 according to Globocan estimation in 2020<sup>2</sup>.

Systematic chemotherapy is the primary treatment of metastatic colorectal cancer. Several target treatments are available which depend on molecular mutations, site (left or right colon), comorbidities, and fitness status. Anti-VEGF, anti-EGFR, anti BRAFV600E, immunotherapy, regorafenib and TAS 102 have improved clinical results in terms of progression free survival and overall survival<sup>3</sup>.

## OBJECTIVE

- To summarize the epidemiological characteristics and treatment patterns of Colombian patients with metastatic CRC between 2015 and 2022

## METHODS

- An observational, secondary data collection, retrospective longitudinal study was conducted.
- The patients with metastatic CRC were identified using the Internacional Code Diseases 10th version (ICD-10) Rectum and colon cancer C18 (colon cancer), C19 (cancer in the colorectal junction) and C20 (rectal cancer) and metastatic [C77 (Secondary and unspecified malignant neoplasm of lymph nodes), C78 (Secondary malignant neoplasm of respiratory and digestive organs), C79 (Secondary malignant neoplasm of other and unspecified sites)].
- The index date was defined as the time when the patient was diagnosed between 2015 to 2022.
- The patients were followed up between one to five years, until death, loss to follow-up, or end of the study, whatever happened first.
- The source of the data was electronic health reports (EHR) of the Health Management Organization (HMO) which include medical records, images, laboratories, claim databases, and other relevant data for the purposes of this study.
- The main endpoint was death. It was collected from the medical records or any register that allows to determine the date of death.
- Descriptive statistics were produced for all variables. Quantitative variables were expressed as mean and standard deviation (S.D.) if they followed a normal distribution and as the median and IQR if they did not. Categorical variables were expressed as absolute values and percentages. Histograms were produced for both continuous and categorical variables while boxplots were produced for continuous variables.
- Demographic and clinical characteristics and treatment at the baseline were abstracted.

## RESULTS

- Four hundred twenty-nine patients were included in the study, 52.7% of them female, mean age at 61.0 (S.D. 12.4).
- Fifty percent of patients were diagnosed with CRC in IV stage. Approximately 85% of patients had only 1 metastasis, being the liver (57.1%), lung (25.2%) and peritoneum (11%) the main metastatic sites (Table 1).
- At histological level, 78.1% were adenocarcinoma. In the patients with information (53%) with localization of first tumor was mainly rectum (56.8%), sigmoid colon (21.6%), and ascending colon (11.0%), excluding the patients without information.
- The biomarkers were isolated or evaluated in the 37.1% of the patients. KRAS and RAS were the most frequent. BRAF was found only in 9 patients. (Table 1)

## RESULTS (cont)

- The prevalence and incidence of metastatic CRC tends to increase every year with steady trend after 2020 (Figure 1).
- In 2022, prevalence was 4.9 cases (Confidence interval (CI) 95% 4.2–5.6) per 100 000 persons. It was slightly more frequent in men than women and persons between 65–74 years.
- In terms of incidence in the same year, it was 2.7 cases (2.2– 3.2) per 100 000 persons being more frequent in those older than 65 years old.
- The treatments in first line were 39.0% chemotherapy, 23% chemotherapy in combination with bevacizumab and 31.0% of patients were treated with palliative treatment as first option. In other lines, chemotherapy alone decreased while the combination of chemotherapy plus bevacizumab increased. Chemotherapy plus cetuximab was used marginally with some increase in second and third lines (Figure 2).

Table 1. Demographic and clinical characteristics of Colombian patients with metastatic colorectal cancer.

	Immunotherapy (n= 250)	Chemotherapy (n=369)	Radiotherapy (n=4)	Total (n=429)
Age mean (sd)	59.9 (12.3)	60.5 (12.1)	49.8 (9.5)	61.0 (12.4)
Female (%)	134 (53.6)	198 (53.7)	3 (75)	226 (52.7)
Charlson score mean (sd)	10.5 (1.9)	10.5 (1.9)	9 (0.8)	10.6 (2.0)
Stage at diagnosis of colorectal cancer				
I	6 (2.4)	9 (2.4)	1 (25)	12 (2.8)
II	12 (4.8)	21 (5.7)	0 (0)	24 (5.6)
III	34 (13.6)	52 (14.1)	0 (0)	57 (13.3)
IV	138 (55.2)	189 (51.2)	1 (25)	216 (50.4)
No data	60 (44)	98 (26.6)	2 (50)	120 (28.0)
Number of mestastasis				
0	0 (0)	0 (0)	0 (0)	0 (0)
1	208 (83.2)	311 (84.3)	3 (75)	366 (85.3)
2	36 (14.4)	50 (13.6)	1 (25)	55 (12.8)
3	6 (2.4)	8 (2.2)	0 (0)	8 (1.9)
Localization of metastasis				
Liver	163 (63.2)	216 (58.5)	2 (50)	245 (57.1)
Lung	63 (25.2)	95 (25.8)	2 (50)	108 (25.2)
Peritoneum	21 (8.4)	42 (11.4)	0 (0)	49 (11.4)
Brain	7 (2.8)	12 (3.3)	0 (0)	14 (3.3)
Bone	8 (3.2)	9 (2.4)	0 (0)	12 (2.8)
Kidney	4 (1.6)	4 (1.1)	0 (0)	4 (0.9)
Other	29 (11.6)	54 (14.6)	1 (25)	64 (14.9)
Patology				
Adenocarcinoma	201 (80.0)	292 (79.1)	4 (100)	335 (78.1)
Squamous	4 (1.6)	10 (2.7)	0 (0)	11 (2.6)
No data	45 (18)	67 (18.2)	0 (0)	83 (19.4)
Biomarkers				
KRAS	59	75	1	77
HER2	0	0	0	4
BRAF	6	8	1	9
RAS	14	14	0	14
Unknown	135	215	2	270

## RESULTS (cont)

Figure 1. Frequency of metastatic colorectal cancer in Colombia from 2015 to 2022. A. Prevalence of metastatic colorectal cancer, B. Incidence of metastatic colorectal cancer.

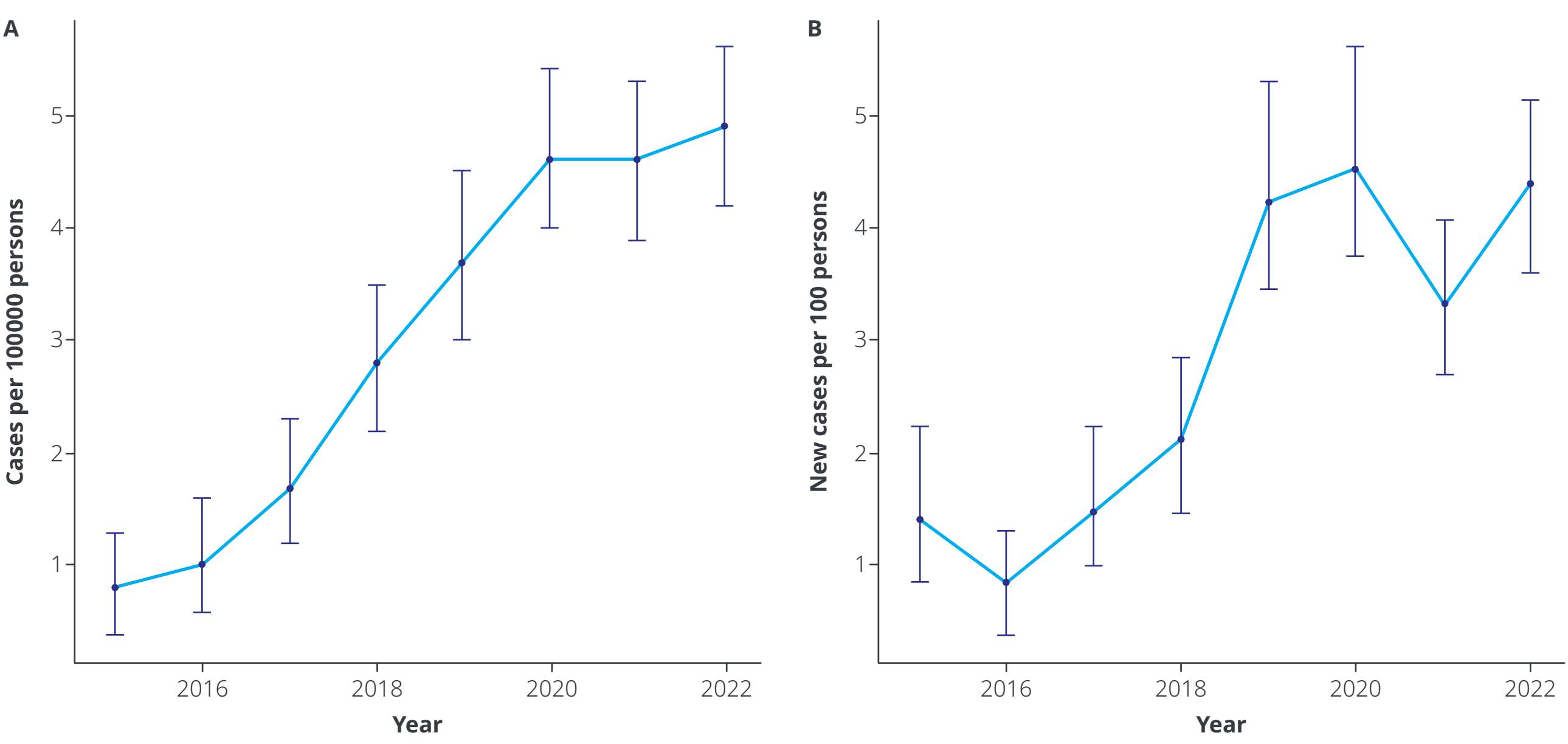
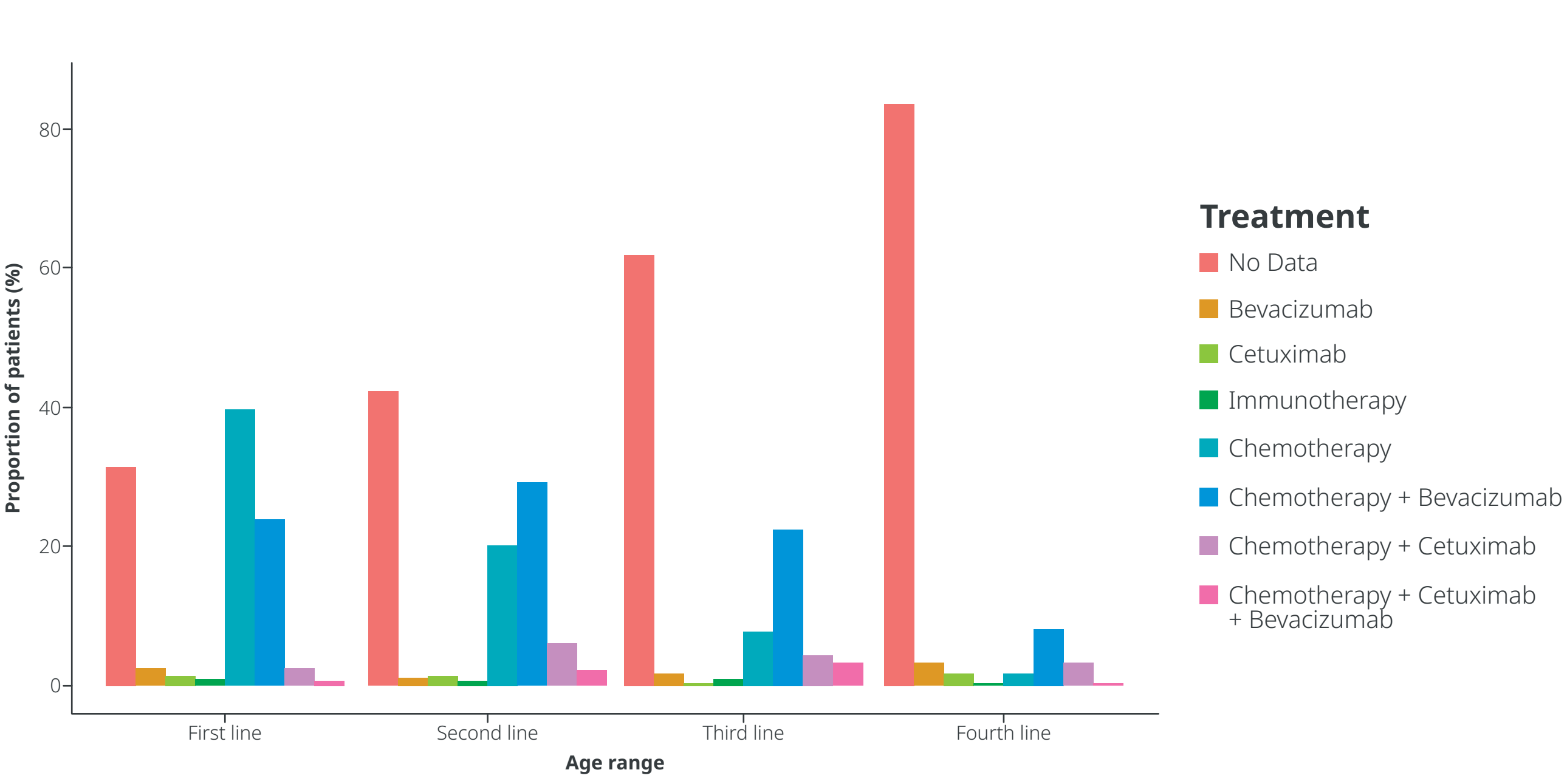


Figure 2. Treatment patterns of Colombian patients diagnosed by metastatic colorectal cancer



## CONCLUSION

- Metastatic CRC has been increasing in frequency in the study population.
- The main treatment used for metastatic CRC is based on chemotherapy during the different lines during the years of study.

## REFERENCE

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