

Supplementary Materials

Table S1. Region-specific restricted mean survival time (RMST) and median overall survival (OS) of metastatic colorectal cancer cohort members on first-line treatment with biologic-based (bevacizumab or cetuximab; Bio + CT) or standard chemotherapy (CT) alone. FABIO project, Italy, 2010–2016.

Region	RMST (Months)			Median OS (Months)	
	Bio + CT	CT	<i>p</i> -value	Bio + CT	CT
Lombardy	31.8	32.9	0.392	20.5	16.8
Lazio	31.1	31.2	0.956	25.4	23.0
Marche	16.9	20.9	0.479	10.9	17.6
Abruzzo	26.7	31.1	0.319	18.8	25.4
Sardinia	20.8	20.0	0.622	21.0	22.7
Sicily	26.8	26.1	0.549	20.5	18.9

Table S2. ICD-9 CM and ATC codes of diseases/conditions and medicaments drugs used for the current study.

Disease/Condition	ICD9-CM Codes
Colorectal cancer	153, 154.0, 154.1, 154.8
Any malignant cancer	140–208
Chemotherapy	V58.1, 99.25, 99.28, 00.10
Distant metastasis	197, 198, 199
Colorectal surgery	32.3, 34.59, 42.86, 44.39, 45.41, 45.43, 45.49, 45.51, 45.61, 45.62, 45.71–45.76, 45.79, 45.8, 45.90–45.94, 46.01–46.04, 46.10, 46.11, 46.13, 46.14, 46.20–46.23, 46.40, 46.43, 46.51, 46.52, 46.76, 46.79, 46.85, 46.93, 46.94, 48.33, 48.35, 48.49, 48.5, 48.62, 48.63, 48.69, 48.79, 50.22, 50.29, 50.3, 54.12, 54.4, 54.51, 54.59, 54.61, 68.8
Drug	ATC codes
Bevacizumab	L01XC07
Cetuximab	L01XC06
Any oncologic drug	L01

Region	Overall	Lombardy	Lazio	Marche	Abruzzo	Sardinia	Sicily
Recruitment period		2010–2014	2011–2014	2012–2014	2011–2014	2015–2016	2012–2015
Patients with colorectal cancer (CRC) diagnosis during the recruitment period (index date)							
	108,858	57,120	20,205	6047	5675	3458	16,353
Adult patients with a new diagnosis of CRC during the recruitment period (incident cases)							
	68,767	30,530	15,010	4118	4068	2273	12,768
Patients with diagnosis of distant metastasis within 180 days from the index date							
	14,390	6181	3183	834	859	604	2729
Patients treated within 6 months from metastasis diagnosis with either Bio+CT or CT alone							
	8247	3187	2045	550	612	349	1504
Final matched cohort							
Biological arm	1896	949	495	9	30	60	353
Standard therapy alone arm	5678	1898	1972	36	120	240	1412

Figure S1. Flow-chart of inclusion and exclusion criteria according with the Italian region where patients were diagnosed. FABIO project, Italy, 2010–2016.

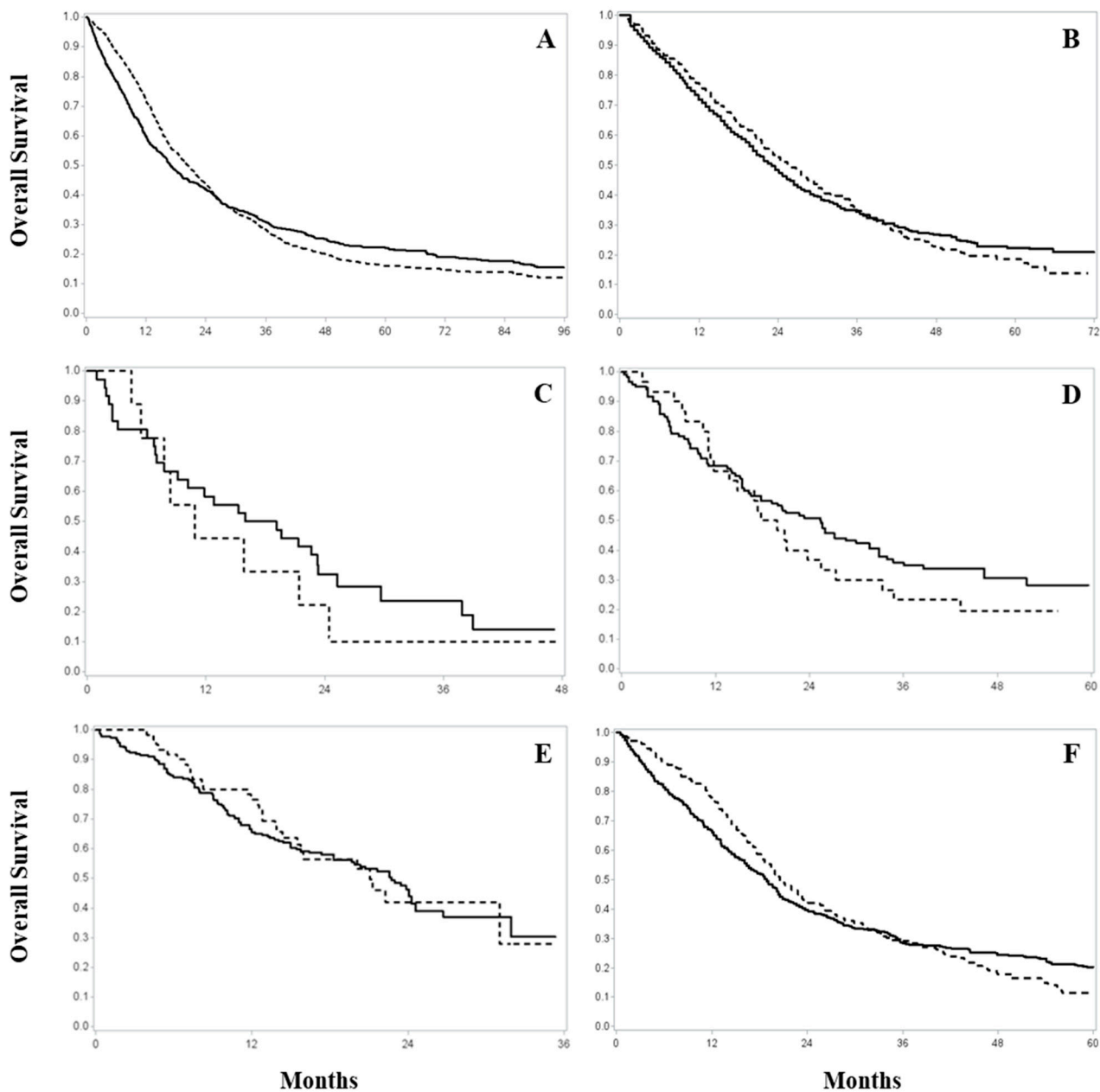


Figure S2. Kaplan-Meier overall survival curves of metastatic colorectal cancer cohort members on first-line treatment with biologic-based (bevacizumab or cetuximab, dotted line) or standard chemotherapy (continuous line) alone in Lombardy (A), Lazio (B), Marche (C), Abruzzo (D), Sardinia (E) and Sicily (F) Region. FABIO project, Italy, 2010–2016.

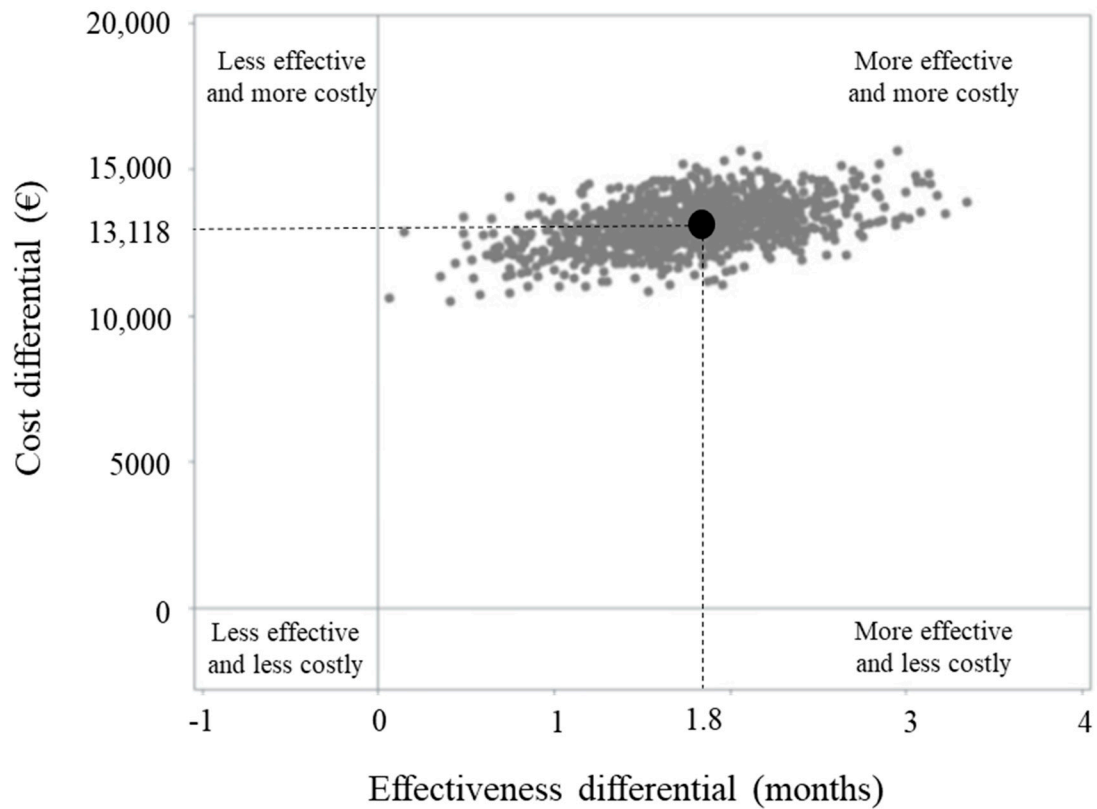


Figure S3. ICER scatterplot measured during the first two years after starting treatment comparing metastatic colorectal cancer cohort members on first-line treatment with biologic-based (bevacizumab or cetuximab, Bio+CT) or standard chemotherapy (CT) alone. FABIO project, Lombardy Region, 2010–2014.