

## 494P - Early-onset colorectal cancer: 10-year cases documented in a comprehensive cancer centre illustrate the importance of a growing oncological problem

José Carlos Ruffinelli<sup>1</sup>, Elisabet Guinó<sup>2</sup>, Núria Dueñas<sup>3</sup>, Matilde Navarro<sup>3</sup>, Victor Moreno<sup>2</sup>, Joan Brunet<sup>4</sup>, Ramon Salazar<sup>1</sup>, Cristina Santos<sup>1</sup>

1. Medical Oncology Department. Institut Català d'Oncologia-IDIBELL, L'Hospitalet de Llobregat, Spain ; 2. Oncology Data Analysis Programme. Institut Català d'Oncologia-IDIBELL, L'Hospitalet de Llobregat, Spain

3. Hereditary Cancer Programme. Institut Català d'Oncologia-IDIBELL, L'Hospitalet de Llobregat, Spain ; 4. Hereditary Cancer Programme. Institut Català d'Oncologia-IDIBGI, Girona, Spain

### Background

Although colorectal cancer (CRC) prevalence increases with age, in the last two decades a considerable rise in the incidence of early-onset (EO) disease has been observed, defined as that which occurs in patients (pts) younger than 50 years old. With most cases being sporadic, this clearly represents a serious public health concern.

### Methods

A retrospective study was performed, assessing the characteristics of an EO CRC pts cohort and correlating them with older pts in the same period. Demographic and clinicopathological data were prospectively collected and its impact in disease outcome was determined. Survival analysis was estimated by Cox proportional-hazards model.

### Results

From January 2010 to January 2020, 210 EO CRC pts were identified, representing 9.6% of a total cohort of 2193 CRC pts in that period. Median age at EO diagnosis was 44.1 years old (yo) (range 16-50) with 60.9% of pts between 45 and 50 yo.

**Financial disclosures** JC Ruffinelli. Travel and Expenses: Roche, Merck and Takeda. Educational lectures: Pierre Fabre, BMS.

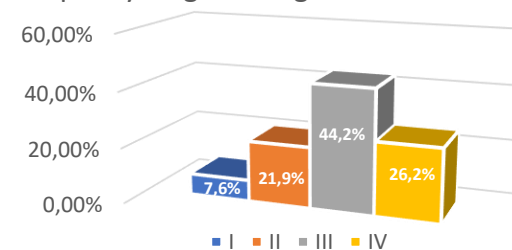
### Results

One hundred twenty-six pts (60%) were male, and most presented with distal colon (48, 22.8%) and rectum (120, 57.1%) tumours.

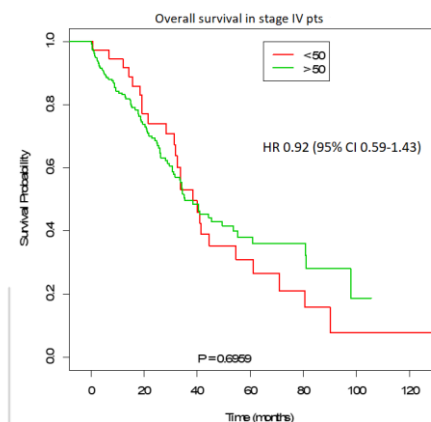
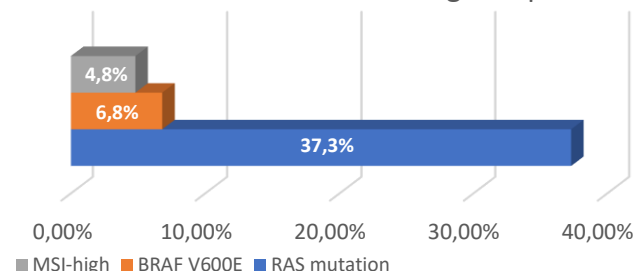
In 152 pts (72.3%) genetic counselling was conducted, with 15 (9.8%) having a hereditary cancer-predisposing syndrome, mainly Lynch syndrome and familial adenomatous polyposis.

When compared with older pts cohort, we found significantly higher proportion of EO pts diagnosed in stage IV, with a non-significant better median overall survival (OS) in this subgroup, as shown in table. Nevertheless, EO pts have a worse OS at 60-months [75% vs 82%; HR 1.37 (95% CI 1-1.87), p=0.061].

EO pts by stage at diagnosis



Molecular features in advanced stage EO pts



### Results

	EO pts (n=210)	Older pts (n= 1983)
Median age at diagnosis (yo)	44,1 (16-50)	68,3 (51-91)
<b>Gender (%)</b>		
Male	60,2	65,8
Female	39,8	34,2
<b>Primary tumour location (%)</b>		
Right colon	15,2	19,1
Left colon	23,7	24,9
Rectum	61,1	56
<b>Stage at diagnosis (%)</b>		
I	8,3	16,4
II	21,1	25,2
III	44,5	45,9
IV	26,2	12,6
Median OS stage IV (months)	35,3	38,3
HR 0.92 (95% CI 0.59-1.43), p=0.698		

### Conclusions

Our results resemble already known epidemiological and clinical data from other EO CRC series and highlight some challenges in this setting, such as the great amount of pts diagnosed in advanced stage and lower overall survival than their older counterparts. They also suggest that an improvement strategy could be to advance the start of screening programmes in average-risk population.

**Contact email:** [jruffinelli@iconcologia.net](mailto:jruffinelli@iconcologia.net)