



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

both patient factors, such as age and frailty, and tumour factors, such as staging information, was used. A prototype web interface to view these data was built.

Results: We present a prototype web-based tool to predict the benefits of adjuvant chemotherapy, with appropriate confidence intervals, based on a large dataset of real-world data.

Conclusions: Quantitative, user-friendly tools such as PREDICT are invaluable for empowering patients to make informed decisions regarding adjuvant treatment. Here we use real-world data at unprecedented scale to provide a proof-of-concept tool for colorectal cancer. Following further validation, this could be transformative for adjuvant treatment decision making.

Legal entity responsible for the study: The authors.

Funding: Has not received any funding.

Disclosure: All authors have declared no conflicts of interest.

<https://doi.org/10.1016/j.annonc.2022.07.469>

332P Impact of the COVID-19 pandemic in the early-onset colorectal cancer (EOCRC)

I. Baraibar Argota¹, A. Garcia Rodriguez¹, F. Salvà Ballabrera¹, F.J. Ros Montana¹, N. Saoudi Gonzalez¹, R. Comas¹, G. Castillo¹, M. Sanchis¹, J. Hernando Cubero¹, A. Garcia-Alvarez¹, J. Capdevila Castillon¹, M. Martí², S. Landolfi², E. Espin², P.G. Nuciforo⁴, A. Vivancos⁵, J. Taberner¹, M.E. Elez Fernandez¹

¹Oncology, Vall d'Hebron University Hospital, Barcelona, Spain; ²General Surgery, Vall d'Hebron University Hospital, Barcelona, Spain; ³Pathology, Vall d'Hebron University Hospital, Barcelona, Spain; ⁴Molecular Oncology Dept., Vall d'Hebron Institute of Oncology (VHIO)-Cellex Center, Barcelona, Spain; ⁵Genomics Department, Vall d'Hebron University Hospital, Barcelona, Spain

Background: The COVID19 pandemic has affected the spectrum of cancer care worldwide. EOCRC is defined as diagnosis below the age of 50. Patients (pts) with EOCRC face multiple challenges, while the COVID19 pandemic caused disruptions in cancer diagnosis and care delivery. Our study aims to identify the clinicopathological features (CF) and outcomes of pts with EOCRC in our Centre during the first wave (FW) of the pandemic compared to the same period in 2019 and 2021.

Methods: Consecutive pts with EOCRC visited for the first time at Vall d'Hebron University Hospital in Spain from the 1 March-30 June 2019, 2020 and 2021 were included in the analysis. Data of CF and treatment were collected from medical records. Data were summarized using descriptive statistics. Quantitative and categorical variables were compared using Wilcoxon rank-sum test and Fisher's exact test.

Results: 136 pts with EOCRC were visited for the first time between 2019 and 2021, of which 53% met the inclusion criteria (2019: 19%, 2020: 40%, 2021: 41%). Table summarizes CF and outcomes. Of note, indication of systemic therapy in the adjuvant or metastatic setting was not altered during the FW. No statistical differences (SD) were found when comparing stage at first visit in 2019, 2020 and 2021 (p=0.7). Of 29%, 38% and 40% of pts starting treatment for the first time in our Centre in the given period in 2019, 2020 and 2021 respectively, median (M) days to treatment initiation (TI) was 18.5, 20 and 23. No SD were found when comparing frequency of pts starting treatment (p=0.6) and days to TI (p=0.4) in 2019, 2020 and 2021. 4 (29%), 7 (24%), and 7 (23%) pts were included in clinical trials (CT) in 2019, 2020 and 2021, respectively. No SD were found (p=0.70).

	2019	2020	2021
Age, M (range)	41 (27-49)	43 (29-49)	44.5 (30-49)
Female, n (%)	7 (50%)	14 (48%)	15 (50%)
Stage at diagnosis (localized/metastatic), %	36%/64%	28%/62%	43%/57%
Stage at visit in our Centre (localized/metastatic), %	22%/78%	11%/89%	17%/83%
Site of primary tumor (right/left/rectum), %	28%/44%/28%	14%/69%/17%	37%/40%/23%
KRAS/NRAS/BRAF/Unknown, %	64%/7%/7%/7%	45%/0%/4%/14%	34%/4%/26%
MSI, n (%)	1, 7%	2, 7%	2, 7%
Patients starting treatment, n (%)	4 (28%)	11 (38%)	12 (40%)
Days to treatment initiation, M (range)	18.5 (17-23)	20 (7-76)	23 (2-69)
Inclusion in clinical trials, n (%)	4 (28%)	7 (24%)	7 (23%)

Conclusions: Our study shows a progressive increase in EOCRC, despite COVID-19 pandemic. Fortunately, no SD in stage of the disease, treatment indication and TI were found during the FW of the pandemic compared to the same period in 2019 and 2021. Rate of inclusion in CT in this subpopulation with unmet clinical needs is relatively high.

Legal entity responsible for the study: The authors.

Funding: Has not received any funding.

Disclosure: I. Baraibar Argota: Financial Interests, Personal, Invited Speaker: Sanofi. F. Salvà Ballabrera: Financial Interests, Personal, Advisory Board: Amgen; Financial Interests, Personal, Invited Speaker: Sanofi, Merck, Servier, Roche. F.J. Ros Montana: Financial Interests, Institutional, Invited Speaker: Sanofi; Other, Travel and accommodation expenses: Amgen, Pierre-Fabre, Merck, Sanofi. J. Hernando Cubero: Financial Interests, Personal, Expert Testimony: Eisai, Ipsen, Novartis, AAA, Angelini, Pfizer, Roche. J. Capdevila Castillon: Financial Interests, Personal, Invited Speaker: Novartis, Novartis, Pfizer, Ipsen, Exelixis, Bayer, Eisai, Advanced Accelerator Applications, Amgen, Sanofi, Lilly, Merck Serono; Financial Interests, Personal, Advisory Board: Pfizer, Ipsen, Exelixis, Bayer, Eisai, Advanced Accelerator Applications, Amgen, Sanofi, Lilly, Merck Serono; Financial Interests, Research Grant: Novartis, Pfizer, AstraZeneca, Advanced Accelerator Applications, Eisai, Bayer. P.G. Nuciforo: Financial Interests, Personal, Invited Speaker: Novartis; Financial Interests, Personal, Advisory Board: MSD Oncology, Bayer; Financial Interests, Personal, Other, Consultant: Targos Molecular Pathology GmbH. A. Vivancos: Financial Interests, Personal, Advisory Board: Roche, Bristol-Myers Squibb, Guardant Health, Bayer, Incyte; Financial Interests, Personal, Stocks/Shares: Reveal Genomics; Financial Interests, Institutional, Research Grant, Preclinical Research Grant: Bristol-Myers Squibb, Roche, Incyte. J. Taberner: Financial Interests, Personal, Advisory Board, scientific consultancy role: Orion Biotechnology, Array Biopharma, AstraZeneca, Bayer, Boehringer Ingelheim, Chugai, Daichi Sankyo, F. Hoffmann-La Roche Ltd, Genentech Inc., HaliDX SAS, Ikona Oncology, IQVIA, Lilly, Menarini, Merck Serono, Merus, MSD, Mirati, Neophore, Novartis, Peptomyces, Pfizer, Pierre Fabre, Samsung Bioepis, Sanofi, Seattle Genetics, Servier, Taiho, Tessa Therapeutics, TheraMyc, Hutchinson MediPharma International, Avinity, Scandion Oncology, Ona Therapeutics, Sotio Biotech, Inspira Inc; Financial Interests, Personal, Invited Speaker, educational collaboration: Medscape Education, Physicians Education Resource (PER), PeerView Institute for Medical Education, Imedex; Financial Interests, Personal, Invited Speaker, educational collaboration: MIJ Life Sciences; Financial Interests, Institutional, Research Grant, ACRCELERATE: Colorectal Cancer Stratified: Fundación Científica de la Asociación Española Contra el Cáncer; Financial Interests, Institutional, Research Grant, OPTIMISTIC: Opportunity to Investigate the Microbiome's Impact on Science and Treatment in Colorectal Cancer: Cancer Research UK; Financial Interests, Institutional, Funding, Clinical Trials & Research: Amgen Inc, Array Biopharma Inc, AstraZeneca Pharmaceuticals LP, Bristol-Myers Squibb International Corporation, Celgene International SARL, Debiopharm International SA, F. Hoffmann-La Roche Ltd, Genentech Inc, Janssen-Cilag International NV, Merck Health KGAA, Merck, Sharp & Dohme de España, SA, Novartis Farmacéutica SA, PharmaMar SA, Sanofi-Aventis Recherche & Développement, Servier, Taiho Pharma USA, Inc, BeiGene, Boehringer Ingelheim, HaliDX SAS, Hutchinson MediPharma, MedImmune, Menarini, Merus N V, Pfizer, Mirati; Non-Financial Interests, Invited Speaker, Board of Directors: Cancer Core Europe, Spanish Association Against Cancer -AECC; Non-Financial Interests, Invited Speaker, General Assembly: Horizon Europe Cancer Mission; Non-Financial Interests, Leadership Role, External Scientific Committee: Institute for Health Research INCLIVA - Clinical Hospital of Valencia, IDISNA - Universidad de Navarra; Non-Financial Interests, Leadership Role, Scientific Advisory Board: Spanish National Cancer Research Centre (CNIO); Non-Financial Interests, Advisory Role, International Scientific Evaluation Committee: Bosch Health Campus (BHC); Non-Financial Interests, Advisory Role, Review Board: National Decade Against Cancer (NCT) - German Consortium for Translational Cancer Research (DKTK); Non-Financial Interests, Advisory Role, Scientific Advisory Board: Karolinska Comprehensive Cancer Centre; Non-Financial Interests, Advisory Role, International Review Committee (IRC): Oncode Institute; Non-Financial Interests, Advisory Role, Scientific Advisory Board (SAB): Oslo University Hospital Comprehensive Cancer Centre (OUH CCC); Non-Financial Interests, Leadership Role, Governance Advisory Committee: European Organization for Research and Treatment of Cancer - EORTC; Non-Financial Interests, Leadership Role, Vice Chairman: World Innovative Networking (WIN) Consortium in Personalized Cancer Medicine; Non-Financial Interests, Other, Coordinating PI & Steering Committee Member. Clinical Trials & Research: Array Biopharma Inc., AstraZeneca Pharmaceutical LP, Boehringer Ingelheim, MedImmune, Menarini, Merck Healthcare KGAA, Merck, Sharp & Dohme de España SA, Pfizer, Servier; Non-Financial Interests, Principal Investigator, Clinical Trials & Research: Array Biopharma Inc., AstraZeneca Pharmaceuticals LP, BeiGene, Boehringer Ingelheim, Bristol-Myers Squibb International Corporation, Celgene International SARL, Debiopharm International SA, F. Hoffmann-La Roche Ltd, Genentech Inc., HaliDX SAS, Hutchinson MediPharma, Janssen-Cilag International NV, Merus NV, Taiho Pharma USA Inc; Non-Financial Interests, Other, Coordinating PI. Clinical Trials & Research: Mirati; Non-Financial Interests, Member: AACR, ASCO, EACR, EORTC, SEOM; Other, Other, President: Oncology Master Plan - Catalonia Department of Health; Other, Other, Advisory Committee: Advisory Committee on Pharmaceutical Provision Financing under the Spanish National Health System. M.E. Elez Fernandez: Financial Interests, Personal, Advisory Board: Hoffman La - Roche, Bristol-Myers Squibb, Servier, Amgen, Merck Serono, Array Biopharma, Sanofi, Bayer; Financial Interests, Institutional, Research Grant: Hoffman La-Roche, Sanofi Aventis, Amgen, Merck Serono, MSD, Boehringer Ingelheim, AbbVie, Pierre-Fabre, Novartis, Bristol-Myers Squibb, GlaxoSmithKline, MedImmune, Array Pharmaceuticals, AstraZeneca. All other authors have declared no conflicts of interest.

<https://doi.org/10.1016/j.annonc.2022.07.470>

333P Pharmaceutical agents as potential drivers in development of early-onset colorectal cancer (EOCRC)

I. Ben-Aharon¹, R. Rotem², A. Cercek³, E. Half⁴, T.G. Goshen-Lago¹, G. Chodick², D.P. Kelsen¹

¹Division of Oncology, Rambam Health Care Campus, Haifa, Israel; ²KSM Research and Innovation Center, Maccabi Healthcare Services, Tel Aviv, Israel; ³Medicine Department, Memorial Sloan Kettering Evelyn H. Lauder Breast Center, New York, NY, USA; ⁴Gastroenterology Institute, Rambam Health Care Campus, Haifa, Israel

Background: The incidence of EOCRC rose abruptly starting in the mid-1990s. Inherited genes and inflammatory bowel disease (IBD), known risk factors, are not the causes of most EOCRC. We hypothesized that the increasing incidence may be an off-target effect of a medication (meds) not previously widely used in a genetically susceptible subgroup of young adults. To identify potential pharmaceutical agents as risk factors in EOCRC, we employed novel machine learning methods using a large Israeli electronic medical records (EMR) database, with digitized pharmacy records.