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SUPPORTIVE CARE AND SURVIVORSHIP

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The psychological impact of the COVID-19 pandemic on patients with early breast cancer

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Background: Direct impact of the COVID-19 pandemic, in addition to the measures adopted to control its spread, may cause a significant emotional burden, especially in patients with cancer. This study aims to understand the psychological impact of COVID-19 pandemic on patients with early breast cancer.

Methods: The BOUNCE study, assessing, among others, depression and anxiety symptoms, has a longitudinal design and includes early breast cancer patients across 3 European countries and Israel. The study was ongoing when the COVID-pandemic started in Europe and data collection has continued, allowing for measurements of associations between symptom severity in three time points and COVID-related parameters (CRP) retrieved from a publicly available database (Our World in Data). Descriptive statistics and series of multilevel mixed-effects linear regression models were performed to assess variation in individual level symptom severity as a function of country-level COVID-19 pandemic parameters across time.

Results: Among 724 participants included in the analyses, 307 were exposed to the pandemic. For depressive symptoms, anxiety symptoms and general psychological distress, we did not find statistically significant associations with weekly COVID-19 incidence, weekly COVID-19 death rate or weekly stringency level of government-imposed COVID-19 containment measures. For depressive symptoms only, we found statistically significant negative interactions with time for COVID-19 incidence (β = -0.002, SE=0.001, p=0.04) and containment measures (β = -0.001, SE=0.001, p=0.02), that we are currently exploring in further analyses.

Conclusions: In women with early breast cancer across 3 European countries and Israel, country-wide CRPs did not seem to have a significant psychological impact, namely regarding to symptoms of depression and anxiety. Given the continuing nature of the pandemic, we will continue the data collection, including more time points of assessment to evaluate possible lagged effects.

Legal entity responsible for the study: Albino Oliveira-Maia.

Funding: This project has received funding from the European Union's Horizon 2020 research and innovationprogramme under grant agreement No 777167.

Disclosure: F. Cardoso: Advisory/Consultancy, The funder had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing, or in the decision to publish the results: Amgen; Advisory/Consultancy, The funder had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing, or in the decision to publish the results: Astellas/Medivation; Advisory/Consultancy, The funder had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing, or in the decision to publish the results: AstraZeneca; Advisory/Consultancy, The funder had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing, or in the decision to publish the results: Celgene; Advisory/Consultancy, The funder had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing, or in the decision to publish the results: Daiichi Sankyo; Advisory/Consultancy, The funder had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing, or in the decision to publish the results: Eisai; Advisory/Consultancy. The funder had no role in the design of the study: in the collection, analyses, or interpretation of data; in the writing, or in the decision to publish the results: GE oncology; Advisory/Consultancy, The funder had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing, or in the decision to publish the results: Genentech; Advisory/Consultancy, The funder had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing, or in the decision to publish the results.: GlaxoSmithKline; Advisory/Consultancy. The funder had no role in the design of the study: in the collection, analyses, or interpretation of data; in the writing, or in the decision to publish the results.: Macrogenics; Advisory/Consultancy, The funder had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing, or in the decision to publish the results: Medscape; Advisory/Consultancy, The funder had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing, or in the decision to publish the results: Merck-Sharp; Advisory/Consultancy, The funder had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing, or in the decision to publish the results: Merus BV; Advisory/Consultancy. The funder had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing, or in the decision to publish the results: Mylan; Advisory/ Consultancy, The funder had no role in the design of the study; in the collection, analyses, or

interpretation of data; in the writing, or in the decision to publish the results: Mundipharma; Advisory/Consultancy, The funder had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing, or in the decision to publish the results: Novartis; Advisory/Consultancy, The funder had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing, or in the decision to publish the results: Pfizer; Advisory/Consultancy, The funder had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing, or in the decision to publish the results: Pfizer; Advisory/Consultancy, The funder had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing, or in the decision to publish the results: prIME Oncology, Advisory/Consultancy, The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing, or in the decision to publish the results: Prime Oncology, advisory/Consultancy, The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing, or in the decision to publish the results: Roche, Samsung Bioepis, Sanofi, Seagen, Teva. A. Oliveira-Maia: Research grant/Funding (self), A grant for norming and validation of cognitive tests: Schuhfried GmBH; Leadership role, National coordinator for Portugal of a Non-interventional Study (EDMS-ERI-143085581, 4.0) to characterize a Treatment-Resistant Depression Cohort in Europe: Janssen-Cilag Ltd.; Research grant/Funding (self), A trial of psilocybin therapy for treatment-resistant depression: Compass Pathways, Ltd. All other authors have declared no conflicts of interest.

https://doi.org/10.1016/j.annonc.2021.03.146

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Breast cancer in young women (BCYW): Different entity or different needs?

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Background: Breast cancer is the most common cause of cancer-related deaths in women under 45 years. It has been reported as a more aggressive disease, with worse survival and higher rate of late toxicities in long term survivors, but this population is underrepresented in studies. We designed a study with Real World Data (RWD) focusing on the BCYW population to fill a knowledge gap.

Methods: A retrospective observational study was conducted, including all patients younger than 46 years with a first consultation in the Breast Cancer Unit of the Puerta de Hierro University Hospital between 2009 and 2019. Epidemiological, clinical, pathological and treatment information was collected. We aim to understand the characteristics of our BCYW population with RWD from over a decade of breast cancer care.

Results: 559 patients with diagnostic of invasive breast cancer were included. Median age was 41 years (IQR 38 - 44). Population was divided into 3 groups for a better understanding. Patients with previous pregnancy are fewer in the younger subgroup

Table: 133P				
	< 35 years %	35 - <40 years%	>= 40 years%	All%
n (%)	55 (9,9%)	146 (26,1%)	358 (64%)	559
Pregnancy	59,3	74,1	83,3	78,6
ACO	45,6	33,6%	43	40,8
IMC median (IQR)	21,9	22,6	23,1	22,8
	(19,8 - 23,6)	(20,4-24,6)	(21,2-26,6)	(20,8-25,8)
AF breast cancer	34,6	35,6	34,6	34,9
BRCA1/2 positive	10,9	6,2	4,8	5,7
Ductal	90,9	87,7	81,8	84,2
Lobular	5,5	4,8	10,9	8,8
Others	3,6	7,5	7,3	7
1	20	31	36,8	33,6
II	52,7	43,5	37,1	40,3
III	25,5	20	21,1	21,2
IV	1,8	5,5	5	4,9
Nodal involvement +	60	48,6	48,3	49,6
TN	18,5	9,1	11,6	11,6
RRHH+ HER2-	59,3	74,1	72	71,3
RRHH+ HER2+	18,5	11,2	11,9	12,4
RRHH- HER2+	3,7	5,6	4,5	4,7
QT (total)	88,9	74,8	69,1	72,6
NEO-QT	32,7	25,3	23,7	25
Mastectomy	79,6	71,7	67,7	70