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.

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1573P First wave mortality data versus full pandemic period from the COVID-CANCER HUIL study

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Background: Cancer patients are one of the most affected by the current pandemic caused by SARS-CoV-2. Social inequalities influence the incidence rate of this disease, as we have seen in the high incidence in our center. In our study, we asked whether the last covid-19 treatment advances, the capacity for restructuring the health centers and their non-saturation, influences the cancer patients outcomes.

Methods: Retrospective review of 189 cancer patients diagnosed in our center with COVID-19 from March 5, 2020 to February 28, 2021. Study data was collected and managed using REDCap.
We compared COVID-19 diagnoses in first-wave cancer patients versus the full pandemic period until data cut-off, as well as patient characteristics and mortality rates.

Results: Mortality rate: 55/189 patients during the entire pandemic period vs 40/85 patients in the first wave ($p = 0.03$). Median age: 72 years (34-95) vs 76 (34-94), 125/189 men in all the period vs 50/85 ($p = 0.2$). Most frequent histologies: lung cancer (72/189 vs 22/85, $p = 0.07$), colorectal (31/189 vs 19/85, $p = 0.23$), breast (24/189 vs 10/85, $p = 0.82$). Staging: 113/189 metastatic disease at diagnosis of infection vs 32/85 in first wave ($p < 0.001$).
During the 2 subsequent waves in our center, where 104 more patients have been detected, mortality has dropped significantly: from the initial 47% to 14.4% in the rest of the period (40/85 vs 15/104, $p < 0.001$), despite having more metastatic involvement in infected patients.

Conclusions: In our center, one of the worst hit by the coronavirus crisis in Spain, with a supersaturation of almost 250% in the middle of the first wave, we have verified how the knowledge of the behavior of this disease, improvements in its treatment and a multidisciplinary management in Oncology ward have led to a significant decrease in mortality, going from almost 50% in the first wave to less than 15%, despite having suffered the disease during the two subsequent waves a greater number of patients with metastatic disease.

Legal entity responsible for the study: Medical Oncology Department, Hospital Universitario Infanta Leonor.

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1574P Mortality of 1,636 COVID-19 cancer patients (pts) and associated prognostic factors

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Background: We assessed mortality risk by COVID-19 (C19) infection among treated cancer patients (pts) and the impact of anti-cancer treatment (tx) on mortality.

Methods: Optum de-identified Electronic Health Record dataset (2021-01-07 release) were used to find cancer pts with a C19 positive (ICD-9/10-CM codes U071/U072 or positive test result) or negative (negative test and no positive test at any time after the first negative result) status on the first test/diagnosis date (ie the "index date"). Pts with <1 year database history, with no tx 0-90 days before index, <18 years old, with implausible death dates, and with index dates outside of 02/2020 - 11/2020 were excluded. C19 positive and negative pts were exact-matched on cancer type, then 1:1 nearest-neighbor matched on propensity scores (variables in table). Missing values were imputed ($n = 5$), and outcomes were evaluated by multivariable logistic regression, including interaction terms between tx and C19 positivity.

Results: We identified 21,060 pts, of whom 1,636 (7.8%) were positive for C19 and 19,424 (92.2%) negative. Among 1,636 matched pairs of positive/negative C19 pts, the odds ratio (OR) of 30-day mortality comparing C19 positive vs negative patients was 2.14 (95% CI: 0.71 − 6.52). Among the strongest predictors of 30-day mortality were age 75+ (OR = 5.42, 95% CI: 2.21 − 13.28), inpatient C19 testing/diagnosis (OR = 4.78, 95% CI: 3.04, 7.53), CCI of 3+ (OR = 2.24, 95% CI: 1.30 − 3.89), and metastatic disease (OR = 1.80, 95% CI 1.21 − 2.68). Anti-cancer therapies do not appear to modulate risk of death due to C19. Beyond 30-day mortality, matched mortality rate ratios (MRRs) suggested increased risk for C19 positive patients (MRR = 1.85, 95% CI: 1.26 − 2.44).

Table: 1574P Select^ OR and 95% CIs for 30-day mortality

	OR	95% CI, lower	95% CI, upper	p
Anti-cancer tx				
Chemotherapy	2.10	0.98	4.52	0.06
Hormone	0.75	0.27	2.09	0.57
Immunotherapy	1.56	0.56	4.39	0.39
Targeted biologic	1.58	0.49	5.07	0.41
Targeted small molecule	2.00	0.74	5.44	0.16
C19 positive	2.14	0.71	6.52	0.18
Interactions with C19				
Chemotherapy	0.81	0.31	2.15	0.67
Immunotherapy	0.45	0.14	1.52	0.20
Hormone therapy	1.58	0.46	5.36	0.46
Targeted biologic	0.49	0.13	1.77	0.26
Targeted nonbiologic	1.42	0.46	4.39	0.54

^ Not shown (statistical significance*): (intercept)*, age*, CCI*, index month*, insurance, metastasis*, obesity, region, setting*, sex, smoking status, years since first cancer diagnosis

Conclusions: C19 showed a trend towards increased 30-day mortality risk (not statistically significant), and increased overall mortality risk. Specific tx did not appear to modulate 30-day mortality due to C19.

Legal entity responsible for the study: Genentech, Inc.

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1575P Systemic anti-cancer therapy and metastatic cancer are independent mortality risk factors during two UK waves of the COVID-19 pandemic at University College London Hospital

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Background: Data from the first wave of COVID-19 infection demonstrated that a history of cancer and SACT was associated with poorer outcomes. Our study compares outcomes for cancer patients matched to non-cancer patients between the two waves in order to explore further how cancer and its treatment may impact COVID-19 mortality.

Methods: Data was collected for patients with positive PCR and history of cancer between 1 Mar to 20 May 2020 and 1 Dec to 8 Feb 2021 for wave 1 and 2, respectively. A contemporaneous cohort of patients without cancer were age- and sex-matched for comparison.

Results: The total number of patients presenting with COVID-19 was higher in wave two (1135 vs 626). 207 of these patients had cancer, and were matched to 452 patients without cancer from both waves. There was a significantly improved chance of mortality in wave 2 (HR 0.41, p < 0.0001). When adjusting for age, sex and co-morbidities, cancer was an independent risk factor for mortality amongst patients hospitalised with COVID-19 in wave 1 (HR 1.62, p = 0.02), but not in wave 2. There was a trend towards improved survival for hospitalised patients in wave 2 receiving COVID-19 specific treatment including dexamethasone, remdesivir, tocilizumab (HR 0.75, p = 0.086). For the combined cancer cohort, SACT was an independent predictor of mortality, as was metastatic disease.

Table: 1575P

	HR (95% CI)	P-value
Malignancy status		
Metastatic	2.1 (1.02 - 4.34)	0.04
Active cancer	0.55 (0.28 - 1.08)	0.08
Active anti-cancer treatment	1.75 (0.97 - 3.18)	0.06
SACT	2.01 (1.10 - 3.66)	0.02
Cytotoxic chemotherapy	1.93 (0.93 - 4.00)	0.08
Endocrine therapy	1.66 (0.69 - 3.96)	0.25
Targeted therapy	0.84 (0.11 - 6.28)	0.86
Immunotherapy	1.73 (0.4 - 7.41)	0.46
Radiotherapy	2.04 (0.62 - 6.74)	0.24
Surgery	0.67 (0.09 - 4.98)	0.69

Conclusions: The mortality for both cancer and non-cancer patients improved between waves of the pandemic. Advances in detection, prevention and treatment may account for this. Cancer was no longer a risk factor for mortality in the second wave, however SACT and metastatic cancer remained risk factors for mortality within the cancer cohort. This emphasises the need for ongoing protection of patients with advanced cancer and those on SACT, including through their prioritisation for COVID-19 vaccination globally.

Legal entity responsible for the study: The authors.

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1576P COVID-CANCER HUIL - Registry of oncological patients with diagnosis of COVID-19 at Hospital Universitario Infanta Leonor in Madrid (Spain): One year of pandemic

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Background: During the first year of the SARS-CoV-2 pandemic the management and treatment of COVID-19 have been improved. However, cancer patients continue to be one of the most affected. We evaluate the mortality rate due to COVID-19 and associated risk factors in the cancer population diagnosed in our center during the first year of pandemic.

Methods: We retrospectively reviewed the medical records of 189 cancer patients who were diagnosed with COVID-19 between March 5, 2020 and February 28, 2021. Mortality rate nd associated risk factors were studied.

Results: Mortality rate: 55/189 patients. Mean age: 72 years (34-95), 125/189 male patients. Predominant histologies: lung cancer (72/189), colorectal (31/189), breast (24/189). Predominant staging: metastatic disease (113/189). Predominant cancer treatment: chemotherapy (63/189); 118/189 patients were receiving any type of oncological treatment with palliative intention. Mortality was associated with male gender (45/55 vs 10/55, p=0.004), presence of comorbidities (48/55 vs 7/55, p=0.01), lung cancer (28/72 deaths with this tumor vs 27/117 with the rest, p=0.02), palliative intention cancer treatment (41/55 vs 12/55, p=0.02), older median age (76 vs 71, p = 0.02), higher median CRP (p=115.6 mg/dl vs 46 mg/dl), lower median lymphocytes (600/mm3 vs 1000/mm3 p<0.001). No specific treatment against COVID-19 significantly decreased mortality. Neither IL-6 nor ferritin were prognostic biomarkers. In multivariate analysis, male gender (OR 2.58, 95% CI 1.1-5.9, p = 0.02), lung cancer (OR 2.0, CI 1.0-3.8, p = 0.03), cancer treatment with palliative intention (OR 2.4, CI 1.07-5.3, p = 0.03), higher median CRP (OR 1.0, CI 1.00-1.01, p <0.001), as well as low lymphocyte median (OR 0.5, CI 0.25-1.0, p = 0.56), continued to be evidenced as risk factors, regardless of comorbidities, staging, sex, and palliative intention cancer-specific treatment, among other variables.

Conclusions: Men with lung cancer under cancer-specific treatment with palliative intention who present, at the diagnosis of SARS-CoV-2 infection with elevated CRP above 115 mg/dl and a decrease in lymphocytes below 600/mm3 have a higher risk of presenting fatal complications.

Legal entity responsible for the study: Medical Oncology department, Hospital Universitario Infanta Leonor.

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1577P Early mortality linked to COVID-19 in cancer patients as compared to historical control in pre-pandemic times

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Background: The COVID-19 pandemic remains a public health emergency of global concern, with higher mortality rates in cancer patients as compared to the general population. However, early mortality of COVID19 in cancer patients has not been compared to historical real-world data from oncology population in pre-pandemic times.

Methods: Longitudinal multicenter cohort study of patients with cancer and confirmed COVID-19 from Oncoclínicas Group in Brazil from March to December 2020. The primary endpoint was 30-day mortality after isolation of the SARS-CoV-2 by RT-PCR. As historical control, we selected patients from Oncoclínicas Data Lake treated before December 2019 and propensity score-matched to COVID-19 cases (3:1) based on the following clinical characteristics: age, gender, tumor type, disease setting (curative or palliative), time from diagnosis of cancer (or metastatic disease) to COVID-19 infection.

Results: In total, 533 cancer patients with COVID-19 were prospectively registered in the database, with median age 60 years, 67% females, most frequent tumor types breast (34%), hematological (16%), gastrointestinal (15%), genitourinary (12%) and