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Methods: This international, prospective cohort study enrolled patients with 15 cancer types who had a decision for surgery during the COVID-19 pandemic up to 31st August 2020. Average national Oxford COVID-19 Stringency Index scores were calculated for each patient during the period they were awaiting surgery, classified into light restrictions (index <20), moderate lockdowns (20-60), and full lockdowns (>60). The primary outcome was the non-operation rate (proportion of patients who did not undergo planned surgery). Cox proportional-hazards regression models were used to explore the associations between lockdowns and non-operation.

Results: From 20,006 patients (466 hospitals, 61 countries), 9.1% did not receive surgery after a minimum of 3-months' follow up (median:23 weeks, IQR:16 to 30 weeks). Light restrictions were associated with a 0.6% non-operation rate, moderate lockdowns 5.5% (adjusted hazard ratio:0.81, 95% confidence interval 0.77-0.84, $p<0.001$), and full lockdowns with a 15.0% rate (HR:0.51, 0.50-0.53). In sensitivity analyses, this effect was independent of local SARS-CoV-2 rates. Each additional week in lockdown led to a 9% reduction in the likelihood in a patient undergoing their cancer operation. Frail patients, those with advanced cancer, and those in lower-income settings were particularly vulnerable to lockdown effects. Surgery beyond 12-weeks from diagnosis increased during lockdowns (9.1% in light restrictions, 10.4% moderate lockdowns, 23.8% full lockdowns).

Conclusions: Cancer surgery systems worldwide were fragile to lockdowns, with one in seven patients not undergoing planned surgery and more preoperative delays. During current and future periods of societal restriction, the resilience of elective surgery systems requires strengthening, which may include ring-fenced surgical units and critical care capacity.

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1567MO

COVID-19 and cancer: First report of the ESMO international, registry-based, cohort study (ESMO CoCARE)

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Background: At the height of the first wave of the SARS-CoV-2 pandemic, ESMO mobilized to accelerate research for the understanding of COVID-19 in cancer patients (pts). ESMO CoCARE is an international collaborative registry-based, cohort study, gathering real-world data and information from healthcare professionals about the natural history, treatment and outcomes of COVID-19 in cancer pts.

Methods: ESMO CoCARE captures information on pts with any solid or hematologic malignancy (including cancer survivors free of disease for ≥ 5 years) presenting with a COVID-19 diagnosis in any of the participating centers. Data collected since 06/2020 include demographics, cancer characteristics and status, co-morbidities, COVID-19 clinical features, course, management and outcome. Factors influencing COVID-19 severity (hospitalization +/- ICU support needed) and recovery are investigated using

multivariable logistic regression with backward elimination method. The study is ongoing.

Results: The current analysis includes 1551 registered pts (19 countries; 87% pts from 23 European centers, 7% and 6% pts from 5 Northern African and 7 Asian centers), with COVID-19 diagnosis as of 11/03/2021. Median age was 64 years, with the majority female (52%), cancer stage III/IV (58%), and on active cancer treatment (60%). 65% had severe COVID-19 requiring hospitalization, with 11% receiving intensive care. In multivariable analysis, in addition to demographics (male gender, older age, other ethnicity than Caucasian, lower BMI), co-morbidities and symptomatic COVID-19, severe disease was associated to higher ECOG PS (Odds Ratio (OR)_{2 vs 0}=5.9, OR_{1 vs 0}=2.1), hematological malignancies (OR_{hemvs solid}=2.0), and active/progressive cancer status (OR_{progressives no evidence of disease}=1.6). 98% of pts with mild disease recovered, as opposed to only 70% of those with severe disease. Cancer stage was an additional prognostic factor for recovery (OR_{III/IV vs IV}=3.4).

Conclusions: Demographic characteristics, type and status of cancer, and symptomatology of COVID-19 increase the probability of severe disease, while advanced cancer stage is also associated with the risk of death.

Legal entity responsible for the study: Institut Curie, Paris, France.

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1568P

Clinical and laboratory outcomes of solid cancer patients reinfected with SARS-CoV-2

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Background: COVID-19 reinfection has been increasingly reported. Immunocompromised patients may be more susceptible to COVID-19 reinfection due to impaired immune responses to the virus. The current study aimed to evaluate the clinical and laboratory outcomes of solid cancer patients who were reinfected with COVID-19.