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**LBA72**

# Assessment of clinical and laboratory prognostic factors in patients with cancer and SARS-CoV-2 infection: The COVID-19 and Cancer Consortium (CCC19)

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## Background

The impact of clinicopathologic factors, cancer type, stage or therapies on outcomes of pts with COVID19 is not well defined. We systematically and comprehensively identified and assessed factors associated with high mortality (M) in the largest cohort of pts with cancer and COVID-19.

## Methods

CCC19 cohort includes pts with active or prior cancer and COVID-19 across US/international sites and collaborates with ESMO-CoCARE. Analysis was limited to lab-confirmed COVID-19. Primary endpoint: all-cause 30-day M. Multivariable logistic regression was used to assess association between 30-day M and *a priori* identified demographic/clinicopathologic risk factors (age, sex, race, region, smoking, obesity, comorbidities, ECOG PS, cancer status, recent [in 3 months] cancer treatment, cancer type, baseline COVID19 severity). Exploratory analysis used separate models adjusted for demographic/clinicopathologic factors to assess associations of lab parameters with 30-day M.

## Results

As of 31 July 2020, 4169 pts have been accrued; median follow-up 30 days (IQR 21-70), median age 66 (IQR 56-76), 50% men, 92% from US, breast and prostate cancer were most common; 38% had active cancer, 56% required hospitalization and 16% ICU. In 3830 pts with lab confirmed COVID19, 30-day M was 14% overall and 23% in hospitalized pts. Table shows adjusted [a]OR for overall and hospitalized pts. Age, male sex, smoking, >2 comorbidities, ECOG PS≥1, progressive cancer, hematologic or >1 cancer, and severe baseline COVID19 at presentation were associated with worse 30-day M. In hospitalized pts, high or low ALC, high ANC, low platelets, abnormal creatinine, d-dimer, HS-troponin and CRP were also associated with worse 30-day M.Table: LBA72

| | OVERall (N=3819) | Hospitalized (N=2168) |
|---|---|---|
| Age | 1.6 (1.4-1.6) | 1.6 (1.4-1.6) |
| Male | 1.3 (1.0-1.6) | 1.3 (1.0-1.6) |
| Ever Smoker | 1.3 (1.0-1.6) | 0.8 (0.6-1.0) |
| >2 Comorbidities | 2.0 (1.1-3.6) | 1.9 (1.0-3.5) |
| ECOG PS 1 | 1.8 (1.3-2.6) | 0.6 (0.4-0.8) |
| ECOG PS >1 | 3.5 (2.5-5.0) | 1.8 (1.3-2.4) |
| progressIVE CA | 2.6 (1.8-3.7) | 2.4 (1.7-3.5) |
| Recent Therapy | 1.4 (1.0-1.8) | 1.4 (1.0-1.8) |

| | OVERall (N=3819) | Hospitalized (N=2168) |
|---|---|---|
| HemE CA | 1.4 (1.0-1.8) | 1.2 (0.9-1.6) |
| >1 ca | 1.4 (1.0-1.9) | 1.2 (0.9-1.7) |
| Mod C19 | 5.5 (3.9-7.7) | 0.7 (0.4-1.0) |
| Sev C19 | 23.4 (16.1-34.1) | 4.1 (3.1-5.3) |
| LABs | | |
| ALC>ULN | | 2.1 (1.0-4.2) |
| ALC<LLN | | 1.4 (1.1-1.9) |
| ANC>ULN | | 1.9 (1.4-2.5) |
| PLT<LLN | | 1.4 (1.1-1.8) |
| AB CREATInine | | 1.5 (1.2-2.0) |
| AB D-DIMER | | 2.0 (1.2-3.5) |
| AB HS-TROP | | 2.1 (1.3-3.5) |
| AB CRP | | 2.1 (1.1-4.2) |

*AB=abnormal.

## Conclusions

We confirmed *a priori* identified risk factors for poor prognosis in the largest COVID-19/cancer cohort and performed initial analysis of lab parameters, informing risk assessment.

## Clinical trial identification

NCT04354701.

## Legal entity responsible for the study

The COVID-19 and Cancer Consortium (CCC19).


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