We identified 426 pts with cancer and 622 non-cancer pts. Among the patients with PCT \( \geq 0.25 \) [\( P = 0.0003 \)], the clinical outcomes of patients with at least one positive culture [\( P < 0.0001 \)]. Among the 373 patients who had a PCT < 0.25, we compared them to patients who had PCT\( > 0.25 \) and found that they were less likely to have a positive culture [\( P < 0.0001 \)]. To our knowledge, this is the first model to incorporate sequence data mapped across the genome of a pathogen to quantify the level of that pathogen in a clinical specimen. This has implications in ID diagnostics, research, and metagenomics.

**Conclusion.** We conducted a retrospective study of COVID-19 positive cancer and non-cancer pts who had chest CT scans at the time of diagnosis, at our hospital and 16 other centers in Asia, Australia, Europe, North America and South America, between March, 2020 and November, 2020. Patients’ age, underlying diseases, symptoms, laboratory studies, and radiologic findings consisting of bilateral ground glass opacities (GGOs), multifocal organizing pneumonia (MOP) were collected in association with clinical outcomes.

**Results.** We identified 426 pts with cancer and 622 non-cancer pts. Thereafter, cancer pts were analyzed into 3 distinct groups and similar to non-cancer pts: GGOs group (n = 224, 54%), GGOs+MOP group (n = 61, 14.6%), and a third group of neither GGOs or MOP (n = 131, 31.4%) in cancer pts, and in non-cancer pts: GGOs group (n = 387, 62.8%), GGOs + MOP group (n = 100, 16.2%), and a third group of neither GGOs or MOP (n = 129, 21%). The median patients’ age was 54 in non-cancer pts vs 62 in cancer pts (\( p < 0.001 \)) and there were more males in the non-cancer group 57% vs 47% (\( p = 0.001 \)). Cough was more prevalent in non-cancer pts, 71% vs 59% (\( p < 0.001 \)) and similar to fever (73% vs 57%, \( p < 0.001 \)). Neutropenia < 0.5 k/µL and lymphocytopenia < 1 k/µL were more frequent in cancer pts (\( p < 0.001 \)). In cancer pts, there was no statistically significant difference between the 3 groups (hospital admission, mechanical ventilation, readmission, within 30 days, and mortality), except pts who required non-invasive (NI) ventilation were more frequent in the GGOs group, 55% (\( p < 0.005 \)). In non-cancer pts, GGOs + MOP have higher hospital admission, ICU transfer, NI- and mechanical ventilation compared to the 2 other groups (\( p < 0.001 \)). While readmission to hospital or mortality rate within 30 days were similar between the 3 groups.

**Disclosure.** No reported disclosures

**Disclosures.**

- **Natalie J Dailey Garnes, MD, MPH. AlloVir (Other Financial or Material Support, collaborator on research protocol)**

**References.**

- 357. A Comparison of Chest CT Findings in Cancer and Non-Cancer Patients with COVID-19
- Alexandre Malek, MD; Hiba Dagher, MD; Ray Y. Hachem, MD; Ying Jiang, MS; Anne-Marie Chaffari, MD; Issam I. Raad, MD; UT MD Anderson Cancer Center, Houston, TX; MD Anderson Cancer Center, Houston, TX; UTMD Anderson Cancer Center, Houston, TX; The University of Texas MD Anderson Cancer Center, Houston, TX

**Session.** P.15. COVID-19 Diagnostics

**Background.** The purpose of this study was to compare chest computed tomography (CT) scan findings in cancer versus non-cancer patients with COVID-19 infection. We sought to assess the correlation between radiologic patterns of COVID-19 pneumonia, clinical course, and outcomes.

**Results.** We performed a prospective study of COVID-19 positive cancer and non-cancer pts who had chest CT scans at the time of diagnosis, at our hospital and 16 other centers in Asia, Australia, Europe, North America and South America, between March, 2020 and November, 2020. Patients’ age, underlying diseases, symptoms, laboratory studies, and radiologic findings consisting of bilateral ground glass opacities (GGOs), multifocal organizing pneumonia (MOP) were collected in association with clinical outcomes.

**Conclusion.** We conducted a retrospective study of COVID-19 positive cancer and non-cancer pts who had chest CT scans at the time of diagnosis, at our hospital and 16 other centers in Asia, Australia, Europe, North America and South America, between March, 2020 and November, 2020. Patients’ age, underlying diseases, symptoms, laboratory studies, and radiologic findings consisting of bilateral ground glass opacities (GGOs), multifocal organizing pneumonia (MOP) were collected in association with clinical outcomes.

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**Conclusion.** This study reveals that non-cancer pts tended to have more radiologic findings on chest CT scan compared to cancer pts at the time of COVID-19 diagnosis and were associated with more worrisome COVID-19-related clinical outcomes.

**Disclosure.** No reported disclosures

358. Early Cardiac Marker of Mortality in COVID-19

**Natalie J Dailey Garnes, MD, MPH. AlloVir (Other Financial or Material Support, collaborator on research protocol)**

**Background.** Cardiac troponin I (cTNI) is a highly inflammatory depot of fat, with high concentrations of IL-6 and macrophages, which can directly reach the myocardium via the vasa vasorum or paracrine pathways. TNF-a and IL-6 diminish cardiac inotropic function, making EAT inflammation a potential cause of cardiac dysfunction.

**Methods.** A retrospective cohort study assessing EAT Thickness and Density from CT scans, without contrast, from adult patients during index admission for COVID-19 infection at Mount Sinai Medical Center from March 2020 to January 2021. A total of 1,644 patients were screened, of which 148 patients were included. Follow-up completed in non-cancer pts, with GGOs + MOP have higher hospital admission, ICU transfer, NI- and mechanical ventilation compared to the 2 other groups (\( p < 0.001 \)). While readmission to hospital or mortality rate within 30 days were similar between the 3 groups.

**Results.** We performed a prospective study of COVID-19 positive cancer and non-cancer pts who had chest CT scans at the time of diagnosis, at our hospital and 16 other centers in Asia, Australia, Europe, North America and South America, between March, 2020 and November, 2020. Patients’ age, underlying diseases, symptoms, laboratory studies, and radiologic findings consisting of bilateral ground glass opacities (GGOs), multifocal organizing pneumonia (MOP) were collected in association with clinical outcomes.

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