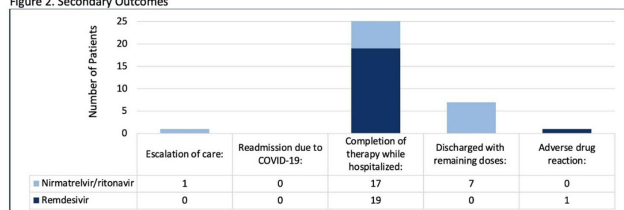


Figure 2. Secondary Outcomes



interactions or lack of enteral access, in which case remdesivir was considered. **Results:** In total, 58 patients were screened and 50 patients were included, 25 patients in each arm. Most were non-Hispanic, white males with at least 1 comorbidity. Compared to the remdesivir arm, the nirmatrelvir-ritonavir arm had more patients with at least a primary COVID-19 vaccine (44% vs 34%). Also, 88% of patients in each arm had a baseline ordinal score of 4, and 12% had a score of 5. Ordinal score changes between the start and end of therapy were similar between groups, and neither had an increase in oxygen requirements (Fig. 1). No readmissions were due to COVID-19, and both medications were well tolerated. Refer to Fig. 2 for secondary outcomes. **Conclusions:** Nirmatrelvir-ritonavir and remdesivir showed similar safety and efficacy in the treatment of hospitalized patients with mild-to-moderate COVID-19. Current evidence-based guidelines and treatment costs favor nirmatrelvir-ritonavir for patients who can receive this drug.

**Disclosures:** None

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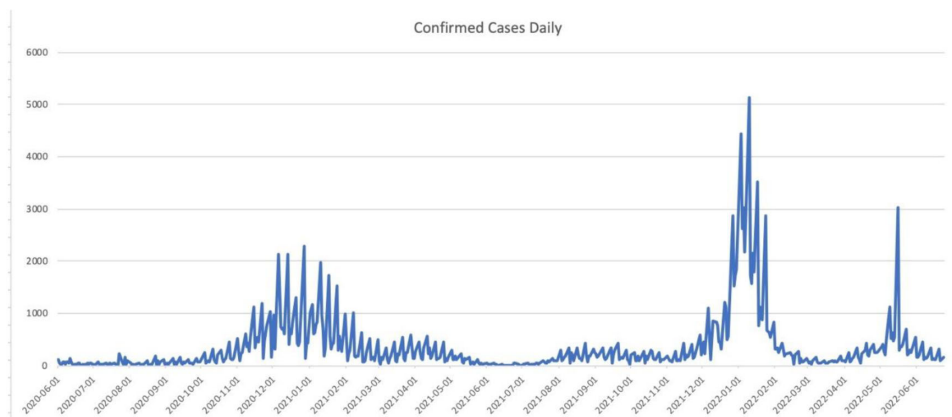
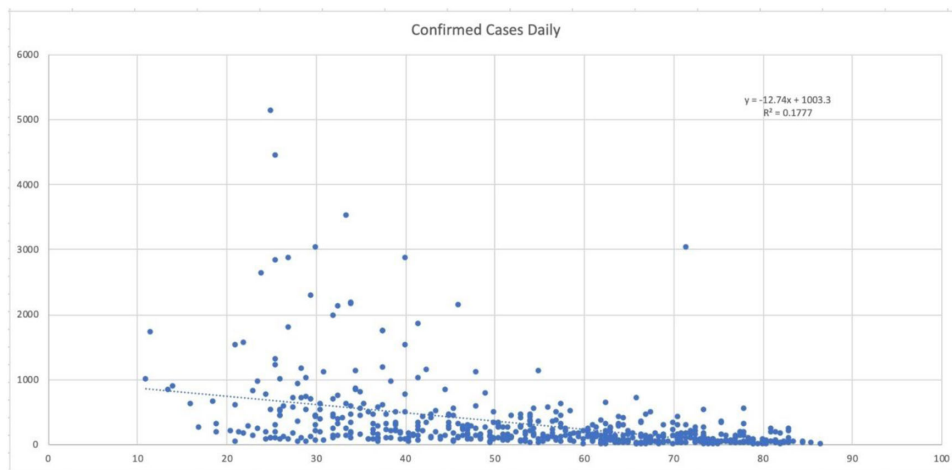
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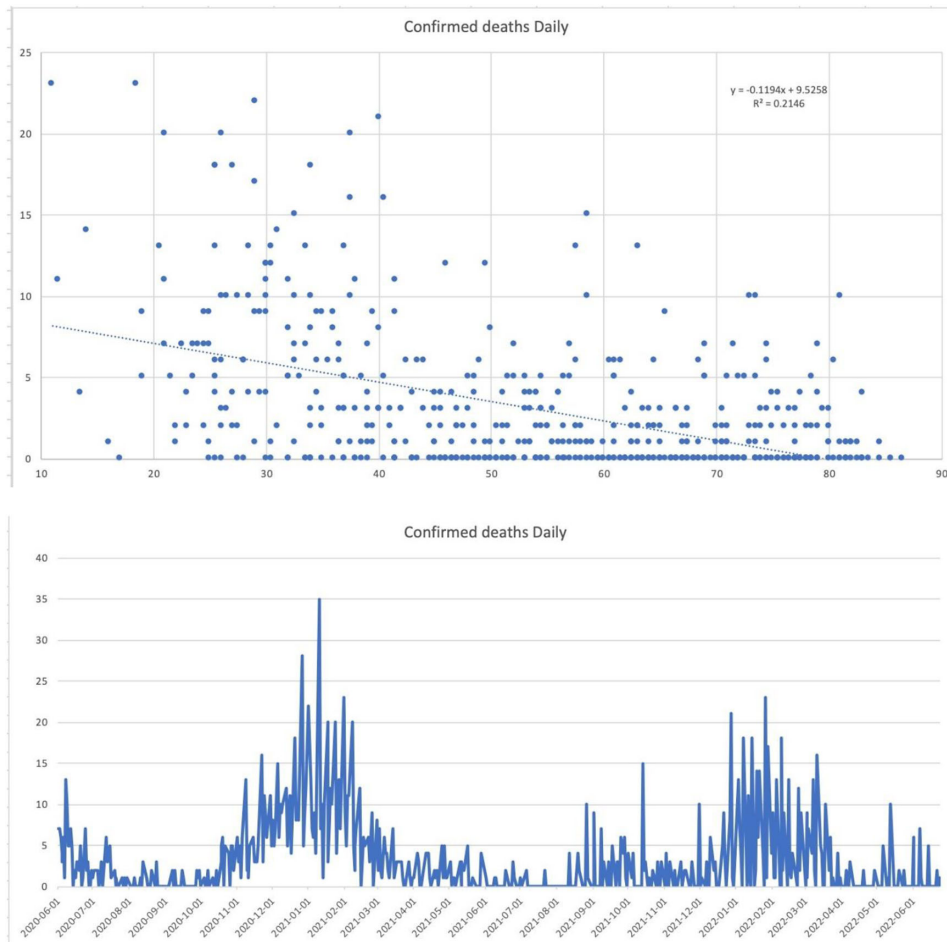
**Subject Category:** COVID-19

**Whether or not the weather matters: A retrospective review assessing the influence of weather on SARS-CoV-2 transmission**

Melissa Colaluca; Sean Harford; Ann Palmer; Ulysses Wu; Kaelin Wu and Matthew Kulowski

**Background:** Since the start of the COVID-19 pandemic, many variables have contributed to surges in cases such as the presence of variants, vaccination status, and comorbid medical conditions. However, other factors can be considered including temperature, precipitation, and periods in large congregations. The spike in SARS-CoV-2 infections during the winter has made it seem plausible that transmission may be affected by meteorological factors. A study by Birukov et al demonstrated that a 1° C increase in temperature was associated with a 3.08% reduction in daily new cases and a 1.19% decrease in daily new deaths. We propose that SARS-CoV-2 transmission will decline more rapidly when either precipitation or temperature is higher; thus, in warmer regions with less precipitation daily cases, hospitalizations and deaths will be lower. **Methods:** This is a retrospective study of statewide data in Hartford County, Connecticut, collected from May 2020 to June 2022 assessing percent positivity reported in daily case count, hospitalizations for COVID-19, and deaths from COVID-19 collected from the Connecticut Department of Public Health COVID-19 database. Information on weather conditions, including temperature and precipitation, were collected from the National Weather Service pertaining to Hartford County. Trends in variables related to patient outcomes were compared to weather conditions within the county of Hartford. Moreover, certain periods within the various seasons that typically involve large gatherings and public holidays (eg, New Year’s Day,





Memorial Day, 4th of July, Labor Day, Thanksgiving, and Christmas Day) were further analyzed. **Results:** There appears to be an inverse correlation coefficient of  $-0.422$ , between confirmed daily cases and mean temperature in Hartford County, indicating that as temperature increases, confirmed cases decrease. This phenomenon is also observed with confirmed daily deaths and mean temperature, with a correlation coefficient of  $-0.463$ . Moreover, there is an even more significant relationship between hospitalization cases and mean temperature, with a correlation coefficient of  $-0.667$ . Furthermore, the year-end holidays (Christmas Day and New Year's Day) were associated with a significant spike in confirmed daily cases, hospitalizations, and deaths.

However, the relationship between confirmed daily cases, hospitalized cases, and confirmed deaths against mean precipitation in Hartford County demonstrated no significant relationship, reporting correlation coefficients of  $-0.042$ ,  $-0.044$ , and  $-0.044$ , respectively. **Conclusions:** Our available COVID-19 and weather data show that temperature is inversely correlated with daily cases, hospitalizations, and deaths. However, with regard to precipitation, there was no discernable relationship between the variables.

**Disclosures:** None

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**Subject Category:** COVID-19

**Outcomes of patients hospitalized for COVID-19, secondary infections, antimicrobial use during SARS-CoV-2 delta and omicron variants**

Swetha Srialluri; Curtis Collins and Holly Murphy

**Background:** The SARS-CoV-2 omicron variant has been associated with increased transmissibility and less severe disease than the SARS-CoV-2 delta variant. Low rates of secondary infections and excess empiric antimicrobial use were reported early in the pandemic. Comparisons between later variants are not as well documented. We evaluated outcomes for SARS-CoV-2 delta- and omicron-variant surges with emphases on COVID-19–related treatment, secondary infections, and antimicrobial utilization. **Methods:** A single-center, observational, retrospective study was conducted for SARS-CoV-2–positive patients admitted to our 548-bed community teaching hospital between November and December 2021 (SARS-CoV-2 delta-variant–predominant phase) and January–February 2022 (SARS-CoV-2 omicron-variant–predominant phase). Demographic and outcome data were obtained from the institutional data warehouse and were compared between groups. Secondary infections were defined as positive blood and respiratory culture results during admission,