Figure 1. Kaplan-Meier estimates of mortality

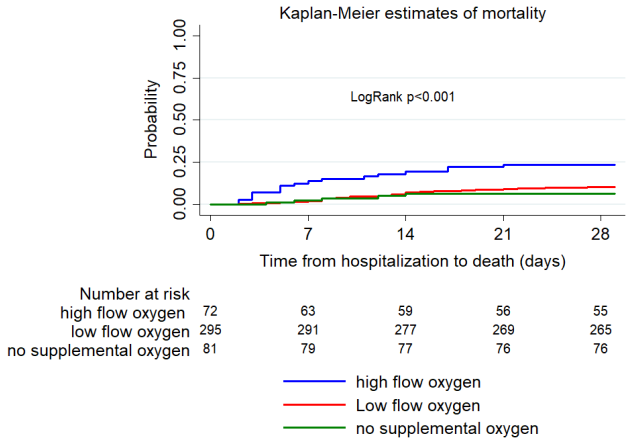
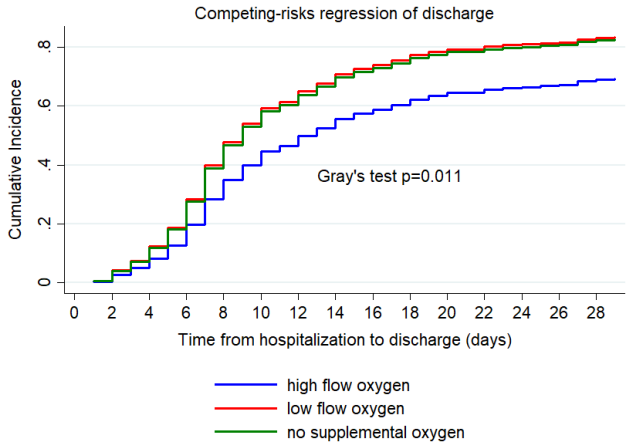


Figure 2. Competing-risks regression of discharge from hospital



Conclusion. In this real-world cohort of COVID-19 positive hospitalized patients, RDV use was consistent across countries. RDV was started within a median of 7 days from symptom within 2 days of admission and given for a median of 5 days. Higher mortality rate and duration of hospitalization was seen in the HFO group and similar rates seen in the LFO and NSO groups. Readmission was consistently low across all 3 groups.

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537. Implementation of a Workflow for COVID-19 Monoclonal Antibody Infusions at a Veterans Affairs Medical Center

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Session: P-24. COVID-19 Treatment

Background. In the setting of the global pandemic due to COVID-19, high-risk patients with mild to moderate disease were identified as a group who would benefit from COVID-19 monoclonal antibody (mAB) treatment to mitigate progression to severe disease or hospitalization. The U.S. Food and Drug Administration (FDA), under Emergency Use Authorizations (EUA) approved multiple COVID-19 mAB therapies with specific criteria for eligibility of candidates, documentation of discussion with patients, and reporting of all errors and serious adverse events.

Methods. A cross discipline working group implemented a mAB clinic at complexity level 1a VA Medical Center in metropolitan Washington, D.C. through collaboration of personnel committed to patient care. The team successfully persuaded hospital leadership to provide space and leveraged technologies for rapid communication and dissemination of education. A stewardship driven medical center wide surveillance system rapidly identified outpatients for screening; primary care and ED providers were engaged through various electronic methods of education, including email, web-based team communication, intranet webpages and other electronic modalities. Within the EMR, an order panel was implemented to assure that the key requirements of the EUA were met and the provider was guided to the appropriate mAB, nursing, and PRN rescue medication orders.

Results. Of over 17,000 COVID-PCR tests were performed at our medical center, 198 outpatients were screened and 16 received COVID-19 mAB infusions between January 2, 2021 to May 31, 2021. One patient experienced a reaction requiring the infusion to be stopped and supportive medications to be administered; there were no long-term sequalae reported as a result of this event.

Conclusion. A multidisciplinary collaboration is well suited to implement innovative processes and policies for novel therapies in the middle of a pandemic. An agile workflow, regular communications between members of the workgroup, and commitment of institutional leadership helped facilitate the changes necessary to provide our patients the opportunity to receive potentially life-saving therapies.

Disclosures. **All Authors**: No reported disclosures

538. The Role of N-acetylcysteine on Post Covid-19 Pulmonary Fibrosis

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Session: P-24. COVID-19 Treatment

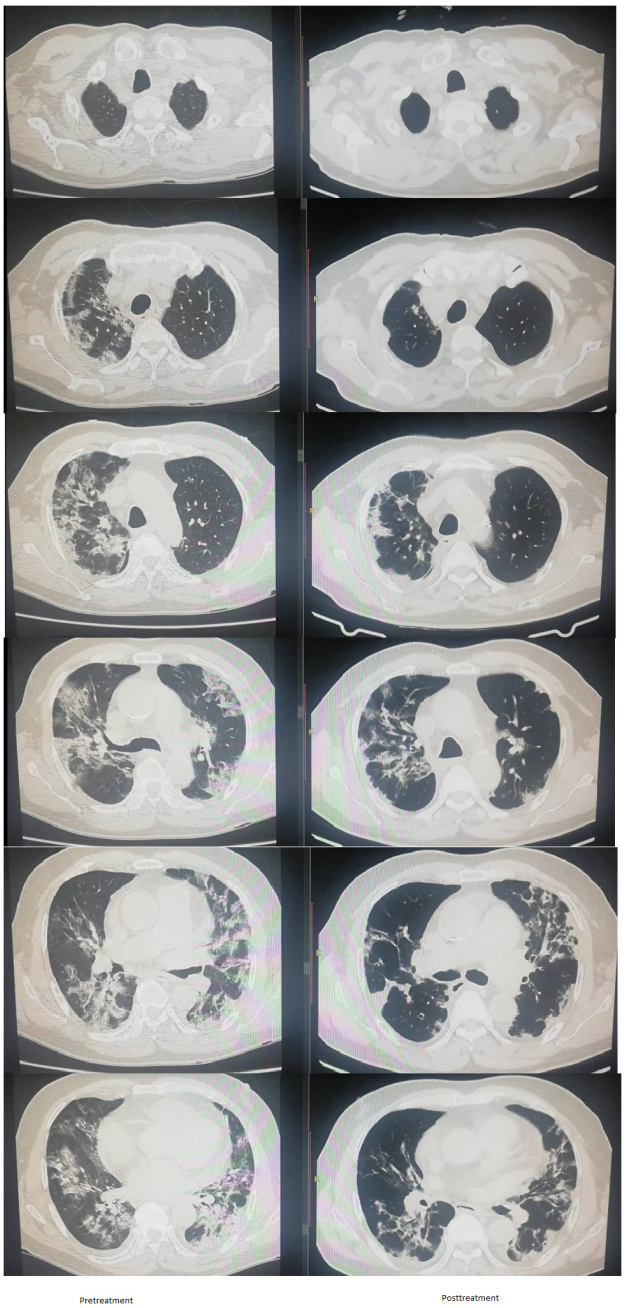
Background. Covid 19 have long lasting complications, from myalgia, body weakness to life debilitating strokes, and pulmonary fibrosis. Several mechanisms had been described but mostly viral or autoimmune which causes damages which leads to Acute respiratory distress syndrome. There is no approved treatment as of this time. Antifibrotic drugs use had been limited due to hepatoxicity, on top of Covid 19 hepatopathy. This study aims to describe the role of N-acetylcysteine on Post COVID 19 pulmonary fibrosis as an alternative treatment.

Methods. Patients are admitted at Baguio General Hospital and Medical Center at the COVID wards. Patients are COVID confirmed by RT PCR nasopharyngeal swab. Patient who are classified as severe were given Dexamethasone, Enoxaparin and Remdesivir for 5-10 days. Patients who are not weaned off from O2 support underwent

Chest CT scan. Patients with Extensive Fibrosis were then consented to undergo High Dose IV Infusion of N-acetylcysteine. (150mg/kg in 1st hour, 50mg/kg next 4 hours and 100mg/kg last 20 hours). Repeat Chest CT Scan was done.

Results. Peripheral Bilateral Ground Glass Opacities and Pulmonary Consolidation was seen on pre-treatment CT Scans. Repeat CT scans showed significant regression of Ground Glass Opacities and Pulmonary Consolidation.

CT SCAN pre and post treatment



Conclusion. High dose N-acetylcysteine showed promising results on Post COVID 19 Pulmonary Fibrosis.

Disclosures. **All Authors**: No reported disclosures

539. Impact of Corticosteroids when Combined with Tocilizumab or Remdesivir for the Treatment of Severe SARS-CoV-2

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Session: P-24. COVID-19 Treatment

Background. Tocilizumab (TCZ) and remdesivir (RDV) have both shown benefit for patients with SARS-CoV-2. However, there have been no head to head studies comparing the efficacy of the two therapies. The purpose of this study is to compare clinical outcomes of patients who have received corticosteroids (CS) along with TCZ or RDV.

Methods. This is an IRB approved retrospective observational study completed in a three hospital health system in New Jersey. Patients were included if age was ≥ 18, admitted with SARS-CoV2 infection requiring oxygen. Patients were stratified into two treatment arms; CS + TCZ and CS + RDV. The primary objective was to compare all-cause inpatient mortality (ACIM) based on oxygenation status; nasal cannula (NC), high-flow nasal cannula (HFNC), and invasive mechanical intubation (IMV). Secondary objectives was a snapshot analysis with a focus on clinical improvement (CI) defined as improvement in clinical ordinal scale by 2 or more at end of stay. Additional endpoint included progression to IMV after therapy initiation.

Results. There were total of 1053 patients included (123 in the CS+TCZ arm, 930 in the CS+RDV arm). Oxygen requirements were as follows: In the CS+TCZ arm (NC n=57, HFNC n=26, IMV n=40), and the RD+CS arm (NC n=669, HFN n=159, and IMV n=102). Results from the primary endpoints can be found in Table 1. No statistically significant differences were observed between the two treatment arms. For the secondary objective there were 214 patients included (70 in the CS+TCZ arm and 105 in the CS+RDV arm). For patients receiving NC, no difference seen in CI between two treatment arms (81.4% CS+RDV vs. 81.5% CS+TCZ). In HFNC group more patients in the CS+TCZ group observed CI compared to CS+RDV (68.8% vs. 40%). Less patients requiring HFNC progressed to IMV in CS+TCZ group (25%) compared to CS+RDV (40%).

All-Cause Inpatient Mortality			
	Remdesivir	Tocilizumab	P-Value
NC (n/N)	3% (20/669)	7% (4/57)	0.11
HFNC (n/N)	31.4% (50/159)	23% (6/26)	0.49
IMV (n/N)	70.6% (70/102)	52.5% (21/40)	0.08

Conclusion. No statistical difference in ACIM was detected between the two treatment arms regardless of baseline oxygenation requirements. There was a trend towards lower ACIM for IMV patients in the CS+TCZ arm compared to the CS+RDV arm. More patients experienced CI in CS+TCZ group compared to CS+RDV in HFNC group. Less HFNC patients also required new IMV in the CS+TCZ arm. Larger studies need to be performed to evaluate a true statistical difference between the two treatment arms.

Disclosures. **All Authors**: No reported disclosures

540. Does *Remdesivir* Impact the Clinical Outcome of Patients with *COVID 19* Infection?

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Session: P-24. COVID-19 Treatment

Background. Remdesivir (RDV), was included for the treatment of mild to moderate COVID-19 since July 2020 in our institution, following the initial results from ACTT-1 interim analysis report. With the adoption of RDV, there seems to be anecdotal evidence of efficacy as evidenced by early fever defervescence, quick recovery when on oxygen with decreased need for ventilation and ICU care. We aimed to study the impact of RDV on clinical outcomes among patients with moderate to severe COVID –19.

Methods. Nested case control study in the cohort of consecutive patients with moderate to severe COVID – 19. Cases were patients initiated on RDV and age and sex- matched controls who did not receive RDV were included. The primary outcome was in-hospital mortality. Secondary outcomes were, duration of hospital stay, need for ICU, duration of oxygen therapy and need for ventilation.

Results. A total of 926 consecutive patients with COVID – 19 were included, among which 411 patients were cases and 515 controls. The mean age of the cohort was 57.05±13.5 years, with male preponderance (75.92%). The overall in-hospital mortality was 22.46%(n=208). On comparison between cases and controls there was no statistically significant difference with respect to primary outcome [22.54% vs. 20.78%, (p value: 0.17)]. Progression to non-invasive ventilation (NIV) was higher among the controls [24.09% vs. 40.78% (p value: < 0.001*)]. Progression to invasive ventilation was also higher among the controls [5.35% vs. 9.71% (p value: 0.014*)]. In subgroup