Based on the data described below, the following system-wide changes have been made:

Remdesivir will not be standard treatment for any level of COVID-19 severity. Rare exceptions may be made for persons that are not steroid candidates, and this may be discussed with the Infectious Disease team.

Supporting evidence:

Remdesivir has been used to treat COVID-19 in hypoxic hospitalized patients with mild to moderate disease. The National Institutes of Health (NIH) and Infectious Diseases Society of America (IDSA) continue to recommend use of this medication.

The World Health Organization (WHO) has issued the following recommendation:

> *"We suggest against administering remdesivir in addition to usual care for the treatment of patients hospitalised with covid-19 regardless of disease severity."*

The ACTT-1 study evaluated 1062 patients with COVID-19 in a double-blind, randomized, placebo-controlled trial. The median time to recovery in the remdesivir group was 10 days vs. 15 days in the placebo group (recovery rate ratio 1.29, 95% CI 1.12-1.49, $p<0.001$). The mortality difference was not statistically significant.

The WHO-initiated SOLIDARITY study was a randomized open-label trial across 30 countries and included over 11,000 hospitalized COVID-19 patients. In the remdesivir portion of the trial (2743 patients) there was no significant difference in 28-day mortality, need for ventilation, or time to discharge.

A randomized, open-label study compared outcomes with remdesivir for 5 day vs. 10 day courses in hospitalized COVID-19 patients. There were no differences of significance seen for those receiving 5 days vs 10 days, but there were statistically significant outcomes for both renal failure and "serious adverse events."

A randomized, double-blind, placebo-controlled trial evaluated remdesivir vs. placebo in adults with COVID-19. Remdesivir resulted in no significant difference in time to clinical improvement vs. placebo. Remdesivir was discontinued due to adverse events in 12% of patients vs. 5% of patients in the placebo group.

In summary:

- Remdesivir does not affect mortality.
- Remdesivir reduced the time to recovery by up to 5 days in the ACTT-1 trial. This was not reproduced in other trials.
- Remdesivir does not have a robust or reproducible effect on hospital length of stay nor has it been shown to prevent progression to severe illness.
- Remdesivir has significant cost and risk for adverse events.

References:

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4. Wang Y, et al. Remdesivir in adults with severe COVID-19: a randomised, double-blind, placebo-controlled, multicentre trial. Lancet. 2020.

COVID-19 WORKGROUP FOR THE ACUTE MEDICINE CLINICAL PRACTICE COUNCIL

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Revision History

This document is active and further recommendations are forthcoming. It will be updated as additions develop.

Revision	Description of Changes	Approvals	Date
1.0	Initial Document	Clinical Leadership Council	4/8/2021