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Approach to Remdesivir Allocation

NM Allocation Decision-Making Team, Infectious Disease, Critical Care and Pharmacy

Remdesivir Allocation

Consistent with accepted standards during public health emergencies, the primary goal of this allocation framework for remdesivir is to maximize benefit to populations of patients, specifically by maximizing survival to hospital discharge and beyond for as many patients as possible. As current data fail to confirm that remdesivir confers a clear direct survival benefit, a committee of NM Infectious Disease (ID) and Critical Care (CC) experts along with the NM Allocation Medical Decision Making Team (ADMT) have targeted the goal of avoiding mechanical ventilation in already hypoxemic COVID-19 positive inpatients. The remdesivir Allocation Taskforce also discussed the inability of immunocompromised patients to control viruses, including COVID-19. Given the potential benefit of remdesivir for this small subset of patients, immunocompromised patients who meet EUA criteria can be enrolled at any stage of their disease, including patients on mechanical ventilation or on ECMO, when they meet the other criteria.

The rationale is:

(1) Avoiding the myriad consequences of mechanical ventilation is a greater benefit compared to shortening the duration of mechanical ventilation by a small number of days.
(2) Patients who are not on mechanical ventilation benefit from a five-day therapy as opposed to the 10-day course required for mechanically ventilated patients (two patients can be treated with the same amount of drug required by one).
(3) A small group of mechanically ventilated patients unable to mount an antiviral defense without support, but likely to do so with the antiviral, who may likely experience a significant benefit commensurate with the need for 10 days of therapy.

Therefore, patients will be prioritized by the following criteria to receive remdesivir per Emergency Use Authorization (EUA):

- Documented COVID-19 by PCR testing
- Severe COVID-19 disease, requiring admission
    - Admitted to medical floor and not currently on mechanical ventilation (unless chronically ventilated as an outpatient or immunosuppressed as outlined below), **or**
    - Admitted to ICU for observation, but not on mechanical ventilation, **or**
    - Mechanically ventilated immunosuppressed patient likely to benefit from antiviral support. This determination is to be reached together by the infectious disease consultant and the critical care attending; in case of dispute, they can escalate to the ADMT.

Revised and Approved 5/21/2020

- Hypoxemic as defined by SpO2 <= 94 on room air and progressively worsening rather than improving.

Excluded from consideration for remdesivir are patients who have obtained it through other means (such as compassionate use or clinical trial) and also patients who meet above criteria but are improving and anticipated to be discharged. Also excluded per EUA are patients with glomerular filtration rate < 30 mL/min or AST/ALT > 5x the limit of normal.

If for this prioritized patient population there is insufficient remdesivir to meet patient needs, then patients who are identified as "essential workforce" will be prioritized followed by a lottery.

Logistics
All patients being considered for remdesivir must be evaluated by an infectious diseases consultant. The infectious diseases consultant is required to directly place the remdesivir order for the patient. The ID team will also determine per EUA guidelines when a continuation of the five-day course is indicated for a given patient. When the needs of the eligible population exceed remdesivir supplies, ID will contact the ADMT which will implement the lottery process. Allocation under this algorithm will be determined fairly and consistently, regardless of race, gender, age, religion, citizenship, sexual orientation, disability unrelated to medical diagnosis or socioeconomic status of the patient, including that patient's ability to pay. Triage and allocation decisions will not be based on judgments about the patient's anticipated quality of life or social value.

Exceptions
Any exceptions or clarifications should be escalated to the ADMT.

Future development

This allocation protocol will be revised in response to emerging clinical information and availability of the drug itself, and will require ongoing monitoring and development by ID, CC and pharmacy experts, along with the ADMT.