



NHMHP-IDSP0GEN/1/2020-IDSP-6515  
National Health Mission  
SDA Complex, Kasumpti, Shimla-9  
Himachal Pradesh  
Dated: Shimla-171009, the



**CIRCULAR**

In continuation to earlier notified guidelines for Clinical Management of COVID-19 cases, please find attached recommendations of State COVID Clinical Team for further necessary action in the matter.

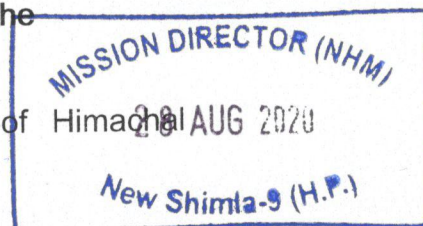
*Nep...* 28/8/20  
Special Secretary (Health) cum  
Mission Director, NHM  
Himachal Pradesh, Shimla – 9

Endst. No. As above

Dated Shimla-9 the

Copy for information and necessary action to:

1. The Additional Chief Secretary (Health) to the Govt. of Himachal Pradesh.
2. The Director Health Services, Himachal Pradesh.
3. The Director of Medical Education & Research, Himachal Pradesh.
4. All the Deputy Commissioners, Himachal Pradesh.
5. All the Principals, Govt. Medical Colleges, Himachal Pradesh.
6. All the Chief Medical Officers, Himachal Pradesh.
7. All the Sr. Medical Superintendents, Himachal Pradesh.
8. All District Surveillance Officers, Himachal Pradesh.
9. All the Nodal Officers of DCCC, DCHC & DCH in Himachal Pradesh.



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Himachal Pradesh, Shimla – 9

**Minutes of meeting:****CLINICAL MANAGEMENT PROTOCOL:**

**COVID-19 Government of India Ministry of Health and Family Welfare Directorate General of Health Services (EMR Division) and AIIMS, New Delhi**

**A. TOCILIZUMAB:**

**Indication:** may consider its Off Label use in the following conditions:

1. **Patients with moderate disease with progressively increasing oxygen requirement**
2. **Mechanically ventilated patients not improving despite use of steroids**

**Special considerations:**

1. Raised inflammatory markers (e.g., CRP, Ferritin, IL-6)
2. Careful monitoring for secondary infections and neutropenia
3. The drug is contraindicated in HIV, those with active infections (systemic bacterial/fungal), Tuberculosis, active hepatitis, Absolute Neutrophil counts  $< 2000/\text{mm}^3$  and Platelet count  $< 1,00,000/\text{mm}^3$

**Dose:** 8mg/kg (maximum 800 mg at one time) given slowly in 100 ml NS over 1 hour; dose can be repeated once after 12 to 24 hours if needed

**B. Plasma therapy:**

**Indication:** Convalescent plasma (Off Label) may be considered in patients with moderate disease who are not improving (oxygen requirement is progressively increasing) despite use of steroids.

**DONOR eligibility:**

1. Males and nulliparous female
2. Normal hemoglobin
3. Negative for HIV, HBV, HCV, Malaria, syphilis

4. Donors: 28 days after symptom resolution
5. ABO compatibility and cross matching of the donor plasma
6. Neutralizing titer of donor plasma should be above the specific threshold (if the latter is not available, plasma IgG titer (against S-protein RBD) above 1:640 should be used)

Recipient should be closely monitored for several hours post transfusion for any transfusion related adverse events

Use should be avoided in patients with IgA deficiency or immunoglobulin allergy

**Dose:** Dose is variable ranging from 4 to 13 ml/kg (usually 200 ml single dose given slowly over not less than 2 hours; may be repeated after 24 hours

**ABO compatibility and cross-matching:**

| Recipient blood group | 1 <sup>st</sup> choice | 2 <sup>nd</sup> choice |
|-----------------------|------------------------|------------------------|
| B                     | B                      | AB                     |
| A                     | A                      | AB                     |
| O                     | O                      | B,A,AB                 |
| AB                    | AB                     | -                      |

**High-Flow Nasal Cannula oxygenation (HFNC):**

**Moderate cases:** Target SpO<sub>2</sub>: 92-96% (88-92% in patients with COPD)

**Severe Cases:** target SpO<sub>2</sub> ≥ 90% in non-pregnant adults and SpO<sub>2</sub> ≥ 92- 96% in pregnant patients

**Indication:**

1. When respiratory distress and/or hypoxemia of the patient cannot be alleviated after receiving standard oxygen therapy.

**Special precaution:**

Patients with hypercapnia, hemodynamic instability, multi-organ failure, or abnormal mental status should generally not receive HFNO, although emerging data suggest that HFNO may be safe in patients with mild-moderate and non-worsening hypercapnia

Patients receiving HFNO should be in a monitored setting and cared for by experienced personnel capable of endotracheal intubation in case the patient acutely deteriorates or does not improve after a short trial (about 1 hr)

Use N95 mask over the HFNC (to avoid aerosol dispersion). If conditions do not improve or even get worse within a short time (1-2 hours), tracheal intubation and invasive mechanical ventilation should be used in a timely manner.

**Remdesivir:**

Emergency Use Authorization for those on oxygen: (Moderate or severe disease) with none of the following contraindications

1. AST/ALT > 5 times Upper limit of normal (ULN)
2. Severe renal impairment (i.e., eGFR < 30ml/min/m<sup>2</sup> or need for hemodialysis)
3. Pregnancy or lactating females
4. Children (< 12 years of age)

**Dose:** 200 mg IV on day 1 followed by 100 mg IV daily for 4 days (total 5 days)

AVOID Remdesivir-Hydroxychloroquine co-administration