COVID-19 Treatment Algorithm

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Adult Admitted with COVID-19

Evaluate Respiratory Status

Consider ID consult for:

- Remdesivir for MV or ECMO or extension of therapy beyond 5 days
- Remdesivir for symptoms > 7 days
- Tocilizumab or Baricitinib approval
- Pregnant women (also OB consult)
- Renal failure (CrCl < 30 ml/min)
- Other ID issue in addition to COVID
- Severe immunocompromise

Respiratory Status	Dexamethasone[1]	Remdesivir[2]	Tocilizumab[3] or Baricitinib[4] (ID approval required)	Monoclonal Antibodies[5] and Convalescent Plasma
No O2 requirement	Not indicated	START if high-risk*, symptomatic within 7 days of onset (3-day course)	Not indicated	Consider ID consultation for immunocompromised or other high-risk patients (see above and footnote)
2L NC, stable resp status		START (5-day course)		
2L NC and worsening (↑O2 req, ↑RR, resp distress) to 4L+ NC	START			
HFNC or NIMV[6] (within first 24h of this level of O2 support)		CONSIDER	START	
HFNC or NIMV[6] (after first 24h of this level of O2 support)			CONSIDER (up to 72 hours from admission)	
MV (within 24 hours)		CONSIDER (ID approval only)	START (Tocilizumab Preferred)	
MV (after 24 hours)			Not indicated	
ECMO				

1. **Dexamethasone:** 6 mg PO or IV daily for up to 10 days. Check Strongyloides IgG for people who were born or have resided in a developing country or an endemic area of the US. In case of dexamethasone shortage can substitute prednisone 40 mg, methylprednisolone 32 mg or hydrocortisone 160 mg.
2. **Remdesivir:** 200 mg IV x 1 dose f/b 100 mg IV q24H (for up to 3 or 5 days total). For patients on mechanical ventilation or therapy extension beyond 5 days, page ID team for approval (first dose may be given per primary team prior to approval to avoid delay). ***High-risk criteria** = Any ONE of: Age >=60 years, hypertension, cardiovascular or cerebrovascular disease, diabetes, BMI >= 30, immune compromise, chronic kidney disease, chronic liver disease, chronic lung disease, current cancer, or sickle cell disease
3. **Tocilizumab:** 8 mg/kg (max 800 mg) IV x 1 dose. **Required:** Elevated CRP > 7.5 required if used for HFNC or NIMV after first 24h of this level of O2 support**. Avoid in:** Pregnancy, Immunosuppression, AST/ALT > 5xULN, Platelets < 50, Active/Suspected concurrent bacterial/fungal infection**. Use caution** in age 70 or older**.** Baricitinib is less expensive than tocilizumab.
4. **Baricitinib:** 4 mg PO daily for up to 14 days**. Required:** Elevated CRP, LDH, ferritin, or D-dimer >ULN required. **Avoid in:** Pregnancy, Immunosuppression, History of VTE in past 3 months, AST/ALT > 5xULN, Platelets < 50, eGFR<30 ml/min, ANC<1000, Active/Suspected concurrent bacterial/fungal infection, LTBI treated for <4 weeks.
5. **Monoclonal antibodies:** The only monoclonal antibody with emergency use authorization for treatment is sotrovimab, but the supply is extremely limited with no availability for inpatients; consider alternatives (i.e. remdesivir). Compassionate use monoclonal antibodies may be available for patients with infection due to non-omicron variants – consult ID for high-risk patients.
6. Assumes patients on HFNC or NIMV are admitted to ICU level of care

Hospital Discharge Prior to Completion of Therapy

Respiratory Status	Dexamethasone	Remdesivir	Other
No O2 requirement	If started inpatient, **DO NOT CONTINUE** on discharge		If **baricitinib** started inpatient, **DO NOT CONTINUE** on discharge
O2 requirement related to COVID-19	If started inpatient, there is insufficient evidence to recommend for or against continuing on discharge	If started inpatient, **DO NOT CONTINUE** on discharge	