COVID PROTOCOL*

	MILD	MODERATE	SEVERE
Clinical Criteria			
SPO_2	> 94 % in Room Air	90 - 94 % in Room Air	< 90 % in Room Air
RR	< 24 / min	24 – 30	> 30
	No Pneumonia	Pneumonia +	Pneumonia ++
CT Chest Criteria			
	Normal or < 25 %	25 % - 75 %	75 % to 100 %
	Grade I	Grade II / III	Grade IV
Laboratory Findings (Expected)			
NLR[1,2]	< 3.2	> 3.2	> 5.5
CRP[3]	< 40	40 – 125	> 125
Ferritin[2]	< 500	> 500	> 800
D-Dimer[4]	< 0.5	> 0.5	> 1.0
LDH	< 300	300 – 400	> 400
IL6	< 4.8	5 – 50	> 80
LFT[5]	Normal	Slight Derangement	Moderate Derangement
Treatment			
Routine	T. Paracetamol 500 mg TDS	T. Paracetamol 500 mg TDS	T. Paracetamol 500 mg TDS
	Anti-tussives SOS	Anti-tussives SOS	Anti-tussives SOS
	T. Vitamin C 500 mg OD	T. Vitamin C 500 mg BD	T. Vitamin C 500 mg BD
	T. Zinc 50 mg BD	T. Zinc 50 mg BD	T. Zinc 50 mg BD
	C. Omeprazole 20 mg BD	C. Omeprazole 20 mg BD	Inj. Pantoprazole 40 mg IV OD
Fluids	Adequate Hydration - Oral	Adequate Hydration - NS	Conservative Fluids
HCQ (Not prescribed routinely)	T. HCQ (In high risk patients – DM / HT / CVA / CKD / CLD / Obesity / Age > 60 yrs) Day 1 - 400 mg BD Followed by 400 mg OD x 4 Days (avoid in cardiac disease or if QTc > 480 ms) – MOHFW Guidelines	T. HCQ (In high risk patients – DM / HT / CVA / CKD / CLD / Obesity / Age > 60 yrs) Day 1 - 400 mg BD Followed by 400 mg OD x 4 Days (avoid in cardiac disease or if QTc > 480 ms) – MOHFW Guidelines	-
Antibiotics	T. Azithromycin 500 mg OD x 5 Days (or) T. AmoxClav 625 BD if T. Azithromycin is	T. Azithromycin 500 mg OD x 5 Days +	T. Azithromycin 500 mg OD x 5 Days + Inj. Piptaz 4.5 mg/ Inj meropenam 500mg IV TDS if

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	Contraindicated and Elderly > 60 yrs.	Inj. Ceftriaxone 1 gm IV BD if secondary bacterial infection suspected	secondary bacterial infection suspected
Anticoagulation	-	Inj. Enoxaparin 40 mg SC OD x 5 Days (can be started as prophylactic without D DIMER) (Contraindicated in ESRD, active bleeding, emergency surgery, platelets < 20,000/mm^3, BP > 200/120) Inj. Dalteparin 2500 IU SC OD ×5 days In ESRD, UH – 5000U SC BD can be used	Inj. Enoxaparin 40 mg SC BD x 5 Days (can be started as prophylactic without D DIMER) (Contraindicated in ESRD, active bleeding, emergency surgery, platelets < 20,000/mm^3, BP > 200/120) Inj. Dalteparin 5000 IU SC OD × 5 day In ESRD, UH – 5000U SC BD can be used
Steroids	-	Inj. Dexamethasone 0.1 – 0.2 mg /kg ≈ 6 mg IV OD x 5 Days or inj. Methyl Prednisolone 0.5 -1 mg/kg ≈ 60mg x 5 Days	Inj. Dexamethasone 0.2 – 0.4 mg /kg ≈ 6 mg IV BD x 10 Days or inj. Methyl Prednisolone 1.0 -2.0 mg/kg ≈ 80 mg x 10 Days
Oxygen Support	Not Required	Maintain Target SPo2 of 92 to 96 % Nasal Prongs (4 lit / min) ↓ Face Mask (5-10 lit / min) ↓ NRM (10 -15 lit / min) ↓ HFNC (10 - 40 lit / min) ↓ CPAP (TV 6ml/kg; PEEP 5-15 cm H20; Target PP 30 cm H20)	Maintain Target SPo2 > 90 % NRM (10 -15 lit / min) ↓ HFNC (10 - 60 lit / min) ↓ CPAP (TV 6ml/kg; PEEP 5-15 cm H20; Target PP 30 cm H20) ↓ MV (ARDS Protocol)
Proning	-	Awake Proning (if > 4 L / min) - 30 to 120 mins prone - 30 to 120 mins left lateral - 30 to 120 mins right lateral - 30 to 120 mins upright – Contraindicated in altered mental status and hemodynamic instability, pregnancy	Prone Ventilation 16 to 18 hrs / Day
Cytokine Storm	-	Inj. Toculizumab 400 mg (max 800 mg) slow IV in 100 ml NS over 1 Hour Repeat Dose after 12 hours if needed	-

		Contra Indications – Active Infections, TB, Hepatitis, Platelets < 1L/mm^3, ANC < 2000/mm^3	
COMORBIDITY AND COMPLICATIONS			
Comorbidity CAD, HT, DM, Hypothyroid, Epilepsy	Treat Appropriately	Treat Appropriately	Treat Appropriately
Complications Septic Shock AKI, MODS Delirium Electrolytes ECG-abnormalities Stress Ulcers Liver Dysfunction	Treat Appropriately	Treat Appropriately	Treat Appropriately
Trial Therapies			
1	-	Inj. Remdesivir 200mg IV OD on Day 1 and 100 mg IV OD x 4 Days Contraindication – Liver Dysfunction/ CKD / Pregnancy / Lactation / Children DI – avoid HCQ, Dexa use Methyl Prednisolone	-
2	-	Convalescent Plasma 200 ml slow IV Single Dose	-
3	-	(Lopinavir 400 mg + Ritonavir 100 mg) Twice Daily x 14 Days Suspended by WHO wef 4.7.20.	-
4	-	(Lopinavir 400 mg + Ritonavir 100 mg) Twice Daily x 14 Days + Interferon Beta 8 Million IU on Alternate Days x 3 Doses	-
MONITORING			
BP / HR	Daily	6^{th} Hourly	4^{th} Hourly
RR / WOB /spO_2	6^{th} Hourly	2^{nd} Hourly	Continuously

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CBC / NLR / RFT / LFT	Baseline	Every 2 Days	Daily
COVID Profile	Baseline	Once every 4 days	Once every 2 days
D Dimer	Repeated 4th day	Once every 4 days	Once every 2 days
ECG	Baseline	Once every 2 days	Daily
ABG	-	-	Daily
X Ray	-	If Clinical Deterioration	
DISCHARGE CRITERIA			
	Afebrile > 3 Days without antipyretics + No Breathlessnes	Afebrile > 3 Days without antipyretics + No Breathlessnes	Afebrile > 3 Days without antipyretics + No Breathlessnes
	10 Days from Symptom Onset	10 Days from Symptom Onset	Clinical Recovery
	-	No O2 Requirement for 3 Days	
	RT-PCR not Required	RT-PCR not Required	Repeat RT-PCR if Swab Negative Transfer to Non Covid Care Ward – if clinical recovery is delayed
POST DISCHARGE ADVICE	Isolation + Self Monitoring for 7 Days	Isolation + Self Monitoring for 7 Days	Isolation + Self Monitoring for 7 Days

* based on clinical management protocol, Covid 19 – MOHFW GOI dt 03.07.20

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5. Zhang et al., doi.org/10.1016/S2468-1253(20)30057-1