Document prepared by Nerve Center of TFORD, Venture Center, Pune

Task Force on Repurposing of Drugs (TFORD) for COVID19

S&T Core Group on COVID19 constituted by PSA to GoI

Molecule Brief: Remdesivir

Updated on 22nd June 2020

Ref: TFORD/MB/003	**Date:** 23rd June 2020
About this document: *This document summarizes information available on drug candidates for COVID19. One Molecule Brief document covers one candidate at a time.*	
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1. Summary Information on Remdesivir

<table>
<tr><td colspan="2">Information About the Candidate for Approved Indication(s)</td></tr>
<tr><td>Common Name of Drug</td><td>Remdesivir</td></tr>
<tr><td>Brand Name/Company</td><td>Remdesivir (Gilead Sciences Inc.)</td></tr>
<tr><td>Category/ Type</td><td>Antiviral</td></tr>
<tr><td>Drug Bank ID/Link</td><td>DB14761
https://www.drugbank.ca/drugs/DB14761</td></tr>
<tr><td>Mode of Action</td><td>Remdesivir is a prodrug that metabolizes into its active form GS-441524. An adenosine nucleotide analog, GS-441524 inhibits the action of viral RNA polymerase. By incorporating into RNA, additional nucleotides cannot be added, terminating RNA transcription.</td></tr>
<tr><td>Currently Approved for which Indication(s)</td><td>
<table>
<tr><th></th><th>Generic name</th><th>Orphan designation</th><th>Designation date</th><th>Designation status</th></tr>
<tr><td>1</td><td>Remdesivir</td><td>Treatment of coronavirus disease 2019 (COVID-19)</td><td>03/23/2020</td><td>Orphan Drug Approval*</td></tr>
<tr><td>2</td><td>Remdesivir</td><td>Treatment of Ebola virus disease</td><td>09/18/2015</td><td>Orphan Drug Approval</td></tr>
</table>
* While this approval was granted, Gilead has made the decision to drop its orphan drug designation potential coronavirus treatment. So, at present, Remdesivir is not an approved drug for COVID-19.
http://www.pmlive.com/pharma_news/gilead_faces_criticism_over_remdesivirs_orphan_drug_designation_1329985
</td></tr>
<tr><td>Approved Dose</td><td>Data not available</td></tr>
<tr><td>Route of Administration</td><td>IV – Used for Ebola and COVID-19 Trials</td></tr>
<tr><td>Safety Profile of drug (dose range in which it has been tested to be safe in humans)</td><td>Data not Available</td></tr>
<tr><td>Adverse events/Side</td><td>Remdesivir is an experimental medicine that does not have established safety or</td></tr>
</table>

effects reported at the current approved dose	efficacy for the treatment of any condition https://www.gilead.com/purpose/advancing-global-health/covid-19/about-remdesivir
Reported Drug-Drug Interactions	Data not available
Link to Datasheet	Data not available
Current TRL level of the Drug	TRL > 7 (Ph II/Ph III Clinical Trials)
Has the drug been repurposed for any other indication before?	No
Is the Drug being sold in India?	Yes
Indian Manufacturer(s)	Hetero, Cipla https://www.expresspharma.in/latest-updates/csir-iict-ties-up-with-cipla-to-develop-anti-covid-19-drug/ Others pursuing – Jubilant, Mylan, BDR, Dr. Reddys https://indianexpress.com/article/india/covid-19-hetero-cipla-get-nod-to-manufacture-market-antiviral-drug-remdesivir-6469193/
International Manufacturer(s)	Gilead Sciences https://www.gilead.com/purpose/advancing-global-health/covid-19/increasing-manufacturing-capacity-and-supply-of-remdesivir
Information About the Candidate for COVID-19	
Repurposing Claim	Indication – COVID-19 Dose – See details below
Approval Status	See table below

Country	Approval Type	Date	Stage of Disease	Brand Name/ (Company)	Dose	Reference
USA	Emergency Use Authorization (EUA)	1st May 2020	Hospitalized; Severe Disease	GS-5734 (Gilead)	IV; Single loading dose of 200 mg on Day 1 followed by once daily maintenance doses of 100 mg from Day 2.	• https://www.fda.gov/media/137566/download • https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-issues-emergency-use-authorization-potential-covid-19-treatment
Japan	Exceptional Approval Pathway (similar to FDA's EUA)	7th May 2020	Hospitalized; Severe Disease	Veklury (Gilead)	Data not available	• https://www.gilead.com/news-and-press/press-room/press-releases/2020/5/gilead-announces-approval-of-veklury-remdesivir-in-japan-for-patients-with-severe-covid19
India	Restricted	20th June	Hospitalized;	Cipremi	200 mg on day	

	Emergency Use	2020	Severe Disease	(Cipla) Covifor (Hetero)	one followed by 100 mg daily for five days	• https://cdsco.gov.in/opencms/opencms/system/modules/CDSCO.WEB/elements/download_file_division.jsp?num_id=NjAwOA== • https://www.cipla.com/press-releases-statements/cipla-launches-cipremi-remdesivir-lyophilised-powder-injection-100-mg • https://www.expresspharma.in/covid19-updates/hetero-announces-launch-of-generic-remdesivir-covifor-for-covid-19-treatment/

Rationale for Repurposing for COVID-19/MoA?	• Evidence of inhibition of SARS-CoV-2 in-vitro and in-vivo (details below) • Evidence of action against other coronaviruses (MERS and SARS) which are structurally similar to SARS-CoV-2 in-vitro and in-vivo https://www.ijbs.com/v16p1753.htm https://pubmed.ncbi.nlm.nih.gov/29511076/ • Illustration of possible MoA: https://science.sciencemag.org/content/367/6485/1412
Proposed use as Primary or Adjuvant?	Primary
Pre-Clinical Data available for COVID19	In-silico data: • A deep learning-based drug-target interaction model study shows that Remdesivir binds to SARS-CoV-2 with a Kd of 113.13nM. https://pubmed.ncbi.nlm.nih.gov/32280433/ In-vitro data: • Remdesivir potently blocks virus infection at low-micromolar concentration and shows high SI in VeroE6 cells (EC_{50} = 0.77 μM; CC_{50} > 100 μM; SI > 129.87). The study shows that Remdesivir functioned at a stage post virus entry which is in agreement with its putative anti-viral mechanism as a nucleotide analogue. https://www.nature.com/articles/s41422-020-0282-0 • Remdesivir inhibits SARS-CoV-2 infection of VeroE6 cells with IC50 of 23.15uM. Synergy between remdesivir and emetine was observed, and remdesivir at 6.25 μM in combination with emetine at 0.195 μM may achieve 64.9% inhibition in viral yield. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7127386/ In-vivo data: • Therapeutic study in rhesus macaque model of SARS-CoV-2 shows: Results: In contrast to vehicle-treated animals, animals treated with Remdesivir did not show signs of respiratory disease and had reduced pulmonary infiltrates on radiographs and reduced virus titers in bronchoalveolar lavages 12hrs after the first treatment administration. Virus shedding from the upper respiratory tract was not reduced by remdesivir treatment. At necropsy, lung viral loads of remdesivir-treated

	animals were lower and there was a reduction in damage to the lungs. Conclusion: Therapeutic remdesivir treatment initiated early during infection had a clinical benefit in SARS-CoV-2-infected rhesus macaques. https://www.nature.com/articles/s41586-020-2423-5
Status of Clinical Trials	15 Interventional Trials (1 in India)
Trial Details	See table below

Trial ID/Link	Type of Trial	No. of patients	Drug Combination/Dose/ Stage of Disease	Primary and Secondary Measures	Has data from the trial been published?
NCT04409262	Randomized, Double-Blind, Multicenter	450	Remdesivir + Tocilizumab (RDV+TCZ) Other arms: RDV+Placebo Dose: Data not available Stage: Severe COVID-19 Pneumonia	Primary: Clinical Status as Assessed by the Investigator Using a 7-Category Ordinal Scale of Clinical Status on Day 28 [Time Frame: Day 28]	No
NCT04292730	Randomized	1600	Remdesivir: 5 day and 10 day regime Dose: 1. 5 day: IV/200mg/day 1 and IV/100mg/day 2-5 2. 10 day: IV/200mg/day 1 and IV/100mg/day 2-10 Stage: Moderate Disease	Primary: The Odds of Ratio for Improvement on a 7-point Ordinal Scale on Day 11 [Time Frame: Day 11]	No
NCT04410354	Randomized, double-blind,	40	MMPD (Merimepodib) + Remdesivir Other Arm: Placebo + Remdesivir Dose: IV/200mg/ loading dose/Day 0 followed IV/100 mg/QD/4 days Stage: Severe Disease	Primary: Number of subjects not hospitalized or, if hospitalized, free of respiratory failure [Time Frame: Day 0 to Day 28], Proportion of subjects alive at Day 28 who are not hospitalized or if hospitalized are free of respiratory failure, Adverse Events [Time Frame: Day 0 to Day 56], Number of Adverse Events (AEs) and number & percentage of subjects experiencing AEs after administration of the first dose of study drug	No
IRCT20171122037571N2	Single-arm, uncontrolled, open-label clinical	120	Remdesivir + HCQ+Lopinavir/ritonavir Dose: 200mg/Day 1 followed by 100mg/QD/14 days Stage: Data not available	Primary: time (day) to clinical improvement (2 score improvement of six categorical scores ranging from death to complete recovery) and TTCR: time (hr) to the normalization of fever, respiration, cough, and blood oxygen level is considered as the primary outcomes of this study.	No
NCT04292899	Randomized	6000	Remdesivir: 5 day and 10 day regime (not mechanically	Primary outcome measures: The Odds of	Yes

			ventilated) Dose: 1. 5 day: IV/200mg/day 1 and RDV IV/100mg/day 2-5 2. 10 day: IV/200mg/day 1 and RDV IV/100mg/day 2-10 Stage: Severe Disease	Ratio for Improvement on a 7-point Ordinal Scale on Day 14 [Time Frame: Day 14	
NCT04431453 (Pediatric)	Open label	52	Remdesivir: Dose: 1. Cohort 1: IV/ 200mg/ Day 1 followed by IV/ 100mg/QD 2. Cohorts 2-5: IV/5mg/kg/ Day 1 followed by 2.5 mg/kg/QD 3. Cohorts 6-7: IV RDV at a dose to be determined based on RDV exposure data from Cohort 5 Stage: Data not available	Primary: 1. Proportion of Participants Experiencing any Treatment-Emergent Adverse Events [Time Frame: First dose date up to Day 30 Follow-up Assessment], 2. Proportion of Participants Experiencing any Treatment-Emergent Graded Laboratory Abnormalities [Time Frame: First dose date up to Day 30 Follow-up Assessment], 3. Plasma Concentrations of Remdesivir (RDV) and Metabolites [Time Frame: Day 2: end of infusion and 4 hours post end of infusion, Day 3: pre-infusion and 2 hours post end of infusion, and Day 5: middle of infusion and 6 hours post end of infusion; infusion duration: 30 minutes to 2 hours], Plasma concentrations will be drawn as follows: (1) for cohorts 1-4 on Day 2, and Day 3, Day 5 is optional; (2) for cohorts 5-7 on Day 2 or Day 3	No
NCT04321616	Randomized, Open, Solidarity Multicenter	700	Remdesivir Dose: IV/200mg/day 1 and IV/100mg/QD/10 days Other arm: HCQ Stage: Data not available	Primary: In-hospital mortality [Time Frame: 3 weeks]	No
NCT04401579	Randomized Blinded Controlled	1032	Remdesivir + Baricitinib Dose: IV/200mg/day 1 and IV/100mg/QD/10 days Stage: Hospitalized	Primary: Time to recovery [Time Frame: Day 1 through Day 29]	No
2020-000982-18	Solidarity multicenter	609	Remdesivir + HCQ: Dose: 100mg Stage: Data not available	Primary: All-cause in-hospital mortality	No

NCT04315948	Randomized	3100	Remdesivir Other arms: Lopinavir/ritonavir, Interferon Beta-1A, Hydroxychloroquine Dose: IV/200mg/day 1 and IV/100mg/QD/10 days Stage:Data not available	Primary: Percentage of subjects reporting each severity rating on a 7-point ordinal scale [Time Frame: Day 15]	No
NCT04280705	Randomized	800	Remdesivir Dose: IV/200mg/day 1 and IV/100mg/QD/10 days Stage: Data not available	Primary: Time to recovery [Time Frame: Day 1 through Day 29]	Yes
NCT04330690	Randomized, Open-label	2900	Remdesivir Other arms: HCQ, Lopinavir/ritonavir Dose: IV/200mg/day 1 and IV/100mg/QD/9 days Stage:Data not available	Primary: Efficacy of Interventions as assessed by all-cause mortality [Time Frame: 29 days]	No
NCT04349410	Randomized	500	Remdesivir Other arms: Hydroxychloroquine, Azithromycin, Hydroxychloroquine, Doxycycline, Hydroxychloroquine, Clindamycin, Hydroxychloroquine, Clindamycin, Primaquine Hydroxychloroquine, Clindamycin, Primaquine, Tocilizumab, Methylprednisolone, Interferon-Alpha2B Losartan, Convalescent Serum Dose: IV/200mg/day 1 and IV/100mg/QD/10 days Stage: Data not available	Primary: Improvement in FMTVDM Measurement with nuclear imaging. [Time Frame: 72 hours]	No
NCT04257656	Phase 3 Randomized, Double-blind, Placebo-controlled, Multicenter Study	237	Remdesivir Dose: 200 mg loading dose on day 1 is given, followed by 100 mg iv once-daily maintenance doses for 9 days. Stage: Severe Disease	Primary: Time to Clinical Improvement (TTCI) [Censored at Day 28] [Time Frame: up to 28 days]	Yes
CTRI/2020/04/024773 (India: Solidarity trial)	Open, randomized	1500	Remdesivir Other arms: Chloroquine or hydroxychloroquine, Lopinavir/ Ritonavir, Lopinavir/ Ritonavir + Interferon Dose: Data not available (daily infusion for 10 days) Stage: Hospitalized	Primary: All-cause mortality, subdivided by the severity of disease at the time of randomization, measured using patient records throughout the study	No

Key Data from Clinical Trials	**Data Published in Journals**

(Note – Only data from interventional trials have been included)	• Type of Trial: Open-Label, Compassionate Use • Country: United States (22 patients), Japan (9), Italy (12), Austria (1), France (4), Germany (2), Netherlands, (1), Spain (1), and Canada (1) • Number of patients: 53 • Disease Stage: COVID-19+ve; Hospitalized • Interventions: Remdesivir • Dose: IV/200mg/D1; IV/100mg/ other 9 days • Results: During a median follow-up of 18 days, 36 patients (68%) had an improvement in oxygen-support class, including 17 of 30 patients (57%) receiving mechanical ventilation who were extubated. A total of 25 patients (47%) were discharged, and 7 patients (13%) died; mortality was 18% (6 of 34) among patients receiving invasive ventilation and 5% (1 of 19) among those not receiving invasive ventilation. • Adverse events: A total of 32 patients (60%) reported adverse events during follow-up - increased hepatic enzymes, diarrhea, rash, renal impairment, and hypotension. In general, adverse events were more common in patients receiving invasive ventilation. A total of 12 patients (23%) had serious adverse events. The most common serious adverse events — multiple organ-dysfunction syndrome, septic shock, acute kidney injury, and hypotension — were reported in patients who were receiving invasive ventilation at baseline. Four patients (8%) discontinued Remdesivir treatment prematurely: one because of worsening of pre-existing renal failure, one because of multiple organ failure, and two because of elevated aminotransferases, including one patient with a maculopapular rash. • Conclusion: In cohort of patients hospitalized for severe Covid-19 who were treated with compassionate-use Remdesivir, clinical improvement was observed in 36 of 53 patients (68%). • Reference:https://www.nejm.org/doi/pdf/10.1056/NEJMoa2007016
	• Type of Trial: Open-Label, Compassionate Use • Country: Italy • Number of patients: 35 • Disease Stage: COVID-19+ve; Hospitalized • Interventions: Remdesivir, HCQ (continued if taken before) (35) • Dose: IV/200mg/loading dose IV/100mg/QD/ 9 days • Results: ICU patients - Day 10: 4 (22.2 %) ICU patients showed improvement in hospitalisation status, 10 (55.5 %) were still undergoing invasive ventilation, and 4 (22.2 %) had died. On 28 day of follow-up, the hospitalisation status of 38.9 % of the ICU patients had improved (six had been discharged, one had been weaned from invasive ventilation), 16.7 % were still undergoing mechanical ventilation and the other 44.4 % had died. IDW patients - 10 day treatment: 6 (35.3 %) had improved, 10 required high-flow therapy and/or non-invasive mechanical ventilation, and 1 had died. • Adverse events: The most frequent was hepatotoxicity, with a grade 3–4 increase in transaminases levels observed in 42.8 % of the patients. The most frequent adverse event leading to treatment discontinuation was acute kidney injury (AKI), which was observed in four patients, all in ICU, three of whom eventually died. Remdesevir was also discontinued in three patients showing a grade 3–4 increase in transaminase levels, and in one patients who developed a serious maculo-papular rash. • Conclusion: Remdesivir treatment may have a beneficial effect on SARS CoV-2 pneumonia, especially in the case of non-critically ill patients. • Reference:https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7212963/
	• Type of Trial: Double-blind, randomized, placebo-controlled • Country: USA

	• Number of patients: 1063; Interim data is for 1059 patients • Disease Stage: COVID-19+ve; Hospitalized • Interventions: Placebo (521), Remdesivir (528) • Dose: IV/200mg/loading dose; IV/100mg/QD/ 9 days • Results: Interim data from 1059 patients -Those who received Remdesivir had a median recovery time of 11 days (95% confidence interval [CI], 9 to 12), as compared with 15 days (95% CI, 13 to 19) in those who received placebo (rate ratio for recovery, 1.32; 95% CI, 1.12 to 1.55; P<0.001). The Kaplan-Meier estimates of mortality by 14 days were 7.1% with remdesivir and 11.9% with placebo (hazard ratio for death, 0.70; 95% CI, 0.47 to 1.04). • Adverse events: Serious adverse events were reported for 114 of the 541 patients in the Remdesivir group • Conclusion: Remdesivir was superior to placebo in shortening the time to recovery in adults hospitalized with Covid-19 and evidence of lower respiratory tract infection. • Reference: https://pubmed.ncbi.nlm.nih.gov/32445440/ --- • Type of Trial: Randomized Open label controlled clinical trial (SIMPLE) • Country: USA • Number of patients: Interim data -397/ 5600 (Total) • Disease Stage: COVID-19+ve; Hospitalized with Pneumonia • Interventions: 200 – 5 days; 197 – 10 days Remdesivir • Dose: IV/200 mg D1; 100 mg/QD/on subsequent days • Results: Interim data from 397 patients - By day 14, a clinical improvement of 2 points or more on the ordinal scale occurred in 64% of patients in the 5-day group and in 54% in the 10-day group. After adjustment for baseline clinical status, patients in the 10-day group had a distribution in clinical status at day 14 that was similar to that among patients in the 5-day group (P=0.14) • Adverse events: The most common adverse events were nausea (9% of patients), worsening respiratory failure (8%), elevated alanine aminotransferase level (7%), and constipation (7%). • Conclusion: In patients with severe Covid-19 not requiring mechanical ventilation, our trial did not show a significant difference between a 5-day course and a 10-day course of remdesivir. With no placebo control, however, the magnitude of benefit cannot be determined. • Reference:https://www.nejm.org/doi/full/10.1056/NEJMoa2015301 --- • Type of Trial: Randomised, double-blind, placebo-controlled, multicentre trial • Country: China • Number of patients: 237 • Disease Stage: COVID-19+ve; Severe Disease • Interventions: Control (79), Remdesivir (158) • Dose: IV/200mg/D1; 100 mg/D2-10 • Results: Remdesivir use was not associated with a difference in time to clinical improvement (hazard ratio 1·23 [95% CI 0·87–1·75]). Although not statistically significant, patients receiving remdesivir had a numerically faster time to clinical improvement than those receiving placebo among patients with symptom duration of 10 days or less (hazard ratio 1·52 [0·95–2·43]). • Adverse events: Adverse events were reported in 102 (66%) of 155 Remdesivir recipients versus 50 (64%) of 78 placebo recipients. Remdesivir was stopped early because of adverse events in 18 (12%) patients versus four (5%) patients who stopped placebo early. • Conclusion: In this study of adult patients admitted to hospital for severe COVID-19, Remdesivir was not associated with statistically significant

	clinical benefits. However, the numerical reduction in time to clinical improvement in those treated earlier requires confirmation in larger studies. • Reference: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31022-9/fulltext
	Data Listed on Trial Registries Data not available
	Data from Other Sources (news articles, pre-prints and unpublished reports) • Source Type: Gilead Press Release • Type of Trial: Randomized, Controlled, Open Label (SIMPLE) • Country: United States, China, France, Germany, Hong Kong, Italy, Japan, Korea, the Netherlands, Singapore, Spain, Sweden, Switzerland, Taiwan and the United Kingdom. • Number of patients: 600 (Interim data)/ 1000 (total) • Disease Stage: COVID-19+ve; Moderate Disease • Interventions: SoC, 5 day, 10 day Remdesivir • Dose: IV/200 mg D1; 100 mg/QD/on subsequent days • Results: Interim data from 600 patients - Patients in the 5-day remdesivir treatment group were 65 percent more likely to have clinical improvement at Day 11 compared with those in the standard of care group (OR 1.65 [95% CI 1.09-2.48]; p=0.017). The odds of improvement in clinical status with the 10-day treatment course of remdesivir versus standard of care were also favorable, trending toward but not reaching statistical significance (OR 1.31 [95% CI 0.88-1.95]; p=0.18). • Adverse events: No new safety signals were identified with Remdesivir across either treatment group. • Conclusion: These study results offer additional encouraging data for Remdesivir, showing that if we can intervene earlier in the disease process with a 5-day treatment course, we can significantly improve clinical outcomes for these patients • Reference: https://www.gilead.com/news-and-press/press-room/press-releases/2020/6/gilead-announces-results-from-phase-3-trial-of-remdesivir-in-patients-with-moderate-covid-19
TRL Level for COVID19	TRL- 9 (Approved Drug)
Other Key References	• WHO: Table of Therapeutics • https://www.drugbank.ca/drugs/DB14761 • https://www.gilead.com/purpose/advancing-global-health/covid-19/ • https://www.ncbi.nlm.nih.gov/pubmed/26934220 • https://www.ema.europa.eu/en/documents/other/summary-compassionate-use-remdesivir-gilead_en.pdf •

IP Status

Pending applications	201948034308 (Divisional to IN319927): Title: Compounds for treating paramyxoviridae virus infections Assignee: Gilead Sciences Priority Date: 22/07/2010 Publication date: 18/10/2019 201717012502 Title: Methods for the preparation of ribosides Assignee: Gilead Sciences Priority Date: 29/10/2014 Publication date: 14/07/2017
Approved and Active applications	IN275967 Title: 1-substituted carba-nucleoside analogs for antiviral treatment Assignee: Gilead Sciences

	Priority date: 19/12/2008 Grant date: 30/09/2016 Expected expiry date: 22/04/2029 IN319927 Title: Compounds for treating paramyxo-viridae virus infections Assignee: Gilead Sciences Priority date: 22/07/2010 Grant date: 05/09/2019 Expected expiry date: 22/07/2031 IN332280 Title: Compounds for treating filoviridae infections Assignee: Gilead Sciences Priority date: 29/10/2014 Grant date: 18/02/2020 Expected expiry date: 29/10/2035
Expired or Lapsed application	NA

2. Background information

About TFORD-COVID19
The Principal Scientific Advisor to the GoI, Dr K VijayRaghavan, has constituted a S&T Core Group on COVID19. Under the aegis of the S&T Core Group on COVID19, a Task Force has been constituted focused on Repurposing of Drugs for COVID19 (in short "TFORD-COVID19"). The Task Force is being coordinated by Dr V Premnath, Head, NCL Innovations at CSIR-NCL and Director, Venture Center and Dr Anurag Agarwal, Director, CSIR-IGIB. The Nerve Center for the Coordination is located be at Venture Center, Pune (located in the campus of CSIR-NCL).

Credits
Editor: Dr Priya Nagaraj; Contributors: Dr Priya Nagaraj, Dr Vidula Walimbe, Dr Smita Kale, Dr Kirtee Wani, Dr Tejas Shah, Dr Mugdha Lele, Mr Navnath Kadam, Dr Manisha Premnath, Dr Premnath V; Information also contributed by Dr Gopakumar Nair, GNAS and GnanLex.

About Advisory Group
The Nerve Center at TFORD-COVID19 has constituted an inter-disciplinary Advisory Group. This Advisory Group reviews the information compiled by the Nerve Center, provides suggestions on data, information sources, organization of data etc. while also providing inputs to refine the analysis and create a structured information base to support decision-making. The Advisory Group also provides expert input and opinions on certain selected points where experience-based inputs are needed. The members of the Advisory Group for each Discussion Paper are listed at https://nclinnovations.org/covid19/teams/ .

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