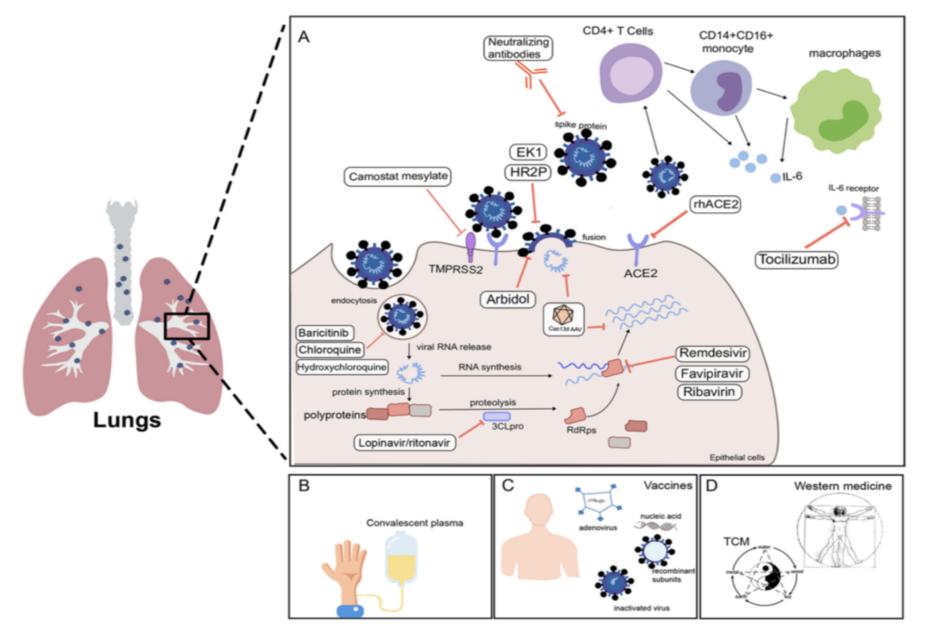


UTSouthwestern

Medical Center

TAMEST COVID-19 Webinar Mamta K. Jain, MD, MPH, FIDSA June 11, 2020

Therapeutic Targets



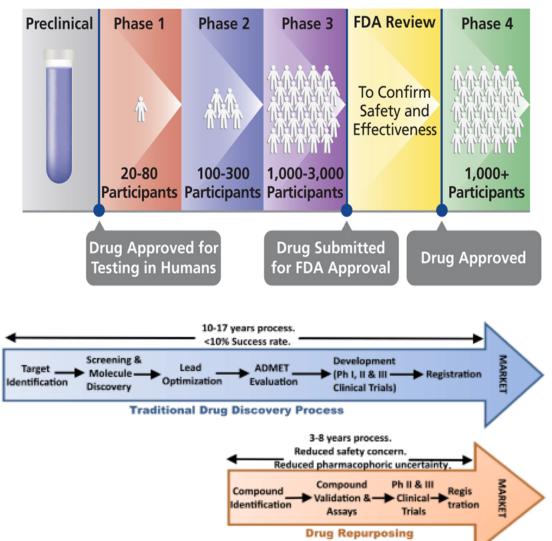
Updated approaches against SARS-CoV-2. Li et. al. AAC Accepted Manuscript Posted Online 23 March 2020. Antimicrob. Agents Chemother. doi:10.1128/AAC.00483-20

Clinical Trials: UT Southwestern & PHHS

Gilead: remdesivir		Regeneron: sarilumab	HERO: hydroxychloroquine	NIH ACTT2: remdesivir +/- baricitinib
Moderate ; hospitalized	Severe; hospitalized	Severe to critical ; hospitalized	Prevention ; outpatient	Hospitalized
 Inclusion : + COVID ≤ 4 days SpO2 >94% on room air Pulmonary infiltrates 	 Inclusion : + COVID ≤ 4 days SpO2 ≤94% on room air or requiring supplemental oxygen Pulmonary infiltrates 	Inclusion: • +COVID pcr+ <14 days • Pulmonary infiltrates • Fever • Supplemental oxygen	Inclusion:Healthcare workers with high risk exposureAsymptomatic	 Inclusion: COVID pcr + <72 hours Illness any duration with No participation in other COVID-19 trials
 Exclusion: Participation in other COVID-19 trials ALT or AST >5X ULN Cr Cl <50 ml/min Pregnancy/breastfeeding Treatment with other COVID-19 antivirals < 24 hours Mechanical ventilation 	 Exclusion: Participation in other COVID-19 trials ALT or AST >5X ULN Cr Cl <50 ml/min Pregnancy/breastfeeding Treatment with other COVID-19 antivirals < 24 hours Mechanical ventilation > 5 days 	 Exclusion: ANC <2000mm³ AST or ALT >5 XULN Platelet <50,000 per mm³ Receipt of leflunomide or methotrexate Known active TB, extrapulmonary TB, suspected or active bacterial or fungal infection 	 Exclusion: Symptoms of fever, cough, fever, shortness of breath for 5 days Congenital prolonged qTC use of medication which can lead to prolonged qTC Prior COVID infection End stage renal disease Prior retinopathy 	 Exclusion: Cr cl <30 ml/min ALT or AST >5 ULN Pregnancy/breastfeeding Immunosuppressive medications Live vaccine in prior 4 weeks Active or untreated TB Hx of VTE
Group 1 : 5 days Group 2: 10 days Group 3: standard of care	Group 1: 5 days Group 2: 10 days	Phase 2:Phase 3:Group 1: 200 mg.Cohort 1: 400 mgGroup 2: 400 mg.Cohort 2: 800 mgGroup 3: placeboCohort 3: 800 mg	hydroxychloroquine 30 days vs placebo	remdesivir vs. remdesivir +baricitinib
Enrolled 25 patients	Enrolled: 135	Enrolled: 36	Enrolled: 12	Enrolled: 7
Closed	Closed	Open	Open	Open

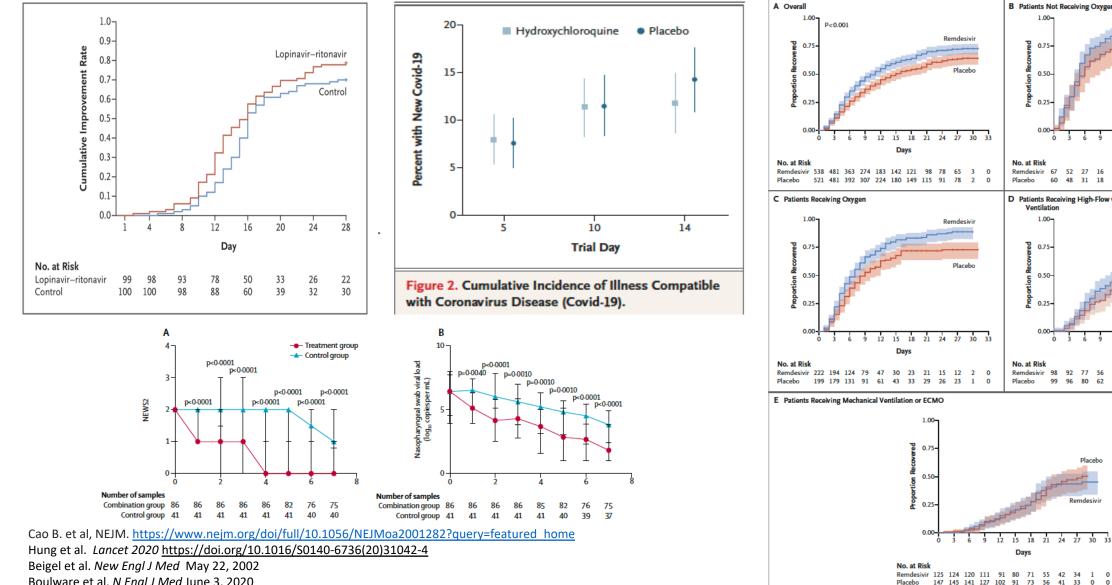
Challenges of Clinical Trials During a Pandemic

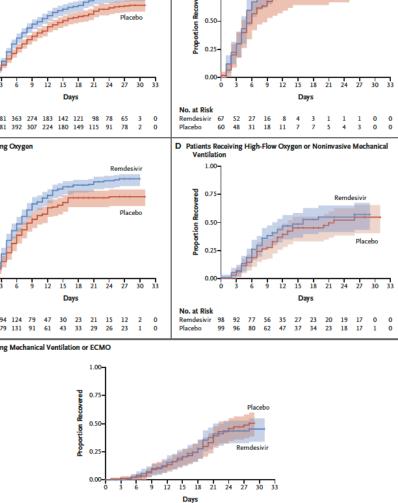
- (1) Lack of knowledge of why we need to do clinical trials
 - I want a drug that works
 - I don't want to be a "guinea pig"
 - I am afraid of the side effects
- (2) Is it ethical to give a placebo?
- (3)Infrastructure to scale up clinical trials
 - Research coordinators, data collection and entry, monitoring and reporting
- (3) Language barriers
- (4) consenting and working remotely
 - Lack of PPE, fear among research staff to see COVID-19 patients



Clinical Trials

Repurposed Drugs for COVID-19





Placebo

B Patients Not Receiving Oxygen

1.00-

0.75

Remdesivir

Placebo

Boulware et al. N Engl J Med June 3, 2020