Drug	Target or mechanism (if known)	Prelim results for SARS-CoV-2 trials or case reports (if applicable)	DOI of pertinent prior studies: SARS, MERS, or related RNA viruses	DOI of prelim clinical trials, case reports, or in vitro studies: SARS-CoV-2/COVID-19	clinicaltrials.gov ID(s) or other study identifier and phase (if available)	Study 1 size, structure, est. completion date	Study 2 size, structure, est. completion date	Study 3 size, structure, est. completion date	Study 4 size, structure, est. completion date	Study 5 size, structure, est. completion date	Study 6 size, structure, est. completion date	Study 7 size, structure, est. completion date	Study 8 size, structure, est. completion date
favipiravir	RNA-dependent RNA polymerase		10.1016/j.pharmthera.2020.107512, 10.1177/2040206618764483, doi.org/10.2183/pjab.93.027		NCT04273763, NCT04310228	NCT04273763: 60 participants, randomized open-label sequential assignment, single center -- April 30, 2020	NCT04310228: 150 participants, randomized open-label parallel assignment, single center -- May 2020						
remdesivir	RNA-dependent RNA polymerase	effective in NEJM case report (Holshue et al.) and in cell culture (Wang et al.)	10.1126/scitranslmed.aal3653, 10.1038/s41467-019-13940-6	10.1056/NEJMoa2001191, 10.1038/s41422-020-0282-0	WHO SOLIDARITY, INSERM Discovery (NCT04315948), NCT04302766 (expanded access), NCT04280705 (phase 2), NCT04292899 (phase 3)	WHO SOLIDARITY: large-scale, multi-center, randomized open-label, otherwise TBA	INSERM Discovery (NCT04315948): 3100 participants, randomized open-label parallel assignment, multi-center -- March 2023	NCT04302766: TBA	NCT04280705 (Adaptive COVID-19 Treatment Trial): 440 participants, randomized double-blind parallel assignment, multi-center -- April 1, 2023	NCT04292899: 400 participants, randomized open-label parallel assignment, single center - May 2020			
β-D-N4-hydroxycytidine	RNA-dependent RNA polymerase	effective at reducing viral load in vitro (lung cell culture) and reducing clinical sequelae in vivo (mice) (Sheahan et al.)	10.1177/0956332020401500102, 10.1101/2020.03.19.997890v1.full	10.1101/2020.03.19.997890v1.full	(trial in planning)								
lopinavir/ritonavir	viral protease inhibitor	mixed efficacy in 2 small Chinese trials (Cao et al., Deng et al.)	10.1038/s41467-019-13940-6, 10.1093/infdis/jiz992, 10.1016/j.jhin.2018.09.005, (PMID: 14660806), 10.1136/thorax.2003.012658, 10.1016/j.jcv.2004.03.003	10.1056/NEJMoa2001282, 10.1016/j.jinf.2020.03.002	WHO SOLIDARITY, INSERM Discovery (NCT04315948), NCT04286503, NCT04307693 (phase 2), NCT04291729 (phase 4), NCT04261907, NCT04295551, NCT04251871	WHO SOLIDARITY: large-scale, multicenter, randomized open-label, otherwise TBA	INSERM Discovery (NCT04315948): 3100 participants, randomized open-label parallel assignment, multi-center -- March 2023	NCT04286503: 520 participants, randomized open-label parallel assignment, single center -- February 28, 2021	NCT04307693: 150 participants, randomized open-label parallel assignment, multi-center - May 2020	NCT04291729: 11 participants, non-randomized open-label single group assignment, single center -- March 19, 2020	NCT04261907: 160 participants, randomized open-label parallel assignment, multi-center -- June 30, 2020	NCT04295551: 80 participants, randomized open-label parallel assignment, multi-center -- April 14, 2021	NCT04251871: 150 participants, randomized open-label parallel assignment, single center -- January 22, 2021
ASC09/ritonavir	viral protease inhibitor				NCT04261907	NCT04261907: 160 participants, randomized open-label parallel assignment, multi-center -- June 30, 2020							
darunavir/cobicistat	viral protease inhibitor				NCT04252274 (phase 3)	NCT04252274: 30 participants, randomized open-label parallel assignment, single center -- December 31, 2020							
umifenovir (arbidol)	membrane fusion				NCT04273763, NCT04286503, NCT04260594 (phase 4)	NCT04273763: 60 participants, randomized open-label sequential assignment, single center -- April 30, 2020	NCT04286503: 520 participants, randomized open-label parallel assignment, single center -- February 28, 2021	NCT04260594: 380 participants, randomized open-label parallel assignment, single center -- December 30, 2020					
losartan	angiotensin II receptor type 1 (AT1)		10.1038/nm1267		NCT04312009 (phase 2)	NCT04312009: 200 participants, randomized double-blind parallel assignment, multi-center -- April 1, 2021							
chloroquine	viral uncoating (endosome acidification), ACE2 receptor	effective in cell culture (Wang et al.), lower therapeutic index than hydroxychloroquine (Yao et al.)		10.1038/s41422-020-0282-0, 10.1093/cid/ciaa237	WHO SOLIDARITY, NCT04303507, NCT04286503	WHO SOLIDARITY: large-scale, multi-center, randomized open-label, otherwise TBA	NCT04303507: 40,000 participants, randomized double-blind parallel assignment, multi-center -- April 2021	NCT04286503: 520 participants, randomized open-label parallel assignment, single center -- February 28, 2021					
hydroxychloroquine	viral uncoating (endosome acidification), ACE2 receptor	effective in cell culture, less toxic than chloroquine (Yao et al.); improved time to clinical recovery (TTCR) (Chen et al.)		10.1093/cid/ciaa237, 10.1101/2020.03.22.20040758	NCT04308668 (phase 2,3), NCT04307693 (phase 2), NCT04261517 (phase 3), HYDRA trial (NCT04315896, phase 3)	NCT04308668: 3000 participants, randomized quadruple-blind parallel assignment, single center -- May 12, 2020	NCT04307693: 150 participants, randomized open-label parallel assignment, multi-center -- May 2020	NCT04261517: 30 participants, randomized open-label parallel assignment, single center - February 25, 2020	HYDRA trial (NCT04315896: 500 participants, randomized quadruple-blind parallel assignment, single center) -- March 22, 2022				
bromhexine HCl	mucolytic				NCT04273763	NCT04273763: 60 participants, randomized open-label sequential assignment, single center -- April 30, 2020							
interferon-beta (1b)	cellular antiviral induction		10.1093/infdis/jiz992		(part of combination therapy trials)								
interferon-alpha (2b)	cellular antiviral induction				NCT04273763, NCT04293887 (phase 1), NCT04251871	NCT04273763: 60 participants, randomized open-label sequential assignment, single center -- April 30, 2020	NCT04293887: 328 participants, randomized open-label parallel assignment, multi-center -- June 30, 2020	NCT04251871: 150 participants, randomized open-label parallel assignment, single center -- January 22, 2021					
interferon-alpha-2a, pegylated (Pegasys)	cellular antiviral induction				NCT04291729 (phase 4)	NCT04291729: 11 participants, non-randomized open-label single group assignment, single center -- March 19, 2020							
novaferon (recombinant IFNalpha-like)	cellular antiviral induction		10.1186/1475-2867-14-8		NCT04291729 (phase 4)	NCT04291729: 11 participants, non-randomized open-label single group assignment, single center -- March 19, 2020							
bevacizumab	VEGF (vascular permeability)				NCT04275414 (phase 2,3)	NCT04275414: 20 participants, non-randomized open-label single group assignment, single center -- May 2020							
camostat	TMPRSS2 (cellular serine protease), S protein priming	effective in cell culture reducing viral entry (Hoffmann et al.)	10.1128/JVI.00094-12, 10.1128/JVI.01890-13	10.1016/j.cell.2020.02.052	(trial in planning)								
azithromycin	synergistic with hydroxychloroquine				(part of combination therapy trials)								
pirfenidone	anti-fibrotic (procollagens I and II, growth factors)				NCT04282902 (phase 3)	NCT04282902: 294 participants, randomized open-label parallel assignment, single center -- June 1, 2020							
tetrandrine	anti-fibrotic				NCT04308317 (phase 4)	NCT04308317: 60 participants, randomized open-label parallel assignment, single center -- May 1, 2021							
thalidomide	anti-fibrotic, cytokine storm (immunomodulation, anti-inflammatory)				NCT04273529 (phase 2), NCT04273581 (phase 2)	NCT04273529: 100 participants, randomized double-blind parallel assignment, multi-center -- June 30, 2020	NCT04273581: 40 participants, randomized quadruple-blind parallel assignment, multi-center -- May 30, 2020						

Drug	Target or mechanism (if known)	Prelim results for SARS-CoV-2 trials or case reports (if applicable)	DOI of pertinent prior studies: SARS, MERS, or related RNA viruses	DOI of prelim clinical trials, case reports, or in vitro studies: SARS-CoV-2/COVID-19	clinicaltrials.gov ID(s) or other study identifier and phase (if available)	Study 1 size, structure, est. completion date	Study 2 size, structure, est. completion date	Study 3 size, structure, est. completion date	Study 4 size, structure, est. completion date	Study 5 size, structure, est. completion date	Study 6 size, structure, est. completion date	Study 7 size, structure, est. completion date	Study 8 size, structure, est. completion date
carrimycin	macrolide antibiotic (immunomodulation, anti-inflammatory)				NCT04286503 (phase 4)	NCT04286503: 520 participants, randomized open-label parallel assignment, single center -- February 28, 2021							
sarilumab	IL-6 receptor (immunomodulation, anti-inflammatory)				NCT04315298 (phase 2)	NCT04315298: 400 participants, randomized quadruple-blind parallel assignment, single center -- March 16, 2021							
tocilizumab	IL-6 receptor (immunomodulation, anti-inflammatory)	effective in reducing morbidity in small Chinese trial (Xu et al.)		10.12074/202003.00026	NCT04310228	NCT04310228: 150 participants, randomized open-label parallel assignment, single center -- May 2020							
fingolimod	sphingosine-1-phosphate receptor (immunomodulation, anti-inflammatory)				NCT04280588 (phase 2)	NCT04280588: 30 participants, non-randomized open-label parallel assignment, single center -- July 1, 2020							
eculizumab (Soliris)	complement cascade (immunomodulation, anti-inflammatory)				NCT04288713	NCT04288713: expanded access							
methylprednisolone	corticosteroids (immunomodulation, anti-inflammatory)				NCT04273321, NCT04244591 (phase 2)	NCT04273321: 400 participants, randomized open-label single group assignment, single center -- May 30, 2020	NCT04244591: 80 participants, randomized open-label parallel assignment, multi-center -- December 25, 2020						
CD24Fc	cytokine inhibition (immunomodulation, anti-inflammatory)				NCT04317040	NCT04317040: 230 participants, randomized quadruple-blind parallel assignment, multi-center -- May 2022							
camrelizumab	PD-1 blocking antibody: anti-sepsis (immunomodulation, anti-inflammatory)				NCT04268537 (phase 2)	NCT04268537: 120 participants, randomized single-blind parallel assignment, single center -- October 31, 2020							
thymosin	anti-sepsis (immunomodulation, anti-inflammatory)				NCT04268537 (phase 2)	NCT04268537: 120 participants, randomized single-blind parallel assignment, single center -- October 31, 2020							
ascorbic acid	anti-sepsis (immunomodulation, anti-inflammatory)				NCT03680274 (phase 3), NCT04264533 (phase 2)	NCT03680274: 800 participants, randomized quadruple-blind parallel assignment, multi-center -- December 31, 2022	NCT04264533: 140 participants, randomized triple-blind parallel assignment, single center -- September 30, 2020						
mesenchymal stem cells (MSCs) and MSC-derived exosomes	immunomodulation, anti-inflammatory, anti-bacterial activity (secondary infections)				NCT04276987 (phase 1), NCT04252118 (phase 1), NCT04288102 (phase 1, 2), NCT04273646, NCT04302519 (phase 1), NCT04269525 (phase 2)	NCT04276987: 30 participants, non-randomized open-label single group assignment, single center -- July 31, 2020	NCT04252118: 20 participants, non-randomized open-label parallel assignment, single center -- December 2021	NCT04288102: 90 participants, randomized quadruple-blind parallel assignment, multi-center -- December 31, 2021	NCT04273646: 48 participants, randomized open-label parallel assignment, single center -- February 15, 2022	NCT04302519: 24 participants, non-randomized open-label single group assignment, single center -- July 30, 2021	NCT04269525: 10 participants, non-randomized open-label single group assignment, single center -- September 30, 2020		
APN01	supportive (rhACE2 for ARDS)				in progress (collaboration of APEIRON and Angalpharma)								
TB9 (dantonic)	supportive (systemic oxygen delivery)				NCT04285190	NCT04285190: 120 participants, randomized open-label parallel assignment, single center -- September 15, 2020							
nitric oxide	supportive (systemic oxygen delivery, vasodilation)				NCT04306393 (phase 2), NCT04312243 (phase 2)	NCT04306393: 200 participants, randomized single-blind parallel assignment, multi-center -- March 21, 2022	NCT04312243: 460 participants, non-randomized open-label parallel assignment, single center -- March 20, 2022						
aviptadil (synthetic VIP)	supportive (vasodilation, bronchodilation)				NCT04311697 (phase 2)	NCT04311697: 120 participants, randomized quadruple-blind parallel assignment, multi-center -- September 2020							
hydroxychloroquine + azithromycin	viral uncoating (endosome acidification), ACE2 receptor	effective in reducing viral load in preliminary clinical trial (Gautret et al.)		10.1016/j.ijantimicag.2020.105949	2020-000890-25 (EU Clinical Trials No.) (preliminary study)	2020-000890-25 (EU Clinical Trials No.): 42 participants, non-randomized open-label parallel assignment, single center -- completed							
danoprevir (Ganovo) + ritonavir +/- interferon	protease inhibitor for HCV (danoprevir), combination therapy		10.1021/jm400164c (for danoprevir)		NCT04291729 (phase 4)	NCT04291729: 11 participants, non-randomized open-label single group assignment, single center -- March 19, 2020							
lopinavir/ ritonavir + interferon beta-1b (+/- ribavirin)	combination therapy		10.1186/s13063-017-2427-0 (MIRACLE trial for MERS)		NCT04276688 (phase 2)	NCT04276688: 70 participants, randomized open-label parallel assignment, single center -- July 31, 2022							
lopinavir/ritonavir + ribavirin + interferon-alpha (interferon alfa)	combination therapy		10.3851/IMP3002, 10.1016/j.ijantimicag.2014.07.026 (pegylated interferon for MERS)	10.1097/CM9.0000000000000790	listing in progress (ref: Zeng et al., 2020)								
favipiravir + tocilizumab	combination therapy				NCT04310228	NCT04310228: 150 participants, randomized open-label parallel assignment, single center -- May 2020							
lopinavir/ritonavir + umifenovir	combination therapy	ineffective in small trial in China (Deng et al.)		10.1016/j.jinf.2020.03.002	NCT04252885	NCT04252885: 125 participants, randomized open-label parallel assignment, single center -- July 31, 2020							
varied multidrug combinations	combination therapy				NCT04303299 (phase 3)	NCT04303299: 80 participants, randomized open-label parallel assignment, multi-center -- November 30, 2020							
traditional chinese medicine (TCM), herbal extracts	combination therapy				NCT04291729 (phase 4), NCT04251871	NCT04291729: 11 participants, non-randomized open-label single group assignment, single center -- March 19, 2020	NCT04251871: 150 participants, randomized open-label parallel assignment, single center -- January 22, 2021						
TCM (Xiyanping) + lopinavir/ritonavir	combination therapy				NCT04295551	NCT04295551: 80 participants, randomized open-label parallel assignment, multi-center -- April 14, 2021							