

Websites that summarize chemotherapy of COVID-19

					A website name											URL		
					Balint Földesi	Using Existing Therapeutics Against COVID-19										https://www.biomol.com/resources/biomol-blog/using-existing-therapeutics-against-covid-19		
					National Institute of Health (NIH)	COVID-19 Treatment Guidelines										https://www.covid19treatmentguidelines.nih.gov/		
					Centers for Disease Control and Prevention	COVID-19										https://www.cdc.gov/coronavirus/2019-ncov/hcp/therapeutic-options.html		
					厚生労働省	新型コロナウイルス感染症について										https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/0000164708_00001.html		
					厚生労働省	新型コロナウイルス感染症について										https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/0000164708_00001.html		

Publications regarding anticoronavirus drugs (case reports are not included)
既存の臨床薬の新型コロナウイルスに対する効果に関する論文(小規模症例報告を除く)

Drug 1 (論文で述べられている薬剤名1)	Drug 2 (論文で述べられている薬剤名2)	Drug 3 (論文で述べられている薬剤名3)	Drug 4 (論文で述べられている薬剤名4)	Authors (論文著者)	Title of publication (論文タイトル)	Communication/Article	Journal name (掲載雑誌名)	Year	Vol	No.	First page	Last page	Page	DOI	URL	SNS source	SNS source
5-aminolevulinic acid	sodium ferrous citrate			Yasutaru Sakurai, Mya Myat Ngwe Tun, Yohhei Kurosaki, Takaya Sakura, Daniel Ken Inaoka, Kiyotaka Fujime, Kiyoshi Kita, Kouichi Morita, Iiro Yasuda	5-amino levulinic acid inhibits SARS-CoV-2 infection in vitro	Communication	Biochemical and Biophysical Research Communications	2021		545		203	207	5 doi.org/10.1016/j.bbrc.2021.01.091	https://doi.org/10.1016/j.bbrc.2021.01.091		
acalabrutinib				Mark Roschewski Michail S. Lionakis Jeff P. Sharman Joseph Roswarski Andre Goy M. Andrew Monticelli Michael Roshon Stephen H. Wrzesinski Jigar V. Desai Marissa A. Zarakas Jacob Collen Keith Rose Ahmed Hamdy Raquel Izumi George W. Wright Kevin K. Chung Jose Baselga Louis M. Staudt, Wyndham H. Wilson	Inhibition of Bruton tyrosine kinase in patients with severe COVID-19	Article	Science Immunology	2020		5				48 https://dx.doi.org/10.1126/sciimmunol.abd0110	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7274761/		

	amlodipine				Lei-Ke Zhang , Yuan Sun , Haolong Zeng, Qingxing Wang , Xiaming Jiang , Wei-Juan Shang , Yan Wu , Shufen Li , Yu-Lan Zhang , Zhao-Nian Hao , Hongbo Chen , Runming Jin , Wei Liu , Hao Li , Ke Peng and Gengfu Xiao	Calcium channel blocker amlodipine besylate therapy is associated with reduced case fatality rate of COVID-19 patients with hypertension	Article	Cell Discovery	2020	6	96			12		https://doi.org/10.1038/s41421-020-00235-0		
	amodiaquine				Yasuteru Sakurai, Norikazu Sakakibara, Masaaki Toyama, Masanori Baba, Robert A. Davey,	Novel amodiaquine derivatives potently inhibit Ebola virus infection	full paper	Antiviral Research	2018	160		175	182	8	doi.org/10.1016/j.antiviral.2018.10.025	https://doi.org/10.1016/j.antiviral.2018.10.025		
	amodiaquine	nafamostat	oseltamivir		Longlong Si, Haiqing Bai, Melissa Rodas, Wuji Cao, Crystal Yuri Oh, Amanda Jiang, Rasmus Moller, Daisy Hoagland, Kohei Oishi, Shu Horiuchi, Skyler Uhl, Daniel Blanco-Melo, Randy A. Albrecht, Wen-Chun Liu, Tristan Jordan, Benjamin E. Nilsson-Payant, Ilona Golynger, Justin Frere, James Logue, Robert Haupt, Marisa McGrath, Stuart Weston, Tian Zhang, Roberto Plebani, Mercy Soong, Atiq Nurani, Seong Min Kim, Danni Y. Zhu, Kambez H. Benam, Girija Goyal, Sarah E. Gilpin, Rachelle Prantil-Baun, Steven P. Gyi, Rani K. Powers, Kenneth E. Carlson, Matthew Frieman, Benjamin R. Tenover, and Donald F. Ingber	A human-airway-on-a-chip for the Rapid Identification of Candidate Antiviral Therapeutics and Prophylactics	ful paper	Nature Biomedical Engineering	2021	5		815	829	15	org/10.1038/s41551-021-00718-9	https://doi.org/10.1038/s41551-021-00718-9		
	arbidol	favipiravir			Chang Chen, Yi Zhang, Jianying Huang, Ping Yin, Zhenshun Cheng, Jianyuan Wu, Song Chen, Yongxi Zhang, Bo Chen, Mengxin Lu, Yongwen Luo, Lingao Ju, Jingyi Zhang, Xinhuan Wang	Favipiravir versus Arbidol for COVID-19: A Randomized Clinical Trial	full paper										medRxiv	https://www.medrxiv.org/content/10.1101/2020.03.17.20037432v4
	arbidol	chloroquine phosphate	lopinavir/ritonavir	ribavirin	Liyong Dong, Shasha Hu, Jianjun Gao	Discovering drugs to treat coronavirus disease 2019 (COVID-19)	communication	Drug Discoveries & Therapeutics	2020	14	1	58	60		DOI: 10.5582/dtd.2020.01012		J-Stage	https://www.jstage.jst.go.jp/article/dtd/14/1/14_2020.01012/article-char/ja/
	artemisinin	chloroquine	mefloquine		海老沢功	抗マラリア薬研究の進歩	review	日本化学療法学会雑誌	2007	55	5	351	357	7	DOI: org/10.11250/cchemotherapy1995.55.351	https://doi.org/10.11250/cchemotherapy1995.55.351	J-Stage	https://www.jstage.jst.go.jp/article/chemotherapy1995/55/5/5_351/article-char/ja/
	aspirin				Writing Committee (on behalf of the RECOVERY Collaborative Group) Peter W Horby, Guilherme Pessoa-Amorim, Natalie Staplin, Jonathan R Emberson, Mark Campbell, Enti Spata, Leon Peto, Nigel J Brunskill, Simon Tiberi, Victor Chew, et al.	Aspirin in patients admitted to hospital with COVID-19 (RECOVERY): a randomised, controlled, open-label, platform trial	article	Lancet	2021						https://doi.org/10.1016/S0140-6736(21)01825-0			
	AT-527 (prodrug of AT-551)				Steven S. Good, Jonna Westover, Kie Hoon Jung, Xiao-Jian Zhou, Adel Moussa, Paolo La Colla, Gabriella Collu, Bruno Canard, d Jean-Pierre Sommadossia	AT-527, a Double Prodrug of a Guanosine Nucleotide Analog, Is a Potent Inhibitor of SARS-CoV-2 In Vitro and a Promising Oral Antiviral for Treatment of COVID-19	full paper	Antimicrobial Agents and Chemotherapy	2021	65	4	e02479-20	12	doi.org/10.1128/AAC.02479-20	https://doi.org/10.1128/AAC.02479-20			
	auranofin				Hussin A. Rathan, Shannon Stone, Janhavi Natekar, Pratima Kumari, Komal Arora, Mukesh Kumar	The FDA-approved gold drug auranofin inhibits novel coronavirus (SARS-CoV-2) replication and attenuates inflammation in human cells	full paper	Virology	2020	547		7	11	5	10.1016/j.virol.2020.05.002	https://doi.org/10.1016/j.virol.2020.05.002		
	boceprevir	GC376			Lifeng Fu, Fei Ye, Yong Feng, Feng Yu, Qisheng Wang, Yan Wu, Cheng Zhao , Huan Sun , Baoying Huang, Peihua Niu, Hao Song , Yi Shi, Xuebing Li , Wenjie Tan , Jianxun Qi and George Fu Gao	Both Boceprevir and GC376 efficaciously inhibit SARS-CoV-2 by targeting its main protease	Article	Nature Communications	2020	11	4417			8	https://doi.org/10.1038/s41467-020-18233-x			
	boceprevir (GC-376)				Chunlong Ma, Michael Dominic Sacco, Brett Hurst, Julia Alma Townsend, Yanmei Hu, Tommy Szeto, Xiujun Zhang, Bart Tarbet, Michael Thomas Marty, Yu Chen and Jun Wang	Boceprevir, GC-376, and calpain inhibitors II, XII inhibit SARS-CoV-2 viral replication by targeting the viral main protease	full paper	Cell Research	2020		0	1	5	5	https://doi.org/10.1038/s41421-020-0356-z			
	calpeptin	calpain inhibitor I				Identification of Potent Small Molecule 1 Inhibitors of SARS-CoV-2 Entry	ful paper	bioRxiv							https://www.biorxiv.org/content/10.1101/2021.08.05.455262v1			

cenicriviroc				Mika Okamoto, Masaaki Toyama, Masanori Baba	The chemokine receptor antagonist cenicriviroc inhibits the replication of SARS-CoV-2 in vitro	full paper	Antiviral Research	2020	182		104902		6	org/10.1016/j.antiviral.2020.104902	https://doi.org/10.1016/j.antiviral.2020.104902		
cepharanthine				M. Baba, M. Okamoto, N. Kashiwaba and M. Ono	Anti-HIV-1 activity and structure-activity relationship of cepharanthine derivatives in chronically infected cells	full paper	Antiviral Chemistry & Chemotherapy	2002	12		307	312	6				
cepharanthine				Christian Bailly	Cepharanthine: An update of its mode of action, pharmacological properties and medical applications	Review	Phytomedicine	2019	62		152956		12	DOI: org/10.1016/j.phymed.2019.152956	https://doi.org/10.1016/j.phymed.2019.152956		
cepharanthine				Moshe Rogosnitzky, Rachel Danks	Therapeutic potential of the biscolaurine alkaloid, cepharanthine, for a range of clinical conditions	Review	Pharmacological Reports	2011	63		337	347	11			ResearchGate	https://www.researchgate.net/publication/51156184_Therapeutic_potential_of_the_biscolaurine_alkaloid_cepharanthine_for_a_range_of_clinical_conditions
cepharanthine	GUT-70			松田 幸樹, 岡田 誠治	フローサイトメトリーを用いたウイルス侵入阻害スクリーニング法の樹立		Cytometry Research	2015	25	1	25	28	4			J-Stage	https://www.jstage.jst.go.jp/article/cytometryresearch/25/1/25_D-15-00005/article-char/ja/
cepharanthine				岡本実佳 Mika OKAMOTO	宿主細胞因子を標的としたHIV-1抑制に関する研究 (Cellular Factors as Targets for Anti-HIV-1 Chemotherapy)	Review	The Journal of AIDS Research (日本エイズ学会誌)	2006	8	2	92	99	8			J-Stage	https://www.jstage.jst.go.jp/article/aidsr1999/8/2/8_2_92/article-char/ja
cepharanthine				亀谷哲治、八木治彦、浅黄節、菅野和子、脇坂菊雄 Tetsuji Kametani, Haruhiko Yagi, Setsu Asagi, Kazuko Kanno, Kikuo Wakisaka	Cepharanthine関連化合物の合成研究 (第2報) 1-(3-Bromo-4-methoxybenzyl)-1,2,3,4-tetrahydro-6-methoxy-2-methyl-7-isouquinolinolの合成 (複素環式化合物の合成研究 第183報)	Full paper	薬学雑誌 (Yakugaku Zasshi)	1967	87	7	749	752	4				
cepharanthine	atovaquone (ATO),	chloroquine (CQ),	lumefantrine (LUM), piperazine (PPQ)	Camille Desgrouas, Jérôme Dormoi, Charles Chapus, Evelyne Olivier, Daniel Parzy and Nicolas Taudon	In vitro and in vivo combination of cepharanthine with anti-malarial drugs		Malaria Journal	2014	13		90		7	DOI:10.1186/1475-2875-13-90	http://www.malariajournal.com/content/13/1/90	ResearchGate	
cepharanthine				Kouki Matsuda, Shinichiro Hattori, Yuji Komizu, Ryusho Kariya, Ryuichi Ueoka, Seiji Okada	Cepharanthine Inhibited HIV-1 Cell-Cell Transmission and Cell-free Infection via modification of cell Membrane Fluidity	full paper	Bioorganic & Medicinal Chemistry Letters	2014	24		2115	2117	3	doi.org/10.1016/j.bmcl.2014.03.041	https://www.sciencedirect.com/science/article/pii/S0960894X14002686		
cepharanthine	fangchinoline	tetrandrine		Dong Eon Kim, Jung Sun Min, Min Seong Jang, Jun Young Lee, Young Sup Shin, Chul Min Park, Jong Hwan Song, Hyoung Rae Kim, Seungtaek Kim, Young-Hee Jin and Sunoh Kwon	Natural Bis-Benzylisoquinoline Alkaloids-Tetrandrine, Fangchinoline, and Cepharanthine, Inhibit Human Coronavirus OC43 Infection of MRC-5 Human Lung Cells	full paper	Biomolecules	2019	9		696		1	doi:10.3390/biom9110696	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6921063/		

	cepharanthine	nelfinavir		Hirofumi Ohashi, Koichi Watashi, Wakana Saso, Kaho Shionoya, Shoya Iwanami, Takatsugu Hirokawa, Tsuyoshi Shirai, Shigehiko Kanaya, Yusuke Ito, Kwang Su	Potential Anti-COVID-19 Agents, Cepharanthine and Nelfinavir, and Their Usage for Combination Treatment	full paper	Science	2021	24	4	102367		11	doi: org/10.1016/j.isci.2021.102367	https://www.sciencedirect.com/science/article/pii/S2589004221022572		https://www.biorxiv.org/content/10.1101/2020.04.14.039925v1.full.pdf+html
	cepharanthine	nafamostat		岡野和雄	メシル酸ナファモスタットとセファランチンの併用による小口径静脈再建後早期における抗血栓作用に関する実験的研究		岡山医学会雑誌	1992	104		107	115	9			J-Stage	https://www.istage.jst.go.jp/article/joma1947/104/1-2/104_1-2_107.pdf
	cepharanthine	gabexate	nafamostat	岡野和雄	蛋白質分解酵素阻害剤およびマファランチンの小口径静脈再建における抗血栓作用に関する実験的研究		人工臓器	1990	19	3	1353	1356	4			J-Stage	https://www.istage.jst.go.jp/article/jsao1972/19/3/19_3_1353_article-char/ja/
	cepharanthine			Masao Tomita, Kazuyoshi Fujitani, and Yoshiaki Aoyagi	Synthesis of dl-Cepharanthine	communication	Tetrahedron Letters	1967	13		1201	1206	6				
	cepharanthine	mefloquine	selamectin	Hua-Hao Fan, Li-Qin Wang, Wen-Li Liu, Xiao-Ping An, Zhen-Dong Liu, Xiao-Qi He, Li-Hua Song, Yi-Gang Tong	Repurposing of clinically approved drugs for treatment of coronavirus disease 2019 in a 2019-novel coronavirus-related coronavirus model		Chinese Medical Journal	2020	133	9	1051	1056	6	DOI:10.1097/CMA.00000000000000797.	https://journals.lww.com/cmj/Fulltext/2020/05050/Repurposing_of_clinically_approved_drugs_for_8.aspx		https://pubmed.ncbi.nlm.nih.gov/32149769/
	cepharanthine			横島 徹, 堤 修一郎, 大槻 俊治, 高市 松夫, 中島 敏秀, 赤須 通範	Cepharanthineの生体内動態に関する研究。ラットにおける吸収、分布、代謝、排泄 (Studies on Metabolic Fate of Cepharanthine Absorption, Distribution, Metabolism and	論文	医薬品研究	1986	17	3	458	479	22			J-GLOBAL	https://jglobal.jst.go.jp/detail?JGLOBAL_ID=200902098942424967
	cepharanthine			安田耕太郎, 茂呂光男, 赤須 通範, 大西明弘	Cepharanthin の第1相臨床試験(単回および連続静脈内投与)における薬物動態	論文	Japanese Journal of Clinical and Pharmacological Therapy 20 (4)	1989	20	4	741	749	9			J-STAGE	https://www.istage.jst.go.jp/article/jscpt1970/20/4/20_4_741_article-char/ja/
	cepharanthine	lumacaftor		Mark Andrew White, Wei Lin, and Xiaodong Cheng	Discovery of COVID-19 Inhibitors Targeting the SARS-CoV-2 Nsp13 Helicase	full paper	The Journal of Physical Chemistry Letters	2020	11		9144	9151	8	org/10.1021/acs.jpcclett.0c02421	https://pubs.acs.org/doi/10.1021/acs.jpcclett.0c02421		
	cepharanthine and its analogs			Atsushi Hijikata, Clara Shionyu-Mitsuyama, Setsu Nakae, Masafumi Shionyu, Motonori Ota, Shigehiko Kanaya, Takatsugu Hirokawa, Shogo Nakajima, Koichi Watashi, and Tsuyoshi Shirai	Evaluating cepharanthine analogues as natural drugs against SARS-CoV-2	full article	FEBS Open Bio	2021					Nov. 30, 2021	org/10.1002/2211-5463.13337			
	chinese herbal medicines			Fangfang Huang, Ying Li, Elaine Lai-Han Leung, Xiaohua Liu, Kaifeng Liu, Qu Wang, Yongqi Lan, Xiaoling Li, Haibing Yu, Liao Cui, Hui Luo, Lianxiang Luo	A review of therapeutic agents and Chinese herbal medicines against SARS-COV-2 (COVID-19)	review	Pharmacological Reports	2020	158		104929		12	doi.org/10.1016/j.phrs.2020.104929	https://www.sciencedirect.com/science/article/pii/S1043661820312378?via%3Dihub		
No.	chloroquine	remdesivir		Manli Wang, Ruiyuan Cao, Leike Zhang, Xinglou Yang, Jia Liu, Mingyue Xu, Zhengli Shi, Zhihong Hu, Wu Zhong and Gengfu Xiao	Remdesivir and chloroquine effectively inhibit the recently emerged novel coronavirus (2019-nCoV) in vitro	Communication	Cell Research	2020	30		269	271	3	https://doi.org/10.1038/s41422-020-0282-0			https://pubmed.ncbi.nlm.nih.gov/31690059/
	chloroquine			Satyajit Beura & Prabhakar Chetti	In-silico strategies for probing chloroquine based inhibitors against SARS-CoV-2	full paper	Journal of Biomolecular Structure and Dynamics	2020					1	DOI: 10.1080/07391102.2020.1772111	https://doi.org/10.1080/07391102.2020.1772111		
	chloroquine			Martin J Vincent, Eric Bergeron, Suzanne Benjannet, Bobbie R Erickson, Pierre E Rollin, Thomas G Ksiazek, Nabil G Seidah and Stuart T Nichol	Chloroquine is a potent inhibitor of SARS coronavirus infection and spread		Virology Journal	2005	2	69			10	DOI:10.1186/1743-422X-2-69	https://virology.biomedcentral.com/articles/10.1186/1743-422X-2-69		
	chloroquine			Yi-Fan Wu, Ping Zhao, Xi Luo, Jin-Chao Xu, Lu Xue, Qi Zhou, Mingrui Xiong, Jinhua Shen, Yong-Bo Peng, Meng-Fei Yu, Weiwei Chen, Liqun Ma and Qing-Hua Liu	Chloroquine inhibits Ca2+ permeable ion channels-mediated Ca2+ signaling in primary B lymphocytes	Full paper	Cell & Bioscience	2017	7	28			5	DOI:10.1186/s13578-017-0155-5			https://pubmed.ncbi.nlm.nih.gov/28546857/

chloroquine				ANDREW F. G. SLATER	Chloroquine Mechanism of Drug Action and Resistance in Plasmodium Falciparum	Review	Pharmaceutical Therapy	1993	57	2-3	203	235	33		https://www.sciencedirect.com/science/article/pii/016372589390056J		
ciclesonide				Taylor, DA ; Jensen, MW ; Kanabar, V ; Engelstatter, R ; Steinijans, VW ; Barnes, PJ ; O'Connor, BJ	A Dose-dependent Effect of the Novel Inhaled Corticosteroid Ciclesonide on Airway Responsiveness to Adenosine-5'-Phosphate in Asthmatic Patients	Article	American Journal of Respiratory and Critical Care Medicine	1999	160	1	237	243	7	10.1164/ajrccm.160.1.9809046	https://doi.org/10.1164/ajrccm.160.1.9809046		
dexamethasone	morphine			N. H. Waldron, C. A. Jones, T. J. Gan, T. K. Allen and A. S. Habib	Impact of perioperative dexamethasone on postoperative analgesia and side-effects: systematic review and meta-analysis	Review	British Journal of Anaesthesia	2013	110	2	191	200	10	10.1093/bja/ae431	https://doi.org/10.1093/bja/ae431		
disulfiram				Stefano Tamburin, Elisa Mantovani, Ernesto De Bernardis, Donato Zipeto1 · Fabio Lugoboni, Gruppo InterSERT di Collaborazione Scientifica (GICS)	COVID-19 and related symptoms in patients under disulfiram for alcohol use disorder	letter	Internal and Emergency Medicine	2021	16-Jan		1729	1731	3	org/10.1007/s11739-021-02633-y	https://doi.org/10.1007/s11739-021-02633-y		
emetine	homoharringtonine	lopinavir	remdesivir	Ka-Tim Choy, Alvina Yin-Lam Wong, Prathanporn Kaewpreedee, Sin Fun Sia, Dongdong Chen, Kenrie Pui Yan Hui, Daniel Ka Wing Chu, Michael Chi Wai Chan, Peter Pak-Hang Cheung, Xuhui Huang, Malik Peiris, Hui-Ling Yen	Remdesivir, lopinavir, emetine, and homoharringtonine inhibit SARS-CoV-2 replication in vitro	full paper	Antiviral Research	2020	178		104786		5	DOI: 10.1016/j.antiviral.2020.104786	https://doi.org/10.1016/j.antiviral.2020.104786		
favipiravir				Fangyuan Shi, Zongtao Li, Lingjin Kong, Yuanchao Xie, Tao Zhang, Wenfang Xu	Synthesis and crystal structure of 6-fluoro-3-hydroxypyrazine-2-carboxamide	full paper	Drug Discoveries & Therapeutics	2014	8	3	117	120	4	DOI: 10.5582/ddt.2014.01028			
favipiravir				古田要介	ファビピラビル：ウイルスRNA ポリメラーゼ阻害薬	review	日本化学療法学会雑誌	2017	65	5	736	744	9		http://www.chemotherapy.or.jp/journal/jc/06505/065050736.pdf		http://journal.chemotherapy.or.jp/detail.php?DB=jsc&recid=5264&action=browse
favipiravir				古田要介	ファビピラビル(T-705) — ウイルスRNA 依存性RNA ポリメラーゼ阻害剤 —	review	日本臨床微生物学会誌	2019	29	2	58	66	9				
favipiravir	lopinavir/ritonavir			Qingxian Cai, Minghui Yang, Dongjing Liu, Jun Chen, Dan Shu, Junxia Xia, Xuejiao Liao, Yuanbo Gu, Qize Cai, Yang Yang, Chenguang Shen, Xiaohu Li, Ling Peng, Deliang Huang, Jing Zhang	Experimental Treatment with Favipiravir for COVID-19: An Open-Label Control Study		Engineering	2020			in press			doi.org/10.1016/j.eng.2020.03.007		ResearchGate	https://www.researchgate.net/publication/34000976_Experimental_Treatment_with_Favipiravir_for_COVID-19_An_Open-Label_Control_Study
favipiravir				Yousuke Furuta, Takashi Komeno, and Takaaki Nakamura	Favipiravir (T-705), a broad spectrum inhibitor of viral RNA polymerase	review	Proceedings of the Japan Academy, Series B, Physical and Biological	2017	93	7	449	463	15	doi: 10.2183/pjab.93.027	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5713175/		
favipiravir				Leen Delang, Rana Abdelnabi, Johan Neyts	Favipiravir as a potential countermeasure against neglected and emerging RNA viruses	review	Antiviral Research	2019	153	May	85	94	10	doi.org/10.1016/j.antiviral.2018.03.003	https://www.sciencedirect.com/science/article/abs/pii/S0166354218300172		

					Ashleigh Shannon, Barbara Selisko, Nhung-Thi-Tuyet Le, Johanna Huchting, Franck Tourtier, Géraldine Piorkowski, Véronique Tatorini, François Ferron, Etienne Decroly, Chris Meier, Bruno Coutard, Olive Peersen and Bruno Canard	Rapid incorporation of Favipiravir by the fast and permissive viral RNA polymerase complex results in SARS-CoV-2 lethal mutagenesis	Article	Nature Communications	2020	11	4682				9		https://doi.org/10.1038/s41467-020-18463-z		
					Yuriko Tomita, Makoto Takeda, Shutoku Matsuyama	The Anti-Influenza Virus Drug Favipiravir Has Little Effect on Replication of SARS-CoV-2 in Cultured Cells	communication	Antimicrobial Agents and Chemotherapy	2021	65	6	e00020-21			3	doi.org/10.1128/AAC.00020-2	https://doi.org/10.1128/AAC.00020-2		
	GRL-1720	5h			Shin-ichiro Hatton, Nobuyo Higashi-Kuwata, Hironori Hayashi, Srinivasa Rao Allu, Jakka Raghavaiah, Haydar Bulut, Debananda Das, Brandon J. Anson, Emma K. Lendy, Yuki Takamatsu.	A small molecule compound with an indole moiety inhibits the main protease of SARS-CoV-2 and blocks virus replication	Article	Nature Communications	2021	12		668					https://doi.org/10.1038/s41467-021-20900-6		
	GS-441524 (Parent drug of remdesivir)				Niels C Pedersen, Michel Perron, Michael Bannasch, Elizabeth Montgomery, Eisuke Murakami, Molly Liepnies and Hongwei Liu	Efficacy and safety of the nucleoside analog GS-441524 for treatment of cats with naturally occurring feline infectious peritonitis	full paper	Journal of Feline Medicine and Surgery	2019	21	4	271	281	11	10.1177/1098612X19825701	https://journals.sagepub.com/doi/pdf/10.1177/1098612X19825701?fbclid=IwAR15ccG3luDVAJV0Hw8y5s_RJ8Z9QaeUjJb/PogT9QdXBHagVTTI8D7Yos	PubMed	https://pubmed.ncbi.nlm.nih.gov/30755068/	
	ivermectin				Leon Caly, Julian D. Druce, Mike G. Catton, David A. Jans, Kylie M. Wagstaff	The FDA-approved drug ivermectin inhibits the replication of SARS-CoV-2 in vitro	full paper	Antiviral Research	2020	178		104787			4	DOI: org/10.1016/j.antiviral.2020.104787	https://doi.org/10.1016/j.antiviral.2020.104787		
	ivermectin				Atsushi Miyajima, Takashi Hirota, Akhito Sugioaka, Masao Fukuzawa, Mari Serine, Yosuke Yamamoto, Takashi Yoshimatsu, Akira Kigure, Taichi Anata, Wataru Noguchi, Keita Akaga, Masayo Komoda	Effect of high-fat meal intake on the pharmacokinetic profile of ivermectin in Japanese patients with scabies		Journal of Dermatology	2016	43		1030	1036	7	doi: 10.1111/1346-8138.13321				
	ivermectin				阿久津駿太, 赤木圭太, 山田瑞穂, 矢田目麻衣, 倉科亮太, 丸山莉穂, 福沢正男, 櫻井万里, 尾関理恵, 小茂田昌代	イベルメクチンの高脂質摂取後の影響に関する研究のサブ解析—肝機能障害発症例のリスク因子解析— (Sub analysis of the study on the effect of high fat meal intake on ivermectin - Risk factor analysis of cases with		日本医薬品安全性学会誌	2018	4	1	28	41	14					
	ivermectin				Karen L. Goa, Donna McTavish and Stephen P. Clissold	Ivermectin. A Review of Its Antifilarial Activity, Pharmacokinetic Properties and Clinical Efficacy in Onchocerciasis	review	Drugs	1991	42		640	658	19	doi: 10.2165/00003495-199142040-00007	https://link.springer.com/article/10.2165/00003495-199142040-00007	PubMed	https://pubmed.ncbi.nlm.nih.gov/1723366/	
	ivermectin				Usha Vaidhyathanan	Review of Ivermectin in Scabies	review	Journal of Cutaneous Medicine and Surgery	2001	5	6	496	504	9	doi: 10.1177/120347540100500607	https://journals.sagepub.com/doi/abs/10.1177/120347540100500607	PubMed	https://pubmed.ncbi.nlm.nih.gov/11907859/	
	ivermectin				Pascal del Giudice	Ivermectin in Scabies	review	Current Opinion in Infectious Diseases	2002	15	2	123	126	4	DOI: 10.1097/00001432-200204000-00004		PubMed	https://pubmed.ncbi.nlm.nih.gov/11964911/	
	ivermectin				Eric A. Ottesen, William Campbell	Ivermectin in human medicine	review	Journal of Antimicrobial Chemotherapy	1994	34	2	195	203	9	doi.org/10.1093/jac/34.2.195	https://doi.org/10.1093/jac/34.2.195			
	ivermectin				Satoshi Ōmura & Andy Crump	The life and times of ivermectin — a success story	review	Nature Reviews Microbiology	2004	2		984	989	6	doi.org/10.1038/nrmicro1048	https://www.nature.com/articles/nrmicro1048			
	ivermectin				Virginia D. Schmith, Jie Jessie Zhou, Lauren R. L Lohmer	The Approved Dose of Ivermectin Alone is not the Ideal Dose for the Treatment of COVID-19	full paper	Clinical Pharmacology and Therapeutics	2020			in press				DOI: 10.1002/cpt.1889		PubMed	https://ascpt.onlinelibrary.wiley.com/doi/abs/10.1002/cpt.1889

lycorine	remdesivir	other drugs		Jung Sun Min, Sunoh Kwon, and Young-Hee Jin	SARS-CoV-2 RdRp Inhibitors Selected from a Cell-Based SARS-CoV-2 RdRp Activity Assay System	full paper	biomedicines	2021	9	996		14	doi.org/10.3390/biomedicines9080996	https://doi.org/10.3390/biomedicines9080996			
many drugs				Arun K.G, Sharanya C.S, Abhithaj J and Sadasivan C	Drug Repurposing to Identify Therapeutics Against COVID 19 with SARS-Cov-2 Spike Glycoprotein and Main Protease as Targets: An in Silico Study			2020				1	https://doi.org/10.3390/biomedicines9080996	https://doi.org/10.3390/biomedicines9080996	chemRxiv		
many drugs				Giuseppe Mancia, Federico Rea, Monica Ludergnani, Giovanni Apolone, and Giovanni Corrao	Renin–Angiotensin–Aldosterone System Blockers and the Risk of Covid-19		The New England Journal of Medicine	2020	382	2441	2448	8	DOI: 10.1056/NEJMoa2006923	https://www.nejm.org/doi/full/10.1056/NEJMoa2006923			
many drugs				Rameswari Chilamakuri and Saurabh Agarwal	COVID-19: Characteristics and Therapeutics	Review	Cells	2021	10	2	206	29	org/10.3390/cells10020206	https://doi.org/10.3390/cells10020206			
many drugs				Hye Jin Jeong, Sejin Min, Heelim Chae, Sarah Kim, Gunwoo Lee, Sung Keon Namgoong and Keunhong Jeong	Signal amplification by reversible exchange for COVID-19 antiviral drug candidates	Article	Scientific Reports	2020	10	14290		13	http://www.nature.com/scientificreports				
many drugs				Huihui Yang and Jinfei Yang	A review of the latest research on Mpro targeting SARS-COV inhibitors	review	RSC Medicinal Chemistry	2021					10.1039/d1md00066g				
many drugs				Rameswari Chilamakuri and Saurabh Agarwal	COVID-19: Characteristics and Therapeutics	review	Cells	2021	10	26		29	10.3390/cells10020206	https://doi.org/10.3390/cells10020206			
many drugs				Sirle Saul and Shirit Einav	Old Drugs for a New Virus: Repurposed Approaches for Combating COVID-19	review	ACS Infectious Diseases	2020	6	2304	2318	15	10.1021/acscinfecdis.0c00343	https://pubs.acs.org/doi/10.1021/acscinfecdis.0c00343			
many drugs				Manon Delaplace, Hélène Huet, Adèle Gambino and Sophie Le Poder	Feline Coronavirus Antivirals: A Review	review	Pathogens	2021	10	1150		16	org/10.3390/pathogens10091150	https://doi.org/10.3390/pathogens10091150			
many drugs				Kazuma Yamakawa, Ryo Yamamoto, Go Ishimaru, Hideki Hashimoto, Takero Terayama, Yoshitaka Hara, Daisuke Hasegawa, Tadashi Ishihara, Haruki Imura.	Japanese rapid/living recommendations on drug management for COVID-19	review	Acute Medicine & Surgery	2021	8	e664		17	10.1002/ams2.664	https://onlinelibrary.wiley.com/doi/full/10.1002/ams2.664			
many drugs				Osmar Ignacio Ayala Cáceres, Fernanda Timóteo, Kristiane Fanti Del Pino Santos, Rafael Rodrigo Piva Vasconcelos, Marco Antonio Utrera Martines, Juliana Jorge, and Haroon ur Rashid	Potential Drug Candidates in Clinical Trials for the Treatment of Covid-19: An Updated Overview	review	Orbital: The Electronic Journal of Chemistry	2021	13	4	350	375	26	org/10.17807/orbital.v13i4.1638	http://dx.doi.org/10.17807/orbital.v13i4.1638		

	many drugs			Atsushi Hijikata, Clara Shionyu, Setsu Nakae, Masafumi Shionyu, Motonori Ota, Shigehiko Kanaya, Tsuyoshi Shirai	Current Status of Structure-based Drug Repurposing against COVID-19 by Targeting SARS-CoV-2 Proteins	review	Biophysics and Physicobiology	2021							doi: 10.2142/biopphysico.bppb-v18.025			
	many drugs (main protease inhibitors)			Wen Cui, Kailin Yang and Haitao Yang	Recent Progress in the Drug Development Targeting SARS-CoV-2 Main Protease as Treatment for COVID-19	review	frontiers in Chemistry	2020	7	616341			10.3389/fmolb.2020.616341	https://www.frontiersin.org/articles/10.3389/fmolb.2020.616341/full				
	many drugs (main protease inhibitors)			Hylemariam Mihretie Mengist, Tebelay Dilnessa and Tengchuan Jin	Structural Basis of Potential Inhibitors Targeting SARS-CoV-2 Main Protease	review	frontiers in Chemistry	2021	9	622898			10.3389/fchem.2021.622898	https://www.frontiersin.org/articles/10.3389/fchem.2021.622898/full				
	many drugs (sigma-1 receptor ligands)			José Miguel Vela	Repurposing Sigma-1 Receptor Ligands for COVID-19 Therapy?	review	Frontiers in Pharmacology	2020	11		Article 582310		10.3389/fphar.2020.582310	https://doi.org/10.3389/fphar.2020.582310				
	mefloquine			Sue J. Lee, Feiko O. ter Kuile, Ric N. Price, Christine Luxemburger, FrancEois Nosten	Adverse effects of mefloquine for the treatment of uncomplicated malaria in Thailand: A pooled analysis of 19,850 individual patients	full paper	PLoS ONE	2017	12		20170116	DOI:10.1371/journal.pone.0168780	https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0168780					
	mefloquine			Ashley M Croft and Andrew Herxheimer	Adverse effects of the antimalaria drug, mefloquine: due to primary liver damage with secondary thyroid involvement?	full paper	BMC Public Health	2002	2		Article No. 6	#VALUE!	DOI: 10.1186/1471-2458-2-6	http://www.biomedcentral.com/1471-2458/2/6			https://www.ncbi.nlm.nih.gov/pmc/articles/PMC101408/	
	mefloquine			W. P. Hems, W. P. Jackson, P. Nightgale, R. Bryant	Practical Asymmetric Synthesis of (+)-erythro Mefloquine Hydrochloride	full paper	Organic Process Research & Development	2012	16	3	461	463	DOI.org/10.1021/op200354f	https://pubs.acs.org/doi/abs/10.1021/op200354f				
	mefloquine			F. I. Carroll and J. T. Blackwell	Optical Isomers of Aryl-2-piperidylmethanol Antimalarial Agents. Preparation, Optical Purity, and Absolute Stereochemistry	full paper	Journal of Medicinal Chemistry	1974	17	2	210	219	DOI: 10.1021/jm00248a015	https://pubs.acs.org/doi/pdf/10.1021/jm00248a015				
	mefloquine			Nina Schutzenmeister, Michael M Iler, Uwe M. Reinscheid, Christian Griesinger, and Andrei Leonov	Trapped in Misbelief for Almost 40 Years: Selective Synthesis of the Four Stereoisomers of Mefloquine	full paper	Chemistry, A European Journal	2013	19		17584	17588	org/10.1002/chem.201303403	https://doi.org/10.1002/chem.201303403				
	mefloquine			Jinyue Ding and Dennis G. Hall	Concise Synthesis and Antimalarial Activity of All Four Mefloquine Stereoisomers Using a Highly Enantioselective Catalytic Borylative Alkene Isomerization**	communication	Angewandte Chemie International Edition	2013	52		8069	8073	org/10.1002/anie.201303931	https://doi.org/10.1002/anie.201303931				
	mefloquine			Alexandra Dassonville-Klimpt, Christine Cézard, Catherine Mullié, Patrice Agnamey, Alexia Jonet, Sophie Da Nascimento, Mathieu Marchivie, Jean Guillon, and Pascal Sonnet	Absolute Configuration and Antimalarial Activity of erythro-Mefloquine Enantiomers	communication	ChemPlusChem	2013	78		642	646	org/10.1002/cplu.201300074	https://chemistry-europe.onlinelibrary.wiley.com/doi/full/10.1002/cplu.201300074				
	mefloquine	nefnavir		Kaho Shionoya, Masako Yamasaki, Shoya Iwanami, Yusuke Ito, Shuetsu Fukushi, Hirofumi Ohashi, Wakana Saso, Tomohiro Tanaka, Shin Aoki, Kouji Kuramochi, Shingo Iwami, Yoshimasa Takahashi, Tadaki Suzuki, Masamichi Muramatsu, Makoto Takeda, Takai	Mefloquine, a Potent anti-Severe Acute Respiratory Syndrome-related Coronavirus 2 (SARS-CoV-2) drug as an entry inhibitor in vitro	Article	Frontiers in Microbiology	2021	12		651403		DOI: 10.3389/fmicb.2021.651403	https://doi.org/10.3389/fmicb.2021.651403			https://www.biorxiv.org/content/10.1101/2020.11.19.389726v1	

	mefloquine				Inventors/Applicant: Andrew Douglas Baxter, Michael Christ Harris, Stuart Brown	Resolution of Mefloquine with O,O-Di-p-aroxytartaric Acid		World Intellectual Property Organization	International Publication Date 11 June 2004 (17.06.2004)							International Publication Number: WO 2004/050625 A1		
	mefloquine				発明者 アンドリュー ダグラス バクスター、マイケル クリストファー ハリス、スチュアート ブラウン	Resolution of Mefloquine with O,O-Di-p-aroxytartaric Acid		公表特許公報(A)	公表日:平成18年5月18日							特許出願公表番号:特表2006-514938/JP 2006-514938)		
	mefloquine				Solange Adams	A Straightforward and High Yielding Synthesis of Mefloquine-II		Tetrahedron	1991	47	36	7609	7614	6		https://www.sciencedirect.com/science/article/pii/S00402001882843		https://www.sciencedirect.com/science/article/pii/S00402001882843?via%3Dihub
	mefloquine				竹島茂人	マラリア予防薬としてメフロキンを長期投与した際の副作用について		Japanese Journal of Tropical Medicine and Hygiene (日本熱帯医学会)	1994	22	4	185	192	8			J-Stage	https://www.istage.jst.go.jp/article/tmh1973/22/4/22_4_185/pdf
	methylene blue				G. Lu M. Nagbanshi, N. Goldau, M. Mendes Jorge, P. Meissner, A. Jahn, F. P. Mockenhaupt and O. Müller	Efficacy and safety of methylene blue in the treatment of malaria: a systematic review	review	BMC Medicine	2018	16		59		16	DOI: org/10.1186/s12916-018-1045-3	https://doi.org/10.1186/s12916-018-1045-3		
	molnupiravir				Florian Kabinger, Carina Stiller, Jana Schmitzová, Christian Dienemann, Goran Kocic, Hauke S. Hillen, Claudia Höbartner and Patrick Cramer	Mechanism of molnupiravir-induced SARS-CoV-2 mutagenesis	article	Nature Structural and Molecular Biology	2021	28		740	746	7	org/10.1038/s41594-021-00651-0	https://doi.org/10.1038/s41594-021-00651-0		
	molnupiravir				John A. McIntosh, Tamas Benkovics, Steven M. Silverman, Mark A. Huffman, Jongrock Kong, Peter E. Malignes, Tetsuji Itoh, Hao Yang, Deeptak Verma, Weilan Pan, Hsing-I Ho, Jonathan Vroom, Anders M. Knight, Jessica A. Hurtak, Artur	Engineered Ribosyl-1-Kinase Enables Concise Synthesis of Molnupiravir, an Antiviral for COVID-19	full paper	ACS Central Science	2021	7	12	1980	1985	6	doi.org/10.1021/acscentsci.1c00608	https://doi.org/10.1021/acscentsci.1c00608		
	nafamostat				Mizuki Yamamoto, Maki Kiso, Yuko Sakai-Tagawa, Kiyoko Iwatsuki-Horimoto, Masaki Imai, Makoto Takeda, Noriko Kinoshita, Norio Ohmagari, Jin Gohda, Kentaro Semba, Zene Matsuda, Yasushi Kawaguchi, Yoshihiro Kawaoka, Jun-ichiro Inoue	The anticoagulant nafamostat potently inhibits SARS-CoV-2 infection in vitro: an existing drug with multiple possible therapeutic effects	full paper								doi.org/10.1101/2020.04.22.054981	https://doi.org/10.1101/2020.04.22.054981	bioRxiv	https://www.biorxiv.org/content/10.1101/2020.04.22.054981v1

nafamostat					Hidekazu Nishimura and Mutsuo Yamaya	A Synthetic Serine Protease Inhibitor, Nafamostat Mesilate, Is a Drug Potentially Applicable to the Treatment of Ebola Virus Disease	full paper	The Tohoku Journal of Experimental Medicine	2015	237		45	50	6	doi: 10.1620/tjem.237.45	https://www.istage.jst.go.jp/article/tjem/237/1/237_45/pdf-char/ja		
nafamostat					Xi Chen, Zhijie Xu, Shuangshuang Zeng, Xiang Wang, Wanli Liu, Long Qian, Jie Wei, Xue Yang, Qiying Shen, Zhicheng Gong and Yuanliang Yan	The Molecular Aspect of Antitumor Effects of Protease Inhibitor Nafamostat Mesylate and Its Role in Potential Clinical Applications	review	frontiers in Oncology	2019	9		852		12 pages	doi: 10.3389/fonc.2019.00852	https://www.frontiersin.org/articles/10.3389/fonc.2019.00852/full		
naphthoquine					Yabin Song, Yongqiang Deng, Huiqiang Wang, Zhuchun Bei, Hongjing Gu, Hui Zhao, Hong Wang, Dongna Zhang, Likun Xu, Baogang Wang, Yuhuan Li, and Hongquan Wang	Naphthoquine: A Potent Broad-Spectrum Anti-Coronavirus Drug In Vitro	full paper	molecules	2022	27		712		8	org/10.3390/molecules27030712	https://doi.org/10.3390/molecules27030712		
nefinavir					Blair Jarvis & Diana Faulds	Nefinavir. A Review of Its Therapeutic Efficacy in HIV Infection	review	Drugs	1998	56	1	147	167	21	DOI: 10.2165/00003495-199856010-00013	https://pubmed.ncbi.nlm.nih.gov/9664204/		
nefinavir					Zhijian Xu, Cheng Peng, Yulong Shi, Zhengdan Zhu, Kaijie Mu, Xiaoyu Wang, Weliang Zhu	Nefinavir was predicted to be a potential inhibitor of 2019-nCoV main protease by an integrative approach combining homology modelling, molecular docking and binding free energy calculation	full paper							1			bioRxiv	https://doi.org/10.1101/2020.01.27.921627
nefinavir					Vanessa Meier-Stephenson, Justin Riemer, Aru Narendran	The HIV protease inhibitor, nefinavir, as a novel therapeutic approach for the treatment of refractory pediatric leukemia	review	OncoTargets and Therapy	2017	10		2581	2593	13		https://doi.org/10.2147/OTT.S136484		
nefinavir					Takashi Inaba, Angela G. Birchler, Yasuki Yamada, Shoichi Sagawa, Katsuyuki Yokota, Koji Ando, and Itsuo Uchida	A Practical Synthesis of Nefinavir, an HIV-Protease Inhibitor, Using a Novel Chiral C4 Building Block: (5R,6S)-2,2-Dimethyl-5-hydroxy-1,3-dioxepan-6-ylammonium Acetate	communication	Journal of Organic Chemistry	1998	53		7582	7583	2	10.1021/jo98147zn			
nefinavir					Noha H. Salama, Edward J. Kelly, Tot Bul Rodney, J. Y. Ho	The Impact of Pharmacologic and Genetic Knockout of P-Glycoprotein on Nefinavir Levels in the Brain and Other Tissues in Mice	full paper	Journal of Pharmaceutical Sciences	2005	94	6	1216	1225	10	org/10.1002/jps.20344	https://www.sciencedirect.com/science/article/pii/S022354916317816		

nelfinavir				Osman Ashari, Henry Perez, Helen Box, Lee Tatham, Rajith K. R. Rajoli, Paul Curley, Megan Neary, Joanne Sharp, Neill J. Liptrott, Anthony Valentijn, Christopher David, Steve P. Rannard, Paul M. O'Neill, Ghaith Aljayyousi, Shaun H. Pennington, Stephen A. Ward, Andrew Hill, David J. Cook, Saou H. Khan, Patrick G. Ray	Prioritization of Anti-SARS-CoV-2 Drug Repurposing Opportunities Based on Plasma and Target Site Concentrations Derived from their Established Human Pharmacokinetics	full paper	Clinical Pharmacology & Therapeutics	2020						16	org/10.1002/cpt.1909	https://ascpt.onlinelibrary.wiley.com/doi/full/10.1002/cpt.1909		
perampanel				Chun-Hui Zhang, Elizabeth A. Stone, Maya Deshmukh, Joseph A. Ippolito, Mohammad M. Ghahremanpour, Julian Tirado-Rives, Krasimir A. Spasov, Shuo Zhang, Yuka Takeo, Shalley N. Kudalkar, Zhuobin Liang, Farren Isaacs, Brett Lindenbach, Scott L. Miller, Karen S. Anderson	Potent Noncovalent Inhibitors of the Main Protease of SARS-CoV-2 from Molecular Sculpting of the Drug Perampanel Guided by Free Energy Perturbation Calculations	full article	ACS Central Science	2021	7	467	475	9	doi.org/10.1021/acscentsci.1c00039	https://pubs.acs.org/doi/10.1021/acscentsci.1c00039				
phenanthridin-6-one				Hiroshi Aoyama, Kazuyuki Sugita, Masahiko Nakamura, Atsushi Aoyama, Mohammed T. A. Salim, Mika Okamoto, Masanori Baba, Yuichi Hashimoto	Fused heterocyclic amido compounds as anti-hepatitis C virus agents	full paper	Bioorganic & Medicinal Chemistry	2011	19	8	2675	2687	13	org/10.1016/j.bmc.2011.03.002	https://doi.org/10.1016/j.bmc.2011.03.002			
phenanthridin-6-one				Aoyama, A., Aoyama, H., Dodo, K., Makishima, M., Hashimoto, Y. and Miyachi, H.	LXR antagonists with a 5-substituted phenanthridin-6-one skeleton: synthesis and LXR restricted carbamoyl analogs	communication	Heterocycles 76,	2008	76	1	137	142	6	10.3987/COM-07-S(N)7	https://www.heterocycles.onlinelibrary/libraries/abstract/02589			
phenanthridin-6-one				Yuko Nishiyama, Shuichi Mori, Makoto Makishima, Shinya Fujii, Hiroyuki Kagechika, Yuichi Hashimoto, and Minoru Ishikawa	Novel Nonsteroidal Progesterone Receptor (PR) Antagonists with a Phenanthridinone Skeleton	full paper	ACS Medicinal Chemistry Letters	2018	9	7	641	645	5	DOI: 10.1021/acmedchemlett.8b00058	https://pubs.acs.org/doi/10.1021/acmedchemlett.8b00058	PMC	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6047039/	
rapamycin				Angela Lombardi, Jessica Gambardella, Xue-Liang Du1, Daniela Sorrento, Maurizio Mauro1, Guido Iaccarino, Bruno Trimarco & Gaetano Santull	Sirolimus induces depletion of intracellular calcium stores and mitochondrial dysfunction in pancreatic beta cell	full paper	Scientific Reports		7			15823	9	DOI:10.1038/s41598-017-15283-y		ResearchGate	https://www.researchgate.net/publication/320856258_Sirolimus_induces_depletion_of_intracellular_calcium_stores_and_mitochondrial_dysfunction_in_pancreatic_beta_cells	
rapamycin				Brian Raught, Anne-Claude Gingras, and Nahum Sonenberg	The target of rapamycin (TOR) proteins	Article	Proceedings of the National Academy of Sciences of the United States of America	2001	98	13	7037	7044	7		https://doi.org/10.1073/pnas.121145898			
remdesivir				Chenping Wang, Daiguo Zheng, Guannan Du, Ronghui Du, Jianping Zhao, Yang Jin, Shouzhi Fu, Ling Gao, Zhenshun Cheng, Qiaofa Lu, Yi Hu, Guangwei Luo, Ke Wang, Yang Lu, Huadong Li, Shuzhen Wang, Shunan Ruan, Chengqing Yang, Chunlin Mei, Yi Wang, Dan Ding, Feng Wang, Yi Wang, Yi Wang, Yi Wang, Yi Wang	Remdesivir in adults with severe COVID-19: a randomised, double-blind, placebo-controlled, multicentre trial	full paper	The Lancet	2020	395			1569	1576	10	doi.org/10.1016/S0140-6736(20)31022-9	https://doi.org/10.1016/S0140-6736(20)31022-9		
remdesivir				Wansik Kim, Yoongho Cho, Camilla Conzelmann, Jana Krüger, Uta Merle, Johannes Steinhart, Tatjana Weil, Lennart Koepke, Caterina Prelli Bozzo, Clarissa Read, Giorgio Fois, Tim Eiseler, Julia Gehrmann, Joanne van Vuuren, Ines M. Wernke, Manfred Riick	SARS-CoV-2 infects and replicates in cells of the human endocrine and exocrine pancreas	article	nature metabolism	2021	3			149	165	37	https://doi.org/10.1038/s42255-021-00347-1			
remdesivir				Goran Kokic, Hauke S. Hillen, Dmitry Tegunov, Christian Dienemann, Florian Seitz, Jana Schmitzova, Lucas Farnung, Aaron Siewert, Claudia Höbartner & Patrick Cramer	Mechanism of SARS-CoV-2 polymerase stalling by remdesivir	article	Nature Chemistry	2021	12			279	7	org/10.1038/s41467-020-20542-0	https://doi.org/10.1038/s41467-020-20542-0			

remdesivir				Richard T. Eastman, Jacob S. Roth, Kyle R. Brimacombe, Anton Simeonov, Min Shen, Samarjit Patnaik, and Matthew D. Hall	Remdesivir: A Review of Its Discovery and Development Leading to Emergency Use Authorization for Treatment of COVID-19	review	ACS Central Science	2020	6		672	683	12	doi.org/10.1021/acscentsci.0c00489	https://pubs.acs.org/doi/10.1021/acscentsci.0c00489	
remdesivir, chloroquine				Koichi Watashi	Open collaborative framework providing severe acute respiratory syndrome coronavirus 2 infection cell culture assays for accelerating drug development	letter	Translational and Regulatory Sciences	2021	3	3	112	114	3	doi: 10.33611/trs.2021-023		
S-217622				Yuto Unoh, Shota Uehara, Kenji Nakahara, Haruaki Nobori, Yukiko Yamatsu, Shiho Yamamoto, Yuki Maruyama, Yoshiyuki Taoda, Koji Kasamatsu, Takahiro Suto, Kensuke Kouki, Atsufumi Nakahashi, Sho Kawashima, Takao Sanaki, Shinsuke	Discovery of S-217622, a Non-Covalent Oral SARS-CoV-2 3CL Protease Inhibitor Clinical Candidate for Treating COVID-19	full paper	BioRxiv	2022						doi.org/10.1101/2022.01.26.47782	https://www.biorxiv.org/content/10.1101/2022.01.26.47782v1	
scridine				中村 運	アクリジン化合物の化学と生理作用	review	化学と生物	1966	4	10	514	526	13		https://www.jstage.jst.go.jp/article/kagakutoseibutsu/96/2/4/10/4_10_514/article-char/ja	
tocilizumab				Xiaoling Xu, View ORCID ProfileMingfeng Han, Tiantian Li, Wei Sun, View ORCID ProfileDongsheng Wang, Binqing Fu, Yonggang Zhou, Xiaohu Zheng, View ORCID ProfileYun Yang, Xiuyong Li, Xiaohua Zhano, Ailun Pan, and Haiming	Effective treatment of severe COVID-19 patients with tocilizumab	article	Proceedings of the National Academy of Sciences of the United States of America	2020	117	20	10970	10975	5		https://doi.org/10.1073/pnas.2005615117	
tocilizumab				Dr Nicolas Frey PharmD Dr Susan Grange PhD Dr Thasia Woodworth MD	Population Pharmacokinetic Analysis of Tocilizumab in Patients With Rheumatoid Arthritis	article	The Journal of Clinical Pharmacology	2013	50	7	754	766	12	https://doi.org/10.1177/009127009350623	https://accpl.onlinelibrary.wiley.com/doi/full/10.1177/009127009350623?casa_token=ISLkrSVuRDAAAAsAA%3ARSy5dEi7MSYm6YMMBG8eidlUsGDcN2rpX0ln5hR_c-v1lRH0Zc5ab_miosW8r	
tocilizumab	glucocorticoids			John H. Stone, M.D., M.P.H., Katie Tuckwell, Ph.D., Sophie Dimonaco, M.Sc., Micki Kleerman, M.D., Martin Aringer, M.D., Daniel Blockmans, M.D., Ph.D., Elisabeth Brouwer, M.D., Ph.D., Maria C. Cid, M.D., Bhaskar Dasgupta, M.B., B.S., M.D., Juergen Reich, M.D., Carlo Salvarani, M.D., Georg Schett, M.D., et al.	Trial of Tocilizumab in Giant-Cell Arteritis	article	The NEW ENGLAND JOURNAL of MEDICINE	2017			377	317	328	11	10.1056/NEJMOA1613849	https://www.nejm.org/doi/full/10.1056/nejmoa1613849
zinc(II)				Aartjan J. W. te Velthuis, Sjoerd H. E. van den Worm, Amy C. Sims, Ralph S. Baric, Eric J. Snijder, Martijn J. van Hemert	Zn ²⁺ Inhibits Coronavirus and Arterivirus RNA Polymerase Activity In Vitro and Zinc Ionophores Block the Replication of These Viruses in Cell Culture	full paper	PLoS Pathogens	2010	6	11	e1001176		10	doi.org/10.1371/journal.ppat.1001176	https://www.researchgate.net/publication/47794995	

