

**COVID-19 國際上具潛力治療藥物之我國相關主要專利資訊 (2022/06 更新) (更新處以紅字標示)**

**Main Information of Patents for International Potential Therapeutic Agents for COVID-19 in Taiwan (Last updated in 2022/06)**  
(Updates shown in red)

底色標註	無專利	不含核心物質專利	含核心物質專利
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Key	No Patent	Patent w/o Core Substance	Patent w/ Core Substance
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分類 <sup>1</sup> Category	藥物 Drug	我國藥品 許可證 <sup>2</sup> Taiwan Drug License	我國主要專利資訊 <sup>3</sup> Information of Patent in Taiwan				專利權期限 Patent Term		
			證書號 Patent Number	物質 Substance	組合物 Composition	用途 Use		製法 Manufacturing Process	
小 分 子 化 學 藥 物 Small Molecule Drugs	remdesivir	O	I401084	V	V	V	2029/4/21		
			I687432	V	V	V	2035/10/26		
			I698444				V	2035/10/26	
	抗 病 毒 藥 物 Antivirals	lopinavir/ritonavir	O	158811	V	V		V	已消滅 Extinguished
				I231211		V			已消滅 Extinguished
				I284640	V <sup>5</sup>				已消滅 (2020/4/1 自請拋棄) Extinguished (Voluntarily waived on 2020/4/1)
				I342221		V		V	已消滅 (2020/4/1 自請拋棄) Extinguished (Voluntarily waived on 2020/4/1)

				I381840			V		已消滅 (2020/4/1 自請拋棄) Extinguished (Voluntarily waived on 2020/4/1)	
		umifenovir	X	無 None						
		favipiravir	X	I463999			V		2030/3/11	
				I507397	V <sup>5</sup>		V		V	2031/9/28
				I552998	V <sup>5</sup>		V		V	2031/9/28
		oseltamivir	O	129988	V	V		V	已消滅 Extinguished	
		ASC09F (ASC09/ritonavir)	X	I415851	V	V	V		2027/6/21	
		darunavir/cobicistat	O	I411613	V	V			2027/7/5	
				I464165					V	2030/3/30
				I496778				V		2027/7/5
				I533868			V			2028/2/21
		danoprevir	X	I375679	V	V	V		2024/10/12	
		ribavirin	O	略 <sup>4</sup> N/A						
		nelfinavir	X	132129	V	V			已消滅 Extinguished	
				I234461			V			已消滅 Extinguished
		emtricitabine/tenofovir disoproxil	O	I355270			V		2024/1/12	
分類 <sup>1</sup> Category	藥物 Drug	我國藥品 許可證 <sup>2</sup> Taiwan Drug License	我國主要專利資訊 <sup>3</sup> Information of Patent in Taiwan							
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小 分 子化 學 藥 物 Small Molecule Drugs	抗病毒藥物 Antivirals	sofosbuvir	O	I357332	V	V	V	V	2028/3/27 (延長至 2031/12/2) <sup>6</sup> 2028/3/27 (Extended until 2031/12/2) <sup>6</sup>
				I498117	V <sup>5</sup>	V	V		2031/3/30
				I566773		V			2032/11/27
				I576352	V <sup>5</sup>	V	V		2030/5/18
				I598358				V	2030/5/18
		tenofovir disoproxil fumarate	O	I355270		V			2024/1/12
				I375560		V	V	V	2026/6/7
				I471145		V			2026/6/7
				I556840		V			2031/11/17
		tenofovir alafenamide fumarate	O	I516499	V	V	V	V	2032/8/14 (延長至 2033/11/30) <sup>6</sup> 2032/8/14 (Extended until 2033/11/30) <sup>6</sup>
				I557133				V	2032/10/2
		azvudine	X	I593414			V		2031/9/20
		baloxavir marboxil	O	I518085	V	V			2031/9/22
				I625330	V				2036/4/27
I663172	V <sup>5</sup>				V		2037/8/9		

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			證書號 Patent Number	物質 Substance	組合物 Composition	用途 Use	製法 Manufacturing Process	
小分子化學 藥物 Small Molecule Drugs	其他 Others	O	I332847		V			2024/4/6 (延長至 2026/4/5) <sup>6</sup> 2024/4/6 (Extended until 2026/4/5) <sup>6</sup>
			I528958		V	V		2032/3/29
		X	略 <sup>4</sup> N/A					
		O	略 <sup>4</sup> N/A					
		O	略 <sup>4</sup> N/A					
		X	無 None					
		O	I444382	V	V	V		2029/3/9 (延長至 2032/6/17) <sup>6</sup> 2029/3/9 (Extended until 2032/6/17) <sup>6</sup>
		O	I351969		V	V		2024/6/3
		O	無 None					
		X	略 <sup>4</sup> N/A					

	budesonide/formoterol	O	I284047		V			2021/5/21
			I347197		V			2023/2/26
			I546094		V			2030/5/27
	candesartan	O	I438201		V			2030/4/27
	CM4620	X	I574959	V	V	V		2031/4/25
	dapagliflozin	O	I254714	V	V			2020/10/5 (延長核駁審定) 2022/10/5 (Rejection extended)
			I310770	V	V	V		2023/5/13 (延長至2028/5/13) <sup>6</sup> 2023/5/13 (Extended until 2028/5/13) <sup>6</sup>
	dexemedetomidine	O	I574688		V	V		2033/1/3
			I593409		V			2033/1/3
	imatinib	O	I350184		V			2023/4/20
	linagliptin	O	I319320	V	V		V	2023/8/19 (延長至2025/2/7) <sup>6</sup> 2023/8/19 (Extended until 2025/2/7) <sup>6</sup>
			I388325		V	V		2023/8/19
			I396539	V <sup>5</sup>	V			2027/5/2
			I447119			V		2029/8/4
			I474843		V		V	2027/5/2

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小 分 子化學 藥物 Small Molecule Drugs	linagliptin (續) (Cont.)	O	I500423			V		2027/5/2
			I513700			V		2029/8/4
			I520753		V		V	2027/5/2
			I534147		V		V	2027/5/2
	nintedanib	O	I268922	V	V			2020/10/11(延長至 2025/10/11) <sup>6</sup> 2020/10/11(Extended until 2025/10/11) <sup>6</sup>
			I285635	V <sup>5</sup>	V	V		2023/7/22 (延長至 2027/4/19) <sup>6</sup> 2023/7/22 (Extended until 2027/4/19) <sup>6</sup>
			I418351			V		2025/12/22
	rivaroxaben	O	I226330	V	V			2020/12/19 (延長至 2024/9/25) <sup>6</sup> 2020/12/19 (Extended until 2024/9/25) <sup>6</sup>
			I356702		V	V		2024/11/25
			I377945			V		2026/1/26

ruxolitinib	O	I410407	V	V	V	2026/12/11 (延長至 2027/11/7) <sup>6</sup> 2026/12/11 (Extended until 2027/11/7) <sup>6</sup>
		I468162			V	2026/12/11
		I553008		V	V	2026/12/11
		I630207			V	2026/12/11
selinexor	X	I574957	V	V	V	2032/7/25
sitagliptin	O	I226331	V	V		2022/7/4 (延長至 2025/1/9) <sup>6</sup> 2022/7/4 (Extended until 2025/1/9) <sup>6</sup>
		I347185	V <sup>5</sup>	V	V	2024/6/15
		I312772				V
TAK-981	X	I680970	V	V	V	2035/6/29
tofacitinib	O	I248935	V			2020/12/4 (延長至 2025/6/28) <sup>6</sup> 2020/12/4 (Extended until 2025/6/28) <sup>6</sup>
		I264305		V		已消滅 (專利期滿消滅) Extinguished (Due to Expiry of Patent Term)
		I310384	V			V

				I619516		V	V		2034/3/11 (延長至 2034/5/4) <sup>6</sup> 2034/3/11 (Extended until 2034/5/4) <sup>6</sup>
		valsartan	O	I358291		V			2023/5/14
		vazegepant	X	I483937	V	V	V		2031/3/29
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小分子化學 藥物 Small Molecule Drugs	其他 Others	silmitasertib	X	無 None					
		antroquinonol <sup>7</sup>	X	I330528	V	V	V		2027/1/27
				I361687	V	V	V		2027/1/27
		duvelisib	X	I546305	V <sup>5</sup>	V	V	V	2032/1/9
				I659956		V			2032/1/9
				I674262			V		2032/1/9
		apilimod	X	I380816	V <sup>5</sup>	V			2025/4/12
		pirfenidone	O	I314868		V		V	已消滅(專利期滿消滅) Extinguished (Due to Expiry of Patent Term)
		dipyridamole	O	I632916		V	V		2033/7/28
		tranilast	X	I651095		V			2037/10/17
brilacidin	X	I520951		V	V		2032/5/14		
larsucoesterol	X	I734665			V		2034/12/22		





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			證書號 Patent Number	物質 Substance	組合物 Composition	用途 Use	證書號 Patent Number	專利權期限 Patent Term
蛋白質藥物 Protein drug	抗 PD-1 抗體 Anti-PD-1 monoclonal antibodies	O	I379898	V	V	V		2026/5/7 (延長至 2029/8/3) <sup>6</sup> 2026/5/7 (Extended until 2029/8/3) <sup>6</sup>
			I630917		V	V		2036/12/5
			I419705	V	V	V		2029/12/7 (延長至 2033/7/8) <sup>6</sup> 2029/12/7 (Extended until 2033/7/8) <sup>6</sup>
			I660738		V	V		2034/9/25
	bevacizumab	O	I457135			V		2031/02/21
			I619509		V	V		2031/02/21
	eculizumab	O	無 None					
	meplazumab	X	無 None					
	sarilumab	X	I533884		V			2031/1/6
			I587870		V			2031/1/6
tocilizumab	O	I351967		V	V		2024/12/15 (延長至 2028/3/17) <sup>6</sup> 2024/12/15 (Extended until 2028/3/17) <sup>6</sup>	
		I375566		V			2028/12/25	

			I400086		V	V		2024/4/27 (延長至 2025/11/2) <sup>6</sup> 2024/4/27 (Extended until 2025/11/2) <sup>6</sup>	
	HzVSFv13	X	無 None						
	canakinumab	O	I321568	V	V		V	已消滅(專利期滿消滅) Extinguished (Due to Expiry of Patent Term)	
			I537003				V	2026/10/24	
	clazakizumab	X	I481413				V	2029/11/24	
			I498120					V	2029/11/24
			I533883			V			2029/11/24
			I547502			V			2029/11/24
			I561530	V				V	2028/5/20
	I617318					V	2029/11/24		
	LY3127804	X	I551610	V	V	V		已消滅(未依限繳費) Extinguished (Due to Outstanding Fees)	
	nivolumab	O	I379898	V	V	V		2026/5/7 (延長至 2029/8/3) <sup>6</sup> 2026/5/7 (Extended until 2029/8/3) <sup>6</sup>	
	siltuximab	O	I329019	V	V	V		2022/11/12 (延長至 2026/1/12) <sup>6</sup> 2022/11/12 (Extended until 2026/1/12) <sup>6</sup>	
	itolizumab	X	I485160				V	2029/3/12	

干擾素 Interferon	ropeginterferon $\alpha$ -2b	O	I381851	V	V			2028/8/14 (延長至 2033/8/14) <sup>6</sup> 2028/8/14 (Extended until 2033/8/14) <sup>6</sup>
其他 Other	efineptakin alfa	X	I720051		V			2036/11/03

其他無我國主要專利之試驗藥物(粗體者為具有我國有效藥品許可證者/經EUA專案核准者)：

Other experimental drugs without major patents in Taiwan (those in **bold** possess valid drug licenses in Taiwan or are **approved under EUA**).

- 小分子藥物包含 ABX464、acalabrutinib、**ACE inhibitor**、almitrine、**amiodarone**、**apremilast**、asapirant、**aspirin**、AT-001、AT-527、**atorvastatin**、atovaquone、**AZD7442 (TW202200610, 尚未申請實體審查)**、5-benzyloxygramine、**bromhexine**、**captopril**、chlorine dioxide、clofazimine、**chlorpromazine**、**ciclesonide**、clarithromycin、clevudine、**clindamycin**、**clopidogrel**、colchicine、**deferoxamine**、**dexamethasone**、**doxycycline**、DUR-928、ebastine、**ensovibep (TW202208404, 尚未申請實體審查)**、escin、**etoposide**、**fenofibrate**、**fluvoxamine**、fostamatinib、galidesivir、GC376、GV-17、**hydrocortisone**、**hydrogen peroxide**、**ibuprofen**、ifenprodil、**isoprinosine**、**isotretinoin**、JS016、KAND567、**ketamine**、**leflunomide**、**lenalidomide**、**lenzilumab**、levamisole、**lufotrelvir (TW202202148, 初審審查中)**、losartan、MDL28170、**mefloquine**、**merimepodib**、**methotrexate**、**methylprednisolone**、**molnupiravir (TW202140040, 尚未申請實體審查)**、**mycophenolic acid**、**N-acetylcysteine**、nafamostat、naltrexone、**naproxen**、nelfinavir、**nirmatrelvir (TW202214604, 初審審查中)**、nitazoxanide、**omeprazole**、ONO5334、PF-00835231、piclidenoson、plitidepsin、**povidone-iodone**、**prazosin**、**prednisolone**、primaquine、**propofol**、proxalutamide、PUL-042、**pyridostigmine**、quinacrine、**ramipril**、**regdanvimab**、**REGN-COV2 (TW202138004, 初審審查中)**、**S-217622**、**sabizabulin**、sarconeos、**sevoflurane**、**sildenafil**、**simvastatin**、**sotrovimab (TW202207983, 尚未申請實體審查)**、**spironolactone**、stannous protoporphyrin、**telmisartan**、tetrandrine、thapsigargin、**tirofiban**、tradipitant、**tranexamic acid**、triazavirin、**trimethoprim/sulfamethoxazole**、**verapamil**
- Small molecule drugs include: ABX464, acalabrutinib, **ACE inhibitor**, almitrine, **amiodarone**, **apremilast**, asapirant, **aspirin**, AT-001, AT-527, **atorvastatin**, atovaquone, **AZD7442 (TW202200610, has not yet applied for substantive examination)**, 5-benzyloxygramine, **bromhexine**, **captopril**, chlorine dioxide, clofazimine, **chlorpromazine**, **ciclesonide**, clarithromycin, clevudine, **clindamycin**, **clopidogrel**, colchicine, **deferoxamine**, **dexamethasone**, **doxycycline**, DUR-928, ebastine, **ensovibep (TW202208404, has not yet applied for substantive examination)**, escin, **etoposide**, **fenofibrate**, **fluvoxamine**, fostamatinib, galidesivir, GC376, GV-17, **hydrocortisone**, **hydrogen peroxide**, **ibuprofen**, ifenprodil, **isoprinosine**, **isotretinoin**, JS016, KAND567, **ketamine**, **leflunomide**, **lenalidomide**, **lenzilumab**, levamisole, **lufotrelvir (TW202202148, patent examination in progress)**, losartan, MDL28170, **mefloquine**, **merimepodib**, **methotrexate**, **methylprednisolone**, **molnupiravir (TW202140040, has not yet applied for substantive examination)**, **mycophenolic acid**, **N-acetylcysteine**, nafamostat, naltrexone, **naproxen**, nelfinavir, **nirmatrelvir (TW202214604, patent examination in progress)**, nitazoxanide, **omeprazole**, ONO5334, PF-00835231, piclidenoson, plitidepsin, **povidone-iodone**, **prazosin**, **prednisolone**, primaquine, **propofol**, proxalutamide, PUL-042, **pyridostigmine**, quinacrine, **ramipril**, **regdanvimab**, **REGN-COV2 (TW202138004, patent examination in progress)**, **S-217622**, **sabizabulin**, sarconeos, **sevoflurane**, **sildenafil**, **simvastatin**, **sotrovimab (TW202207983, has not yet applied for substantive examination)**, **spironolactone**, stannous protoporphyrin, **telmisartan**, tetrandrine, thapsigargin, **tirofiban**, tradipitant, **tranexamic acid**, triazavirin, **trimethoprim/sulfamethoxazole**, **verapamil**

- 蛋白質、多肽類藥物包含重組人類干擾素  $\alpha$ -1b、重組人類干擾素  $\alpha$ -2b、**聚乙二醇干擾素  $\alpha$ -2a**、聚乙二醇干擾素  $\alpha$ -2b、**人類干擾素  $\beta$ -1a**、**重組人類干擾素  $\beta$ -1b**、聚乙二醇人類干擾素  $\lambda$ -1a、重組人類凝溶膠蛋白、重組人類 ACE2、**alteplase**、aviptadil、anakinra、BMS-986253、CD24Fc、CPI-006、DAS181、dornase alfa、efineptakin alfa、emapalumab、garadacimab、gimsilumab、IFX-1、lanadelumab、lenzilumab、leronlimab、sargramostim、sng001、TJ003234、thymosin、zilucoplan
- Protein and polypeptide drugs include: recombinant human interferon  $\alpha$ -1b, recombinant human interferon  $\alpha$ -2b, **pegylated interferon  $\alpha$ -2a**, pegylated interferon  $\alpha$ -2b, **human interferon  $\beta$ -1a**, **recombinant human interferon  $\beta$ -1b**, pegylated human interferon  $\lambda$ -1a, recombinant human gelsolin protein, recombinant human ACE2, **alteplase**, aviptadil, anakinra, BMS-986253, CD24Fc, CPI-006, DAS181, dornase alfa, efineptakin alfa, emapalumab, garadacimab, gimsilumab, IFX-1, lanadelumab, lenzilumab, leronlimab, sargramostim, sng001, TJ003234, thymosin, zilucoplan
- 核苷酸、多醣類藥物包含 defibrotide、**enoxaparin**、**fondaparinux**、**heparin**、**tinzaparin**
- **Nucleic acids** and polysaccharide drugs include: defibrotide, **enoxaparin**, **fondaparinux**, **heparin**, **tinzaparin**.

註解 [205081]: Nucleotide

註 1：本表所列藥物包含針對 COVID-19 之併發症或合併症之治療藥物，另有關涉及人類免疫球蛋白、細胞療法、疫苗、中藥及天然萃取物、益生菌、營養補充劑、激素及其他治療方法之試驗藥物不納入本表統整，**僅有名稱代號而無法查得確實化學結構之藥物亦不納入統整。**

1: Includes drugs used for the treatment of complications or comorbidities of COVID-19. Experimental drugs involving human immunoglobulins, cell therapy, vaccines, TCM and natural extracts, probiotics, nutritional supplements, hormones and other therapeutic modalities are not included within this table, nor are drugs **with only nominal codes for which the exact chemical structure is unavailable.**

註 2：若曾核發藥品許可證惟相關藥品許可證皆已註銷，則視為不具有許可證，以 X 表示。

2: If a drug license was issued then revoked, the license is deemed not to exist and is denoted by X.

註 3：本案之專利資訊**主要係僅檢索原開發廠相關主要專利**，且未包含僅與中間體相關之專利或該藥物非作為主要成分之組合物專利等，故非屬完整之專利佈局分析；此外，表中所述無專利保護之藥物亦可能包含製表時**尚未提出申請或尚未公開者**，即後續仍有機會取得相關專利權。

3: Patent information is limited to **main patents held by the original developer** and does not include patents related only to intermediates or to drug composition that does not include the main ingredient. As such, it is not a complete analysis of the patent portfolio. Also, the table only reflects the situation up until the date the table was created. Drugs listed as without patent protection do not take into account cases where the applicant has yet to file an application or has yet to disclose their patent at the time the table was created.

註 4：已於臨床使用多年之藥物。

4: Drug has already been in clinical use for many years.

註 5：為特定結晶型式或鹽類之專利，非該活性成分之最初化合物專利。

5: Patent is only for a specific crystalline form or salt, not for the original compound of the active ingredient.

註 6：經核准延長之專利權期間之範圍僅及於許可證所載之有效成分及用途所限定之範圍。

6: The approved extension of the patent term is applicable only to the scope of the active ingredient and the use stipulated within the license.

註 7：另含多筆不同用途之核准專利案，省略不列出。

7: Includes several other approved patents for different uses, which have been omitted and are not listed here.

藥品清單資料來源：參考 ClinicalTrials.gov 網站資料庫及業經國內外報導之 COVID-19 藥品資訊。

Source: From the ClinicalTrials.gov online database, as well as domestic and international reports on COVID-19 drugs information.