

COVID-19 - WCO-WHO Cooperation

List of priority medicines for customs during COVID-19 pandemic

WHO Secretariats of INN Programme and EML

Background

The World Customs Organisation (WCO) wishes to produce a list of medical supplies and medicines for COVID-19, which will serve to help customs and economic operators identify them and facilitate their classification at the border. The list contains medicines used in the general management of hospitalised patients and some medicines being used as part of the direct treatment against COVID-19 with their suggested HS codes. Where appropriate, medicines are identified by their International Nonproprietary Names (INN).

As of 30 April 2020, the present COVID-19 pandemic has affected 213 countries, areas or territories, where more than 3.1 million cases have been confirmed, and more than 217 000 people have died as a consequence of the infection. Due to the clinical characteristics of this coronavirus disease and its evolution, COVID-19 is challenging the health system of many countries, as patients in the severe stage require transfer to Intensive Care Units (ICU) and mechanical ventilation, intubation, sedation, and treatment of potential coinfections.

Within this framework, shortages of medicines can worsen the situation, especially in three cases:

- (1) Medicines used in the general management of hospitalised patients with COVID-19.
- (2) Medicines which are used as part of the direct treatment against COVID-19 in hospitalised patients.
- (3) Medicines where interrupted supply could result in serious health consequences.

Method

The following tables have been prepared considering different documents published by National Health Authorities, scientific societies or pharmacology experts, namely:

- (1) The Office of the Chief Pharmacist Department for Health and Wellbeing; Government of South Australia.
- (2) The Australian Therapeutics and Goods Administration (TGA)
- (3) The Essential Medicines List for the management of COVID-19 patients admitted to ICU prepared by the Argentinian CUFAR, a WHO-CC for the Rational Use of Medicines.
- (4) NICE COVID-19 rapid guidelines.
- (5) The National guidelines for the management of adult COVID-19 patients issued by different medical societies in Panama.

(6) Brazilian Ministry of Health, Protocolo de Manejo Clínico da Covid-19 na Atenção Especializada.

The complete references appear at the end of the document.

This is a living document, which will be regularly updated.

General Disclaimer:

The WHO Secretariats of the International Nonproprietary Name Programme and of the Model List of Essential Medicines, in this exceptional situation, wish to serve customs and economic operators by compiling a list of active substances that have been used in the context of the COVID-19 pandemic. This interim list will be continuously updated and will be a living document.

In view of the exceptional circumstances and the emergency due to the COVID-19 pandemic, the Secretariats are not in a position to verify the possible benefits and harms of the listed medicines for treatment and management of COVID-19, as well as the dosage. The mention of specific medicines or combinations does not imply that they are endorsed or recommended by WHO against COVID-19 or in the context of the COVID-19 pandemic. The responsibility for the interpretation and use of the material lies with the reader. In no event shall WHO and WCO be liable for damages arising from its use.

The HS codes were provided by the WCO Secretariat with a view to facilitating the classification at the international level (6 digit of the HS) of the medicines contained in the list. Economic operators are kindly advised to consult with the relevant Customs administrations in relation to classification at domestic levels (7 or more digits) or in the event of any discrepancy between their practices and this list.

Some INN substances were classified by the Harmonized System Committee (HSC). The complete table of all INN substances classified by the HSC can be found at:

http://www.wcoomd.org/en/topics/nomenclature/instrument-and-tools/tools-to-assist-with-the-classification-in-the-hs/hs_classification-decisions/inn-table.aspx

Custom Medicines Prioritization lists

Table 1.- Medicines used in the general management of hospitalised patients with COVID-19.

| Condition / Symptom | Medicine <i>INN (Proposed List)</i> <i>(Recommended List)</i> | HS Codes as pure substances / (*) put up as medicaments in measured doses | 2019 Model List of Essential Medicines section |
|--|--|---|--|
| Fever | paracetamol (8)(4) | 2924.29; 3004.90* | 2.1 Non-opioids and non-steroidal anti-inflammatory medicines (NSAIDs) |
| Medicinal gas | Oxygen | 2804.40 | 1.1 General anaesthetics and oxygen 1.1.1 Inhalational medicines |
| Analgesia | Morphine morphine glucuronide (92)(54) | 2939.11; 3004.49* 2939.19; 3004.49* | 1.3 Preoperative medication and sedation for short-term procedures |
| | fentanyl (14)(8) | 2933.33; 3004.90* | 2.2 Opioid analgesics |
| Sedation | propofol (49)(23) | 2907.19; 3004.90* | 1.1 General anaesthetics and oxygen 1.2 Injectable medicines |
| | midazolam (40) (19) | 2933.91; 3004.90* | 1.3 Preoperative medication and sedation for short-term procedures |
| | lorazepam (23)(10) | 2933.91; 3004.90* | 5. ANTICONVULSANTS/ANTIEPILEPTICS |
| | haloperidol (10)(4) | 2933.39; 3004.90* | 2.3 Medicines for pain and palliative care |
| | levomepromazine (8)(4) | 2934.30; 3004.90* | |
| Muscle relaxant | Atracurium ¹ atracurium besilate (42)(20) | 2933.49; 3004.90* | 20. MUSCLE RELAXANTS (PERIPHERALLY-ACTING) AND CHOLINESTERASE INHIBITORS |
| | Succinylcholine suxamethonium chloride (1) | 2923.90; 3004.90* | 20. MUSCLE RELAXANTS (PERIPHERALLY-ACTING) AND CHOLINESTERASE INHIBITORS |
| Sedation adjuvant | Atropine atropine methonitrate (4)(3) atropine oxide (13)(5) | 2939.79; 3004.49* 2939.79; 3004.49* 2939.79; 3004.49* | 1.3 Preoperative medication and sedation for short-term procedures |
| Anti-infectives (for coinfections; need to refer to local guidelines and AMR data) | amoxicillin (27)(12)+ clavulanic acid ² (44)(21) | 3003.10; 3004.10* | 6.2.1 Access group antibiotics |
| | amoxicillin (27)(12) | 2941.10; 3004.10* | 6.2.1 Access group antibiotics |
| | azithromycin (58)(28) | 2941.90; 3004.20* | 6.2.2 Watch group antibiotics |
| | ceftriaxone (44)(21) | 2941.90; 3004.20* | 6.2.2 Watch group antibiotics |
| | ceftazidime (44)(21) | 2941.90; 3004.20* | 6.2.2 Watch group antibiotics |
| | doxycycline (16)(8) | 2941.30; 3004.20* | 6.2.1 Access group antibiotics |
| | vancomycin (6)(3) | 2941.90; 3004.20* | 6.2.2 Watch group antibiotics |
| | meropenem (60)(29) ³ | 2941.90; 3004.20* | 6.2.2 Watch group antibiotics |
| | amikacin (30)(14) | 2941.90; 3004.20* | 6.2.1 Access group antibiotics |
| | piperacillin (38)(18)+ tazobactam (63)(29) | 3003.10; 3004.10* | 6.2.2 Watch group antibiotics |
| | amphotericin B (10)(4) | 2941.90; 3004.20* | 6.3 Antifungal medicines |
| Glucocorticoids | hydrocortisone (1)(6) ⁴ | 2937.21; 3004.32* | 3. Antiallergics and medicines used in anaphylaxis |
| | norepinephrine (45)(23) ⁵ | 2937.90; 3004.39* | |
| Vasoactive medicines | epinephrine (16)(7) ⁶ | 2937.90; 3004.39* | 3. ANTIALLERGICS AND MEDICINES USED IN ANAPHYLAXIS |
| | dobutamine (29)(13) | 2922.29; 3004.90* | |
| | Vasopressin vasopressin injection (16)(7) | 2937.19; 3004.39* | |
| Myocardial dysfunction | levosimendan (68)(23) ⁷ | 2933.99; 3004.90* | |
| | milrinone (50)(24) ⁷ | 2933.79; 3004.90* | |
| Volume expanders (crystalloids) | Saline solution | 2501.00; 3004.90* | 26.2 Solutions correcting water, electrolyte and acid-base disturbances |
| | Ringer's lactate | 3004.90* | 26.2 Solutions correcting water, electrolyte and acid-base disturbances |
| Medicines for influenza co-infection | oseltamivir (80)(42) ⁸ | 2924.29; 3004.90* | 6.4.3 Other antivirals |
| Anticoagulant | enoxaparin enoxaparin sodium (77)(39) | 3001.90; 3004.90* | 10.2 Medicines affecting coagulation |
| | heparin sodium (54)(26) | 3001.90; 3004.90* | 10.2 Medicines affecting coagulation |
| Antacids | omeprazole (46)(22) | 2933.39; 3004.90* | 17.1 Antiulcer medicines |
| | ranitidine (41)(19) | 2932.19; 3004.90* | 17.1 Antiulcer medicines |

| | | | |
|--------------------|--|-------------------|--|
| Antiemetic | metoclopramide (14)(6) | 2924.29; 3004.90* | 17.2 Antiemetic medicines |
| | ondansetron (62)(29) | 2933.29; 3004.90* | 17.2 Antiemetic medicines |
| Antiseptic | chlorhexidine (6)(3) | 2925.29; 3004.90* | 15.1 Antiseptics |
| | alcohol-based hand rub | 3808.94 | 15.1 Antiseptics |
| | povidone (74)(36)-iodine | 3905.99; 3004.90* | 15.1 Antiseptics |
| Bronchodilators | salbutamol (20)(9) | 2922.50; 3004.90* | 25.1 Antiasthmatic and medicines for chronic obstructive pulmonary disease |
| | ipratropium bromide (31)(14) | 2939.79; 3004.49* | 25.1 Antiasthmatic and medicines for chronic obstructive pulmonary disease |
| Cough suppressants | Codeine | 2939.11; 3004.49* | 2.2 Opioid analgesics |

¹ [vecuronium bromide](#) (46)(22) can be an alternative. (HS Codes: 2933.49; 3004.90*)

² [ampicillin](#) (13)(8) + [sulbactam](#) (45)(21) can be an alternative. (HS Codes: 3003.10; 3004.10*)

³ [imipenem](#) (50)(24) + [cilastatin](#) (50)(24) can be an alternative. (HS Codes: 3003.20; 3004.20*)

⁴ [methylprednisolone](#) (8)(4) can be an alternative. (HS Codes: 2937.29; 3004.32*)

⁵ Recommended as first choice in patients with shock, as it produces less tachycardia than [epinephrine](#) (16)(7).

⁶ Vasopressin can be an alternative.

⁷ Panama guidelines (see Ref.)

⁸ In the case of influenza virus co-infection in compromised patients.

Table 2.- Medicines which are used as part of the direct treatment against COVID-19 in hospitalised patients.¹

| Medicine <i>INN (Proposed List)</i> <i>(Recommended List)</i> | HS Codes as pure substances / (*) put up as medicaments in measured doses | 2019 Model List of Essential Medicines section ² |
|---|--|--|
| hydroxychloroquine (8)(4) | 2933.49; 3004.90* | 29.2 Disease-modifying agents used in rheumatoid disorders (DMARDs) |
| chloroquine (4)(3) | 2933.49; 3004.60* | 6.5.3 Malaria due to <i>Plasmodium vivax</i> , <i>ovale</i> , <i>malariae</i> 29.2 Disease-modifying agents used in rheumatoid disorders (DMARDs) |
| azithromycin (58)(28) | 2941.90; 3004.20* | 6.2.2 Watch group antibiotics |
| lopinavir (80)(42) | 2933.59; 3004.90* | 6.4.2.3 Protease inhibitors |
| ritonavir (74)(36) | 2934.10; 3004.90* | |
| remdesivir (116)(78) | 2934.99; 3004.90* | - |
| interferon alfa (73)(36) | 3002.13; 3002.15* | 6.4.4.2.3 Other antivirals for hepatitis C |
| ribavirin (31)(40) | 2934.99; 3004.90* | 6.4.3 Other antivirals |

¹ Medicines being tested in different hospitals. Each country should identify the list of medicines prescribed in its hospitals.

² Medicines being tested for COVID-19 have not been included on the EML for COVID-19; in the above table are reported the sections for which they have been included in EML.

Table 3.- Medicines which interrupted supply could result in serious health consequences.

| Medicine Prescription medicines ^{1 2} | 2019 Model List of Essential Medicines section |
|---|--|
| Analgesics | 2.1 Non-opioids and non-steroidal anti-inflammatory medicines (NSAIMs) |
| Anaphylaxis treatment | 3. ANTIALLERGICS AND MEDICINES USED IN ANAPHYLAXIS |
| Antianginal | 12.1 Antianginal medicines |
| Anti-arrhythmics | 12.2 Antiarrhythmic medicines |
| Anti-coagulants | 10.2 Medicines affecting coagulation |
| Anti-depressants | 24.2.1 Medicines used in depressive disorders |
| Anti-diarrhoeals | 17.5 Medicines used in diarrhoea |
| Anti-epileptics | 5. ANTICONVULSANTS/ANTIPILEPTICS |
| Anti-hypertensives | 12.3 Antihypertensive medicines |
| Anti-parkinson drugs | 9. ANTIPARKINSONISM MEDICINES |
| Anti-platelets | 12.5.1 Anti-platelet medicines |
| Anti-psychotics | 24.1 Medicines used in psychotic disorders |
| Anti-virals | 6.4.2 Antiretrovirals |
| Benzodiazepines | 24.3 Medicines for anxiety disorders |
| Cancer/Palliative care medicines | 8.2 Antineoplastics and supportive medicines |
| Diuretics | 16. DIURETICS |
| Endocrine medicines | 18. MEDICINES FOR ENDOCRINE DISORDERS |
| Gastrointestinal medicines | 17. GASTROINTESTINAL MEDICINES |

| | |
|--|--|
| Glaucoma eye drops | 21.4 Miotics and antiglaucoma medicines |
| Immunosuppressants | 8. IMMUNOMODULATORS AND ANTINEOPLASTICS |
| Insulins | 18.5.1 Insulins |
| Oral contraceptives | 22.1.1 Oral hormonal contraceptives |
| Oral hypoglycaemics | 18.5.2 Oral hypoglycaemic agents |
| Respiratory medicines | 25.1 Antiasthmatic and medicines for chronic obstructive pulmonary disease |
| Non-prescription medicines^{1, 3, 4} | |
| epinephrine (adrenaline) autoinjector (HS Code: 3004.39*) | 3. ANTIALLERGICS AND MEDICINES USED IN ANAPHYLAXIS |
| chloramphenicol (1)(1) eye drops/ointment (HS Code: 2941.40; 3004.20*) | |
| GTN (glyceryl trinitrate) (HS Code: 2920.90; 3004.90*) | 12.1 Antianginal medicines |
| levonorgestrel (33)(15) (HS Code: 2937.23; 3004.39*) | 22.1.1 Oral hormonal contraceptives |
| naloxone (13)(5) (HS Code: 2939.19; 3004.49*) | 4. ANTIDOTES AND OTHER SUBSTANCES USED IN POISONINGS |
| salbutamol (20)(9) (HS Code: 2922.50; 3004.90*) | 25.1 Antiasthmatic and medicines for chronic obstructive pulmonary disease |
| Medicines used in specific programs | |
| WHO Global Malaria Program | |
| WHO Global TB Program | |
| HIV/AIDS Program | |

¹ List recommended by the Australian TGA.

² Classifications are not given for classes of medicaments as classification varies dependent on the specific substance.

³ In certain countries, some of these active ingredients can be prescription medicines.

⁴ Classifications not marked are for the pure substance. Classifications marked * are for the substances put up as medicaments in measured doses. Note, the classification for epinephrine if it is imported as a pure substance, *not in an autoinjector or otherwise put up for retail sale or in measured doses*, is 2937.90.

References

- WHO International Nonproprietary Names Programme
<https://www.who.int/medicines/services/inn/en/>
Lists of Recommended and Proposed INNs
<https://www.who.int/medicines/publications/druginformation/innlists/en/>
INN Mednet
<https://mednet.who.int/inn>
- Therapeutics Goods Administration (TGA) **COVID-19 limits on dispensing and sales at pharmacies**. Link: <https://www.tga.gov.au/media-release/limits-dispensing-and-sales-prescription-and-over-counter-medicines>
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- NICE. COVID-19 rapid guideline: managing suspected or confirmed pneumonia in adults in the community. Link: <https://www.nice.org.uk/guidance/ng165>

- NICE. COVID-19 rapid guideline: managing symptoms (including at the end of life) in the community. Link: <https://www.nice.org.uk/guidance/ng163>
- NICE. COVID-19 rapid guideline: severe asthma. Link: <https://www.nice.org.uk/guidance/ng166>
- Brazilian Ministry of Health. Protocolo de Manejo Clínico da Covid-19 na Atenção Especializada. Link: http://bvsmms.saude.gov.br/bvs/publicacoes/manejo_clinico_covid-19_atencao_especializada.pdf
- Sociedad de Enfermedades Infecciosas de Panamá (SEIP), Asociación Panameña de Neumología y Cirugía del Tórax (APNCT), Asociación Panameña de Médicos Intensivistas (ASPAMI), Sociedad Panameña de Anestesiología, Reanimación y Algiología (SPARA), Sociedad Panameña de Medicina Interna (SPMI), Asociación Panameña de Medicina de Emergencias (ASPAME), Sociedad Panameña de Reumatología (SPR), Asociación Panameña de Alergología e Inmunología Clínica (APAIC), Asociación Panameña de Geriátrica (APG), Asociación Panameña de Medicina Crítica y Terapia Intensiva (APMCTI), Asociación Panameña de Neurología (APN), Sociedad Panameña de Nefrología e Hipertensión (SPNH). **National guidelines for the management of adult COVID-19 patients.** Panamá, 16 March, Ri 2020.
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