

Stability of Refrigerated/Frozen Medications

Pharmacy Department, Hospital Pulau Pinang

Medication Safety Initiative
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Introduction

Appropriate storage and handling of medication from pharmacy to patients are important to ensure safety and efficacy of medications, especially temperature-controlled medication such as those requiring refrigeration. In 2018, our Medication Safety Committee has taken the initiative to compile the stability information of the refrigerated and frozen medications once they are out of fridge. First edition of the guideline has been released.

This year in 2020, Medication Safety Committee reviewed and updated this guideline. There are a total of 145 medications that requires refrigeration, compared to 130 in 2018. Stability out of fridge data is obtained from the package inserts. For package inserts that do not state the stability out of fridge, we contacted their manufacturers/product registration holdersto provide the durability and stability of their product outside the recommended storage temperatures. The provided information is compiled into a table form that includes proper storage data, allowable temperature excursions and the length of time such excursions arepermitted.

Definition:

'Case by case basis'	Manufacturer or product registration holder will provide stability out of fridge information depending on factors such as batch number, highest/lowest temperature of exposure and the duration of exposure.
'No information available'	Manufacturer or product registration holder did not reply.
'No stability data'	Manufacturer or product registration holder cannot provide further information on stability.
¶	Stability data is from the information provided by manufacturer or registration holder and is not stated in package insert.

The table is intended to be used as a guide when temperature excursion occurs, e.g. refrigerator malfunction, power outages, natural disasters, and inadvertent storage at room-temperature if the need for refrigerator is unknown. This table may help to avoid unnecessary drug loss and expenditures due to improper storage temperatures.

Disclaimer

For Hospital Pulau Pinang Pharmacy Department internal use only. All the information in this table should be used as a guide only.

Review of the Booklet

The next review of this booklet will be in 2022.

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NO	ITEM	BRAND (Manufacturer)	Recommended Storage	Stability out of Refrigerator	Source of Information
1	Adalimumab 40mg PFP Inj.	HUMIRA® (AbbVie)	2 - 8 °C Do not freeze Protect from light	No information available ¶ Case by case basis	Package Insert (Oct 2018) ¶ Abbvie
2	Aflibercept 25mg/ml Inj.	ZALTRAP® (Sanofi-aventis)	2 - 8 °C Protect from light	No information available	Package Insert (May 2018)
	Aflibercept 40mg/ml Inj.	Eylea® (Bayer)	2 - 8 °C Do not freeze Protect from light	Up to 24 hours at 25°C	Package Insert (25 June 2018)
3	Alfacalcidol 2mcg/ml Drops	One-Alpha® (LEO Pharma)	2 - 8 °C Protect from light	No information available	Package Insert (Aug 2017)
4	Alprostadil 500mcg/ml Inj.	Prostin VR Pediatric® (Pfizer)	2 - 8 °C	No information available ¶ Case by case basis	Package Insert (9 March 2018) ¶ Pfizer
5	Amphotericin B 50mg/10ml powder for Inj.	PHOTERICIN B® (Cipla)	2 - 8 °C Protect from light	No information available	Package Insert
6	Amphotericin B Lipid Complex 50mg Inj.	AMPHOLIP® (Bharat Serums & Vaccines Ltd.)	2 - 8 °C Do not freeze Protect from light	No information available	Package Insert (3 May 2016)
7	Anidulafungin 100mg/30ml Inj.	ERAXIS® (Pharmacia & Upjohn) Registration holder: Pfizer	2 - 8 °C	Excursions for 96 hours up to 25°C are permitted, and the powder can be returned to refrigerated storage	Package Insert
8	Anti RhD Gamma Globulin 250mcg/2ml Inj.	Rhesonativ® (Octapharma AB) Registration holder: Pharmaniaga	2 - 8 °C Protect from light	No information available ¶ 25°C for 12 months; 30°C for 9 months; 40°C for 6 months	Package Insert (May 2014) ¶ Pharmaniaga
9	Antithymocyte Immunoglobulin (Horse) 50mg Inj.	Atgam® (Pharmacia & Upjohn)	2 - 8 °C Do not freeze	No information available ¶ Case by case basis	Package Insert (15 March 2018) ¶ Pfizer
10	Antithymocyte Immunoglobulin (rabbit) 25mg Inj.	Thymoglobuline® (Genzyme Polyclonals S.A.S.)	2 - 8 °C Do not freeze	A temperature excursion up to 25°C for 3 days will not alter the product characteristics.	Package insert (28 Apr 2012)
11	Atracurium 25mg/2.5ml Inj.	hameln® (Siegfried Hameln GmbH)	2 - 8 °C Do not freeze	No information available	Package Insert (Jan 2018)
12	Beclomethasone Dibr. 100mcg / Formoterol fumarate 6mcg Pressurized Inhaler (Foster)	Foster® (Chiesi)	2 - 8 °C	Do not store > 30°C (for a maximum of 2 months) Do not expose to temperatures > 50°C	Package insert (Jul 2014)
13	Beractant Intratracheal Suspension (200 mg phospholipids in 8	Survanta® (AbbVie)	2 - 8 °C Protect from light	No information available ¶ Case by case basis	Package insert (Nov 2012) ¶ Abbvie
14	Bevacizumab 100mg/4ml Inj.	Avastin® (Roche)	2 - 8 °C Do not freeze Protect from light	No information available	Package Insert (Dec 2018)
15	Busulfan 6mg/ml Inj.	Busulflex® (Otsuka)	2 - 8 °C	No information available ¶ Case by case basis	Package Insert (Jan 2015) ¶ Smart Medicine
16	Calcitonin (Synthetic Salmon) 200 IU Nasal Spray	NO MORE PURCHASING			
17	Carbetocin 100mcg/ml Inj.	NO MORE PURCHASING			
18	Carboprost Tromethamine 250mcg Inj.	Hemabate® (Pharmacia & Upjohn) Registration holder: Pfizer	2 - 8 °C	No information available ¶ Test result of internal study that evaluated the stability of Hemabate stored at 25°C and 60% relative humidity for 15 days and then placed under labeled conditions throughout the end of shelf life demonstrated no impact to product quality attributes	Package Insert ¶ Pfizer
19	Carfilzomib 60mg Inj.	Kyprolis® (Amgen) (Patheon Manufacturing Services)	2 - 8 °C Protect from light	No information available ¶ Case by case basis	Package Insert (July 2018) ¶ Amgen

20	Carmustine 100mg Inj.	Carnumax® (GLS PHARMA LIMITED)	2 - 8 °C Protect from light	Has a low melting point (30.5 °C to 32.0 °C). Exposure of the drug to this temperature or above will cause the drug to liquefy and appear as an oil film on the vials. This is a sign of decomposition and vials should be discarded.	Package insert
21	Caspofungin 50mg/10ml Inj.	Cancidas® (Merk Sharp & Dohme)	2 - 8°C	No information available ¶ Case by case basis	Package Insert (Jan 2017) ¶ Merck Sharp & Dohme
22	Caspofungin 70mg/10ml Inj.	Cancidas® (Merk Sharp & Dohme)	2 - 8°C	No information available ¶ Case by case basis	Package Insert (Jan 2017) ¶ Merck Sharp & Dohme
23	Cetuximab 100mg/20ml Inj.	Erbitux® (Merk Sharp & Dohme)	2 - 8°C	No information available	Package Insert (June 2015)
24	Chlorambucil 2mg Tablet	Leukeran™ (Excella)	2 - 8°C	No information available	Package Insert (Nov 2016)
25	Chloramphenicol 0.5% Ear Drops	Enclor® (Idaman Pharma)	2 - 8°C Do not freeze Protect from light	No information available ¶ 25 ± 2°C (6 months)	Package Insert (20 Jan 2016) ¶ Idaman Pharma
26	Chloramphenicol 5% Eye Drops	NICOL® (CCM Pharmaceuticals)	2 - 8 °C Protect from light	No information available ¶ 25°C (6 months)	Package Insert (4 Dec 2009) ¶ CCM Pharmaceuticals
27	Cisatracurium Besilate 10mg/5ml Inj.	Cisatracurium Kabi® (Fresenius Kabi)	2 - 8°C Do not freeze Protect from light	No information available ¶ Case by case basis	Package insert (Jan 2016) ¶ Fresenius Kabi
28	Clindamycin 300mg/2ml Inj.	TIDACT® (YSP Industries)	2 - 8°C	No information available	Package Insert (14 Dec 2018)
29	Clostridium Botulinum Toxin Type A 100 units Inj.	Botox® (Allergan)	2 - 8°C	No information available ¶ No stability data	Package insert (Apr 2015) ¶ Allergan
30	Clostridium Botulinum Toxin Type A 500 units Inj.	Dysport® (Ipsen Biopharm Ltd.) Registration holder: EP Plus Group	2 - 8°C Do not freeze	No information available ¶ Case by case basis	Package Insert (Sept 2017) ¶ EP Plus Group
31	Cobra Antivenom Inj.	(Queen Saovabha Memorial Institute) Cubicin® (OSO Biopharmaceuticals) Registration holder: Merck Sharp & Dohme	≤ 25°C	Not applicable	Package insert (Apr 2012)
32	Daptomycin 500mg Inj.	(OSO Biopharmaceuticals) Registration holder: Merck Sharp & Dohme	2 - 8°C	No information available ¶ Case by case basis	Package Insert (Sept 2017) ¶ Merck Sharp & Dohme
33	Darbepoetin Alfa 20 mcg prefilled syringe (Nesp)	NESP® (Terumo Corporation) Registration holder : Kyowa Hakkō Kirin	2 - 8°C Store in a lightproof container Avoid freezing	No information available ¶ Almost stable at least for up to 3 months at 25°C protected from light	Package Insert (Nov 2018) ¶ Kyowa
34	Darbepoetin Alfa 40 mcg prefilled syringe (Nesp)	NESP® (Terumo Corporation) Registration holder : Kyowa Hakkō Kirin	2 - 8°C Store in a lightproof container Avoid freezing	No information available ¶ Almost stable at least for up to 3 months at 25°C protected from light	Package Insert (Nov 2018) ¶ Kyowa
35	Denosumab 120 mg solution for Injection	NIL IN STOCK			
36	Denosumab 60mg PFS Inj.	Prolia® (Amgen)	2 - 8°C Do not freeze Protect from light	30 days < 25°C	Package Insert (Nov 2017)
37	Desmopressin 4mcg/ml Inj.	Minirin® (Ferring GmbH)	2 - 8°C	No information available ¶ Case by case basis	Package Insert (May 2015) ¶ Ferring
38	Digoxin Immune Fab 40 mg Injection	DigiFab® (Phebra) (BTG International)	2 - 8°C Do not freeze	No information available	Package Insert (14 Feb 2014)

39	Dinoprostone (Prostagladine E2) 3mg Vaginal Tablet	Prostin E2™ (Sanico N.V) Registration holder: Pfizer	2 - 8°C	No information available ¶ Case by case basis	Package Insert ¶ Pfizer
40	Diphtheria Antitoxin 10,000IU	(Biological E. Limited)	2-8 °C Do not freeze Protect from heat	No information available	Package insert
41	Diphtheria, Pertussis, Tetanus Vaccine	Boostrix® (GSK)	2-8 °C Do not freeze	No information available	Package insert
42	Epoetin Alfa 2000 IU PFS Inj. (Binocrit)	Binocrit® (Novartis)	2-8 °C Do not freeze Protect from light	3 days ≤ 25°C	Package insert (Nov 2016)
43	Epoetin Alfa 10,000 IU PFS Inj. (Eprex®)	Eprex® (Cilag)	2-8 °C Do not freeze Protect from light	7 days ≤ 25°C	Package insert (Oct 2018)
44	Epoetin Beta 2000 IU Injection (Recormon)	Recormon® (Roche)	2-8 °C Protect from light	3 days ≤ 25°C	Package insert (Nov 2018)
45	Epoetin Beta 4000 IU Injection (Recormon)	Recormon® (Roche)	2-8 °C (Protect from light)	3 days ≤ 25°C	Package insert (Nov 2018)
46	Etanercept 50mg PFS Inj.	Enbrel® (Pfizer)	2-8 °C Do not freeze Protect from light	No information available ¶ No more than 6 months at 23-27°C	Package insert ¶ Pfizer
47	Exenatide 2mg PR Inj. (Bydureon)	No longer available			
48	Factor II, IX, X Human Prothrombin Complex 500 IU Inj. (Prothrombinex® - VF)	Prothrombinex® - VF (CSL Behring)	2-8 °C Do not freeze Protect from light	No information available ¶ No more than 6 months at <25°C. Do not return to refrigeration after storage <25°C	Package insert (5 March 2015) ¶ Pusat Darah Negara
49	Factor IX 500 IU Inj. (AlphaNine®)	AlphaNine® (Grifols)	2-8 °C Do not freeze	1 month < 30°C	Package insert (July 2013)
50	Factor VIIa (Activated Recombinant) 1mg Inj. (NovoSeven®)	NovoSeven® (Novo Nordisk)	Do not freeze Protect from light	Not applicable	Package insert (12 Dec 2017)
51	Factor VIIa (Activated Recombinant) 2mg Inj. (NovoSeven®)	NovoSeven® (Novo Nordisk)	Do not freeze Protect from light	Not applicable	Package insert (12 Dec 2017)
52	Factor VIII (High Purity) 500 IU Inj. (Octanate)	Octanate® (Octapharma AB) Product registration holder: Pharmaniaga	2 - 25 °C Do not freeze Protect from light	No information available	Package insert (May 2015)
53	Factor VIII (Recombinant) Octocog Alfa 250 IU Inj. (Advate)	Advate® (Baxalta)	2-8 °C Do not freeze Protect from light	6 months ≤ 25°C	Package insert (Nov 2017)
54	Factor VIII (Recombinant) Octocog Alfa 500 IU Inj. (Advate)	Advate® (Baxalta)	2-8 °C Do not freeze Protect from light	6 months ≤ 25°C	Package insert (Nov 2017)
55	Factor VIII and Von Willebrand factor 500 IU Inj. (Alphanate)	No longer available in HPP			
56	Factor VIII Inhibitor Bypassing Fraction 500IU Powder for Inj. (Feiba®)	FEIBA® (Baxter)	≤ 25°C Do not freeze Protect from light	No information available	Package insert (July 2018)
57	Factor VIII, Von Willebrand factor 1000IU Inj. (IMMUNATE)	Immunate® (Shire)	2-8 °C Protect from light Do not freeze	6 months ≤ 25°C	Package insert (June 2018)
58	Factor VIII, Von Willebrand factor 250IU Inj. (IMMUNATE)	Immunate® (Shire)	2-8 °C Protect from light Do not freeze	6 months ≤ 25°C	Package insert (June 2018)
59	Factor VIII, Von Willebrand factor 500IU Inj. (IMMUNATE)	Immunate® (Shire)	2-8 °C Protect from light Do not freeze	6 months ≤ 25°C	Package insert (June 2018)
60	Filgrastim 30MU/ml Injection (300mcg/ml) (Vial) Inj.	Neupogen® (Amgen)	2-8 °C Protect from light	No information available	Package insert (Dec 2015)
61	Gemeprost (Prostagladin E1) 1 mg Pessary	Cervagem® (Sanofi)	Below -10°C	Use within 12 hours	Package insert (Feb 2019)
62	Glucagon (Lyophilised) 1 mg/ml Inj.	GlucaGen® (Novo Nordisk)	2-8 °C Protect from light Do not freeze	¶ Case by case basis	Package insert (Aug 2016) ¶ Novo Nordisk
63	Golimumab 50mg (0.5ml) Autoinjector Pen Inj.	Simponi® (Baxter) Product Registration Holder: Johnson & Johnson	2-8 °C Do not freeze Protect from light	No information available	Package insert (Dec 2017)
64	Haemophilus Influenzae Type b Conjugate 10 mcg Vaccine Inj.	Hiberix™ (GSK)	Vaccine: 2 - 8°C Not affected by freezing Protect from light Solvent: 2 - 8°C or at ambient temperature (≤ 25°C) Do not freeze	No information available	Package insert (23 Jun 2015)

65	Hematotoxic Polyvalent Snake Antivenom Inj.	Polyvalent Snake Antivenin (Queen Saovabha Memorial Institute)	Below 25°C	¶ Stable for 3 months at -20°C and at 37°C	Package insert ¶ The Thai Red Cross Society
66	Hepatitis B 20mcg HbsAg Vaccine (Adult)	Euvax B® (LG Chem)	2-8 °C Do not freeze	No information available	Package insert (Mac 2017)
67	Hepatitis B Immunoglobulin 100IU/0.5ml (Human) Inj.	Hepabig® (Green Cross)	2-8 °C Do not freeze	¶ No more than 6 months at 23-27°C	Package insert ¶ Propharm
68	Human Chorionic Gonadotrophin 5000IU Inj.	HuCoG® (Bharat Serums & Vaccines Ltd.) Registration holder: Firstline Pharmaceutical	2-8 °C Protect from light Do not freeze	No information available	Package insert (Jan 2013)
69	Human Normal Immunoglobulin 2.5g/50ml Inj, 5% (IV IG)	Flebogamma® (Grifols)	≤30°C Do not freeze	No information available	Package insert (Aug 2011)
70	Human Normal Immunoglobulin 3g/50ml Inj, 6% (IV IG)	Intragam® (CSL Behring)	2-8 °C Do not freeze Protect from light	¶ 3 months < 25°C	Package insert (Feb 2016) ¶ Pusat Darah Negara
71	Idarubicin 10mg Inj.	Zavedos® (Pfizer)	2-8 °C Do not freeze Protect from light	No information available ¶ Case by case	Package insert (Apr 2018) ¶ Pfizer
72	Idarucizumab 2.5 g/50 mL Inj.	Praxbind® (Boehringer Ingelheim)	2-8 °C Protect from light Do not freeze	Unopened vial may be kept ≤ 30°C for ≤ 48 hours if stored in original package protected from light; or ≤ 6 hours if exposed to light.	Package Insert (Aug 2017)
73	Infliximab 100mg/10ml Injection	Remsima® (Celltrion)	2-8 °C	¶ 6 months at 23-27°C; 3 months at 38-42°C	Package insert (Oct 2018) ¶ Celltrion
74	Insulin Aspart (Novorapid) 100 IU/ml FlexPen Inj.	Recormon® (Roche)	2-8 °C Protect from light Do not freeze	4 weeks < 30°C (Protect from light)	Package insert (Sept 2018)
75	Insulin Aspart 30% and Protaminated Insulin Aspart 70% (NovoMix-30) 100 IU/ml FlexPen Inj.	NovoMix® 30 FlexPen® (Novo Nordisk)	2-8 °C Protect from light Do not freeze	4 weeks < 30°C (Protect from light)	Package insert (May 2018)
76	Insulin Detemir (Levemir) 100 IU/ml FlexPen Inj.	Levemir® FlexPen® (Novo Nordisk)	2-8 °C Protect from light and heat Do not freeze	6 weeks < 30°C	Package insert (Sept 2017)
77	Insulin Glargine (Lantus) 300IU/3ml PFP Inj.	Basalog One® (Biocon)	2-8 °C Protect from light Do not freeze	28 days ≤ 30°C (Protect from heat and light)	Package insert (July 2018)
78	Insulin Glulisine 300 IU/3ml PFP Inj. (Apidra Solostar)	Solostar® (Sanofi)	2-8 °C Protect from light	4 weeks < 25°C (Protect from heat and light)	Package insert (Oct 2018)
79	Insulin Like Growth Factor-1 40mg Inj (Increlex)	Increlex® (Ipsen Pharma)	2-8 °C Do not freeze Protect from light	No information available	Package insert
80	Insulin lispro 50% /lispro protamin 50%(Humalog Mix-50) 100 IU/mL Penfill Cartridge	Humalog Mix-50® (Lily)	Do not freeze Protect from direct sunlight	4 weeks < 30°C	Package Insert (10 Jan 2017)
81	Insulin Recombinant Neutral Human Short-acting 100 IU/ml in Penfill Inj. (Actrapid®)	Actrapid® (Novo Nordisk)	2 - 8°C Do not freeze Protect from light	6 weeks < 30°C	Package Insert (17 June 2016)
82	Insulin Recombinant Neutral Human Short-acting 100 IU/ml in Penfill Inj. (Insugen-R®)	Insugen-R® (Biocon)	2 - 8°C Do not freeze Protect from light	6 weeks < 30°C	Package Insert (Jan 2018)
83	Insulin Recombinant Neutral Human Short-acting 100 IU/ml in Vial Inj. (Actrapid®)	Actrapid® (Novo Nordisk)	2 - 8°C Do not freeze Protect from light	6 weeks < 30°C	Package Insert (19 Sept 2016)
84	Insulin Recombinant Synthetic Human Intermediate-acting 100 IU/ml in Penfill Inj. (Insugen-N®)	Insugen-N® (Biocon)	2 - 8°C Do not freeze Protect from light	6 weeks < 30°C	Package Insert (Jan 2018)
85	Insulin Recombinant Synthetic Human Intermediate-acting 100 IU/ml in Vial Inj. (Insulatard®)	Insulatard® (Novo Nordisk)	2 - 8°C Do not freeze Protect from light	6 weeks < 25°C; 4 weeks < 30°C	Package Insert (20 Sept 2016)
86	Insulin Recombinant Synthetic Human Intermedicate-acting 100 IU/ml in Penfill Inj. (Insulatard®)	Insulatard® (Novo Nordisk)	2 - 8°C Do not freeze Protect from light	6 weeks < 30°C	Package Insert (17 June 2016)
87	Insulin Recombinant Synthetic Human Premixed 100 IU/ml in Penfill Inj. (Insugen®-30/70)	Insugen®-30/70 (Biocon)	2 - 8°C Do not freeze Protect from light	6 weeks < 30°C	Package Insert (Aug 2019)
88	Insulin Recombinant Synthetic Human Premixed 100 IU/ml in Penfill Inj. (Mixtard® 30)	Mixtard® 30 (Novo Nordisk)	2 - 8°C Do not freeze Protect from light	6 weeks < 30°C	Package Insert (17 June 2016)
89	Interferon Alfa-2b 18MIU Multidose Inj. Pen (Intron-A®)	Removed			
90	Interferon Beta-1a 22 mcg (6MIU) PFP Inj. (Rebif)	Rebif®	2 - 8°C	For the purpose of ambulatory use,	Package Insert (Feb 2017)
91	Interferon Beta-1a 44 mcg (12MIU) PFP Inj. (Rebif)	(Merck Serono)	Do not freeze		

92	Isoprenaline HCl 0.2mg/ml Inj	No longer fridge item			
93	Ixekizumab 80mg in Prefilled Syringe	Taltz® (Eli Lilly)	2 - 8°C Do not freeze Protect from light	Up to 5 days not above 30°C	Package Insert (17 Aug 2018)
94	King Cobra Antivenom Inj.	Removed			
95	Latanoprost 0.005% Eye Drops	Latandrops (Vianex S.A.)	2 - 8°C Do not freeze	Within 4 weeks at temperature up to 25°C	Package Insert (Dec 2009)
96	Leucovorin Calcium 50mg/5ml Injection (Folinic acid) Inj.	Leucovorin Calcium (Pharmaniaga)	2 - 8°C Do not freeze Protect from light	¶ 25°C up to 6 months	Package Insert (5 Oct 2017) ¶ Pharmaniaga
97	Levosimendan 12.5 mg/5ml Injection	Simdax® (Orion Pharma)	2 - 8°C Do not freeze	No information available	Package Insert (11 June 2010)
98	Lopinavir 80mg/Ritonavir 20mg in 1mL Oral Solution (Kaletra)	Kaletra oral solution® (Abbvie)	2 - 8°C	Within 2 months < 25°C	Package Insert (Jan 2019)
99	Malayan Pit Viper Antivenom Inj.	(Queen Saovabha Memorial Institute) Registration holder: Idaman Pharma	< 25°C	Not applicable	Package Insert (Apr 2012)
100	Melphalan 2 mg Tablet	Alkeran™ (Excella) Registration holder: Aspen	2 - 8°C	No information available ¶ Case by case basis	Package Insert (Nov 2016) ¶ Aspen
101	Meningococcal ACYW 135 Vaccine Inj. (1 dose)	Menactra® (Sanofi Pasteur)	2 - 8°C Do not freeze	No information available ¶ Case by case basis	Package Insert (Feb 2017) ¶ Sanofi
102	Methoxypolyethyleneglycol epoetin beta (Mircera) 100mcg/0.3 ml PFS Inj.	Mircera® (Roche)	2 - 8°C Do not freeze Protect from light	Mircera® may be removed from refrigeration for storage at room	Package Insert
103	Methoxypolyethyleneglycol epoetin beta (Mircera) 200mcg/0.3 ml PFS Inj.				
104	Neurotoxic Polyvalent Snake Antivenom Inj.	(Queen Saovabha Memorial Institute)	< 25°C	Not applicable	Package Insert
105	Noradrenaline 4mg/4ml Inj.	No longer fridge item			
106	Octreotide 0.1 mg/ml Injection	Sandostatin® (Novartis)	2 - 8°C Do not freeze Protect from light	Not above 30°C for up to 2 weeks	Package Insert (Sept 2017)
107	Octreotide Acetate 20 mg Inj. LAR	Sandostatin® LAR (Novartis)	2 - 8°C Do not freeze	Sandostatin® LAR can remain below 25°C on	Package Insert (Sept 2017)
108	Octreotide Acetate 30 mg Inj. LAR				
109	Omalizumab 150mg Inj.	Xolair® (Novartis)	2 - 8°C Do not freeze	No information available ¶ Max 3 days up to 25°C	Package Insert (March 2017) ¶ Novartis
110	Oxytocin 10 units/ml Inj.	Udoxan® (Duopharma)	2 - 8°C Do not freeze Protect from light	No information available ¶ 6 months up to 25°C	Package Insert (20 Feb 2004) ¶ Duopharma
111	Oxytocin 5U + Ergometrine 0.5mg/ml Inj.	Syntometrine® (Rotexmedica) Registration holder: Alliance Pharmaceuticals	2 - 8°C Protect from light	No information available ¶ Case by case basis	Package Insert (May 2014) ¶ Rigelpharma
112	Palivizumab 100mg Inj.	Synagis® (Boehringer Ingelheim)	2 - 8°C Do not freeze	No information available ¶ Case by case basis	Package insert (Nov 2016) ¶ Abbvie
113	Panitumumab 100mg Inj.	Vectibix® (Amgen, GSK)	2 - 8°C Do not freeze Protect from light	No information available ¶ Case by case basis	Package insert (Aug 2016) ¶ Amgen
114	Pegfilgrastim 6mg/0.6ml Inj.	Removed			
115	Peginterferon alfa-2a 180 mcg PFS Inj. (Pegasys)	Pegasys® (Roche)	2 - 8°C Do not freeze or shake Protect from light	No information available ¶ Case by case basis	Package insert (Oct 2015) ¶ Roche
116	Peginterferon alfa-2b 100mcg PFP Inj. (Peg-Intron® Clearclick™)	Removed			
117	Pegylated Liposomal Doxorubicin 20mg/10ml Inj.	Lipo-Dox (TTY Biopharm) Registration holder: Pharm-D	2 - 8°C Do not freeze	No information available	Package insert (25 July 2017)
118	Pertuzumab 420mg/14ml Inj.	Perjeta® (Roche)	2 - 8°C Do not freeze or shake Protect from light	No information available ¶ Case by case basis	Package insert (Feb 2016) ¶ Roche
119	Physostigmine 1mg/ml Inj	Anticholium® (Dr Franz)	< 25°C Protect from light	No information available	Package insert (April 2018)
120	Pneumococcal Vaccine 0.5ml (Polyvalent - 23-serotypes) Inj.	PNEUMOVAX® 23 (Merck Sharp & Dohme)	2 - 8°C	No information available ¶ Case by case basis	Package insert (Feb 2016) ¶ Merck
121	Pneumococcal Vaccine 0.5ml (Polyvalent - 13-serotypes) Inj.	Prevenar 13® (Pfizer)	2 - 8°C Do not freeze	No information available	Package insert (13 Dec 2017)
122	Proparacaine HCl 0.5% Ophthalmic Drops (Proxymetacaine HCl)	Alcaine® (Alcon, Novartis)	2 - 8°C ¶ Do not freeze Protect from light	No information available ¶ Case by case basis	Package insert (Jan 2016) ¶ Alcon
123	Quadrivalent Seasonal Influenza Vaccine	VaxigripTetra® (Sanofi Pasteur)	2 - 8°C Do not freeze Protect from light	No information available ¶ Case by case basis	Package insert (Aug 2019) ¶ Sanofi

124	Rabies Human Diploid Cell Vaccine (Lyophilised) Inj.	Verorab® (Sanofi Pasteur)	2 - 8°C Do not freeze Protect from light	No information available ¶ Case by case basis	Package insert (Feb 2018) ¶ Sanofi
125	Ranibizumab 10 mg/ml Inj (2.3mg in 0.23ml Vial)	Accentrix® (Novartis)	2 - 8°C Do not freeze Protect from light	No information available ¶ 1 month up to 30°C followed by up to 36 months at 5°C	Package insert (Jan 2019) ¶ Novartis
126	Rasburicase 1.5mg Inj.	Rascase® (Virchow Biotech)	2 - 8°C Do not freeze Protect from light	No information available	Package insert (Jan 2019)
127	Rituximab 100mg/ 10ml Inj.	Mabthera® (Roche)	2 - 8°C Protect from light	No information available ¶ Case by case basis	Package insert (May 2018) ¶ Roche
128	Rituximab 1400mg/11.7ml Subcutaneous Inj.	Mabthera® (Roche)	2 - 8°C Do not freeze Protect from light	No information available ¶ Case by case basis	Package insert (May 2018) ¶ Roche
129	Rituximab 500mg/50ml Inj.	Mabthera® (Roche)	2 - 8°C Protect from light	No information available ¶ Case by case basis	Package insert (May 2018) ¶ Roche
130	Rocuronium Bromide 50mg/5ml Inj.	Rocuronium Kabi (Fresenius Kabi)	2 - 8°C	No information available ¶ Case by case basis	Package insert (Apr 2015) ¶ Fresenius Kabi
131	Sea Snake Antivenom Inj.	(Seqirus)	2 - 8°C Do not freeze Protect from light	No information available ¶ Case by case basis	Package insert (21 Nov 2017) ¶ United Italian
132	Secukinumab 150mg/ml Solution in single-use Pen Inj.	Cosentyx® (Novartis)	2 - 8°C Do not freeze	No information available ¶ Up to 4 days not above 30°C	Package insert (March 2017) ¶ Novartis
133	Somatropin 10mg/1.5 ml PFP Inj. (Norditropin Nordilet)	Norditropin® Nordilet® (Novo Nordisk)	2 - 8°C Do not freeze	Maximum 3 weeks < 25°C	Package insert (23 June 2016)
134	Streptokinase 1,500,000 IU Inj.	Biofactor Streptokinase 1 500 000® (Biofactor GmbH)	< 25°C Do not freeze	Not applicable ¶ At least 3 months at 15 - 25°C	Package insert (July 2009) ¶ Biofactor
135	Suxamethonium 100mg/2ml	Suxamethonium Chloride Fresenius® (Fresenius Kabi)	2 - 8°C Protect from light	No information available ¶ Case by case basis	Package insert (June 2016) ¶ Fresenius Kabi
136	Synthetic ACTH (Tetracosactrin Acetate) 250 mcg/ml Inj.	Synacthen® (Alfasigma)	2 - 8°C Protect from light	No information available ¶ Up to 6 hours at 25°C	Package insert (July 2018) ¶ Wija Pharma
137	Teriparatide 250mcg/ml PFP Inj.	Forteo® (Lilly)	2 - 8°C Do not freeze	No information available	Package insert (2 Apr 2018)
138	Terlipressin 1 mg/5ml Inj.	Glypressin® (Ferring)	2 - 8°C Protect from light	No information available ¶ Case by case basis	Package insert (July 2017) ¶ Ferring
139	Tetanus Immunoglobulin Human 250 Units/Vial Inj.	Sero-Tet® (Green Cross Corp)	2 - 8°C Do not freeze	No information available ¶ At least 6 weeks at 45°C; 6 months at 37°C	Package insert (8 July 2016) ¶ Propharm
140	Tetanus Toxoid Inj. (ATT) (10 doses)	TT Vaccine® (Biofarma)	2 - 8°C Do not freeze Protect from light	No information available ¶ 12 months at 25°C and 37°C	Package insert (1 Aug 2016) ¶ Propharm
141	Thiotepa 100mg Inj.	Thiomed® (Bruck Pharma)	2 - 8°C Do not freeze Protect from light	No information available ¶ Case by case basis	Package insert ¶ Johnson & Johnson
142	Tocilizumab 162 mg PFS Inj.	Actemra® (Vetter Pharma-Fertigung GmbH) Registration holder: Roche	2 - 8°C Do not freeze Protect from light	No information available ¶ Case by case basis	Package insert (Nov 2017) ¶ Roche
143	Tocilizumab 400 mg/20ml Inj.	Actemra® (Chugai Pharma) Registration holder: Roche	2 - 8°C Do not freeze Protect from light	No information available ¶ Case by case basis	Package insert (Oct 2014) ¶ Roche
144	Tocilizumab 80 mg/4ml Inj.	Actemra® (Chugai Pharma) Registration holder: Roche	2 - 8°C Do not freeze Protect from light	No information available ¶ Case by case basis	Package insert (Oct 2014) ¶ Roche
145	Trastuzumab 440mg Inj.	Herceptin® (Genentech) Registration holder: Roche	2 - 8°C	No information available ¶ Case by case basis	Package insert (May 2018) ¶ Roche
146	Trastuzumab 600mg/5ml Inj.	Herceptin® (Roche)	2 - 8°C Do not freeze Protect from light	Not more than 6 hours at ambient temperature (do not store above 30°C) ¶ Case by case basis	Package insert (Sept 2015) ¶ Roche
147	Tuberculin PPD 2 TU/0.1ml Dose in 1.5 ml Inj.	Tuberculin PPD RT 23 SSI (AJ Vaccines)	2 - 8°C Protect from light	No information available	Package insert (Jan 2019)

148	Ustekinumab 45 mg/0.5ml PFS Inj.	Stelara® (Cilag Ag)	2 - 8°C Do not freeze Protect from light	No information available ¶ Case by case basis	Package insert (13 Dec 2018) ¶ Johnson & Johnson
149	Varicella Zoster Immunoglobulin 125 IU Vial Inj.	Varitect® CP (Biotest Pharma GmbH)	2 - 8°C Do not freeze Protect from light	No information available	Package insert (Feb 2017)
150	Varicella Zoster Vaccine Live Attenuated	Varivax® (Merck Sharp & Dohme)	2 - 8°C Do not freeze Protect from light	No information available	Package insert (April 2018)
151	Vasopressin 20units/ml Inj.	Vascel® 20 (Celon Labs)	2 - 8°C Do not freeze	No information available	Package insert
152	Vindesine Sulphate 5mg Inj.	Eldisine® (Genus Pharmaceuticals)	2 - 8°C	No information available	Package insert (Nov 2014)
153	Vinorelbine 50mg/50ml Inj.	Vinelbine® (Fresenius Kabi)	2 - 8°C Do not freeze Protect from light	No information available ¶ Case by case basis	Package insert (June 2009) ¶ Fresenius Kabi
154	Voriconazole 40mg/ml Oral Suspension	Vfend® (Pfizer)	2 - 8°C	No information available	Package insert (15 Nov 2017)
155	Zoledronic Acid 5mg in 100ml Infusion Solution	No longer available			
156	Zuclopenthixol 20mg/ml Drops	Clopixol® Drops (H. Lundbeck)	2 - 8°C Protect from light	No information available	Package insert (March 2018)

Disemak oleh,

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