

**Supplementary Table 1. Code List.**



















Drug 6	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	642130019	Arelix 6mg injection
Drug 7	22 Prescription/Injection Order or Administration	YJ Code	2139011D1022	Samsca granule 1%
Drug 7	22 Prescription/Injection Order or Administration	YJ Code	2139011D1MID	Generic name code
Drug 7	22 Prescription/Injection Order or Administration	YJ Code	2139011F1023	Samsca tablet 15mg
Drug 7	22 Prescription/Injection Order or Administration	YJ Code	2139011F1MID	Generic name code
Drug 7	22 Prescription/Injection Order or Administration	YJ Code	2139011F2020	Samsca tablet 7.5mg
Drug 7	22 Prescription/Injection Order or Administration	YJ Code	2139011F2MID	Generic name code
Drug 7	22 Prescription/Injection Order or Administration	YJ Code	2139011F3026	Samsca OD tablet 7.5mg
Drug 7	22 Prescription/Injection Order or Administration	YJ Code	2139011F4010	Generic name code
Drug 7	22 Prescription/Injection Order or Administration	YJ Code	2139011F4022	Samsca OD tablet 15mg
Drug 7	22 Prescription/Injection Order or Administration	YJ Code	2139011F4MID	Generic name code
Drug 7	22 Prescription/Injection Order or Administration	YJ Code	2139011F72027	Samsca tablet 30mg
Drug 7	22 Prescription/Injection Order or Administration	YJ Code	2139011F72MID	Generic name code
Drug 7	22 Prescription/Injection Order or Administration	YJ Code	21390A2D1027	Samsca granule 1%
Drug 7	22 Prescription/Injection Order or Administration	YJ Code	21390A2D1MID	Generic name code
Drug 7	22 Prescription/Injection Order or Administration	YJ Code	21390A2F1028	Samsca OD tablet 7.5mg
Drug 7	22 Prescription/Injection Order or Administration	YJ Code	21390A2F1MID	Generic name code
Drug 7	22 Prescription/Injection Order or Administration	YJ Code	21390A2F2024	Samsca OD tablet 15mg
Drug 7	22 Prescription/Injection Order or Administration	YJ Code	21390A2F2MID	Generic name code
Drug 7	22 Prescription/Injection Order or Administration	YJ Code	2499012F1022	Samsca tablet 30mg
Drug 7	22 Prescription/Injection Order or Administration	YJ Code	2499012F1MID	Generic name code
Drug 7	22 Prescription/Injection Order or Administration	YJ Code	2499012F2029	Samsca OD tablet 30mg
Drug 7	22 Prescription/Injection Order or Administration	YJ Code	2499012F2MID	Generic name code
Drug 7	22 Prescription/Injection Order or Administration	YJ Code	24990A2F1022	Samsca OD tablet 30mg
Drug 7	22 Prescription/Injection Order or Administration	YJ Code	24990A2F1MID	Generic name code
Drug 7	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	622001203	Samsca tablet 7.5mg
Drug 7	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	622174301	Samsca tablet 7.5mg
Drug 7	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	622281901	Samsca tablet 30mg
Drug 7	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	622537701	Samsca granule 1%
Drug 7	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	622694301	Samsca OD tablet 7.5mg
Drug 7	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	622694401	Samsca OD tablet 15mg
Drug 7	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	622694501	Samsca OD tablet 30mg
Drug 8	22 Prescription/Injection Order or Administration	YJ Code	2119406A1025	Amcoral injection 50
Drug 8	22 Prescription/Injection Order or Administration	YJ Code	2119406A1033	Cartonic injection 50mg
Drug 8	22 Prescription/Injection Order or Administration	YJ Code	2119406A1MID	Generic name code
Drug 8	22 Prescription/Injection Order or Administration	YJ Code	2119406A2021	Amcoral injection 100
Drug 8	22 Prescription/Injection Order or Administration	YJ Code	2119406A2030	Cartonic injection 100mg
Drug 8	22 Prescription/Injection Order or Administration	YJ Code	2119406A2MID	Generic name code
Drug 8	22 Prescription/Injection Order or Administration	YJ Code	2119407A1020	Coretec injection 5mg
Drug 8	22 Prescription/Injection Order or Administration	YJ Code	2119407A1MID	Generic name code
Drug 8	22 Prescription/Injection Order or Administration	YJ Code	2119407G1022	Coretec injection Sb 9mg
Drug 8	22 Prescription/Injection Order or Administration	YJ Code	2119407G1MID	Generic name code
Drug 8	22 Prescription/Injection Order or Administration	YJ Code	2119408A1024	Mirilene injection 10mg
Drug 8	22 Prescription/Injection Order or Administration	YJ Code	2119408A1032	Mirilene injection 10 [KN]
Drug 8	22 Prescription/Injection Order or Administration	YJ Code	2119408A1040	Mirilene injection 10mg [TAKATA]
Drug 8	22 Prescription/Injection Order or Administration	YJ Code	2119408A1059	Mirilene injection 10mg [TAIYO]
Drug 8	22 Prescription/Injection Order or Administration	YJ Code	2119408A1MID	Generic name code
Drug 8	22 Prescription/Injection Order or Administration	YJ Code	2119408A2020	Mirilene injection 10mg [F]
Drug 8	22 Prescription/Injection Order or Administration	YJ Code	2119408A2039	Mirilene injection 10mg [SANDOZ]
Drug 8	22 Prescription/Injection Order or Administration	YJ Code	2119408A2MID	Generic name code
Drug 8	22 Prescription/Injection Order or Administration	YJ Code	2119408A3027	Mirilene injection 22.5mg [F]
Drug 8	22 Prescription/Injection Order or Administration	YJ Code	2119408A3MID	Generic name code
Drug 8	22 Prescription/Injection Order or Administration	YJ Code	2119408G1027	Mirilene-K injection 22.5mg
Drug 8	22 Prescription/Injection Order or Administration	YJ Code	2119408G1035	Mirilene injection 22.5mg bag [TAKATA]
Drug 8	22 Prescription/Injection Order or Administration	YJ Code	2119408G1MID	Generic name code
Drug 8	22 Prescription/Injection Order or Administration	YJ Code	2119408G1223	Mirilene injection syringe 10mg [HK]
Drug 8	22 Prescription/Injection Order or Administration	YJ Code	2119409G2MID	Generic name code
Drug 8	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	620002437	Cordic injection Sb 9mg 150ml
Drug 8	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	620003824	Mirilene 10mg 10ml
Drug 8	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	620004201	Mirilene injection 10mg [F] 10ml
Drug 8	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	620004202	Mirilene injection 22.5mg [F] 150ml
Drug 8	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	620004203	Mirilene injection [KN] 10mg 10ml
Drug 8	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	620004204	Mirilene injection 10mg [TAKATA] 10ml
Drug 8	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	620004205	Mirilene injection 22.5mg bag [TAKATA] 150ml
Drug 8	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	620008233	Mirilene injection 10mg [TAIYO] 10ml
Drug 8	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	621967601	Mirilene injection 10mg [SANDOZ] 10ml
Drug 8	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	622750300	Mirilene 10mg 10ml
Drug 8	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	622750400	Mirilene 22.5mg 150ml injection
Drug 8	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	622750500	Mirilene 22.5mg 150ml kit
Drug 8	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	640480879	Cordetec injection 5ml 5ml
Drug 8	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	640490840	Mirilene injection 10mg 10ml
Drug 8	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	640490843	Mirilene injection 22.5mg 150ml
Drug 8	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	642110135	Amcoral injection 50 0.5% 10ml
Drug 8	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	642110136	Amcoral injection 100 0.5% 20ml
Drug 8	23 DPC or Receipt Pharmaceutical Information	Electronic medical claims processing code	642110138	Cartonic injection 100mg 0.5% 20ml
Blood test 1, 2 and 3	05 Clinical Laboratory Test Information	JLAC10 Code	4227100000220001	Brain natriuretic peptide (BNP), plasma, quantitative value
Blood test 1, 2 and 3	05 Clinical Laboratory Test Information	JLAC10 Code	4227100000220061	Brain natriuretic peptide (BNP), plasma, radioimmunoassay (RIA), quantitative value
Blood test 1, 2 and 3	05 Clinical Laboratory Test Information	JLAC10 Code	42271000002202301	Brain natriuretic peptide (BNP), plasma, enzyme immunoassay (EIA), quantitative value
Blood test 1, 2 and 3	05 Clinical Laboratory Test Information	JLAC10 Code	42271000002202501	Brain natriuretic peptide (BNP), plasma, chemiluminescent Immunoassay (CLIA), quantitative value
Blood test 1, 2 and 3	05 Clinical Laboratory Test Information	JLAC10 Code	4227100000220501	Brain natriuretic peptide (BNP), plasma, electrochemiluminescence immunoassay (ECILIA), quantitative value
Blood test 1, 2 and 3	05 Clinical Laboratory Test Information	JLAC10 Code	42271000002205031	Brain natriuretic peptide (BNP), plasma, visible absorption photometry (other than JSCC, IFCC method), quantitative value
Blood test 1, 2 and 3	05 Clinical Laboratory Test Information	JLAC10 Code	4227100000222701	Brain natriuretic peptide (BNP), plasma, radioimmunoassay (RIA), quantitative value
Blood test 1, 2 and 3	05 Clinical Laboratory Test Information	JLAC10 Code	4227100000238801	Brain natriuretic peptide (BNP), plasma, any method, quantitative value
Blood test 1, 2 and 3	05 Clinical Laboratory Test Information	JLAC10 Code	4227100000238901	Brain natriuretic peptide (BNP), plasma, other method, quantitative value
Blood test 4, 5 and 6	05 Clinical Laboratory Test Information	JLAC10 Code	4227200000220001	N-terminal pro-brain natriuretic peptide (NT-proBNP), plasma, quantitative value
Blood test 4, 5 and 6	05 Clinical Laboratory Test Information	JLAC10 Code	4227200000220501	N-terminal pro-brain natriuretic peptide (NT-proBNP), serum, chemiluminescent Immunoassay (CLIA), quantitative value
Blood test 4, 5 and 6	05 Clinical Laboratory Test Information	JLAC10 Code	42272000002205031	N-terminal pro-brain natriuretic peptide (NT-proBNP), plasma, electrochemiluminescence immunoassay (ECILIA), quantitative value
Blood test 4, 5 and 6	05 Clinical Laboratory Test Information	JLAC10 Code	42272000002302031	N-terminal pro-brain natriuretic peptide (NT-proBNP), serum, enzyme immunoassay (EIA), quantitative value
Blood test 4, 5 and 6	05 Clinical Laboratory Test Information	JLAC10 Code	42272000002304301	N-terminal pro-brain natriuretic peptide (NT-proBNP), serum, fluorescent immunoassay (FIA), quantitative value
Blood test 4, 5 and 6	05 Clinical Laboratory Test Information	JLAC10 Code	4227200000230501	N-terminal pro-brain natriuretic peptide (NT-proBNP), serum, chemiluminescent enzyme immunoassay (CLIA), quantitative value
Blood test 4, 5 and 6	05 Clinical Laboratory Test Information	JLAC10 Code	42272000002305031	N-terminal pro-brain natriuretic peptide (NT-proBNP), serum, electrochemiluminescence immunoassay (ECILIA), quantitative value
Medical Practice 1	27 DPC or Receipt Medical Procedure Information	Electronic medical claims processing code	150342470	Intracardiac echocardiography continuous monitoring surcharge (cardiac surgery or coronary artery disease/valvular disease)
Medical Practice 1	27 DPC or Receipt Medical Procedure Information	Electronic medical claims processing code	150395670	Intraventricular transesophageal echocardiography continuous monitoring surcharge (catheter-assisted percutaneous cardiac surgery)
Medical Practice 1	27 DPC or Receipt Medical Procedure Information	Electronic medical claims processing code	160072210	Ultrasound examination (tomography) (chest and abdomen)
Medical Practice 1	27 DPC or Receipt Medical Procedure Information	Electronic medical claims processing code	160072510	Ultrasound examination (cardiac ultrasound examination) (trans-thoracic echocardiography)
Medical Practice 1	27 DPC or Receipt Medical Procedure Information	Electronic medical claims processing code	160072610	Ultrasound examination (cardiac ultrasound examination) (M-mode method)
Medical Practice 1	27 DPC or Receipt Medical Procedure Information	Electronic medical claims processing code	160160410	Ultrasound examination (cardiac ultrasound examination) (transesophageal echocardiography)
Medical Practice 1	27 DPC or Receipt Medical Procedure Information	Electronic medical claims processing code	160165010	Ultrasound examination (tomography) (other)
Medical Practice 1	27 DPC or Receipt Medical Procedure Information	Electronic medical claims processing code	160198470	Intracardiac echocardiography surcharge
Medical Practice 1	27 DPC or Receipt Medical Procedure Information	Electronic medical claims processing code	160198810	Ultrasound examination (cardiac ultrasound examination) (stress echocardiography)
Medical Practice 1	27 DPC or Receipt Medical Procedure Information	Electronic medical claims processing code	160218310	Ultrasound examination (tomography) (visiting medical care)

\*Up to four diagnoses each can be input into the categories "comorbidities at the time of hospitalization" and "diseases that developed after hospitalization"