

Supplemental Table 1: International Classification of Diseases, Tenth Revision, Clinical Modification/Procedure Coding System (ICD-10-CM/PCS) codes used to define baseline characteristics, comorbidities, and in-hospital and post-procedural complications from the 2016 Nationwide Readmissions Data (NRD).

Diagnosis	ICD-10-CM/PCS
Esophageal Varices	'I8500', 'I8501', 'I8510', 'I8511'
Transesophageal Echocardiography	'B240ZZ4', 'B241ZZ4', 'B244ZZ4', 'B245ZZ4', 'B245ZZ4', 'B24BZZ4', 'B24CZZ4', 'B24DZZ4'
Chronic Liver Disease	'B180','B181','B182','I8500', 'I8501','I8510', 'I8511','K700','K702','K7030','K7031', 'K7040', 'K7041','K709', 'K7210','K7211','K7290', 'K7291','K730', 'K731', 'K732', 'K738', 'K739', 'K740','K741', 'K742', 'K743','K744', 'K745', 'K7460', 'K7469', 'K754','K7581','K760','K766', 'K7689','K769','Z944'
Alcoholism	'F1010','F1011','F10120','F10121','F10129','F1014','F10150','F10151','F10159','F10180','F10181','F10182','F10188','F1019','F1020','F1021','F10220','F10221','F10229','F10230','F10231','F10232','F10239','F1024','F10250','F10251','F10259','F1026','F1027','F10280','F10281','F10282','F10288','F1029','F10921','F1094','F10950','F10951','F10959','F1096','F1097','F10980','F10981','F10982','F10988','F1099'
Chronic Peptic Ulcer Disease	'K254','K255','K256', 'K257', 'K259', 'K264', 'K265','K266', 'K267', 'K269', 'K274', 'K275', 'K276', 'K277', 'K279', 'K284', 'K285', 'K286', 'K287', 'K289'
Bacteremia	'R7881'
Infective Endocarditis	'I330', 'I339', 'I38', 'I39', 'A3951', 'A5203', 'B376'

Coronary Artery Disease	'I2510' to 'I252', 'I257.xx', 'I25810', 'I2582', 'I2583','I2584', 'I2589', 'I259', 'I255', 'Z951', 'Z955', 'Z9861'
Congestive Heart Failure	'I0981', 'I501','I5020','I5021', 'I5022', 'I5023', 'I5030', 'I5031', 'I5032', 'I5033', 'I5040', 'I5041', 'I5042', 'I5043','I50810', 'I50811', 'I50812', 'I50813', 'I50814', 'I5082', 'I5083', 'I5084', 'I5089', 'I509'
Valvular Heart Disease	'A5203', 'I050' to 'I0989', 'I340' to 'I341' to 'I39', 'Q230', 'Q231', 'Q232', 'Q233','Z952', 'Z953', 'Z954'
Peripheral Vascular Disease	'I70.XX', 'I710' to 'I729', 'I731', 'I7381', 'I7389', 'I739', 'I742', 'I743', 'I744', 'I76', 'I771', 'I7770', to 'I7779', 'I790', 'I791', 'I798', 'K551', 'K558', 'K559', 'Z95820', 'Z95828'
Hyperlipidemia	'E780', 'E7800', 'E7801', 'E781', 'E782', 'E783', 'E784', 'E785','E7881', 'E7889', 'E8889', 'E789'
Diabetes Mellitus	'E0800' to 'E139', 'O24011' to 'O2433', 'O24811' to 'O2493', 'P702'
Hypertension	'I129' to 'I132', 'I150', 'I151', 'I120', 'I10', 'O10011' to 'O1003', 'O10911' to 'O1093', 'I160','I161', 'I169', 'I674', 'O10111' to 'O1013', 'O10211' to 'O1033','O10411' to 'O1043','O110' to 'I119','I152', 'I158','I159'
Chronic Kidney Disease	'N183','N184', 'N185', 'N186', 'N189', 'N19', 'Z4901', 'Z4902', 'Z4931','Z4932','Z9115', 'Z940', 'Z992'
Chronic Pulmonary Disease	'J40' to 'J45998', 'J470', 'J471','J479', 'J60' to 'J64', 'J660' to 'J679', 'J684'

Obesity	'E6601', 'E6609', 'E661', 'E662', 'E668', 'E669', 'O99210' to 'O99215', 'R939', 'Z6830', 'Z6831' to 'Z6845', 'Z6854'
Smoking	'Z87891', 'F17200' to 'F17229', 'F17290', 'F17293', 'F17298', 'F17299'
Long-term Antiplatelets	'Z7902'
Long-term Anticoagulation	'Z7901'
Abnormal Coagulation Profile	'R791'
Post-procedural Gastrointestinal Bleeding	'k91840', 'k91841', 'k9161', 'k9162', 'k91870', 'k91871', 'k920', 'k921', 'k922', 'k226', 'd62'
Esophageal Perforation	'k9171', 'k9172', 'k223'
Thrombocytopenia	'D696', 'D6959'

Supplemental Table 2: Multivariable regression models estimating the association of the common covariables with the in-hospital all-cause mortality of EV-TEE group.

Covariable	Multivariable*		
	OR	95%CI	P
Female	0.9	0.8-0.9	<0.01
Bacteremia	0.8	0.6-1.1	0.10
Infective endocarditis	2.2	1.7-3.0	<0.01
Coronary artery disease	0.8	0.7-0.9	<0.01
Congestive heart failure	1.4	1.3-1.6	<0.01
Valvular heart disease	0.8	0.7-0.9	<0.01
Chronic kidney disease	1.9	1.8-2.1	<0.01
Peripheral vascular disease	1.5	1.4-1.7	<0.01
Diabetes mellitus	0.7	0.6-0.7	<0.01

Hypertension	0.7	0.6-0.8	<0.01
Hyperlipidemia	0.8	0.7-0.8	<0.01
Peptic ulcer disease	0.9	0.8-0.9	0.04
Chronic pulmonary disease	1.1	0.9-1.2	0.07
Alcoholism	1.0	0.9-1.1	0.31
Smoking	0.7	0.7-0.8	<0.01
Long-term anticoagulation	0.6	0.5-0.7	<0.01
Abnormal coagulation profile	1.5	1.3-1.8	<0.01

*Multivariable regression model was adjusted for all covariables listed in the table. OR: odds ratio, P: p-value, 95%CI: 95% confidence interval.

Supplemental Figure Legend

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Supplemental Table 2: Multivariable regression models estimating the association of the common covariables with the in-hospital all-cause mortality of EV-TEE group.