

ONLINE SUPPLEMENT

Early Antidepressant Treatment and All-cause 30-Day Mortality in Patients with Ischemic Stroke

The online supplement contains:

International Classification of Diseases (ICD) 8 and 10 codes and Anatomical Therapeutic Chemical (ATC) prescription codes, used for identification of potential predictors.

Description of the Charlson Comorbidity Index

Table I: Baseline Characteristics for the propensity score matched patients.

International Classification of Diseases (ICD) 8 and 10 codes and Anatomical Therapeutic Chemical (ATC) prescription codes, used for identification of potential predictors:

Diabetes with and without end-organ damage was defined as a diagnosis in Danish Stroke Registry (DSR) and/or a diagnosis in The National Registry of Patients (LPR) ICD-8: 249.01-249.05; 249.08, 250.01-250.05; 250.08, ICD-10: E10.2-E10.8, E11.2-E11.8(DM with end organ damage) eller ICD-8: 249.00; 249.06; 249.07; 249.09; 250.00; 250.06; 250.07; 250.09, ICD-10: E10.00, E10.1; E10.9; E11.0; E11.1; E11.9 (DM without end organ damage) and/or redeemed prescription for insulin or oral antiglycaemic drugs (ATC-code A10A, A10B)

Atrial fibrillation: Diagnosis in DSR and/or LPR (ICD-8: 427.93, 427.94, ICD-10:I48)

Hypertension: Diagnosis in DSR and/or LPR (ICD-8 codes 400-404, 410.09, 411.09, 412.09, 413.09, 414.09, 430.00, 430.01, 430.08, 430.09, 431.00, 431.01, 431.08, 431.09, 432.00, 432.01, 432.02, 432.08, 432.09, 433.09, 434.09, 435.09, 436.00, 436.01, 436.09, 437.00, 437.01, 437.08, 437.09, 438.09; ICD-10 codes I10-I15).

Former use of Antihypertensive drugs (including ACE-inhibitors, alpha receptor blockers, beta-blockers, calcium antagonists, and angiotensin II receptor antagonists): ATC-codes C02, C07, C08, C09.

Former use of platelet inhibitors (low-dose aspirin, dipyridamole, clopidogrel): ATC-codes B01A C06, B01A C07, B01A C04.

Former use of Vitamin K-antagonists: ATC-codes B01A A03, B01A A04 (Note: New Oral Anticoagulants are not included, as they were not available during our inclusion period)

Former use of statins: ATC-codes C10A A01, C10A A02, C10A A03, C10A A04, C10A A05, C10A A06, C10A A07, B04AB01, B04AB02, B04AB03, B04AB04

Former use of HRT (only among women): ATC code G03C, G03D, G03F, G03HB01

Former Myocardial Infarction: Diagnosis in DSR and/or LPR (ICD-8: 410, ICD-10: I21; I22; I23)

Dementia: Diagnosis in LPR (ICD-8: 290.09-290.19; 293.09, ICD-10: F00-F03; F05.1; G30)

	Charlson comorbidity category	ICD-8	ICD-10	Score
1	Myocardial infarction	410	I21;I22;I23	1
2	Congestive heart failure	427.09; 427.10; 427.11; 427.19; 428.99; 782.49	I50; I11.0; I13.0; I13.2	1
3	Peripheral vascular disease	440; 441; 442; 443; 444; 445	I70; I71; I72; I73; I74; I77	1
4	Cerebrovascular disease	430-438	I60-I69; G45; G46	1
5	Dementia	290.09-290.19; 293.09	F00-F03; F05.1; G30	1
6	Chronic pulmonary disease	490-493; 515-518	J40-J47; J60-J67; J68.4; J70.1; J70.3; J84.1; J92.0; J96.1; J98.2; J98.3	1
7	Connective tissue disease	712; 716; 734; 446; 135.99	M05; M06; M08; M09;M30;M31; M32; M33; M34; M35; M36; D86	1
8	Ulcer disease	530.91; 530.98; 531- 534	K22.1; K25-K28	1
9	Mild liver disease	571; 573.01; 573.04	B18; K70.0-K70.3; K70.9; K71; K73; K74; K76.0	1
10	Diabetes type1	249.00; 249.06; 249.07; 249.09	E10.0, E10.1; E10.9	1
	Diabetes type2	250.00; 250.06; 250.07; 250.09	E11.0; E11.1; E11.9	
11	Hemiplegia	344	G81; G82	2
12	Moderate to severe renal disease	403; 404; 580-583; 584; 590.09; 593.19; 753.10-753.19; 792	I12; I13; N00-N05; N07; N11; N14; N17-N19; Q61	2
13	Diabetes with end organ damage			2
	type1	249.01-249.05; 249.08	E10.2-E10.8	
	type2	250.01-250.05; 250.08	E11.2-E11.8	
14	Any tumor	140-194	C00-C75	2
15	Leukemia	204-207	C91-C95	2

16	Lymphoma	200-203; 275.59	C81-C85; C88; C90; C96	2
17	Moderate to severe liver disease	070.00; 070.02; 070.04; 070.06; 070.08; 573.00; 456.00-456.09	B15.0; B16.0; B16.2; B19.0; K70.4; K72; K76.6; I85	3
18	Metastatic solid tumor	195-198; 199	C76-C80	6
19	AIDS	079.83	B21-B24	6

Table 1: Baseline Characteristics of The Propensity Score Matched Treated and Non-treated Patients.

Variable	Treated* patients, No. (%) (n=954)	Non-treated† patients, No. (%) (n=954)	Total, No. (%) (n=1908)
Mean age, years (min-max)	71.1 (18-99)	70.3 (21-97)	70.7 (18-99)
Sex			
Male	411 (43.1)	429 (45.0)	840 (44.0)
Female	543 (56.9)	525 (55.0)	1068 (56.0)
Thrombolysis			
Yes	146 (15.3)	147 (15.4)	293 (15.34)
No	482 (50.5)	468 (49.1)	950 (49.8)
Unknown	326 (34.2)	339 (35.5)	665 (34.9)
Atrial Fibrillation‡			
No Atrial Fibrillation	737 (77.3)	718 (75.3)	1455 (76.3)
Atrial Fibrillation	217 (22.8)	236 (24.7)	453 (23.7)
Hypertension‡			
No Hypertension	369 (38.7)	367 (38.5)	736 (38.6)
Hypertension	585 (61.3)	587 (61.5)	1172 (61.4)
Diabetes§			
No Diabetes	809 (84.8)	795 (83.3)	1604 (84.1)
Diabetes	145 (15.2)	159 (16.7)	304 (15.9)
Dementia			
No dementia	946 (99.2)	945 (99.1)	1891 (99.1)
Dementia	8 (0.8)	9 (0.9)	17 (0.9)
Former myocardial infarction‡			
No former myocardial infarction	826 (86.6)	817 (85.6)	1643 (86.1)
Former myocardial infarction	128 (13.4)	137 (14.4)	265 (13.9)
Blood pressure lowering drugs#			
Never use before admission	552 (57.9)	563 (59.0)	1115 (58.4)
At least one prescription before admission	402 (42.1)	391 (41.0)	793 (41.6)
Platelet Inhibitors#			
Never use before admission	712 (74.6)	686 (71.9)	1398 (73.3)
At least one Prescription before Admission	242 (25.4)	268 (28.1)	510 (26.7)
Vitamin K-antagonist#			
Never use before admission	920 (96.4)	915 (95.9)	1835 (96.2)
At least one Prescription before Admission	34 (3.6)	39 (4.1)	73 (3.8)
Statins#			
Never use before admission	812 (85.1)	815 (85.4)	1627 (85.3)
At least one Prescription before Admission	142 (14.9)	139 (14.6)	281 (14.7)
HRT (Women)#			
Women, no HRT	380 (39.8)	388 (40.7)	768 (40.3)
Women, former HRT	31 (3.3)	41 (4.3)	72 (3.8)
Men (no HRT)	543 (56.9)	525 (55.0)	1068 (56.0)
Severity of Stroke (Scandinavian			

Baseline Characteristics of The Propensity Score Matched Treated and Non-treated Patients –Cont.

Stroke Scale)			
Mild/moderate	569 (59.6)	566 (59.3)	1135 (59.5)
Severe/very severe	289 (30.3)	297 (31.1)	586 (30.7)
Unknown	96 (10.1)	91 (9.5)	187 (9.8)
Comorbidity			
Charlson score 0	513 (53.8)	498 (52.2)	1011 (53.0)
Charlson score 1-2	340 (35.6)	341 (35.7)	681 (35.7)
Charlson score 3+	101 (10.6)	115 (12.1)	216 (11.3)
Living arrangements			
Living with someone	551 (57.8)	535 (56.1)	1066 (56.9)
Living alone	390 (40.9)	407 (42.7)	797 (41.8)
Other Form of living arrangement	9 (0.9)	10 (1.1)	19 (1.0)
Unknown	4 (0.4)	2 (0.2)	6 (0.3)
Housing			
Own House	898 (94.1)	886 (92.9)	1784 (93.5)
Nursing Home/Institution	34 (3.6)	43 (4.5)	77 (4.0)
Other Form of Housing	12 (1.3)	13 (1.4)	25 (1.3)
Unknown	10 (1.1)	12 (1.3)	22 (1.2)
Alcohol Use**			
Max 14 (F)/21(M) Units per Week	791 (82.9)	797 (83.5)	1588 (83.2)
More than 14 (F)/21(M) Units per Week	82 (8.6)	69 (7.2)	151 (7.9)
Unknown	81 (8.5)	88 (9.2)	169 (8.9)
Smoking			
Never	340 (35.6)	334 (35.0)	674 (35.3)
Former	13 (1.4)	10 (1.1)	23 (1.2)
Occasionally	244 (25.6)	243 (25.5)	487 (25.5)
Daily	298 (31.2)	313 (32.8)	611 (32.0)
Unknown	59 (6.2)	54 (5.7)	113 (5.9)
Body Mass Index			
<18.5	33 (3.5)	39 (4.1)	72 (3.8)
18.5-<25	349 (36.6)	359 (37.6)	708 (37.1)
>25	435 (45.6)	410 (43.0)	845 (44.3)
Unknown	137 (14.4)	146 (15.3)	283 (14.8)
Income			
<116.422 kr.	249 (26.1)	258 (27.0)	507 (26.6)
116.422-148.866 kr.	223 (23.4)	229 (24.0)	452 (23.7)
148.866-239.451 kr.	241 (25.3)	239 (25.1)	480 (25.2)
>239.451 kr.	241 (25.3)	228 (23.9)	469 (24.6)
Educational level			
Primary school	412 (43.2)	415 (43.5)	827 (43.3)
High school	288 (30.2)	269 (28.2)	557 (29.2)
College	127 (13.3)	124 (13.0)	251 (13.2)
Unknown	127 (13.3)	146 (15.3)	273 (14.3)
Employment status			
Employed	242 (25.4)	228 (23.9)	470 (24.6)

Baseline Characteristics of The Propensity Score Matched Treated and Non-treated Patients –Cont.

Unemployed	23 (2.4)	20 (2.1)	43 (2.3)
Early retirement	125 (13.1)	106 (11.1)	231 (12.1)
Retired	564 (59.1)	600 (62.9)	1164 (61.0)
Quality of in-hospital stroke care [∞]			
100%	316 (33.1)	326 (34.2)	383 (20.1)
75-99,9%	194 (20.3)	189 (19.8)	383 (20.1)
50-74,9%	234 (24.5)	219 (23.0)	453 (23.7)
25-49,9%	95 (10.0)	94 (9.9)	189 (9.9)
<25%	108 (11.3)	114 (12.0)	222 (11.6)
Unknown	7 (0.7)	12 (1.3)	19 (1.0)

Abbreviations: No: numbers, M: men, W: women, Kr: Kroner (Danish currency), HRT: hormonal replacement therapy.

* Patients treated during admission

† Patients not treated during admission

‡ Diagnosis registered in The Danish Stroke Registry or in The Danish National Patients Registry

§ Diagnosis registered in The Danish Stroke Registry or in The Danish National Patients Registry or at least one filled prescription of an anti-diabetic drug within 10 years prior to stroke admission.

|| Diagnosis registered in The Danish National Patients Registry

At least on prescription filled within 90 days prior to admission.

** The categories of alcohol intake reflected recommendations in the study period on maximum alcohol intake issued by the National Board of Health in Denmark

[∞] Proportion of received relevant processes of care.