

Appendix 1 to Wium-Andersen IK, Wium-Andersen MK, Jorgensen M, et al. Anti-inflammatory Treatment and Risk of Depression after First-time Stroke in a Cohort of 147 487 Danish Patients. *J Psychiatry Neurosci* 2017.

DOI: 10.1503/jpn.160244

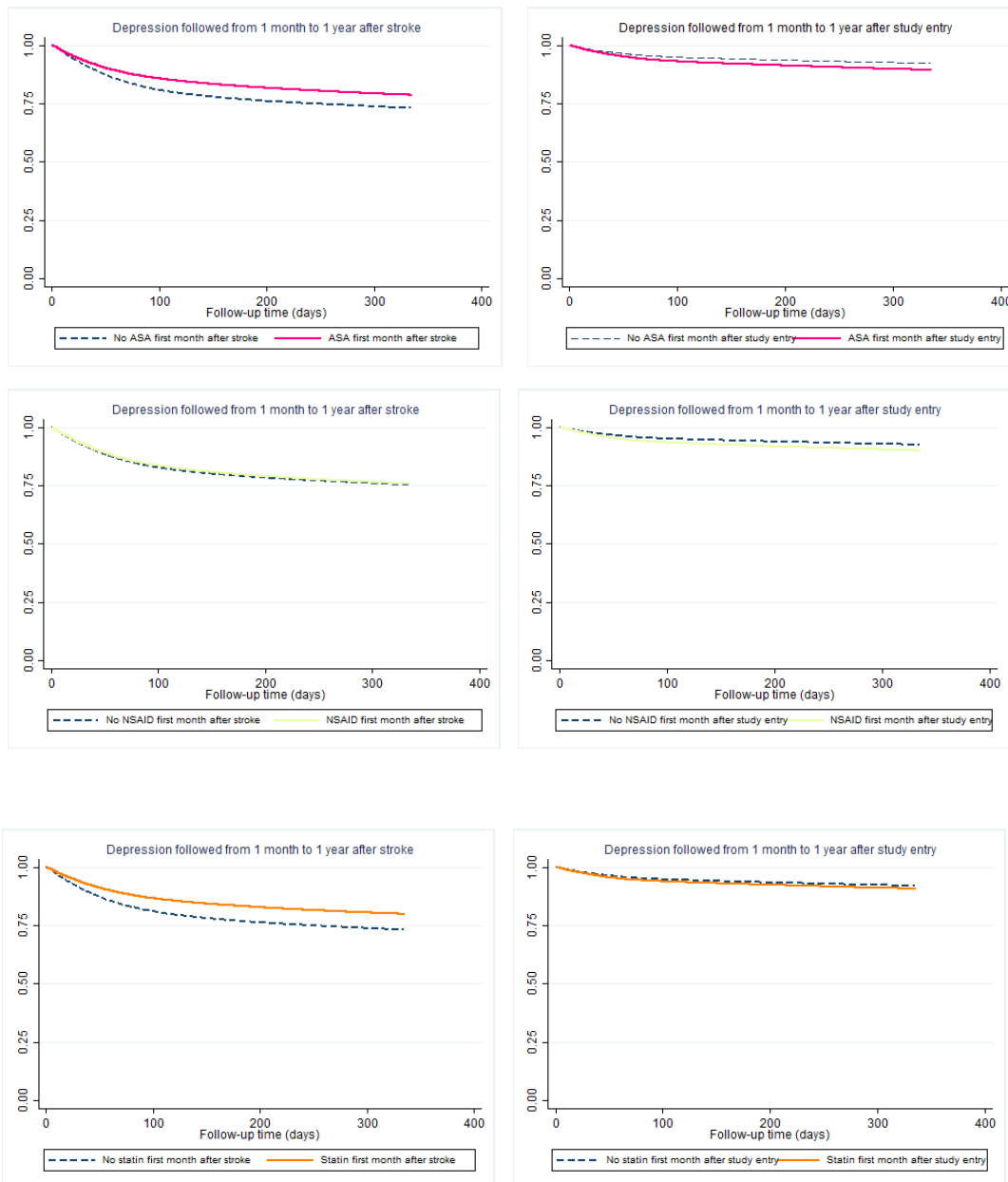
© Joule Inc., or its licensors

Online appendices are unedited and posted as supplied by the authors.

Supplementary Figure 1. Kaplan Meier plots of the association of anti-inflammatory medication (acetyl salicylic acids (ASA), non-steroid anti-inflammatory drugs (NSAID) and statin) with early depression in stroke patients and in the non-stroke population.

Stroke patients

Non-stroke population



Appendix 1 to Wium-Andersen IK, Wium-Andersen MK, Jorgensen M, et al. Anti-inflammatory Treatment and Risk of Depression after First-time Stroke in a Cohort of 147 487 Danish Patients. *J Psychiatry Neurosci* 2017.

DOI: 10.1503/jpn.160244

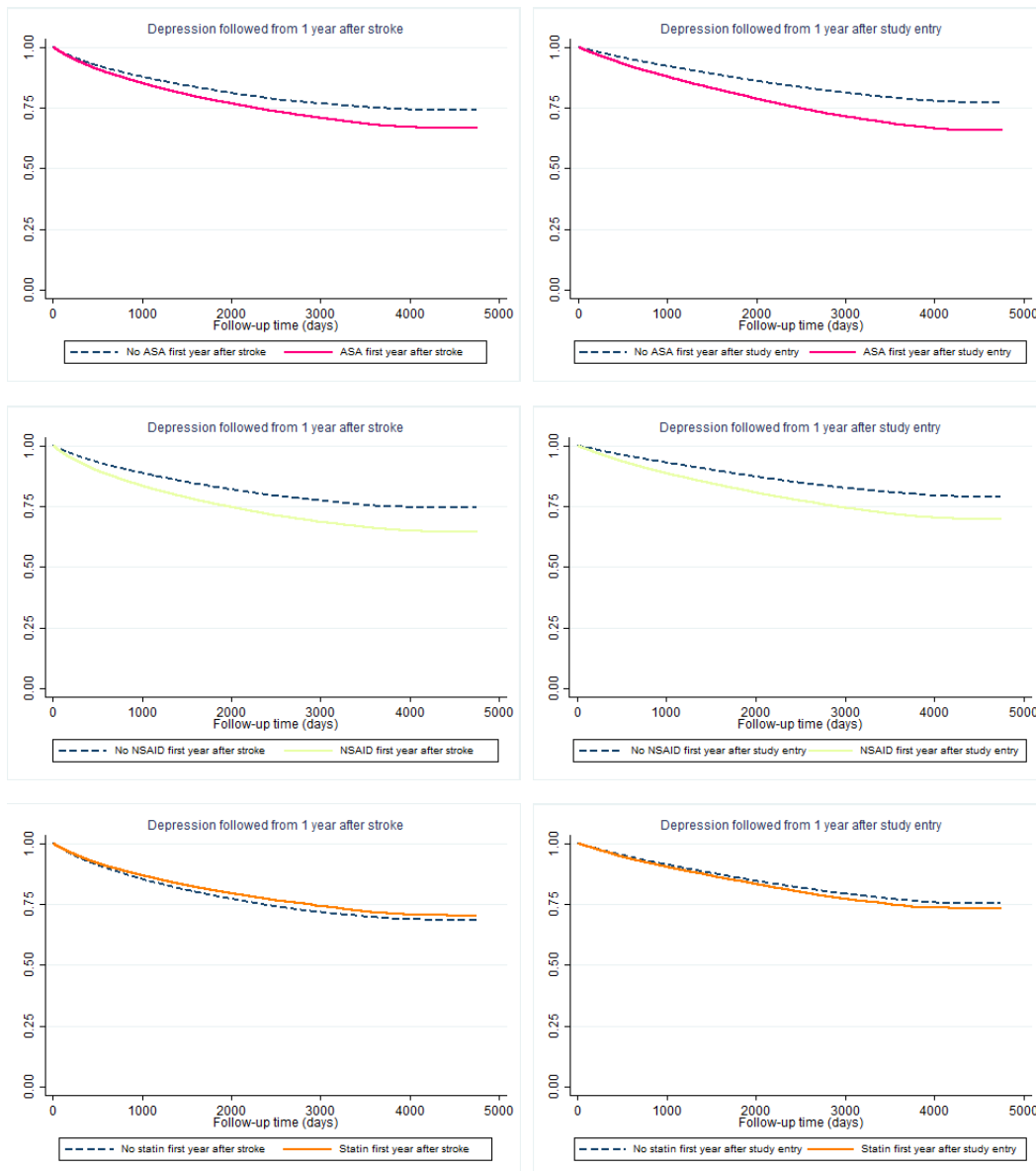
© Joule Inc., or its licensors

Online appendices are unedited and posted as supplied by the authors.

Supplementary Figure 2. Kaplan Meier plots of the association of anti-inflammatory medication (acetyl salicylic acids (ASA), non-steroid anti-inflammatory drugs (NSAID) and statin) with late depression in stroke patients and the non-stroke population.

Stroke patients

Non-stroke population



Appendix 1 to Wium-Andersen IK, Wium-Andersen MK, Jorgensen M, et al. Anti-inflammatory Treatment and Risk of Depression after First-time Stroke in a Cohort of 147 487 Danish Patients. *J Psychiatry Neurosci* 2017.

DOI: 10.1503/jpn.160244

© Joule Inc., or its licensors

Online appendices are unedited and posted as supplied by the authors.

Supplementary Table 1. ICD10 and ATC codes

	ICD10	Name	ATC	Name
Somatic comorbidity				
Acute coronary heart disease	I20.0, I21	Angina pectoris, STEMI, Non-STEMI		
Other cardiovascular disease	I46	Cardiac arrest	C01A-B	
	I48	Atrial fibrillation and flutter	C01D	
	I49	Other cardiac arrhythmias	C04	
	I50.0-1, I50.9	Left ventricular heart failure, heart failure, unspecified		
	I70	Atherosclerosis		
	I71-2	Dissection of aorta, aortic aneurysm, other aneurysm		
	I74	Embolism and thrombosis		
Connective tissue disease	M30	Polyarteritis nodosa, polyarteritis, Kawasaki syndrome	M09A	Other drugs for disorders of the musculo-skeletal system
	M31	Angiitis, granulomatosis, giant cell arteritis, vasculopathies	M04A	Antigout preparations
	M32	Systemic lupus erythematosus	H05A	Parathyroid hormones and analogues
	M33	Dermatopolymyositis, polymyositis	M01C	Specific antirheumatic agents
	M34	Systemic sclerosis		
	M35	Sicca syndrome and other similar		
	M36	Connective tissue diseases in neoplastic disease, arthropathies		
	M86	Acute hematogenous osteomyelitis		
Inflammatory disease	K50	Crohn's disease	A01-A10	Alimentary tract agents
	K51	Ulcerative colitis, inflammatory polyps	B01-B02B	Antithrombotic and antihemorrhagic agents
	K65	Peritonitis	J01-J04	Antiinfectives for systemic use
	K81	Cholecystitis	M01B	Anti-inflammatory/antirheumatic agents in combination
	K86.0-1	Chronic pancreatitis	L04A	Immunosuppressants drugs

Appendix 1 to Wium-Andersen IK, Wium-Andersen MK, Jorgensen M, et al. Anti-inflammatory Treatment and Risk of Depression after First-time Stroke in a Cohort of 147 487 Danish Patients. *J Psychiatry Neurosci* 2017.

DOI: 10.1503/jpn.160244

© Joule Inc., or its licensors

Online appendices are unedited and posted as supplied by the authors.

Supplementary Table 1. ICD10 and ATC codes

	ICD10	Name	ATC	Name
			R01B- R03	Nasal preparations, throat drugs, drugs for obstructive airway diseases
Infective disease	A00-A09	Intestinal infectious diseases	J01	Antibacterial drugs
	A30-A49	Other bacterial diseases	J02	Antimycotic drugs
	A50-A64	Infections, sexual transmission	J04	Antimychobacterials
	A80-B19	Viral infections	J05	Antiviral drugs
	B25-B34	Other viral infections		
	B35-B99	Other infectious diseases		
	A15-A28, A65-79, B20-24 J00-22	Remainder infectious and parasitic diseases Upper and lower respiratory, infections, influenza and pneumonia		
	L00-08	Infections of skin and subcutaneous tissue		
Chronic obstructive pulmonary disease	J40-47	Chronic lower respiratory diseases	R03	Drugs for obstructive airway diseases
	J96.1-2	Chronic respiratory failure		
	J98.1-2	Atelectasis, emphysema		
Obesity	E65	Localized adiposity	A08	Antiobesity preparations, excluding diet products
	E66	Obesity		
	E67	Hyperalimentation		
	E68	Sequelae of hyperalimentation		
Hypertension	I10	Essential hypertension	C02	Antihypertensive drugs
	I11	Hypertensive heart disease	C03	Adiuretic drugs
	I12	Hypertensive chronic kidney disease	C08	Calcium channel blockers
	I13	Hypertensive heart and kidney disease	C09	Agents acting on the renin-angiotensin system
	I15	Secondary hypertension		
Diabetes mellitus	E10	Type 1 diabetes	A10	Drugs used in diabetes
	E11	Type 2 diabetes		
	E13	Other specified diabetes		

Appendix 1 to Wium-Andersen IK, Wium-Andersen MK, Jorgensen M, et al. Anti-inflammatory Treatment and Risk of Depression after First-time Stroke in a Cohort of 147 487 Danish Patients. *J Psychiatry Neurosci* 2017.

DOI: 10.1503/jpn.160244

© Joule Inc., or its licensors

Online appendices are unedited and posted as supplied by the authors.

Supplementary Table 1. ICD10 and ATC codes

	ICD10	Name	ATC	Name
	H36	Retinal disorders in diseases		
Psychiatric comorbidity				
Anxiety	F41	Anxiety disorder	N05B	Anxiolytic drugs
	F42	Obsessive-compulsive disorder	N05C	Hypnotics and sedatives
	F43	Reactions to stress		
	G47	Sleep disorders		
	F51.0	Insomnia		
Alcoholism	F10	Alcohol use, abuse and dependence	N07BB	Drugs used in alcohol dependence
	K70	Alcoholic liver disease		
	T51	Toxic effect of alcohol		
	G31.2	Degeneration of nervous system due to alcohol		
	G62.1	Alcoholic polyneuropathy		
	G72.1	Alcoholic myopathy		
	I42.6	Alcoholic cardiomyopathy		
	K29.2	Alcoholic gastritis		
	K86.0	Alcohol-induced chronic pancreatitis		
	Z72.1	Problem with alcohol use		
	I85.6	Oesophageal varices		
Organic brain disorders (Including dementia)	F01-04	Dementia	N06D	
	F05	Delirium		
	G30	Alzheimers dementia		
Non-affective disorder	F20	Schizophrenia	N05A excl. N05AN01 and N05A04	
	F30	Mania		
	F31.0-2	Bipolar disorder, mania		
Post-stroke, delirium	F05	Delirium		
Previous depression	F31.3-31.9	Bipolar disorder, depression	N06A	
	F32	Unipolar depression, single episode		

Appendix 1 to Wium-Andersen IK, Wium-Andersen MK, Jorgensen M, et al. Anti-inflammatory Treatment and Risk of Depression after First-time Stroke in a Cohort of 147 487 Danish Patients. *J Psychiatry Neurosci* 2017.

DOI: 10.1503/jpn.160244

© Joule Inc., or its licensors

Online appendices are unedited and posted as supplied by the authors.

Supplementary Table 1. ICD10 and ATC codes

	ICD10	Name	ATC	Name
	F33	Unipolar depression, recurrent		
	F34.1	Dysthymic disorder		
Medication				
Warfarin use			B01AA03	Warfarin
			B01AA04	Phenprocoumon
Clopidogrel use			B01AC22	Prasugrel
			B01AC04	Clopidogrel
Beta blocker use			C07	Betablocking agents
Lithium			N05AN01	Lithium

Appendix 1 to Wium-Andersen IK, Wium-Andersen MK, Jorgensen M, et al. Anti-inflammatory Treatment and Risk of Depression after First-time Stroke in a Cohort of 147 487 Danish Patients. *J Psychiatry Neurosci* 2017.

DOI: 10.1503/jpn.160244

© Joule Inc., or its licensors

Online appendices are unedited and posted as supplied by the authors.

Supplementary Table 2. Distribution of the covariables in relation to ASA, NSAID, or statin use and depression outcomes in the non-stroke population.

	Medication use before the end of the first month					Medication use before end of the first year				
	Total n	ASA use (%) (n = 24,352)	NSAID use (%) (n = 40,328)	Statin use (%) (n = 17,961)	Early onset depression (%) (n = 12,363)	Total n	ASA use (%) (n = 34,720)	NSAID use (%) (n = 61,369)	Statin use (%) (n = 24,074)	Late onset depression (%) (n = 22,378)
Basic characteristics										
All	152,185	16,0	26,5	11,8	8,1	136,733	25,4	44,9	17,6	16,4
Age above 70	84,223	21,9	29,2	13,0	10,1	72,980	36,3	50,7	19,9	19,8
Women	73,591	16,1	28,7	10,9	10,7	64,166	25,0	49,7	15,9	18,9
Single	70,548	17,8	28,6	10,4	10,2	61,305	28,4	48,8	15,4	17,7
Only primary school	56,575 ^A	17,1	26,8	14,1	8,7	50,685 ^B	27,6	46,7	20,7	18,5
Somatic comorbidity										
Acute coronary syndrome	4,298	65,0	31,7	58,2	10,5	3,673	88,7	55,0	71,2	20,2
Other cardiovascular disease	26,273	40,0	31,8	25,4	12,2	21,921	64,4	56,9	38,0	20,8
Connective tissue disease	6,735	24,6	32,7	19,8	10,9	5,758	41,4	64,9	30,2	20,0
Inflammatory disease	57,308	21,7	31,7	14,7	13,1	47,961	34,7	56,6	22,0	20,8
Infective disease	108,99	17,7	28,5	12,8	9,4	96,244	28,0	49,2	19,1	17,8
Cancer	8,890	20,0	29,6	13,0	11,2	7,412	32,5	50,6	20,1	18,4
Obesity	4,260	19,1	33,5	18,9	11,4	3,734	28,0	59,5	25,7	23,3
Hypertension	72,441	26,4	30,0	19,5	10,7	62,509	43,1	53,5	29,4	18,7
Chronic obstructive pulmonary disease	24,261	20,3	29,8	14,6	11,7	20,657	32,3	54,1	21,4	21,0
Diabetes mellitus	10,979	31,8	28,7	36,8	10,9	9,405	52,4	52,6	54,4	18,5
Migraine	3,710	13,4	28,3	10,7	13,5	3,177	19,4	55,1	15,2	21,4
Psychiatric comorbidity										
Anxiety	46,930	21,0	31,7	13,3	16,8	37,713	34,2	57,5	20,2	26,5
Alcoholism	2,789	14,7	27,3	11,7	20,4	2,154	20,5	47,6	16,0	25,4
Organic brain disorders (including dementia)	2,862	30,4	37,3	9,7	32,6	1,705	45,3	62,1	14,3	19,2
Non-affective disorder	6,951	22,0	36,1	9,9	28,4	4,628	34,1	59,2	13,7	28,1
Post-stroke delir*	7	42,9	28,6	14,3	14,3	55	52,7	74,6	23,6	14,6

Appendix 1 to Wium-Andersen IK, Wium-Andersen MK, Jorgensen M, et al. Anti-inflammatory Treatment and Risk of Depression after First-time Stroke in a Cohort of 147 487 Danish Patients. *J Psychiatry Neurosci* 2017.

DOI: 10.1503/jpn.160244

© Joule Inc., or its licensors

Online appendices are unedited and posted as supplied by the authors.

Supplementary Table 2. Distribution of the covariables in relation to ASA, NSAID, or statin use and depression outcomes in the non-stroke population.

	Medication use before the end of the first month				Outcome	Medication use before end of the first year				Outcome
	Total n	ASA use (%) (n = 24,352)	NSAID use (%) (n = 40,328)	Statin use (%) (n = 17,961)	Early onset depression (%) (n = 12,363)	Total n	ASA use (%) (n = 34,720)	NSAID use (%) (n = 61,369)	Statin use (%) (n = 24,074)	Late onset depression (%) (n = 22,378)
Lithium use	504	15,7	30,4	10,5	47,0	257	19,5	48,3	14,0	37,4
Previous depression	25,886	19,7	29,6	14,0	36,1	15,875	31,0	54,7	21,7	31,9
Medication use										
Warfarin use*	2,207	25,2	29,0	25,8	7,7	6,138	39,0	50,3	35,2	18,3
Clopidogrel use*	444	58,3	34,9	70,7	11,9	1,714	77,3	54,8	82,7	16,8
Beta blocker use*	7,931	41,3	30,7	32,3	8,4	22,008	56,9	52,1	41,4	18,5

Based on 152,185 non-stroke individuals at baseline and 136,733 individuals after one year. Exposure (use of ASA, NSAID, and Statin) and Outcome (Early and late onset depression) are shown in percentages. The basic characteristics are measured at baseline. Somatic and psychiatric comorbidity is measured within 5 years preceding stroke. ^A24,464 missing, ^B20,143 missing, * from inclusion to the end of the first month.

Appendix 1 to Wium-Andersen IK, Wium-Andersen MK, Jorgensen M, et al. Anti-inflammatory Treatment and Risk of Depression after First-time Stroke in a Cohort of 147 487 Danish Patients. *J Psychiatry Neurosci* 2017.

DOI: 10.1503/jpn.160244

© Joule Inc., or its licensors

Online appendices are unedited and posted as supplied by the authors.

Supplementary Table 3. Risk of early onset depression in 118,156 stroke patients

Covariate	HR (95% CI)	SE	z	p
Only ASA	0.70 (0.67-0.72)	0.013	-18.94	<0.00
Only NSAID	0.87 (0.84-0.90)	0.017	-7.19	<0.00
Only statin	0.71 (0.68-0.75)	0.016	-15.05	<0.00
ASA and NSAID	0.69 (0.66-0.72)	0.016	-15.76	<0.00
ASA and statin	0.61 (0.59-0.64)	0.013	-23.52	<0.00
NSAID and statin	0.68 (0.63-0.73)	0.024	-10.94	<0.00
All	0.63 (0.59-0.67)	0.019	-15.10	<0.00
Sociodemographic characteristics				
Age, years	1.01 (1.00-1.01)	0.001	14.20	<0.00
Gender, male	0.90 (0.88-0.93)	0.012	-7.85	<0.00
Cohabitation status, not single	0.94 (0.91-0.96)	0.011	-5.09	<0.00
Education*				
Short	0.98 (0.96-1.01)	0.014	-1.21	0.23
Middle/long	0.86 (0.88-0.92)	0.019	-6.86	<0.00
missing	0.78 (0.76-0.82)	0.016	-12.05	<0.00
Somatic comorbidity				
ACS	1.09 (1.03-1.15)	0.032	2.96	<0.00
Other CVD	1.06 (1.03-1.09)	0.016	3.95	<0.00
Connective tissue disease	1.00 (0.95-1.05)	0.025	-0.00	1.00
Inflammatory disease	1.03 (1.00-1.05)	0.013	1.98	0.05
Infectious disease	0.99 (0.96-1.02)	0.015	-0.80	0.42
Cancer	1.00 (0.95-1.05)	0.023	-0.06	0.95
Obesity	1.04 (0.98-1.10)	0.030	1.39	0.16
Hypertension	1.13 (1.10-1.16)	0.016	8.66	<0.00
COPD	1.00 (0.97-1.03)	0.015	-0.11	0.91
Diabetes mellitus	1.06 (1.02-1.10)	0.020	3.18	<0.00
Migraine	1.02 (0.96-1.08)	0.032	0.60	0.55
Psychiatric comorbidity				
Anxiety	1.28 (1.24-1.31)	0.017	18.00	<0.00
Alcoholism	1.01 (0.96-1.06)	0.025	0.36	0.72
Organic brain disorder	1.18 (1.10-1.26)	0.039	4.97	<0.00
non-affective disorders	1.15 (1.11-1.20)	0.024	7.11	<0.00
use of lithium	1.39 (1.24-1.57)	0.084	5.48	<0.00
post-entry delirium	1.25 (1.00-1.56)	0.141	1.99	0.05
Past depression	3.16 (3.07-3.24)	0.042	85.47	<0.00
Medication use				
Warfarin	0.68 (0.64-0.73)	0.024	-10.90	<0.00
Clopidogrel	0.73 (0.70-0.78)	0.019	-11.98	<0.00
Beta-blockers	0.76 (0.72-0.80)	0.019	-11.09	<0.00

* Basic school reference. HR=hazard ratio. CI=confidence interval. SE=standard error. ASA=acetylsalicylic acid. NSAID=non-steroid antiinflammatory drugs. ACS=acute coronary syndrome. CVD=cardiovascular disease. COPD=chronic obstructive pulmonary disease.

Appendix 1 to Wium-Andersen IK, Wium-Andersen MK, Jorgensen M, et al. Anti-inflammatory Treatment and Risk of Depression after First-time Stroke in a Cohort of 147 487 Danish Patients. *J Psychiatry Neurosci* 2017.

DOI: 10.1503/jpn.160244

© Joule Inc., or its licensors

Online appendices are unedited and posted as supplied by the authors.

Supplementary Table 4. Risk of early onset depression in 152,185 in the non-stroke population

Covariate	HR (95% CI)	SE	z	p
Only ASA	0.99 (0.93-1.06)	0.033	-0.27	0.79
Only NSAID	1.10 (1.05-1.15)	0.025	4.19	<0.00
Only statin	1.04 (0.96-1.12)	0.042	0.93	0.35
ASA and NSAID	1.04 (0.96-1.13)	0.041	1.05	0.29
ASA and statin	0.97 (0.88-1.07)	0.049	-0.58	0.56
NSAID and statin	1.08 (0.96-1.22)	0.067	1.31	0.19
All	1.00 (0.87-1.16)	0.073	0.03	0.98
Sociodemographic characteristics				
Age, years	1.01 (1.01-1.01)	0.001	11.41	<0.00
Gender, male	0.85 (0.82-0.89)	0.017	-7.81	<0.00
Cohabitation status, not single	0.93 (0.93-1.01)	0.019	-1.67	0.10
Education*				
Short	0.91 (0.87-0.95)	0.021	-4.02	<0.00
Middle/long	0.93 (0.87-0.99)	0.030	-2.26	0.02
missing	1.06 (1.01-1.12)	0.028	-2.23	0.03
Somatic comorbidity				
ACS	0.99 (0.90-1.10)	0.051	-0.10	0.92
Other CVD	1.03 (0.98-1.07)	0.024	1.09	0.28
Connective tissue disease	0.99 (0.92-1.06)	0.038	-0.33	0.74
Inflammatory disease	1.21 (1.17-1.26)	0.024	9.63	<0.00
Infectious disease	1.09 (1.03-1.14)	0.027	3.31	<0.00
Cancer	1.10 (1.03-1.17)	0.037	2.87	<0.00
Obesity	1.03 (0.95-1.14)	0.049	0.78	0.43
Hypertension	1.12 (1.07-1.17)	0.024	5.23	<0.00
COPD	1.05 (1.00-1.09)	0.023	2.12	0.03
Diabetes mellitus	1.04 (0.98-1.11)	0.033	1.38	0.17
Migraine	1.03 (0.94-1.12)	0.48	0.55	0.58
Psychiatric comorbidity				
Anxiety	1.49 (1.43-1.55)	0.031	19.32	<0.00
Alcoholism	1.37 (1.25-1.49)	0.061	7.01	<0.00
Organic brain disorder	1.87 (1.74-2.01)	0.067	17.47	<0.00
non-affective disorders	1.38 (1.31-1.45)	0.036	12.18	<0.00
use of lithium	1.82 (1.60-2.07)	0.122	8.94	<0.00
post-entry delirium	0.68 (0.10-4.85)	0.682	-0.38	0.70
Past depression	13.57 (12.98-19.19)	0.308	114.99	<0.00
Medication use				
Warfarin	0.91 (0.78-1.06)	0.072	-1.17	0.24
Clopidogrel	1.03 (0.79-1.36)	0.145	0.23	0.82
Beta-blockers	0.82 (0.76-0.89)	0.034	-4.81	<0.00

* Basic school reference. HR=hazard ratio. CI=confidence interval. SE=standard error. ASA=acetylsalicylic acid.

NSAID=non-steroid antiinflammatory drugs. ACS=acute coronary syndrome.

CVD=cardiovascular disease. COPD=chronic obstructive pulmonary disease.

Appendix 1 to Wium-Andersen IK, Wium-Andersen MK, Jorgensen M, et al. Anti-inflammatory Treatment and Risk of Depression after First-time Stroke in a Cohort of 147 487 Danish Patients. *J Psychiatry Neurosci* 2017.

DOI: 10.1503/jpn.160244

© Joule Inc., or its licensors

Online appendices are unedited and posted as supplied by the authors.

Supplementary Table 5. Risk of late onset depression in 80,681 stroke patients

Covariate	HR (95% CI)	SE	z	p
Only ASA	1.40 (1.31-1.50)	0.047	9.93	<0.000
Only NSAID	1.38 (1.29-1.48)	0.047	9.41	<0.000
Only statin	1.01 (0.93-1.10)	0.042	0.26	0.795
ASA and NSAID	1.75 (1.65-1.86)	0.055	17.89	<0.000
ASA and statin	1.19 (1.12-1.27)	0.039	5.33	<0.000
NSAID and statin	1.34 (1.24-1.45)	0.053	7.45	<0.000
All	1.50 (1.41-1.60)	0.047	12.78	<0.000
Sociodemographic characteristics				
Age, years	1.01 (1.00-1.01)	0.001	7.95	<0.000
Gender, male	0.95 (0.92-0.98)	0.016	-3.05	0.002
Cohabitation status, not single	0.98 (0.95-1.01)	0.014	-1.40	0.161
Education*				
Short	0.92 (0.89-0.95)	0.016	-4.78	<0.000
Middle/long	0.77 (0.73-0.82)	0.022	-9.29	<0.000
missing	0.85 (0.80-0.89)	0.023	-6.12	<0.000
Somatic comorbidity				
ACS	1.00 (0.88-0.95)	0.039	0.05	0.960
Other CVD	1.02 (0.98-1.07)	0.021	1.15	0.251
Connective tissue disease	0.95 (0.89-1.02)	0.032	-1.42	0.155
Inflammatory disease	1.12 (1.08-1.15)	0.018	6.66	<0.000
Infectious disease	1.08 (1.04-1.13)	0.021	4.28	<0.000
Cancer	1.05 (0.98-1.12)	0.035	1.34	0.180
Obesity	1.12 (1.04-1.20)	0.040	3.08	0.002
Hypertension	1.00 (0.96-1.03)	0.018	-0.15	0.878
COPD	1.07 (1.03-1.12)	0.021	3.57	<0.000
Diabetes mellitus	1.12 (1.07-1.17)	0.028	4.54	<0.000
Migraine	1.07 (0.99-1.16)	0.043	1.76	0.079
Psychiatric comorbidity				
Anxiety	1.39 (1.34-1.43)	0.024	18.89	<0.000
Alcoholism	1.25 (1.17-1.34)	0.043	6.59	<0.000
Organic brain disorder	0.87 (0.76-0.99)	0.059	-2.09	0.036
non-affective disorders	1.12 (1.05-1.20)	0.036	3.58	<0.000
use of lithium	1.40 (1.10-1.77)	0.169	2.80	0.005
post-entry delirium	1.28 (0.94-1.75)	0.204	1.58	0.114
Past depression	1.67 (1.60-1.73)	0.033	25.90	<0.000
Medication use				
Warfarin	1.08 (1.02-1.13)	0.028	2.83	0.005
Clopidogrel	0.97 (0.92-1.02)	0.024	-1.24	0.216
Beta-blockers	1.05 (1.01-1.09)	0.020	2.56	0.011

* Basic school reference. HR=hazard ratio. CI=confidence interval. SE=standard error. ASA=acetylsalicylic acid.

NSAID=non-steroid antiinflammatory drugs. ACS=acute coronary syndrome.

CVD=cardiovascular disease. COPD=chronic obstructive pulmonary disease.

Appendix 1 to Wium-Andersen IK, Wium-Andersen MK, Jorgensen M, et al. Anti-inflammatory Treatment and Risk of Depression after First-time Stroke in a Cohort of 147 487 Danish Patients. *J Psychiatry Neurosci* 2017.

DOI: 10.1503/jpn.160244

© Joule Inc., or its licensors

Online appendices are unedited and posted as supplied by the authors.

Supplementary Table 6. Risk of late onset depression in 136,733 non-stroke patients

Covariate	HR (95% CI)	SE	z	p
Only ASA	1.20 (1.13-1.26)	0.034	6.22	<0.00
Only NSAID	1.22 (1.18-1.27)	0.021	11.67	<0.00
Only statin	0.83 (0.76-0.90)	0.037	-4.26	<0.00
ASA and NSAID	1.35 (1.28-1.42)	0.034	11.97	<0.00
ASA and statin	1.06 (0.99-1.14)	0.038	1.59	0.11
NSAID and statin	1.09 (1.00-1.17)	0.043	2.08	0.04
All	1.18 (1.11-1.26)	0.038	5.06	<0.00
Sociodemographic characteristics				
Age, years	1.02 (1.02-1.02)	0.001	24.07	<0.00
Gender, male	0.95 (0.92-0.98)	0.014	-3.45	<0.00
Cohabitation status, not single	0.97 (0.94-1.00)	0.014	-2.17	0.03
Education*				
Short	0.86 (0.83-0.89)	0.014	-9.31	<0.00
Middle/long	0.75 (0.71-0.78)	0.018	-12.15	<0.00
missing	1.04 (0.99-1.08)	0.022	1.69	0.09
Somatic comorbidity				
ACS	1.02 (0.94-1.10)	0.041	0.49	0.63
Other CVD	1.08 (1.05-1.13)	0.022	3.96	<0.00
Connective tissue disease	1.04 (0.98-1.11)	0.032	1.41	0.16
Inflammatory disease	1.18 (1.15-1.21)	0.017	11.25	<0.00
Infectious disease	1.14 (1.10-1.18)	0.019	7.92	<0.00
Cancer	1.11 (1.05-1.17)	0.031	3.62	<0.00
Obesity	1.15 (1.08-1.24)	0.041	4.03	<0.00
Hypertension	1.01 (0.98-1.04)	0.016	0.39	0.70
COPD	1.19 (1.15-1.23)	0.021	9.91	<0.00
Diabetes mellitus	1.13 (1.07-1.19)	0.030	4.70	<0.00
Migraine	1.09 (1.01-1.18)	0.043	2.26	0.02
Psychiatric comorbidity				
Anxiety	1.65 (1.60-1.70)	0.025	33.47	<0.00
Alcoholism	1.54 (1.41-1.68)	0.068	9.69	<0.00
Organic brain disorder	1.22 (1.09-1.36)	0.069	3.52	<0.00
non-affective disorders	1.25 (1.17-1.32)	0.037	7.38	<0.00
use of lithium	1.54 (1.25-1.88)	0.159	4.15	<0.00
post-entry delirium	1.11 (0.55-2.22)	0.392	0.29	0.77
Past depression	2.15 (2.08-2.23)	0.037	44.52	<0.00
Medication use				
Warfarin	1.07 (1.01-1.14)	0.035	2.12	0.03
Clopidogrel	0.98 (0.87-1.11)	0.060	-0.33	0.74
Beta-blockers	0.99 (0.96-1.03)	0.019	-0.41	0.68

* Basic school reference. HR=hazard ratio. CI=confidence interval. SE=standard error. ASA=acetylsalicylic acid. NSAID=non-steroid antiinflammatory drugs. ACS=acute coronary syndrome.

Appendix 1 to Wium-Andersen IK, Wium-Andersen MK, Jorgensen M, et al. Anti-inflammatory Treatment and Risk of Depression after First-time Stroke in a Cohort of 147 487 Danish Patients. *J Psychiatry Neurosci* 2017.

DOI: 10.1503/jpn.160244

© Joule Inc., or its licensors

Online appendices are unedited and posted as supplied by the authors.

Supplementary Table 7.
Risk of early onset depression (based on an ICD-10 diagnosis)

	Stroke population*		
	ASA (HR, 95%CI)	NSAID (HR, 95%CI)	STATIN (HR, 95%CI)
Crude	0.95 (0.88-1.02)	1.08 (1.00-1.18)	0.92 (0.85-0.99)
Model 1	0.95 (0.88-1.03)	1.07 (0.98-1.16)	0.92 (0.85-1.00)
Model 2	0.92 (0.85-1.00)	1.03 (0.95-1.12)	0.89 (0.82-0.97)
Model 3	0.91 (0.85-0.99)	0.98 (0.91-1.07)	0.96 (0.88-1.04)
Model 4	0.91 (0.84-0.98)	0.98 (0.90-1.07)	0.94 (0.86-1.02)
Model 5	0.91 (0.84-0.98)	0.98 (0.91-1.07)	0.96 (0.88-1.04)

	Non-stroke population**		
	ASA (HR, 95%CI)	NSAID (HR, 95%CI)	STATIN (HR, 95%CI)
Crude	1.68 (1.43-1.97)	1.50 (1.29-1.73)	1.14 (0.93-1.40)
Model 1	1.25 (1.07-1.48)	1.29 (1.12-1.50)	1.17 (0.95-1.43)
Model 2	1.05 (0.89-1.25)	1.18 (1.02-1.36)	0.94 (0.76-1.17)
Model 3	1.01 (0.85-1.19)	1.10 (0.95-1.27)	1.02 (0.82-1.27)
Model 4	0.99 (0.84-1.17)	1.08 (0.93-1.25)	1.00 (0.80-1.24)
Model 5	0.99 (0.83-1.17)	1.08 (0.93-1.25)	1.00 (0.80-1.24)

* Based on 128,673 stroke patients of whom 2,656 (2,1%) received an ICD-10 diagnosis of depression within the first year after stroke.

** Based on 160,111 non-stroke individuals of whom 805 (0,5%) received an ICD-10 diagnosis of depression within the first year after study entry.

Individuals receiving antidepressant medication after study entry before either the first month or the first year were not excluded as in the previous analyses leaving more individuals in both the stroke and non-stroke population for analysis.

Levels of adjustments: Model 1 = The basic sociodemographic characteristics (age, gender, education and civil status). Model 2 = Model 1 and somatic comorbidity. Model 3 = Model 2 and psychiatric comorbidity. Model 4 = Model 3 and previous depression. Model 5 = Model 4 and other cardiac medication.

ASA=acetylsalicylic acid. NSAID=non-steroid antiinflammatory drugs. HR=hazard ratio. CI=confidence interval.

Appendix 1 to Wium-Andersen IK, Wium-Andersen MK, Jorgensen M, et al. Anti-inflammatory Treatment and Risk of Depression after First-time Stroke in a Cohort of 147 487 Danish Patients. *J Psychiatry Neurosci* 2017.

DOI: 10.1503/jpn.160244

© Joule Inc., or its licensors

Online appendices are unedited and posted as supplied by the authors.

Supplementary Table 8.
Risk of late onset depression (based on an ICD-10 diagnosis)

	Stroke population*		
	ASA (HR, 95%CI)	NSAID (HR, 95%CI)	STATIN (HR, 95%CI)
Crude	1.21 (1.14-1.29)	1.47 (1.39-1.56)	0.81 (0.77-0.86)
Model 1	1.16 (1.10-1.23)	1.39 (1.31-1.47)	0.83 (0.78-0.88)
Model 2	1.13 (1.07-1.20)	1.29 (1.22-1.37)	0.81 (0.77-0.86)
Model 3	1.14 (1.07-1.20)	1.21 (1.14-1.29)	0.87 (0.82-0.92)
Model 4	1.13 (1.07-1.20)	1.18 (1.11-1.25)	0.85 (0.81-0.91)
Model 5	1.12 (1.06-1.20)	1.18 (1.11-1.25)	0.85 (0.80-0.91)

	Non-stroke population**		
	ASA (HR, 95%CI)	NSAID (HR, 95%CI)	STATIN (HR, 95%CI)
Crude	1.64 (1.53-1.76)	1.82 (1.70-1.94)	0.90 (0.82-0.98)
Model 1	1.16 (1.08-1.24)	1.51 (1.41-1.61)	0.87 (0.80-0.95)
Model 2	1.01 (0.93-1.09)	1.34 (1.26-1.44)	0.73 (0.66-0.81)
Model 3	0.98 (0.91-1.05)	1.23 (1.15-1.32)	0.77 (0.70-0.85)
Model 4	0.97 (0.90-1.04)	1.20 (1.12-1.28)	0.75 (0.68-0.83)
Model 5	0.98 (0.91-1.06)	1.20 (1.12-1.28)	0.75 (0.68-0.83)

* Based on 112,193 stroke patients of whom 5,147 (4,6%) received an ICD-10 diagnosis of depression after the first year after stroke.

** Based on 155,301 non-stroke individuals of whom 3803 (2,4%) received an ICD-10 diagnosis of depression after the first year after study entry.

Individuals receiving antidepressant medication after study entry before either the first month or the first year were not excluded as in the previous analyses leaving more individuals in both the stroke and non-stroke population for analysis.

Levels of adjustments: Model 1 = The basic sociodemographic characteristics (age, gender, education and civil status). Model 2 = Model 1 and somatic comorbidity. Model 3 = Model 2 and psychiatric comorbidity. Model 4 = Model 3 and previous depression. Model 5 = Model 4 and other cardiac medication.

ASA=acetylsalicylic acid. NSAID=non-steroid antiinflammatory drugs. HR=hazard ratio. CI=confidence interval.