

Supplementary material to

**Real-world effectiveness of antidepressants, antipsychotics and their combinations in the maintenance treatment of psychotic depression. Evidence from within-subject analyses of two nationwide cohorts**

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**Supplementary Figure 1A.** Description of study design, exposure periods and time resetting in the within-individual design.

**Supplementary Figure 1B.** Detailed description of exposure coding.

**Supplementary Figure 2.** Correlation of the effectiveness of antidepressant (AD) results (i.e., adjusted Hazard Ratios) in preventing psychiatric hospitalization in patients with psychotic depression between the Finnish and Swedish cohorts.

**Supplementary Figure 3.** Correlation of effectiveness of the antipsychotic results (i.e., adjusted Hazard Ratios) in preventing psychiatric hospitalization in patients with psychotic depression between the Finnish and Swedish cohorts.

**Supplementary Table 1.** Characteristics of Finnish and Swedish cohorts.

**Supplementary Table 2.** Risk of psychiatric hospitalization associated with specific antipsychotics (AP) and specific antidepressants (AD) when the first 30 days were removed from all use periods, in within-individual models of the Finnish and Swedish cohorts, and in meta-analysis (MA).

**Supplementary Table 3.** Risk of psychiatric hospitalization associated with specific antipsychotics (AP) and specific antidepressants (AD), in between-individual models of the Finnish and Swedish cohorts, and in meta-analysis (MA).

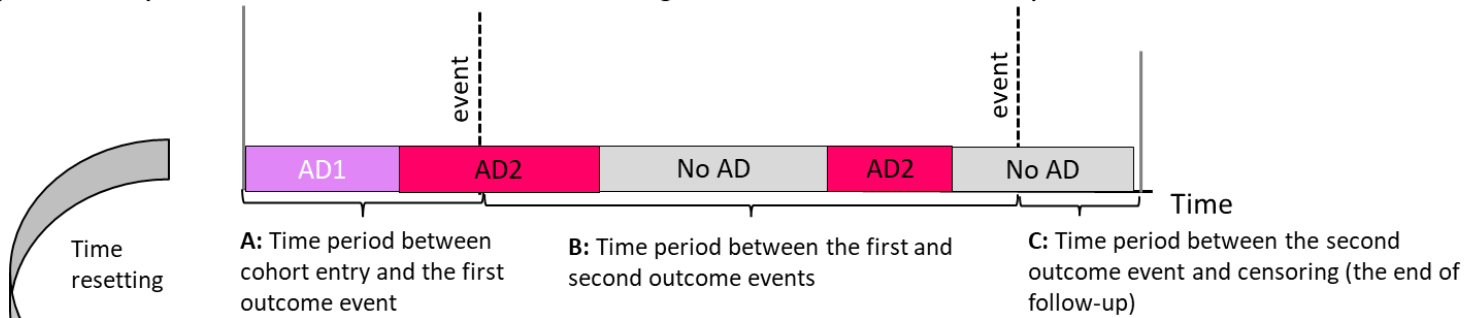
**Supplementary Table 4.** Risk of psychiatric hospitalization associated with specific antidepressants compared with non-use of antidepressants and specific antipsychotics compared with non-use of antipsychotics in fixed effects versus random effects meta-analysis (MA) based on within-individual Cox models of the Finnish and Swedish cohorts.

**Supplementary Table 5.** Risk of psychiatric hospitalization associated with specific antidepressants compared with non-use of antidepressants and specific antipsychotics compared with non-use of antipsychotics among those who do not experience diagnostic conversion to bipolar disorder or schizophrenia during the follow-up, in fixed effects meta-analysis (MA) based on within-individual Cox models of the Finnish and Swedish cohorts.

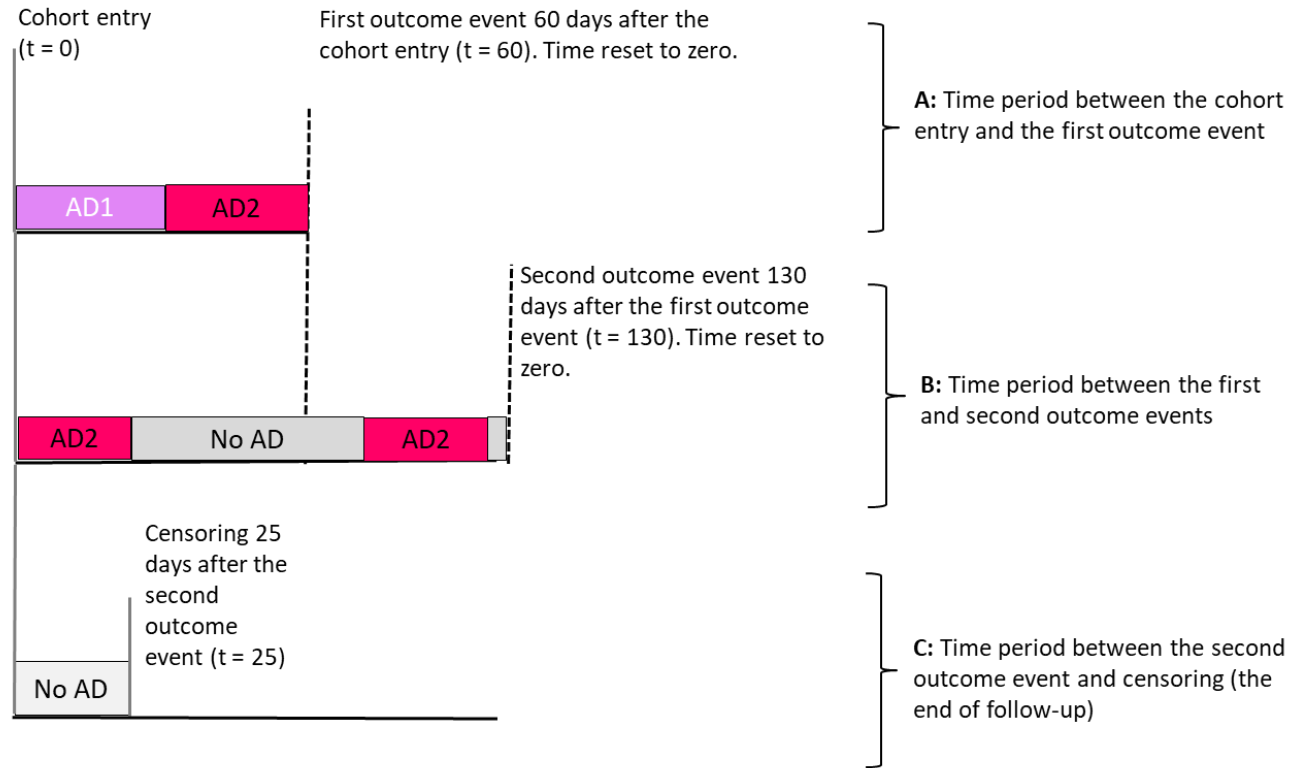
**Supplementary Table 6.** Risk of psychiatric hospitalization associated with two-drug combinations of most common antipsychotics and antidepressants and use of antidepressant only or antipsychotic only, with reference to non-use of both antipsychotics and antidepressants in within-individual design, in the Finnish and Swedish cohorts.

**Supplementary Figure 1A.** Description of study design, exposure periods and time resetting in the within-individual design.

Principles how comparisons are conducted in within-individual design where each individual act as his/her own control

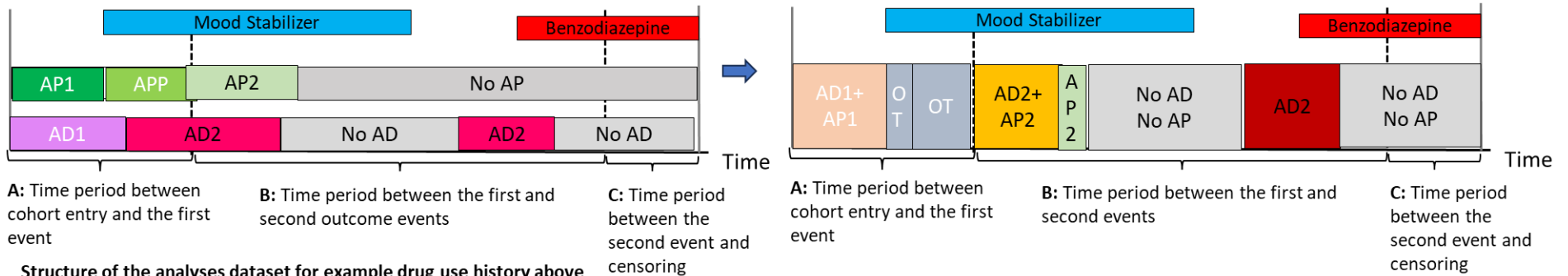


Each individual forms his/her own stratum. Within each stratum, time is reset after each outcome event. Exposure is time-varying use (as different specific drugs, antidepressants AD in this example, AD1 and AD2) vs. non-use of the drug class ("No AD"). Within-individual design is analyzed as stratified Cox model. After resetting, time periods from the same individual are used in comparisons in the same way as different individuals are compared in a traditional Cox model. The method is described in: Paul D Allison: Fixed Effects Regression Models, SAGE Publications, 2009.



**Supplementary Figure 1B.** Detailed description of exposure coding.

Comparisons when analyzing antidepressant (AD), antipsychotic (AP) and antidepressant-antipsychotic pairs.



Structure of the analyses dataset for example drug use history above

row#	ID	start	stop	AD	MS	AP	BE	series	censor	init	end
1	3	1	29	AD1	0	AP1	0	1	0	1	29
2	3	30	60	AD2	1	APP	0	1	1	30	60
3	3	61	92	AD2	1	AP2	0	2	0	1	32
4	3	93	98	NoAD	1	AP2	0	2	0	33	38
5	3	99	130	NoAD	1	NoAP	0	2	0	39	70
6	3	131	140	NoAD	0	NoAP	0	2	0	71	80
7	3	141	169	AD2	0	NoAP	0	2	0	81	109
8	3	169	180	AD2	0	NoAP	1	2	0	109	120
9	3	181	190	NoAD	0	NoAP	1	2	1	121	130
10	3	191	215	NoAD	0	NoAP	1	3	0	1	25

start and stop describe time since cohort entry (start=1) until the end of follow-up (stop=215) as days. These are the basis for between-individual model.

AP=antipsychotic describes time-varying use of two specific antipsychotics (AP1 and AP2), their concomitant use (APP) and non-use of antipsychotics (NoAP).

AD=antidepressant describes time-varying use of two specific antidepressants (AD1 and AD2) and non-use of antidepressants (No AD).

MS (mood stabilizer) and BE (benzodiazepine) describe time-varying use of these medications on drug-class level (1=use, 0=non-use).

series indicates which rows belong to the same series of within-individual model (when series changes time is reset to zero).

censor indicates whether the period ended at outcome event (censor=1) or censoring (censor=0). After censor=1, time is reset and the next row starts with init=1.

init and end assign time variable for within-individual model where time is reset to zero after each outcome event.

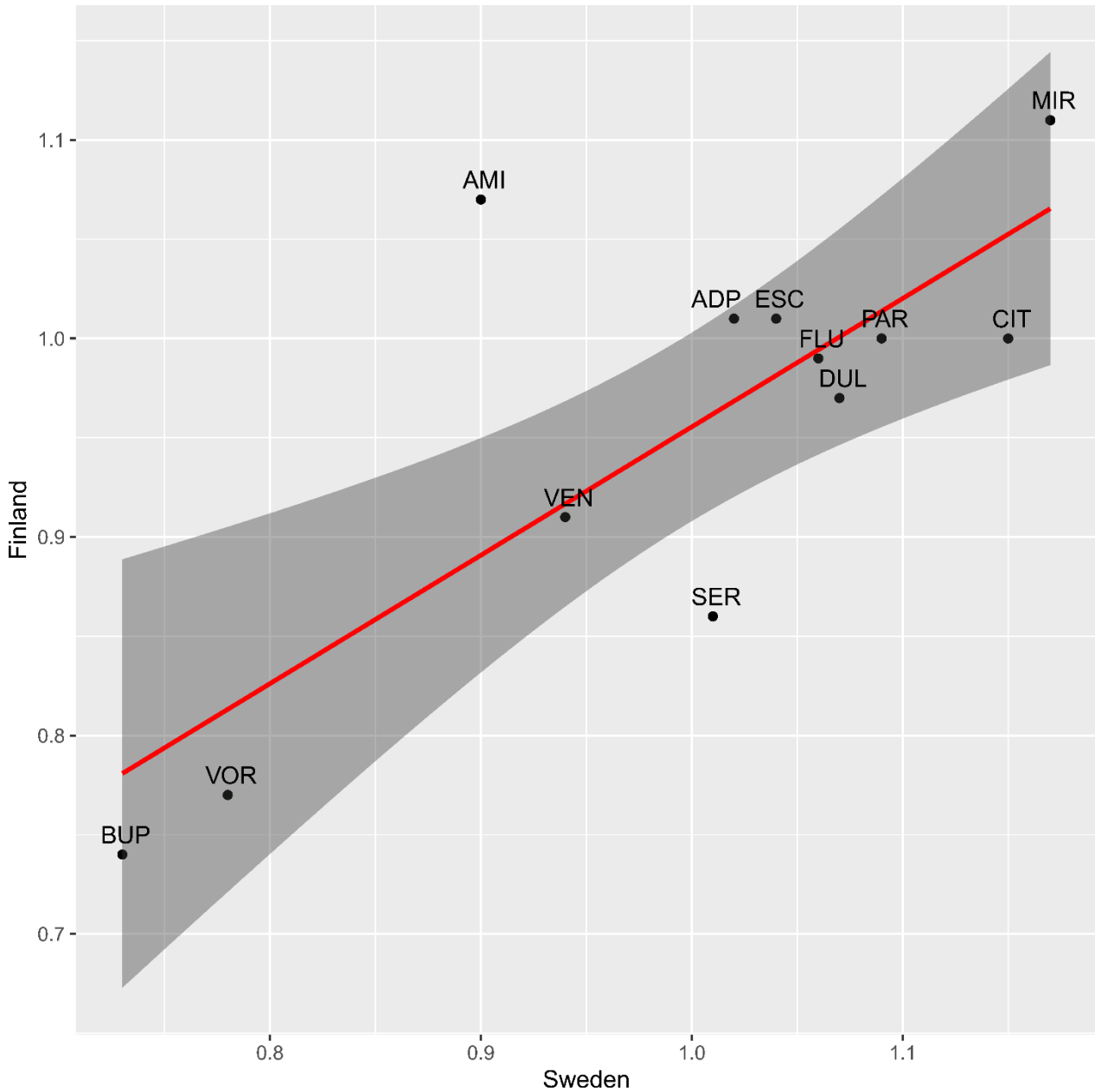
Row changes every time there is a change in exposures (AP, MS, AD or BE) or outcome event happens.

**Antidepressant analyses** compared use periods of AD1 and AD2 with "No AD" as reference, by adjusting for use of AP, MS and BE.

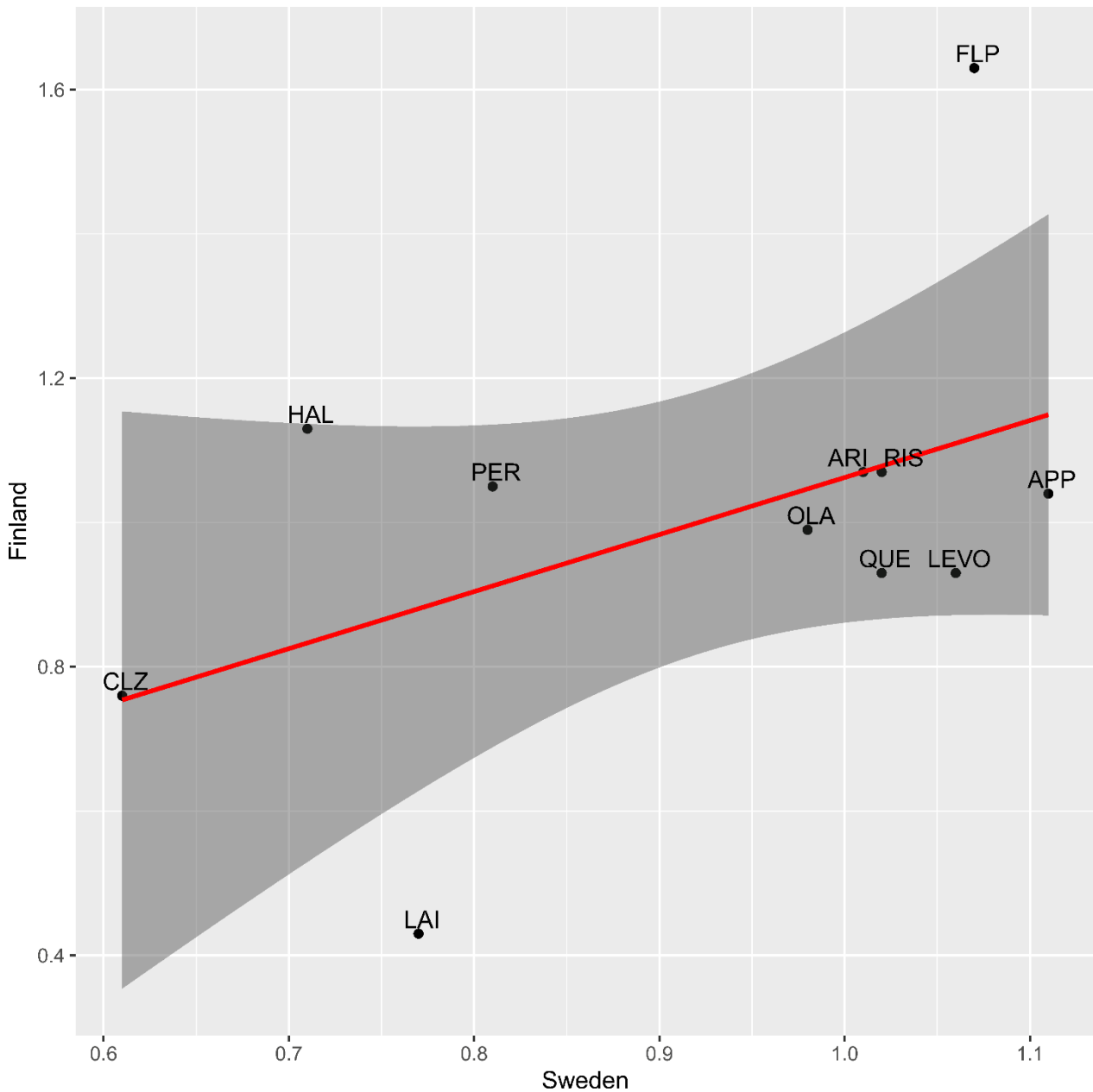
**Antipsychotic analyses** compared use periods of AP1, AP2 and APP with "No AP" Time periods as reference, by adjusting for use of AD, MS and BE.

**Antidepressant-antipsychotic pair analyses** (figure on right) compared use Of antidepressants and antipsychotics with non-use of both (No AD No AP), by adjusting for use of MS and BE. In these analyses, only two-drug pairs were specifically analyzed, in this example AD1+AP1, AD2+AP2, and "monotherapy" of one drug class only (in this example AP2 and AD2). OT refers to periods of more than 1 AD + 1 AP which were all grouped together and not reported.

**Supplementary Figure 2.** Correlation of the effectiveness of antidepressant (AD) results (i.e., adjusted Hazard Ratios) in preventing psychiatric hospitalization in patients with psychotic depression between the Finnish and Swedish cohorts. Pearson's  $r=0.78$ ,  $p=0.01$ ,  $N=12$  antidepressants. The linear regression curve is depicted with a red line and the 95% confidence interval area for the curve is shown in dark grey. The x-axis shows adjusted hazard ratios in Sweden and the y-axis shows adjusted hazard ratios in Finland. AMI=amitriptyline, ADP=antidepressant polytherapy, BUP=bupropion, CIT=citalopram, DUL=duloxetine, ESC=escitalopram, FLU=fluoxetine, MIR=mirtazapine, PAR=paroxetine, SER=sertraline, VEN=venlafaxine, VOR=vortioxetine.



**Supplementary Figure 3.** Correlation of effectiveness of the antipsychotic results (i.e., adjusted Hazard Ratios) in preventing psychiatric hospitalization in patients with psychotic depression between the Finnish and Swedish cohorts. Pearson's  $r=0.46$ ,  $p=0.14$ ,  $N=11$  antipsychotics. The linear regression curve is depicted with a red line and the 95% confidence interval area for the curve is shown in dark grey. The x-axis shows adjusted hazard ratios in Sweden and the y-axis shows adjusted hazard ratios in Finland. APP=antipsychotic polytherapy, ARI=aripiprazole oral, CLZ=clozapine, FLP=flupenthixol oral, HAL=haloperidol oral, LAI=any long-acting injectable antipsychotic, LEVO=levomepromazine, OLA=olanzapine oral, QUE=quetiapine, PER=perphenazine oral, RIS=risperidone oral.



**Supplementary Table 1.** Characteristics of Finnish and Swedish cohorts.

	<b>Finnish cohort</b>	<b>Swedish cohort</b>
	N=19330	N=13684
Mean age (SD)	39.8 (14.7)	41.3 (14.0)
Sex, % (N)		
Women	57.9 (11194)	53.5 (7325)
Men	42.1 (8136)	46.5 (6359)
Year of cohort entry, % (N)		
2000-2005	30.2 (5844)	NA
2006-2010	29.2 (5642)	31.7 (4336)
2011-2015	26.0 (5026)	33.3 (4559)
2016-*	14.6 (2818)	35.0 (4789)
Register source where patients were identified for the cohort		
Inpatient care register	36.6 (7277)	32.7 (4473)
Specialized outpatient register	47.8 (9237)	54.8 (4473)
Sick leave/ disability pension	14.6 (2816)	12.6 (1717)

\*The Finnish cohort until 2018 and the Swedish cohort until 2021.

**Supplementary Table 2.** Risk of psychiatric hospitalization associated with specific antipsychotics (AP) and specific antidepressants (AD) when the first 30 days were removed from all use periods, in within-individual models of the Finnish and Swedish cohorts, and in meta-analysis (MA). Adjusted Hazard Ratios (aHRs) with 95% Confidence Intervals (CIs). LAI= long-acting injectable antipsychotic.

	<b>Finnish cohort</b>	<b>Swedish cohort</b>	<b>Fixed effects MA</b>
<b><i>Antipsychotics</i></b>	aHR (95%CI)	aHR (95%CI)	aHR (95%CI)
LAI	0.48 (0.29-0.77)	0.70 (0.44-1.10)	0.58 (0.42-0.81)
Clozapine	0.82 (0.60-1.11)	0.59 (0.35-0.99)	0.75 (0.58-0.98)
Haloperidol	1.30 (0.88-1.93)	0.78 (0.57-1.08)	0.96 (0.75-1.23)
Quetiapine	1.02 (0.95-1.09)	1.05 (0.95-1.16)	1.03 (0.97-1.09)
Levomepromazine	1.03 (0.88-1.20)	1.15 (0.95-1.40)	1.08 (0.95-1.22)
Aripiprazole	1.26 (1.07-1.47)	1.05 (0.90-1.23)	1.14 (1.02-1.28)
Olanzapine	1.21 (1.10-1.34)	1.12 (1.02-1.24)	1.17 (1.09-1.25)
Perphenazine	1.19 (1.00-1.42)	1.11 (0.65-1.90)	1.18 (1.00-1.40)
AP polytherapy	1.20 (1.11-1.30)	1.23 (1.12-1.36)	1.21 (1.14-1.29)
Risperidone	1.25 (1.12-1.38)	1.16 (0.99-1.35)	1.22 (1.12-1.33)
Flupentixol	1.35 (0.86-2.11)	1.18 (0.84-1.65)	1.24 (0.94-1.62)
<b><i>Antidepressants</i></b>			
Bupropion	0.73 (0.55-0.96)	0.72 (0.57-0.91)	0.72 (0.60-0.87)
Vortioxetine	0.96 (0.66-1.40)	0.80 (0.58-1.12)	0.87 (0.68-1.11)
Sertraline	1.00 (0.87-1.14)	1.09 (0.96-1.23)	1.05 (0.95-1.14)
Venlafaxine	1.07 (0.98-1.16)	1.08 (0.96-1.22)	1.07 (1.00-1.15)
Escitalopram	1.12 (1.00-1.26)	1.10 (0.96-1.26)	1.11 (1.02-1.21)
Citalopram	1.16 (1.03-1.31)	1.16 (0.93-1.45)	1.16 (1.04-1.29)
Duloxetine	1.12 (0.96-1.32)	1.19 (1.03-1.38)	1.16 (1.04-1.29)
AD polytherapy	1.22 (1.13-1.32)	1.08 (0.99-1.18)	1.16 (1.09-1.23)
Amitriptyline	1.31 (1.03-1.67)	1.03 (0.78-1.35)	1.18 (0.98-1.41)
Fluoxetine	1.14 (0.98-1.34)	1.24 (1.07-1.44)	1.19 (1.07-1.33)
Paroxetine	1.13 (0.93-1.37)	1.40 (1.07-1.83)	1.22 (1.04-1.42)
Mirtazapine	1.28 (1.16-1.42)	1.27 (1.12-1.43)	1.28 (1.18-1.38)
	1.23 (1.17-1.29)	1.26 (1.19-1.35)	1.24 (1.20-1.29)
<b>Benzodiazepines and related drugs</b>			
<b><i>Mood stabilizers</i></b>			
Carbamazepine	0.75 (0.53-1.06)	0.93 (0.70-1.24)	0.85 (0.69-1.06)
Lithium	0.86 (0.73-1.00)	0.85 (0.74-0.99)	0.86 (0.77-0.95)
Lamotrigine	0.75 (0.66-0.86)	0.97 (0.86-1.10)	0.86 (0.79-0.94)
Valproic acid	0.89 (0.79-1.00)	0.99 (0.79-1.24)	0.91 (0.82-1.01)
MS polytherapy	1.09 (0.84-1.42)	1.06 (0.83-1.35)	1.07 (0.90-1.28)

**Supplementary Table 3.** Risk of psychiatric hospitalization associated with specific antipsychotics (AP) and specific antidepressants (AD), in between-individual models of the Finnish and Swedish cohorts, and in meta-analysis (MA). Adjusted Hazard Ratios (aHRs) with 95% Confidence Intervals (CIs). LAI= long-acting injectable antipsychotic.

	<b>Finnish cohort</b>	<b>Swedish cohort</b>	<b>Fixed effects MA</b>
<b>Antipsychotics</b>	aHR (95%CI)	aHR (95%CI)	aHR (95%CI)
Any LAI	0.96 (0.70-1.32)	0.72 (0.52-1.00)	0.84 (0.67-1.05)
Perphenazine	1.08 (1.95-1.23)	1.13 (0.78-1.64)	1.08 (0.96-1.23)
Risperidone	1.18 (1.10-1.27)	1.02 (0.91-1.15)	1.13 (1.07-1.20)
Quetiapine	1.13 (1.08-1.19)	1.12 (1.04-1.20)	1.13 (1.08-1.18)
Haloperidol	1.48 (1.15-1.90)	1.01 (0.83-1.23)	1.17 (1.00-1.36)
Olanzapine	1.27 (1.18-1.36)	1.11 (1.03-1.19)	1.18 (1.12-1.24)
Aripiprazole	1.48 (1.31-1.67)	1.03 (0.93-1.15)	1.21 (1.12-1.31)
Clozapine	1.27 (1.00-1.60)	1.11 (0.75-1.63)	1.22 (1.00-1.49)
Flupentixol	1.74 (1.24-2.46)	1.14 (0.92-1.41)	1.28 (1.07-1.54)
Levomepromazine	1.33 (1.20-1.48)	1.23 (1.02-1.49)	1.31 (1.20-1.43)
AP Polytherapy	1.47 (1.38-1.56)	1.32 (1.22-1.42)	1.41 (1.34-1.47)
<b>Antidepressants</b>			
Bupropion	0.83 (0.69-1.01)	0.82 (0.71-0.96)	0.83 (0.74-0.93)
Sertraline	0.88 (0.81-0.96)	0.92 (0.84-1.00)	0.90 (0.85-0.95)
Vortioxetine	0.88 (0.73-1.08)	0.95 (0.79-1.14)	0.92 (0.80-1.05)
Citalopram	0.93 (0.86-1.01)	0.91 (0.81-1.03)	0.92 (0.87-0.99)
Escitalopram	0.98 (0.91-1.06)	0.96 (0.88-1.05)	0.97 (0.92-1.03)
Paroxetine	1.00 (1.89-1.12)	1.01 (0.82-1.25)	1.00 (0.90-1.11)
Fluoxetine	0.99 (1.90-1.10)	1.04 (0.92-1.17)	1.01 (0.94-1.09)
Duloxetine	1.08 (1.95-1.23)	1.00 (0.90-1.11)	1.03 (0.95-1.12)
Venlafaxine	1.05 (0.99-1.11)	0.99 (0.91-1.08)	1.03 (0.98-1.08)
AD polytherapy	1.18 (1.12-1.24)	1.09 (1.02-1.15)	1.14 (1.10-1.19)
Amitriptyline	1.18 (1.99-1.40)	1.07 (0.81-1.41)	1.15 (0.99-1.33)
Mirtazapine	1.17 (1.10-1.25)	1.14 (1.06-1.24)	1.16 (1.10-1.22)

Analyses adjusted for age, sex, duration of first inpatient stay with diagnosis of psychotic depression (0 days for outpatients), whether person had previous non-psychotic depression, anxiety disorders (ICD-10 F40-F43), personality disorders (F60-F69), ADHD (F90), substance use disorders (F10-F19 or use of ATC N07B), suicide attempt (X60-X84, Y10-Y34), diabetes (E10-E14 or use of ATC A10), asthma/COPD (J44-J46), cancer (C00-C99), cardiovascular disease (I00-I99), main occupational activity during previous year before baseline (work vs. disability pension vs. sickness absence vs. unemployment vs. other), and prior use of clozapine, LAI, lithium or other mood stabilizers.



**Supplementary Table 4.** Risk of psychiatric hospitalization associated with specific antidepressants compared with non-use of antidepressants and specific antipsychotics compared with non-use of antipsychotics in fixed effects versus random effects meta-analysis (MA) based on within-individual Cox models of the Finnish and Swedish cohorts. LAI: any long-acting injectable antipsychotic.

	<b>Fixed Effects MA aHR (95%CI)</b>	<b>Random Effects MA aHR (95%CI)</b>
<b><i>Antidepressants</i></b>		
Bupropion	0.73 (0.63-0.85)	0.73 (0.63-0.85)
Vortioxetine	0.78 (0.63-0.96)	0.78 (0.63-0.96)
Venlafaxine	0.92 (0.86-0.98)	0.92 (0.86-0.98)
Sertraline	0.94 (0.87-1.02)	0.94 (0.80-1.10)
Amitriptyline	1.00 (0.85-1.17)	1.00 (0.85-1.18)
AD polytherapy	1.01 (0.96-1.06)	1.01 (0.96-1.06)
Duloxetine	1.02 (0.93-1.12)	1.02 (0.93-1.12)
Fluoxetine	1.02 (0.93-1.13)	1.02 (0.93-1.13)
Escitalopram	1.02 (0.94-1.10)	1.02 (0.94-1.10)
Paroxetine	1.03 (0.89-1.18)	1.03 (0.89-1.18)
Citalopram	1.04 (0.95-1.14)	1.05 (0.92-1.20)
Mirtazapine	1.13 (1.06-1.21)	1.13 (1.06-1.21)
<b><i>Antipsychotics</i></b>		
LAI	0.60 (0.45-0.80)	0.58 (0.33-1.02)
Clozapine	0.72 (0.57-0.91)	0.72 (0.57-0.91)
Haloperidol	0.84 (0.69-1.04)	0.88 (0.56-1.40)
Quetiapine	0.96 (0.91-1.01)	0.97 (0.89-1.05)
Levomepromazine	0.98 (0.88-1.09)	0.98 (0.87-1.12)
Olanzapine	0.99 (0.93-1.05)	0.99 (0.93-1.05)
Perphenazine	1.03 (0.88-1.20)	1.02 (0.87-1.20)
Rare AP	1.04 (0.92-1.17)	1.01 (0.81-1.25)
Aripiprazole	1.04 (0.94-1.14)	1.04 (0.94-1.14)
Risperidone	1.05 (0.97-1.13)	1.05 (0.97-1.13)
AP polytherapy	1.07 (1.01-1.13)	1.07 (1.01-1.14)
Flupentixol	1.27 (1.00-1.61)	1.30 (0.86-1.96)

**Supplementary Table 5.** Risk of psychiatric hospitalization associated with specific antidepressants compared with non-use of antidepressants and specific antipsychotics compared with non-use of antipsychotics among those who do not experience diagnostic conversion to bipolar disorder or schizophrenia during the follow-up, in fixed effects meta-analysis (MA) based on within-individual Cox models of the Finnish and Swedish cohorts. LAI: any long-acting injectable antipsychotic.

Exposure	Fixed Effects MA aHR (95%CI)
<b><i>Antidepressants</i></b>	
Vortioxetine	0.77 (0.62-0.96)
Bupropion	0.77 (0.66-0.90)
Sertraline	0.92 (0.84-1.01)
Venlafaxine	0.92 (0.86-0.99)
Amitriptyline	0.98 (0.81-1.17)
Paroxetine	0.98 (0.82-1.16)
AD polytherapy	1.01 (0.95-1.07)
Fluoxetine	1.05 (0.94-1.17)
Citalopram	1.06 (0.95-1.18)
Escitalopram	1.06 (0.97-1.16)
Duloxetine	1.09 (0.97-1.21)
Mirtazapine	1.16 (1.08-1.25)
<b><i>Antipsychotics</i></b>	
LAI	0.66 (0.47-0.92)
Clozapine	0.66 (0.49-0.87)
Haloperidol	0.79 (0.61-1.01)
Perphenazine	0.92 (0.77-1.11)
Quetiapine	0.98 (0.92-1.05)
Levomepromazine	0.99 (0.87-1.12)
Rare AP	1.00 (0.87-1.16)
Olanzapine	1.02 (0.95-1.09)
Risperidone	1.08 (0.99-1.18)
Aripiprazole	1.09 (0.98-1.22)
AP polytherapy	1.10 (1.03-1.17)
Flupentixol	1.17 (0.90-1.53)

**Supplementary Table 6.** Risk of psychiatric hospitalization associated with two-drug combinations of most common antipsychotics and antidepressants and use of antidepressant only or antipsychotic only, with reference to non-use of both antipsychotics and antidepressants in within-individual design, in the Finnish and Swedish cohorts. Adjusted Hazard Ratios (aHRs) with 95% Confidence Intervals (CIs). LAI= long-acting injectable antipsychotic. PY: person-years.

	Finnish cohort				Swedish cohort			
	Events	Users	PYs	aHR (95%CI)	Events	Users	PYs	aHR (95%CI)
Non-use of both	5045	14272	53351	reference	4811	10765	38121	reference
<i>Antipsychotic-antidepressant combinations</i>								
Amitriptyline-Olanzapine	7	45	59	0.28 (0.11-0.70)	27	76	41	0.53 (0.31-0.90)
Amitriptyline-Quetiapine	21	133	82	1.06 (0.58-1.93)	24	71	47	0.97 (0.53-1.79)
Amitriptyline-Risperidone	12	50	48	1.73 (0.71-4.21)	24	33	32	1.43 (0.75-2.71)
Fluoxetine-Levomepromazine	10	39	18	0.82 (0.36-1.87)	14	40	16	0.73 (0.37-1.43)
Fluoxetine-Olanzapine	50	204	130	1.10 (0.72-1.67)	54	257	206	1.23 (0.81-1.87)
Fluoxetine-Quetiapine	185	513	434	0.98 (0.78-1.23)	41	203	126	0.70 (0.46-1.06)
Fluoxetine-Risperidone	51	198	127	1.39 (0.89-2.18)	18	102	57	0.96 (0.49-1.88)
Fluoxetine-Aripiprazole	12	47	22	0.99 (0.44-2.23)	55	125	69	1.22 (0.84-1.79)
Citalopram-Levomepromazine	37	88	109	0.80 (0.53-1.21)	9	27	6	2.10 (0.70-6.35)
Citalopram-Perphenazine	40	176	140	1.05 (0.64-1.71)	5	12	15	1.39 (0.29-6.72)
Citalopram-Olanzapine	99	385	414	0.86 (0.62-1.19)	55	271	214	0.83 (0.53-1.31)
Citalopram-Quetiapine	248	947	1379	0.80 (0.65-0.97)	31	155	84	1.49 (0.85-2.63)
Citalopram-Risperidone	111	491	480	1.05 (0.78-1.43)	23	144	84	0.86 (0.46-1.63)
Paroxetine-Levomepromazine	15	39	20	0.57 (0.24-1.34)	10	19	5	1.44 (0.63-3.29)
Paroxetine-Olanzapine	47	114	79	0.96 (0.64-1.42)	19	79	75	1.23 (0.57-2.66)
Paroxetine-Quetiapine	77	242	319	0.85 (0.59-1.23)	16	65	79	0.83 (0.39-1.79)
Paroxetine-Risperidone	40	150	121	1.41 (0.85-2.33)	14	29	28	0.78 (0.35-1.75)
Sertraline-Levomepromazine	18	58	45	1.22 (0.65-2.27)	38	72	35	1.30 (0.75-2.27)
Sertraline-Perphenazine	18	111	154	0.85 (0.44-1.64)	5	21	11	0.69 (0.21-2.31)
Sertraline-Flupentixol	4	10	4	1.11 (0.31-4.00)	21	48	40	1.16 (0.54-2.49)
Sertraline-Olanzapine	83	362	372	0.84 (0.60-1.18)	188	834	623	1.14 (0.91-1.44)
Sertraline-Quetiapine	217	829	944	0.74 (0.60-0.91)	117	426	313	0.89 (0.68-1.18)

Sertraline- Risperidone	68	387	388	0.93 (0.63-1.37)	66	309	276	1.12 (0.77-1.64)
Sertraline- Aripiprazole	25	110	78	1.28 (0.71-2.32)	67	277	228	0.93 (0.67-1.29)
Escitalopram- Levomepromazine	17	58	28	0.96 (0.46-2.01)	4	38	27	0.40 (0.11-1.40)
Escitalopram- Perphenazine	27	118	102	1.17 (0.68-1.99)	3	12	6	0.98 (0.24-4.10)
Escitalopram- Olanzapine	141	595	456	0.94 (0.71-1.24)	123	558	375	0.82 (0.62-1.09)
Escitalopram- Quetiapine	454	1502	1399	1.03 (0.88-1.20)	104	377	322	1.16 (0.87-1.53)
Escitalopram- Risperidone	80	411	321	0.93 (0.66-1.32)	37	196	125	0.92 (0.57-1.46)
Escitalopram- Aripiprazole	28	140	97	1.03 (0.63-1.70)	36	189	131	0.88 (0.57-1.36)
Mirtazapine- Levomepromazine	38	136	96	0.98 (0.64-1.50)	12	111	55	0.66 (0.31-1.43)
Mirtazapine- Perphenazine	45	186	145	1.03 (0.63-1.68)	5	13	8	1.24 (0.33-4.67)
Mirtazapine- Olanzapine	168	704	595	0.88 (0.70-1.10)	241	898	557	1.20 (0.97-1.49)
Mirtazapine- Quetiapine	298	1241	1042	1.03 (0.86-1.23)	113	407	239	1.25 (0.96-1.63)
Mirtazapine- Risperidone	260	898	865	1.07 (0.88-1.30)	60	349	194	0.87 (0.59-1.27)
Mirtazapine- Aripiprazole	32	91	62	2.70 (1.52-4.80)	20	151	81	0.81 (0.45-1.48)
Bupropion- Olanzapine	11	108	81	0.42 (0.19-0.93)	24	116	68	0.83 (0.44-1.55)
Bupropion- Quetiapine	60	418	277	0.83 (0.56-1.22)	36	171	82	1.11 (0.66-1.85)
Venlafaxine- Levomepromazine	47	169	147	0.78 (0.53-1.16)	15	82	39	1.71 (0.83-3.52)
Venlafaxine- Perphenazine	38	191	206	0.98 (0.58-1.67)	5	18	10	0.72 (0.16-3.26)
Venlafaxine- Clozapine	19	28	35	0.59 (0.35-1.02)	2	6	8	0.60 (0.10-3.63)
Venlafaxine- Olanzapine	374	926	1136	0.78 (0.66-0.93)	200	694	529	1.05 (0.84-1.31)
Venlafaxine- Quetiapine	825	2010	2895	0.79 (0.70-0.90)	181	431	472	0.90 (0.73-1.12)
Venlafaxine- Risperidone	312	811	1021	1.12 (0.92-1.35)	97	270	223	1.14 (0.77-1.67)
Venlafaxine- Aripiprazole	82	252	243	0.97 (0.70-1.36)	39	217	167	0.76 (0.49-1.17)
Duloxetine- Levomepromazine	2	26	15	0.55 (0.12-2.58)	26	72	47	1.72 (0.95-3.09)
Duloxetine- Perphenazine	25	44	57	1.33 (0.73-2.43)	1	6	2	2.02 (0.13-32.59)
Duloxetine- Olanzapine	69	172	154	1.33 (0.93-1.92)	65	280	165	0.92 (0.65-1.29)
Duloxetine- Quetiapine	199	572	679	0.80 (0.64-0.99)	76	269	255	1.11 (0.80-1.53)
Duloxetine- Risperidone	15	95	103	1.17 (0.54-2.52)	28	120	64	1.79 (1.04-3.09)

Duloxetine-Aripiprazole	16	53	30	1.20 (0.61-2.37)	43	124	105	0.92 (0.61-1.39)
Vortioxetine-Olanzapine	11	65	24	0.82 (0.33-2.06)	11	50	27	0.95 (0.43-2.06)
Vortioxetine-Quetiapine	23	196	82	1.42 (0.73-2.77)	14	81	50	1.16 (0.56-2.42)
<i>Antidepressant only (without concomitant antipsychotic)</i>								
Vortioxetine	24	400	154	0.52 (0.28-1.00)	56	372	300	0.75 (0.49-1.14)
Bupropion	53	787	532	0.66 (0.43-1.02)	98	817	615	0.73 (0.56-0.95)
Duloxetine	123	1019	1008	0.89 (0.67-1.17)	278	1260	1546	0.90 (0.74-1.10)
Sertraline	255	1738	2088	0.81 (0.66-1.00)	646	3032	3796	0.95 (0.83-1.09)
Fluoxetine	170	1222	1310	0.86 (0.67-1.09)	384	1124	1389	0.98 (0.83-1.16)
Venlafaxine	644	3505	4981	0.99 (0.87-1.13)	566	2175	3389	0.90 (0.78-1.05)
Paroxetine	158	741	1016	0.96 (0.74-1.26)	94	320	437	1.10 (0.79-1.52)
Escitalopram	427	2871	2885	0.94 (0.80-1.10)	440	1980	2265	1.11 (0.95-1.30)
Amitriptyline	110	614	612	1.29 (0.94-1.76)	59	653	558	0.73 (0.49-1.07)
Citalopram	481	2459	3224	1.07 (0.91-1.25)	248	1325	1616	1.27 (1.01-1.59)
Mirtazapine	706	3873	3142	1.16 (1.02-1.32)	640	3086	2455	1.18 (1.04-1.35)
<i>Antipsychotic only (without concomitant antidepressant)</i>								
LAI	19	58	54	0.52 (0.27-1.00)	13	34	21	1.03 (0.51-2.07)
Clozapine	10	47	29	0.56 (0.27-1.14)	12	12	10	1.12 (0.50-2.51)
Haloperidol	15	82	25	1.41 (0.68-2.95)	12	129	35	0.52 (0.26-1.04)
Risperidone	165	1212	675	1.10 (0.87-1.40)	48	593	283	0.61 (0.40-0.91)
Quetiapine	774	3922	3555	0.89 (0.79-1.00)	269	1175	702	1.11 (0.93-1.32)
Levomepromazine	89	300	276	0.97 (0.72-1.30)	55	258	140	0.97 (0.68-1.38)
Perphenazine	48	405	189	1.10 (0.71-1.68)	4	36	15	0.90 (0.18-4.42)
Olanzapine	209	1306	857	1.28 (1.04-1.57)	171	1401	663	0.97 (0.78-1.21)
Aripiprazole	57	372	183	1.10 (0.77-1.58)	74	471	204	1.20 (0.86-1.68)
Flupentixol	10	51	24	3.38 (1.12-10.18)	15	121	75	0.88 (0.41-1.89)