# The prescription patterns of Selective Serotonin (Norepinephrine) Reuptake Inhibitors in Germany

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## Introduction

- Depression is common health issue in Germany, with an overall prevalence of 8.1 patients per 100 persons (1)
- The most commonly prescribed pharmaceutical treatment prescribed in Europe are the selective serotonin (norepinephrine) reuptake inhibitors (ss(n)ri) (2, 3).
- The German health system accepts treatment of depression by both general practitioners (GP) and Neurologists/psychiatrists (NP) (4).
- It unknown how much GPs are involved in the treatment of depression in Germany and if patients receive treatment from both specialties.

# **Objectives**

• The aim of the study was to investigate the prescription (Rx) patterns of Selective Serotonin (Norepinephrine) Reuptake Inhibitors (SS(N)RI) in patients treated by GPs and NPs.

# **Methods**

## Data source

- The IMS® LRx database served to identify eligible patients (5)
- Contains around 60% of prescriptions reimbursed by statutory health insurance funds
- Reflects the actual dispensation of drugs
- Full product information and prescription information are available

#### Study population

Inclusion	Exclusion		
✓ initial Rx of ss(n)ri in 2016 prescribed by a GP or a NP	x Age at index below 18 years		
✓ At least 12 months of pre-index data	x Initial treatment with Milnacipram		
√ 12 months of follow-up data available			

## **Statistical analyses**

- The primary outcome was the proportion of patients that received Rx from both a GP and a NP
- Cox regression model evaluating age, gender, substance, type of physician and previous prescription of other antidepressants
- Kaplan-Meier plots were created to visualize the associations

## **Results**

- The majority of patients received the first Rx from a GP (58.6%). There were slight differences in the baseline characteristics of the two patient cohorts (tabel1)
- Over one third of patients (36.1%) of patients initially treated by a GP and 30% of patients initially treated by a NP, received only 1 Rx.
- Of the patients who received at least two prescriptions, 26.3% switched prescriber during follow-up (24.5% of patients initially treated by a GP and 28.4% of patients initially treated by a NP.
- Switching prescriber was more likely if a patient received the initial prescription by a NP, if patients are younger at index and for those who received previous prescriptions for AD. The likelihood was also higher for patients starting on Sertraline and Venlafaxine

### References

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Table 1. Baseline characteristics by initial prescriber

	GP	NP
Age; mean (SD)	57.2 (18.6)	52.6 (17.0)
Female patients	67.8%	64.6%
Initial therapy		
Citalopram	47.8%	24.7%
Duloxetine	7.9%	11.5%
Escitalopram	17.5%	21.7%
Fluoxetine	3.8%	6.4%
Fluvoxamine	0.1%	0.2%
Paroxetine	3.6%	4.4%
Setraline	9.2%	17.9%
Venlafaxine	10.2%	13.3%
Previous prescription of antidepressants	26.0%	39.8%

Figure 1. Kaplan-Meier plot – Patients without switch by age category

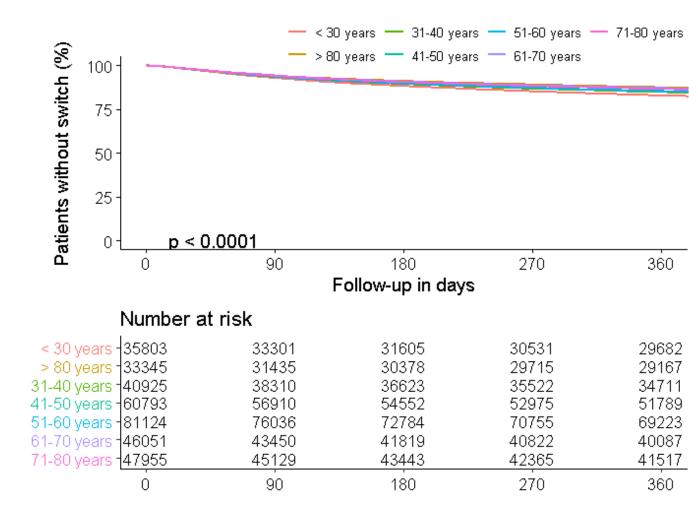


Figure 2. Kaplan-Meier plot – Patients without switch by previous prescription of ADs

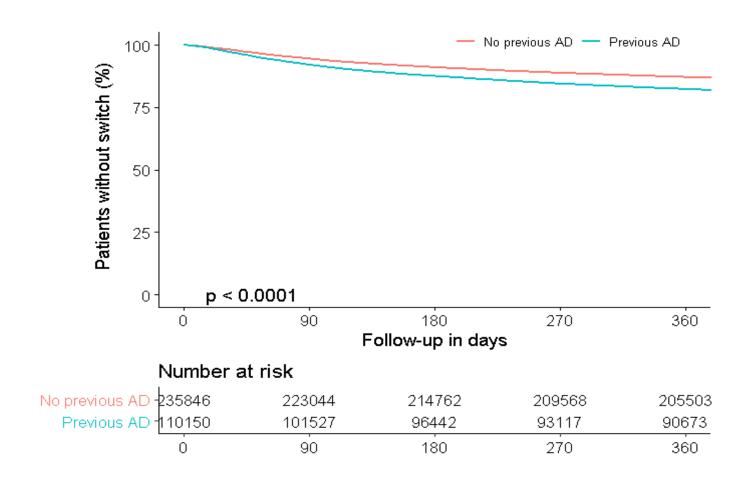
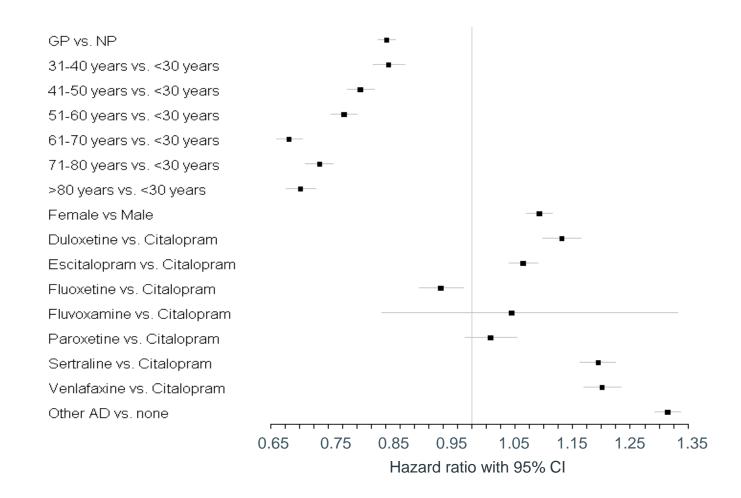


Figure 3. Forest plot of the multivariable Cox analyses on risk of switching prescriber



## **Conclusions**

- The majority of the patients (60%) received their initial ss(n)ri from a GP indicating that the GP plays an important role in the treatment of depression in Germany.
- Future studies should therefore also focus on the role of GPs in the treatment of depression.