

# Non-adherence to Direct Oral Anticoagulants among new users and old users in patients with atrial fibrillation in French clinical practice

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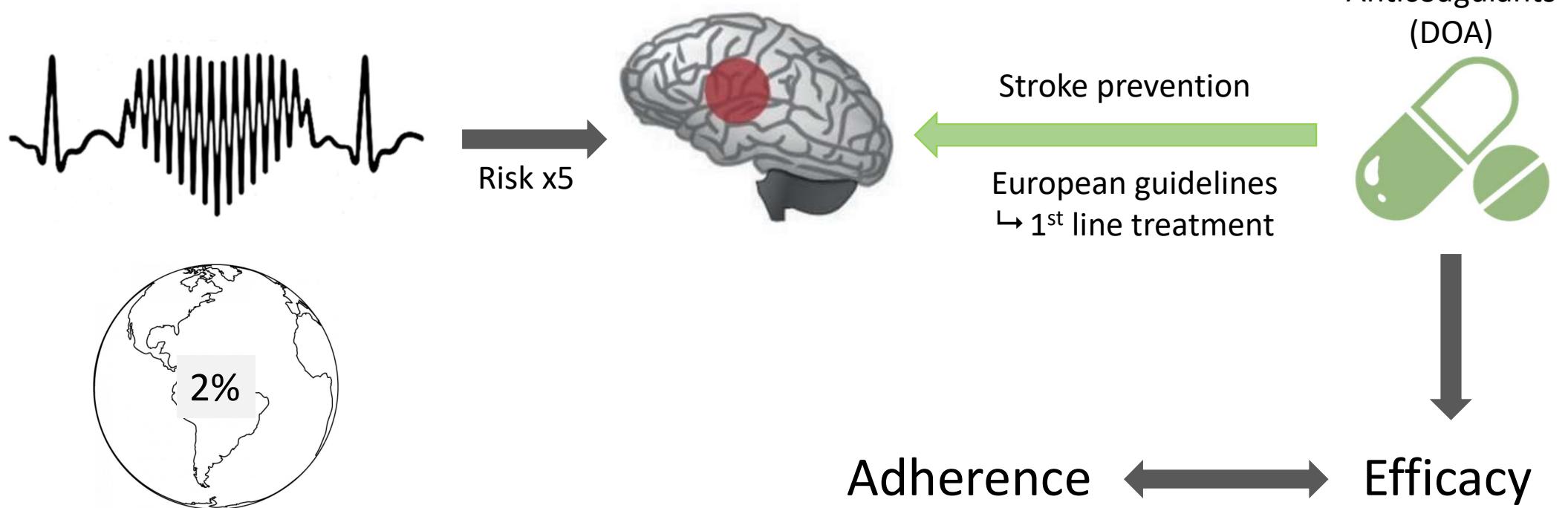
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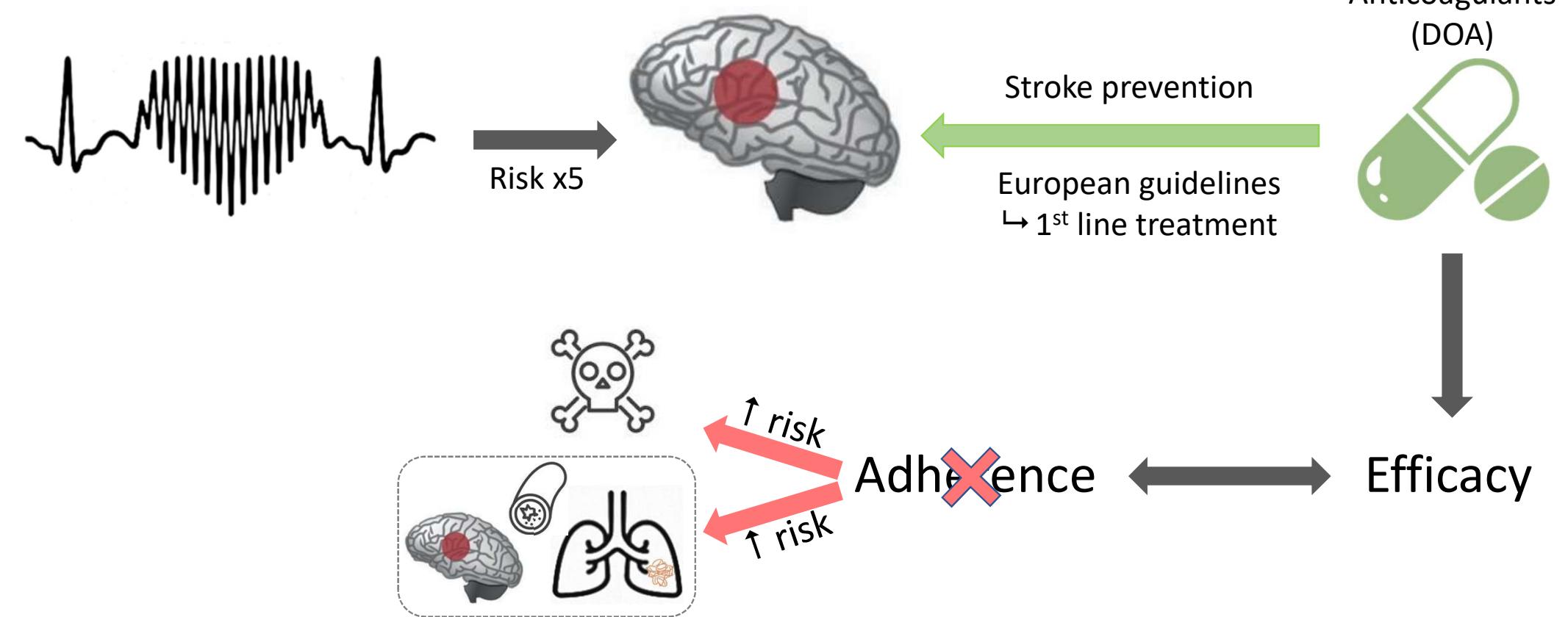
# Disclosures

- This work was funded by the UCLouvain university, Brussels, Belgium
- All authors have no relationships to disclose

# Background



# Background



# What is known ?

PDC <80%

Threshold used  
for non-adherence



Population



New users

Category of DOA users

PDC: Proportions of Days Covered ; DOA: Direct Oral Anticoagulants

Salmasi, *BMJ Open*, 2020 ; Maura, *Pharmacoepidemiol Drug Saf.*, 2017

# What is known ?

France

PDC <80%



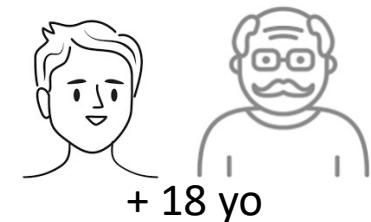
Threshold used  
for non-adherence

Population

Category of DOA users

# What is new ?

PDC <80%  
PDC <90%



PDC: Proportions of Days Covered ; DOA: Direct Oral Anticoagulants

Kim, EP Europace, 2020 ; Komen, Eur Heart J Cardiovasc Pharmacother., 2021

# Objectives

In AF patients (+18yo):

- Estimate the non-adherence
  - ↳ Among new users and old users
  - ↳ At 2 thresholds: <80% & <90%
  - ↳ At 6 months & 1 year
- Identify factors associated with non-adherence

# Data sources



Anonymized electronic medical records

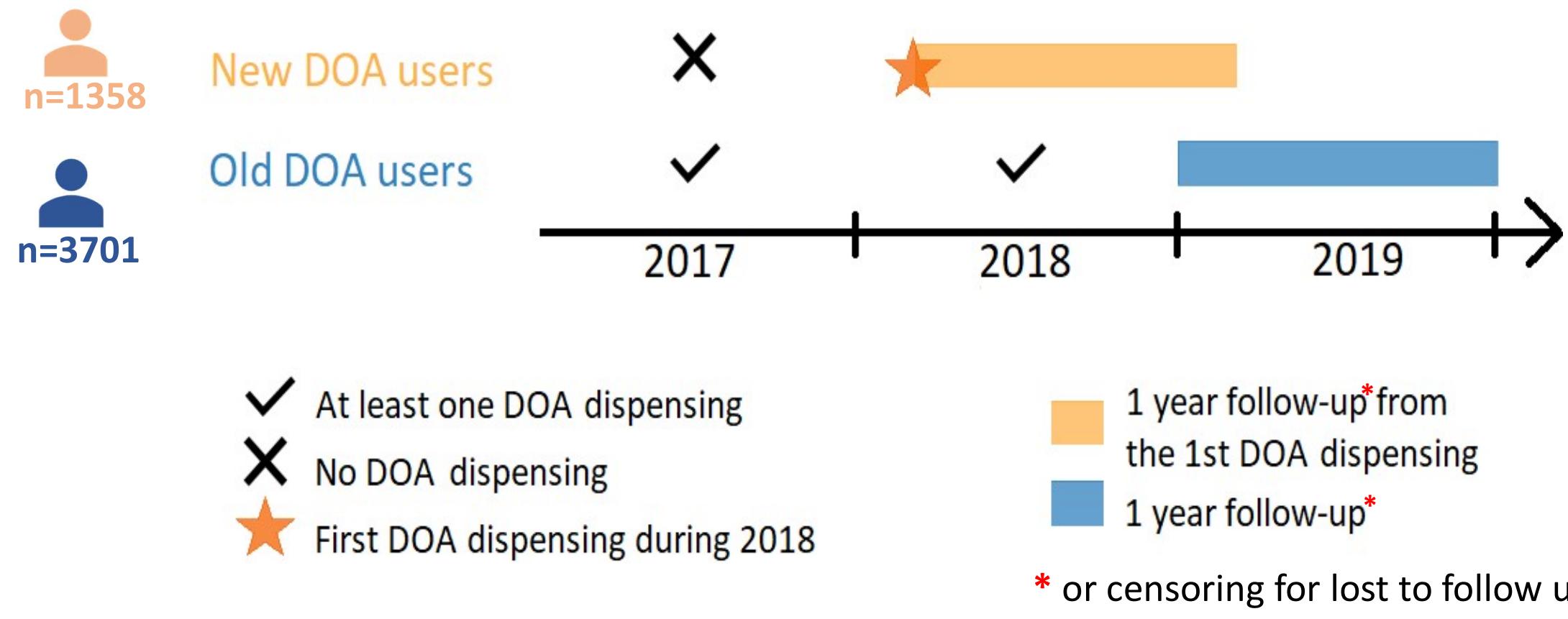
Collected from 3000 primary care physicians

Representative of the French population

Includes:

- demographic data
- diagnostic information (ICD-10)
- claims data for prescriptions, hospitalizations

# Cohorts definition and study design



# Statistical analysis

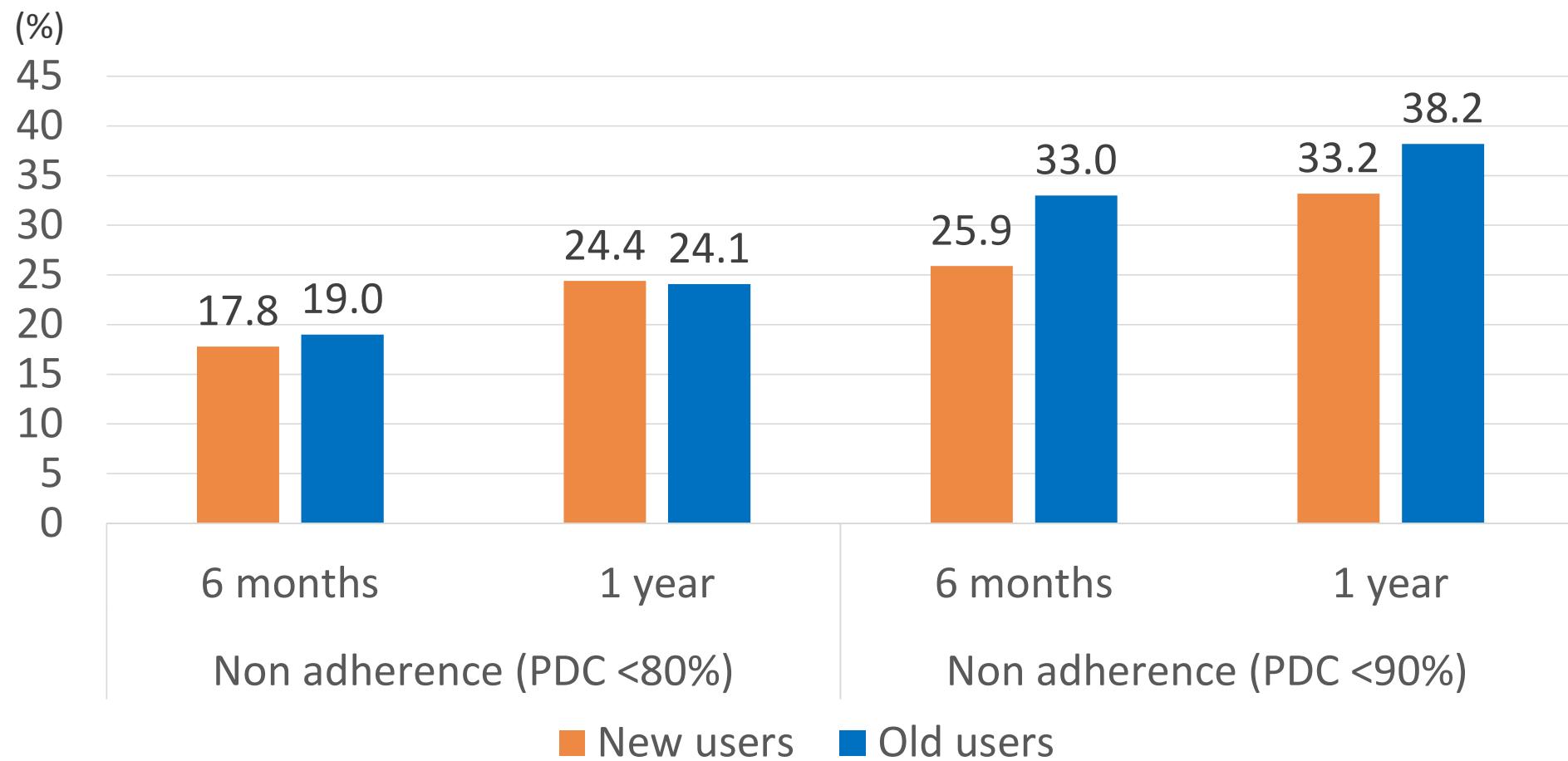
- Adherence - Proportion of Days Covered (PDC)
  - Calculated with the AdhereR package (R)
  - Stockpiling allowed
  - Adherent during hospitalisation
- Associated factors: multivariate logistic regression (AIC criterion)

# Baseline characteristics

	New users N = 1,358 <sup>1</sup>	Old users N = 3,701 <sup>1</sup>
Sex		
Men	<b>753 (55.4%)</b>	<b>2,136 (57.7%)</b>
Age at baseline (years)	<b>74.5 ± 10.3</b>	<b>76.4 ± 9.3</b>
Specialty of the prescriber		
General practitioner	<b>1,050 (77.3%)</b>	<b>3,032 (81.9%)</b>
Cardiologist	308 (22.7%)	669 (18.1%)
Coronary heart diseases	174 (12.8%)	469 (12.7%)
Hypertension	<b>870 (64.1%)</b>	<b>2,560 (69.2%)</b>
Diabetes	269 (19.8%)	798 (21.6%)
Gastrointestinal diseases	302 (22.2%)	967 (26.1%)
Chronic pulmonary disease	448 (33.0%)	1,320 (35.7%)
History of bleedings	193 (14.2%)	704 (19.0%)
Charlson Comorbidity Index Score	4.6 ± 2.2	4.9 ± 2.1
Prior use of Vitamin K Antagonists	<b>296 (21.8%)</b>	*
Number of comedications		
0-4	356 (26.2%)	1,071 (28.9%)
>=5	<b>1,002 (73.8%)</b>	<b>2,630 (71.1%)</b>

<sup>1</sup> n (%); Mean±SD; Median (IQR) \* : not applicable

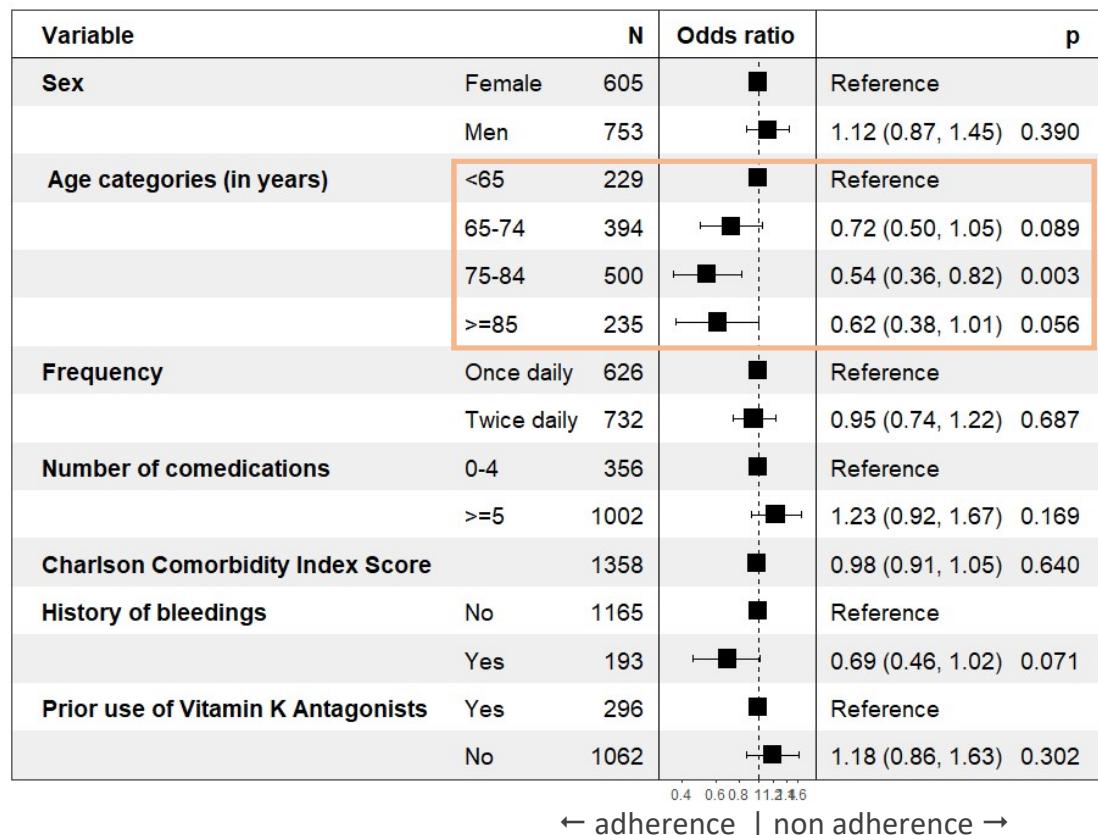
# Non Adherence rates



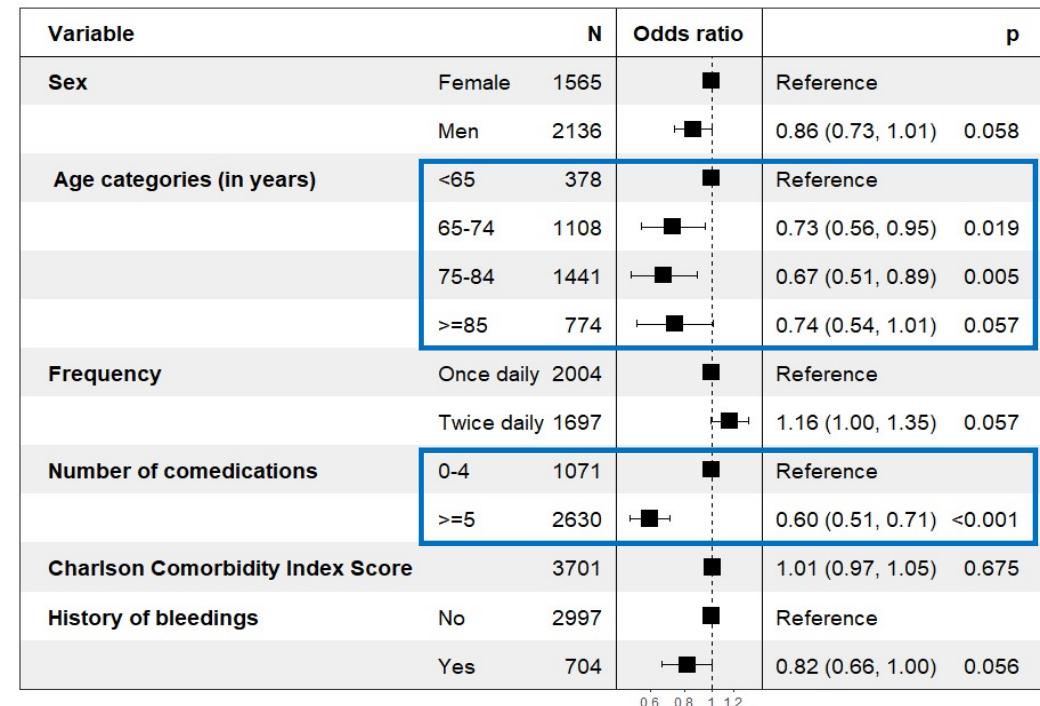
PDC : Proportions of Days Covered

# Factors associated with non adherence (PDC<80%) at 1 year

New users



Old users



# Limitations

- Administrative databases : coding limitations
- Non adherence based on dispensing data
  - ↳ no possibility to check the real drug intake
- No information on reasons for non-adherence in the database

# Key messages

- 80% threshold : similar rates in both populations
  - ↳ 24% at 1 year
- 90% threshold : small difference – new users adhere better
  - ↳ 33-38 % at 1 year
- Protective associated factors at 1 year:
  - Age  $\geq$  65 yo (both population)
  - Have a number of concomitant  $\geq$  5 drugs (old users)

# Thank you for your attention

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