

# Persistence of Anticholinergic agents in patients with overactive bladder: a cohort study from the French National Health Insurance Claim Database (SNDS)

HSD85

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## BACKGROUND

- Overactive bladder (OAB) is a clinical syndrome characterized by an irrepressible need to urinate (urgency) with or without incontinence, most often associated with pollakiuria (increased frequency of micturition, generally  $\geq 8$  micturition per 24 hours) and nocturia, in the absence of urinary tract infection or obvious local pathology<sup>1</sup>;
- In France, anticholinergic agents may be considered as a first-line treatment, or after the failure of behavioral interventions and/or rehabilitation, and represents the only pharmacological class commercialized and reimbursed by the national health insurance system as a first-line option<sup>2</sup>;
- Currently, there is a lack of recent data on the real-life management of OAB patients ;
- The French National Health Data System (SNDS) is managed by national authorities and encompasses key public health databases, including health insurance data (SNIIRAM). It contains comprehensive information on healthcare expenditures, such as prescription dispensing, and is primarily used to support public interest research and evaluations<sup>3</sup>.

## OBJECTIVE AND METHODS

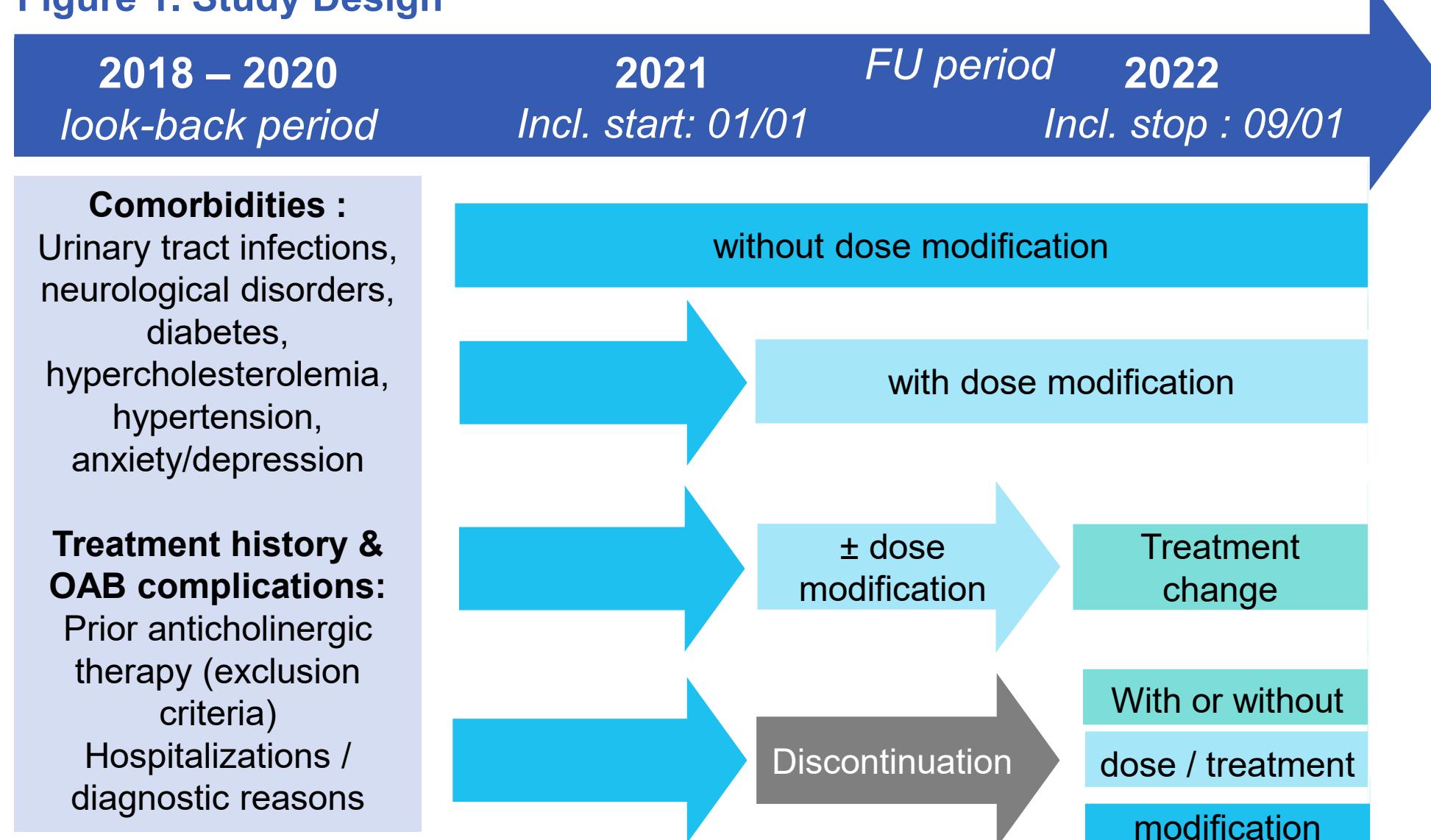
### Objective

- The primary objectives were to generate up-to-date data describing current treatment regimens and to assess treatment persistence of ACH in adult patients with OAB in France.
- The secondary objectives were to :
  - Describe patient characteristics.
  - Characterize therapeutic changes during the study period.
  - Describe healthcare resource utilization.

### Study design & methodology

- This longitudinal, observational, retrospective study over a 5-year period (2018–2022) used a 2% representative sample of the French National Medicco administrative Claim Database (SNDS).
- The study population included treatment-naïve adult patients who initiated anticholinergic therapy (ACH) in 2021 or 2022. The study focused exclusively on first line treatment initiation to minimize selection bias and adherence bias related to prior therapy.
- Patients were followed from baseline until the end of 2022. To ensure a minimum follow-up of 3 months, those who initiated treatment after September 1, 2022, were excluded from the primary analysis.
- Treatment duration was defined as the time between first and last delivery of the same ACH without discontinuation, define as at least 3 months free of ACH dispensing. Demographics, comorbidities, prescribers and subsequent treatments were described.
- A subgroup analysis was conducted in patients with at least 1 year of follow-up.

Figure 1. Study Design



## RESULTS

### Patient characteristics

- A total of 9,835 naïve patients initiating ACH were included, with a median age of 68 years (28.9% above 75 years), 58.0% were women and 62.4% had at least one comorbidity, including 41.2% with hypertension (Table 1).

Table 1. Demographics and comorbidities at initiation of treatment in the total population

Variables	Total Population N= 9,835
Gender	Male 4,131 (42.0%)
	Female 5,704 (58.0%)
Age at initiation (years)	
Mean (standard deviation)	65.0 (16.8)
Median	68.0
Q1-Q3	[55.0; 77.0]
Age group	
18-35	693 (7.0%)
35-55	1,855 (18.9%)
55-75	4,448 (45.2%)
>75	2,839 (28.9%)
At least one comorbidity	6,134 (62.4%)
Cardiovascular diseases	1,639 (16.7%)
Hypertension	4,051 (41.2%)
Diabetes	1,341 (13.6%)
Benign prostatic hyperplasia	392 (4%)
Anxiety or central nervous system disorders	2,498 (25.4%)

## RESULTS

### Description of treatment at initiation

- Most patients initiated treatment with solifenacin (41.4%) or fesoterodine (38.4%), with prescriptions consistent with the summary of product characteristics (SmPC)-recommended dose (Table 2).

Table 2. ACH treatments initiated at baseline

Treatment at initiation	Total population N = 9,835
<b>Solifenacin</b>	4,069 (41.4%)
Dose of 5 mg	3,474 (85%)
Dose of 10 mg	634 (15%)
<b>Fesoterodine</b>	3,772 (38.4%)
Dose of 4 mg	3,283 (87.0%)
Dose of 8 mg	529 (14.0%)
<b>Oxybutynin (dose of 10 mg)</b>	980 (10.0%)
<b>Trospium (dose of 40 mg)</b>	1,014 (10.3%)

### Duration of initial treatment

- Overall, regardless of the treatment, more than half of patients (55.4%) had a treatment duration of one month, corresponding to a single dispensing, with a median duration of 1 month (Q1–Q3: 1–4). Only 27.6% of patients continued treatment for more than 3 months (Table 3).
- In a sensitivity analysis (N = 4,995) including patients who initiated treatment before December 31, 2021 (minimum follow-up 1 year), less than 12% of patients had a treatment duration exceeding 12 months.

Table 3. Duration of initial treatment

Variables	Primary Analysis Population N = 8,084
<b>Distribution of treatment duration</b>	
1 month (single dispensing)	4,479 (55.4%)
2 months	755 (9.3%)
3 months	622 (7.7%)
>3 months	2,228 (27.6%)
<b>Treatment duration (month)</b>	
Mean (standard deviation)	3.7 (4.8)
Median	1
Q1-Q3	[1.0 ; 4.0]

### Changes in total doses dispensed over the course of treatment

- A total of 66.1% of patients with at least two dispensings of medicines remained on the same total dose throughout the treatment period (Table 4).

Table 4. Changes in doses dispensed

Variables	Patients with ≥ 2 dispensings N=3,605
<b>No change in total dose dispensed during the treatment period</b>	2,384 (66.1%)
<b>Reduction in total dose dispensed</b> (between the first and last dispensing)	222 (6.2%)
<b>Increase in total dose dispensed</b> (between the first and last dispensing)	576 (16.0%)

### Description of treatment discontinuations

- Regardless of the ACH treatment initiated, 85.7% of patients had permanently discontinued treatment by the end of the study follow-up period (Table 5).

Table 5. Treatment discontinuations

Variables	Primary analysis population N = 8,084
<b>Temporary interruption for two consecutive months</b>	1,135 (14.0%)
<b>Permanent treatment discontinuation (at least three consecutive months)</b>	6,931 (85.7%)

### Change in management (pharmacological and non-pharmacological)

- After failure (permanent discontinuation), 82.5% of patients received no further treatment in the year following discontinuation (Table 6).

Table 6 Change in management

Variables	Patients with discontinuation in 2021 N=3373
<b>Restart of the same treatment after permanent discontinuation</b>	59 (1.7%)
<b>Change in management / treatment</b>	530 (15.7%)
Other ACH	430 (12.7%)
Surgery	120 (3.6%)
Botulinum toxin	16 (0.5%)
<b>No further management</b>	2,784 (82.5%)

### Use of healthcare resources

- At treatment initiation, the therapy was prescribed in most cases by a general practitioner (61.6%), a urologist (22.6%), or a gynecologist (5.5%) (Table 7).
- Among patients with at least two dispensings, the mean number of general practitioner consultations was 4 visits per month before treatment initiation and around 7 visits per month during treatment (before or after a therapeutic change). Initiation of anticholinergic treatment appeared to substantially impact consultation frequency, being associated with approximately twice as many visits (Table 8).
- Although low, the mean number of consultations with specialists (ophthalmologists, cardiologists, neurologists, and dermatologists) was slightly higher during anticholinergic treatment (Table 9).

Table 7. Treatment initiation prescribers

Prescriber specialty at initiation	Total Population N = 9,835
General practitioner	6,059 (61.6%)
Urologist	2,226 (22.6%)
Gynecologist	537 (5.5%)
Neuro-urologist	58 (0.6%)
Others	957 (9.7%)

Table 8. General practitioner consultations at initiation and around treatment changes in patients with ≥2 dispensings

General practitioners	Patients with ≥2 dispensings N=3,605
<b>At least one consultation</b>	
Within 30 days before initiation	3,377 (93.7%)
Within 30 days before a change	3,058 (84.8%)
Within 30 days after a change	3,069 (85.1%)
<b>Mean number of consultations (SD)</b>	
Within 30 days before initiation	3.98 (5.29)
Within 30 days before an outcome event	7.16 (18.17)
Within 30 days after an outcome event	6.80 (17.39)

Table 9. Specialist consultations at initiation and around treatment changes in patients with ≥2 dispensings

Variables	Patients with ≥2 dispensings N=3,605
<b>Mean number of consultations (SD)</b>	
Ophthalmologists	0.18 (0.56)
Within 30 days before initiation	0.28 (0.89)
Within 30 days after an outcome event	0.28 (1.03)
Cardiologists	0.07 (0.36)
Within 30 days before initiation	0.11 (0.56)
Within 30 days after an outcome event	0.11 (0.70)
Neurologists	0.07 (0.63)
Within 30 days before initiation	0.18 (1.85)
Within 30 days after an outcome event	0.17 (1.80)

## CONCLUSIONS

- This study reveals limited persistence with ACH in the management of OAB in France.
- Over half of patients (55.4%) discontinued treatment after only 1 month, corresponding to a single dispensation.
- More than 50% of patients maintained the same dose throughout their treatment period.
- By the end of follow-up, 85.7% had permanently discontinued therapy, while 14.0% experienced a temporary interruption of at least 2 months.
- Following permanent discontinuation, 82.5% of patients remained untreated. These results highlight the need for strategies addressing treatment optimization and maintaining treatment adherence.

## ACKNOWLEDGEMENTS AND DISCLOSURES

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