

Burden of Chronic Obstructive Pulmonary Disease (COPD) Patients Uncontrolled Despite Triple-Therapy in France

Objective

About 7.5% of adults over the age of 45 have COPD, resulting in 20,850 deaths per year, on average¹. The recommended pharmacological management of COPD GOLD E patients relies primarily on short-acting bronchodilators (beta-2 agonist and/or anticholinergic) in combination with long-acting bronchodilators (beta-2 agonist and/or anticholinergic). When COPD exacerbations still occur, inhaled glucocorticosteroids may be added to prevent future exacerbations.

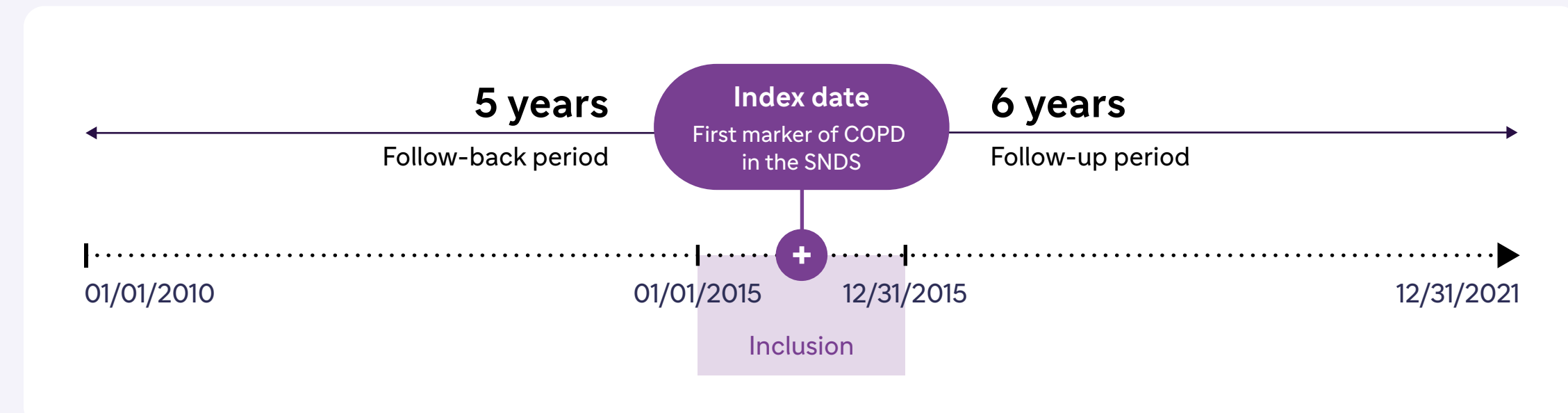
The objective of this study is to identify and describe French COPD patients under triple therapy according to their exacerbation status.

Methods

An observational retrospective study was conducted using the French Health Data System (Système National des Données de Santé, SNDS). Adult (aged ≥40 years) patients with a triple therapy for COPD between January 1st, 2015, and December 31st, 2015, were included.

Patients with a triple-therapy were further divided into exacerbators vs non-exacerbators (see below).

Study period



Definition of the triple therapies

- 3 deliveries of a free association (AF) LABA/ICS + 1 delivery of LAMA
- 3 deliveries of a AF LABA/LAMA + 1 delivery of ICS
- 3 deliveries of LABA + 1 delivery of LAMA + 1 delivery of ICS

Study population

Population 1 Patients treated with a triple therapy in 2015 (long-acting β2-agonist (LABA), long-acting anticholinergic (LAMA) and inhaled corticosteroids (ICS)).

This population was further divided into 2 groups:

Population 1a Patients with at least one exacerbation leading to hospitalization or with 2 moderate exacerbations in the previous year.

Population 1b Patients with no severe exacerbation or up to 1 moderate exacerbation in the previous year.

Definition of severe exacerbations

Based on the publication by Molinari & al.²:

Patients with hospitalization of at least 2 days,

AND

with:

- a principal diagnosis J41 or J42 or J43 or J44 or J961+0,
- OR
- a principal diagnosis I26 or I50.0 or I270.0 or J13 or J14 or J18 or 20 or J40 or J93 or J100 or J110 or J120 or J121 or J122 or J123 or J128 or J150 or J151 or J152 or J153 or J154 or J155 or J156 or J157 or J158 or J159 or J160 or J168 or J170 or J851 or U049 or J80 or J960 and an associated diagnosis J41 or J42 or J43 or J44 or J961+0

Definition of moderate exacerbations

Treatment of exacerbation with the delivery of both a glucocorticoid and an antibiotic within 7 days.

Conclusion

Nearly 300,000 patients, aged over 40, were treated with a triple therapy in France in 2015. With the chosen algorithm, more than 25% of them experienced at least one exacerbation on the year before inclusion and 75% of them had at least one exacerbation in the 5 previous years. Our results are concordant with the literature and the chosen algorithm seems accurate to identify exacerbating patients.

Our study suggests important unmet needs in the COPD population treated with a triple therapy.

Références

¹Comprendre la BPCO (bronchopneumopathie chronique obstructive) [Internet]. Available on: <https://www.ameli.fr/assure/sante/themes/bpco-bronchite-chronique/comprendre-bpco>

²Molinari N, Chanez P, Roche N, Ahmed E, Vachier I, Bourdin A. Rising total costs and mortality rates associated with admissions due to COPD exacerbations. Respir Res. 2016;17:149

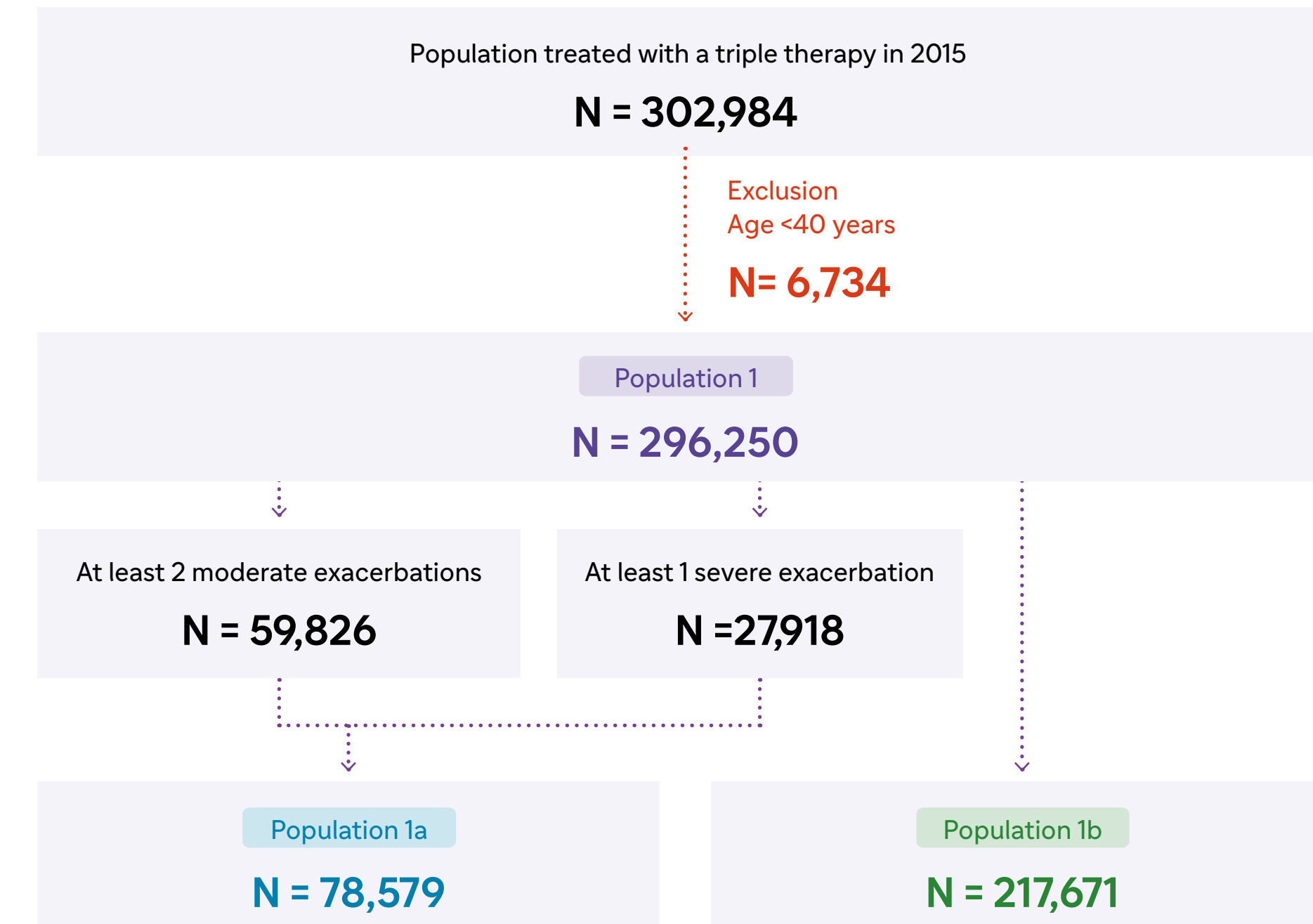
Disclosure

Presenting author is a Sanofi employee and may hold shares and/or stock options. This work was funded by Sanofi.

Results

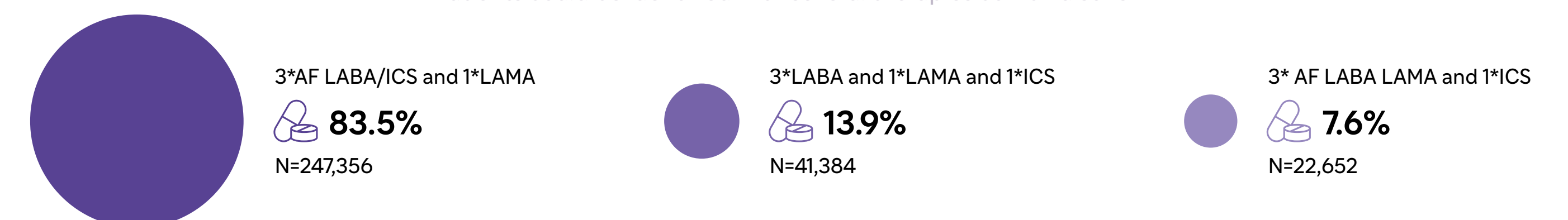
Selection of the study population

Flow chart

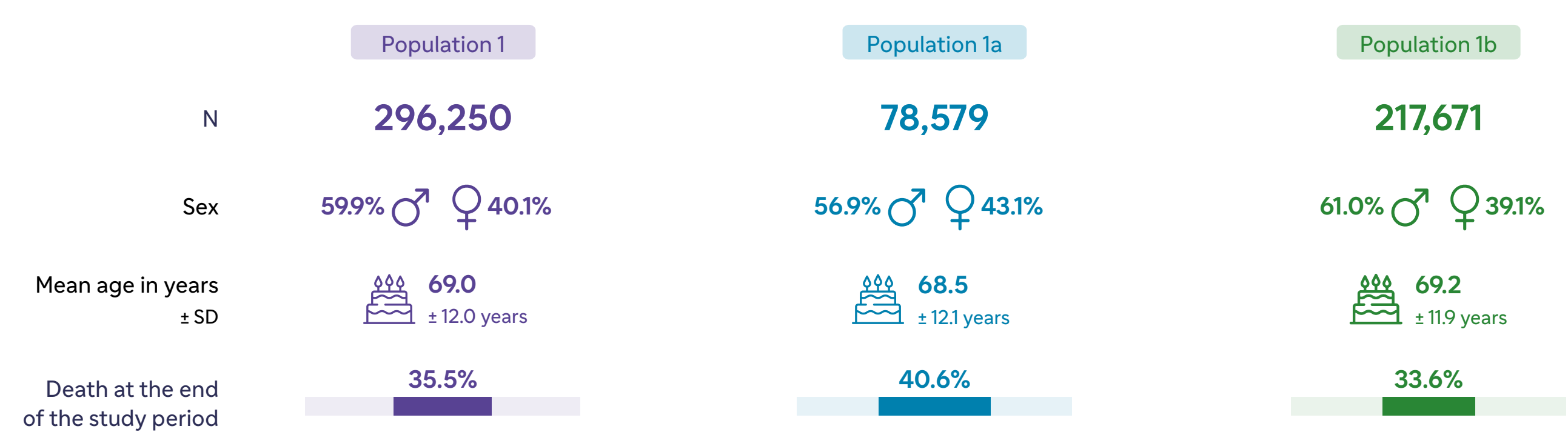


Combined identified triple therapies

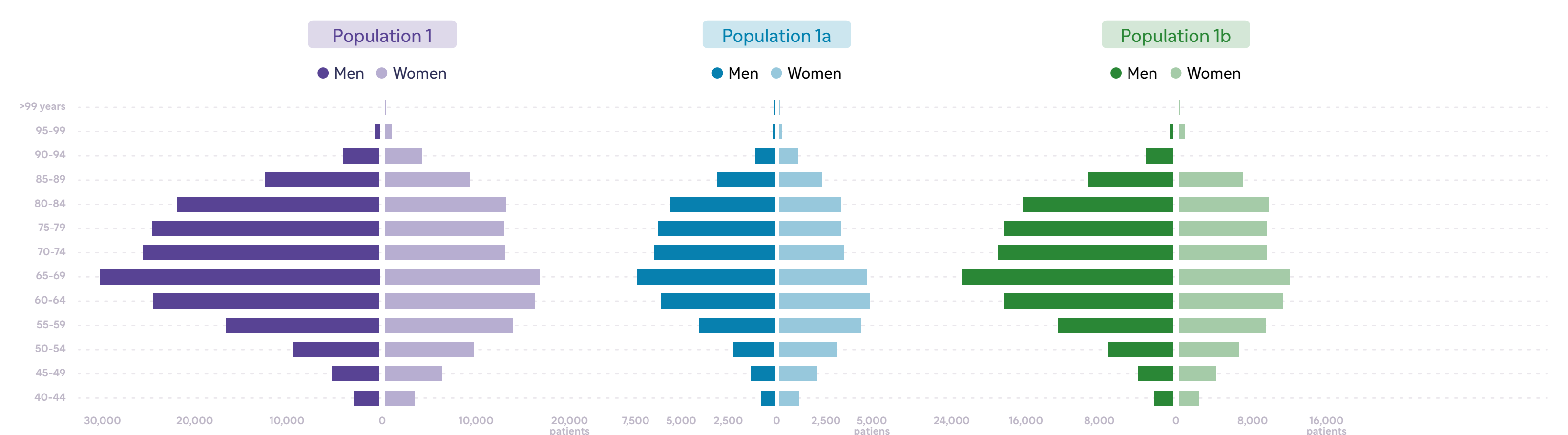
Patients could be identified with several therapies combinations



Patient's characteristics

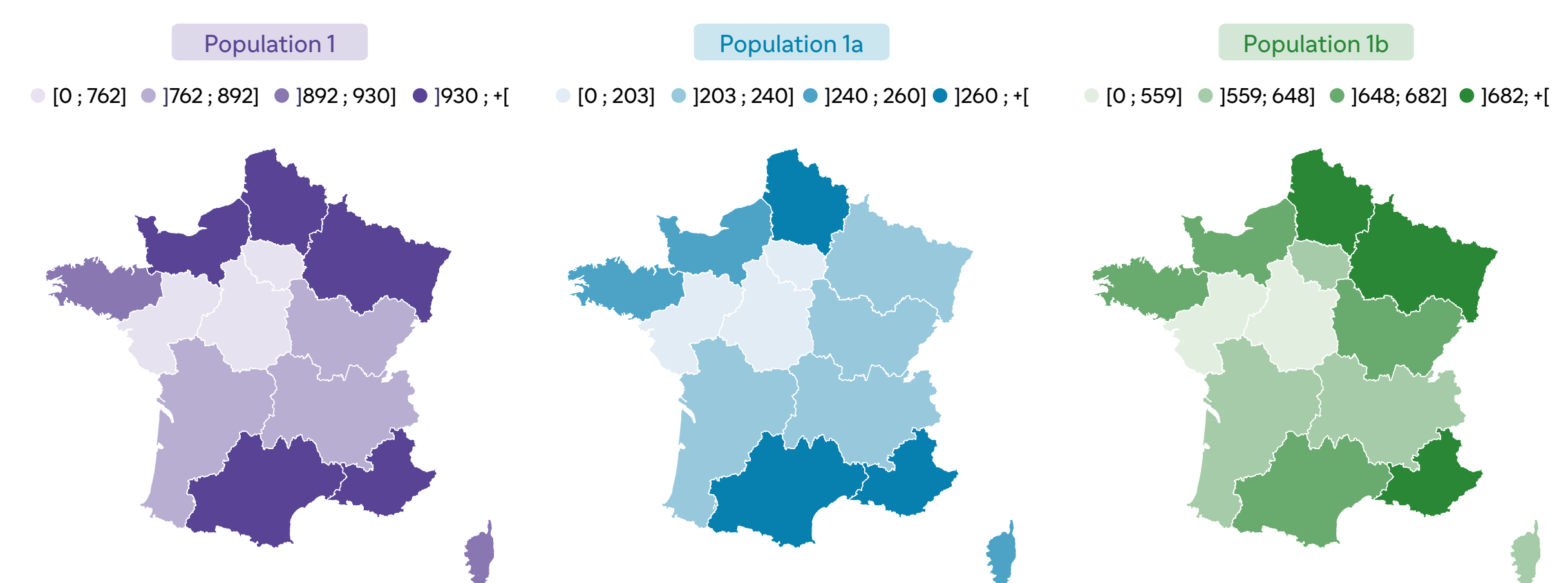


Age distribution

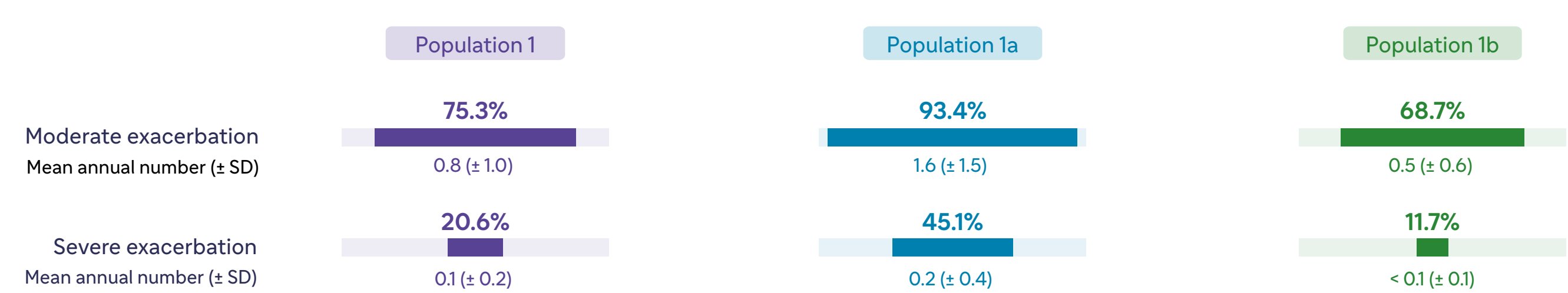


Region of residence

Class boundaries for standardized rates (on age and sex) are defined using quartiles (Q1, median and Q3) of standardized rates excluding DROMs.



COPD history during the follow-back period



Comorbidities

