

BACKGROUND AND AIM

Patients with chronic obstructive pulmonary disease (COPD) can experience a worsening of respiratory symptoms, namely "exacerbation". Despite up-to-date international and national recommendations, in Italy the care of COPD patients through drug and specialist service prescriptions is still ill-timed and inappropriate.

AIM. To describe patients with COPD treated with triple (TT) and dual (DT) therapy following exacerbation and their healthcare resource consumption, cared through the healthcare reimbursed by Italian National Health Service (SSN).

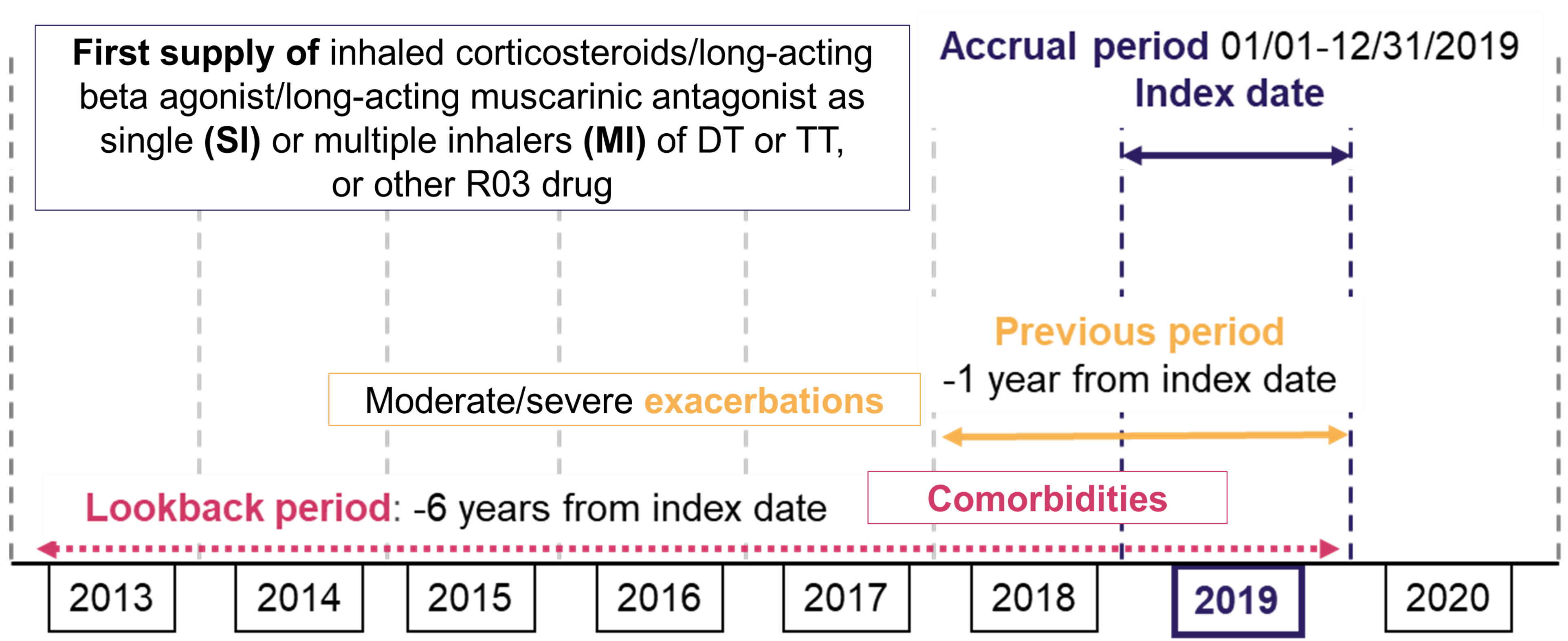
METHODS

Study design: Observational retrospective analysis using administrative data from the Fondazione Ricerca e Salute (ReS) database

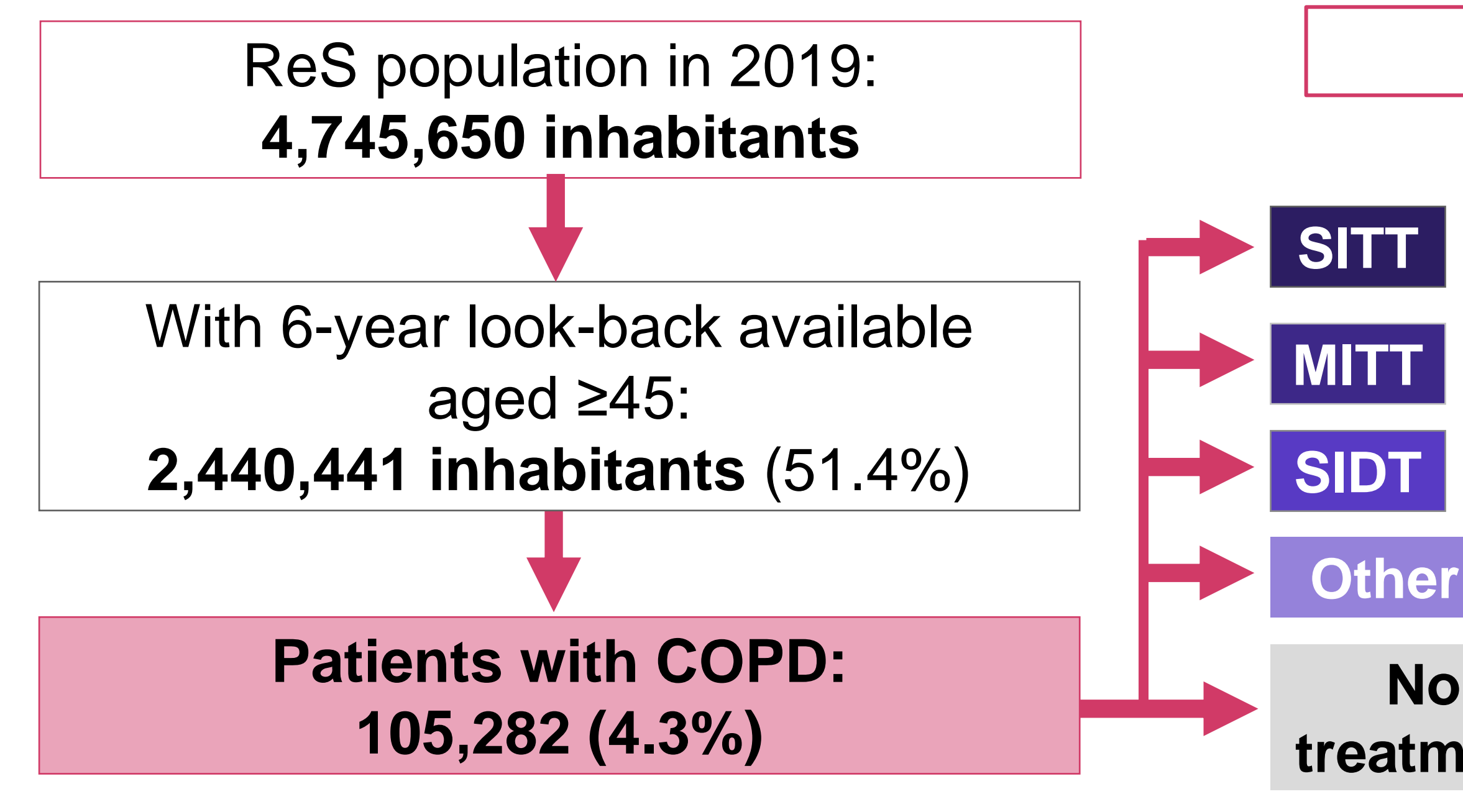
Patients' population: Patients aged ≥45 with a COPD diagnosis in 2019 were selected based on at least one of the following criteria:

- ≥1 hospitalization with a primary or secondary diagnosis of COPD (ICD-9-CM code);
- disease waiver claim code for COPD ;
- ≥4 reimbursed supplies of drugs for obstructive airway diseases within 12-months (ATC code: R03)

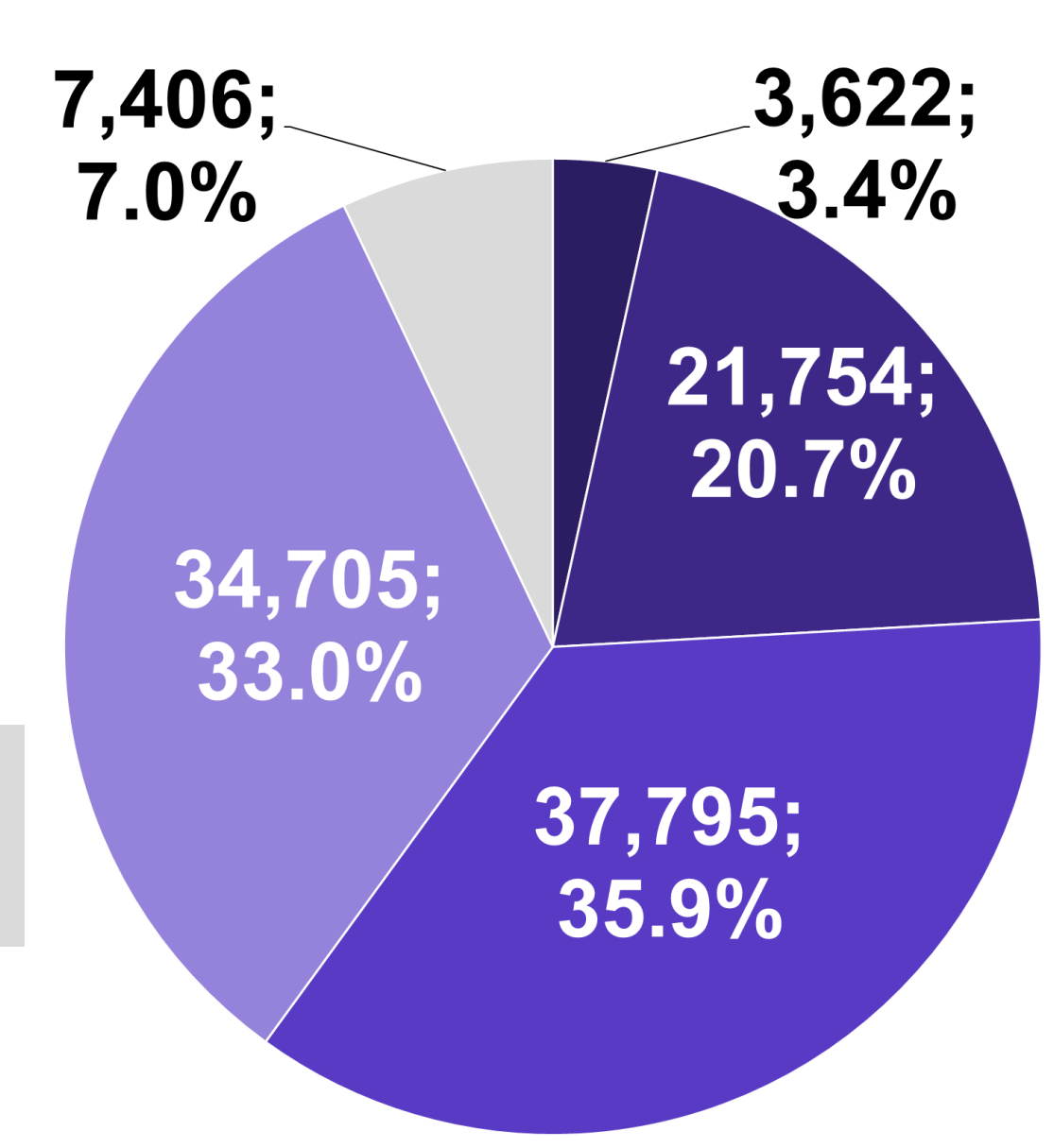
A look-back period of 6-year and absence of concomitant asthma were required. Confounding by severity was not considered in the analysis.



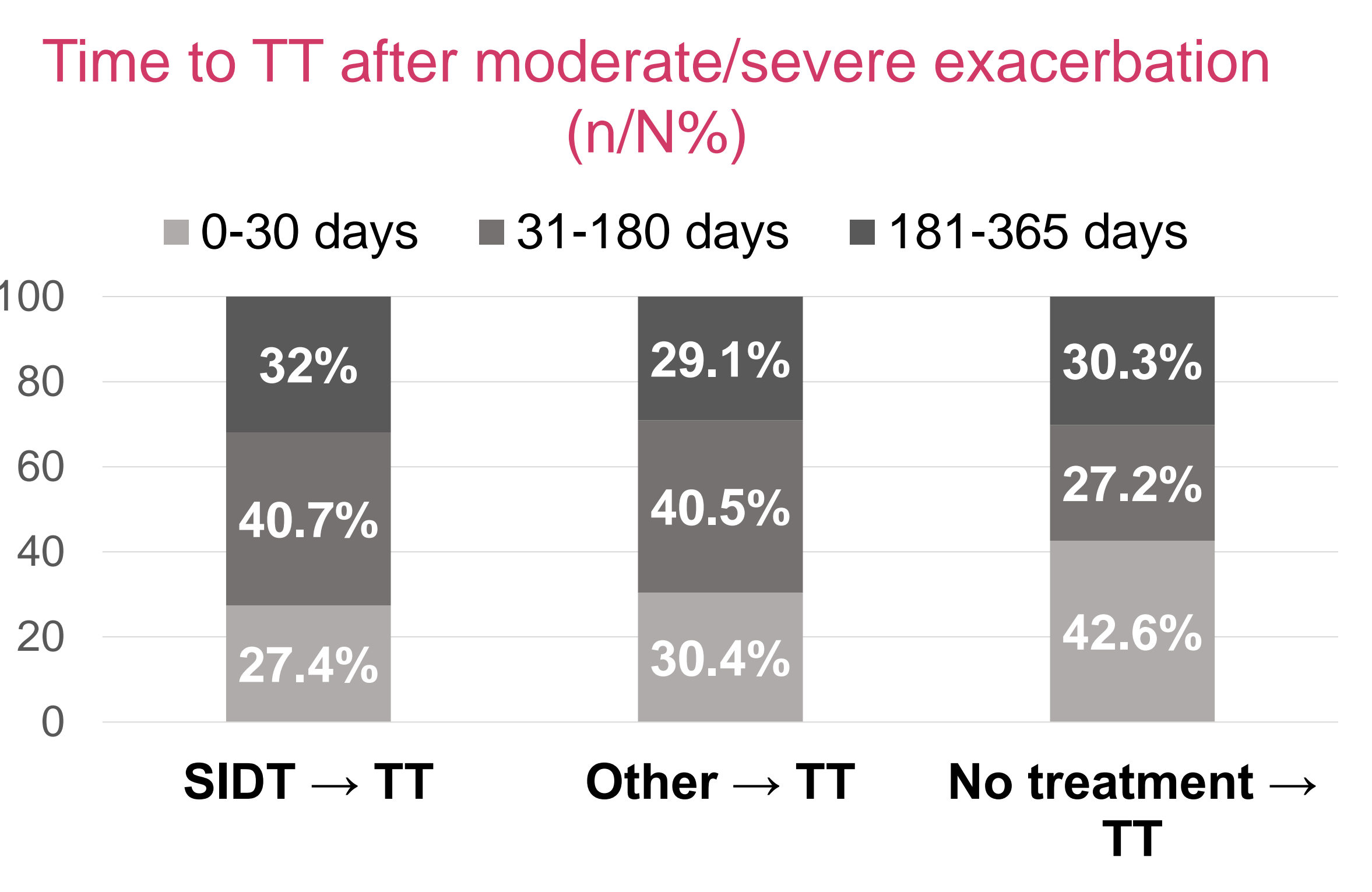
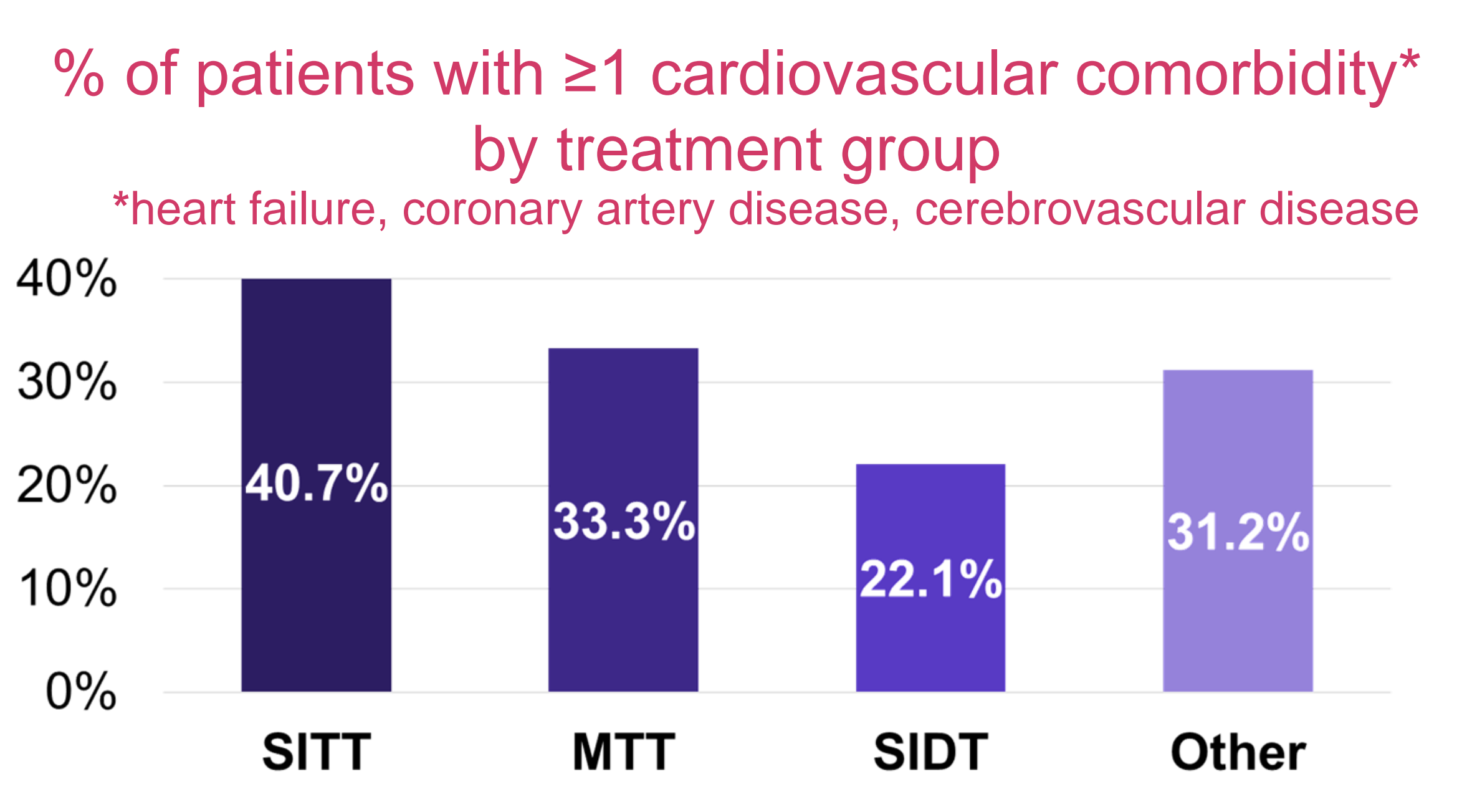
RESULTS



COPD patients treated with R03 drugs, by treatment strategy



	SITT	MITT	SIDT	Other
Mean age [SD]	74 [9]	75 [10]	72 [12]	75 [12]
Male	2,814 (77.7%)	14,659 (67.9%)	20,617 (54.5%)	19,161 (55.2%)
% patient with exacerbation in the 12 months look back-period				
≥1	60.5%	39.9%	30.8%	31.9%
Severity of exacerbation in the 12 months look back-period				
Moderate	63.5%	80.4%	89.3%	88.3%
Severe	36.5%	19.6%	10.7%	11.7%
% of patients with comorbidities				
0	8.3%	8.7%	15.9%	9.9%
1	17.3%	20.4%	25.1%	20.2%
2	20.3%	22.2%	22.4%	22.2%
≥3	54.1%	48.7%	36.6%	47.7%



Therapy adjustment after exacerbation (n patients; n/N%)

	Switch group	n patients; n/N%
after moderate/severe exacerbation	SIDT → SIDT	6,711; 63.8%
	SIDT → TT	3,121; 29.7%
	SITT	631; 6.0%
after severe exacerbation	SIDT → SIDT	410; 32.9%
	SIDT → TT	726; 58.3%
after moderate/severe exacerbation	Other → SIDT	4,039; 22.9%
	Other → TT	4,668; 26.5%
after severe exacerbation	Other → SIDT	457; 21.7%
	Other → TT	987; 46.9%
after moderate/severe exacerbation	No treatment → SIDT	756; 28.8%
	No treatment → TT	521; 19.9%
after severe exacerbation	No treatment → SIDT	346; 29.5%
	No treatment → TT	320; 27.3%

CONCLUSIONS

COPD patients in TT were older and affected by more comorbidities, in particular cardiovascular diseases. After exacerbation only some patients switch treatment, suggesting inappropriate therapeutic and specialist service prescriptions. Ensuring early and adequate treatment, as well as integration of in-hospital and outpatient management, is pivotal for an appropriate clinical care of COPD patients.