

Supplemental table 1 – Selection criteria of patients at risk of herpes zoster in the accrual period (2013), by risk factor

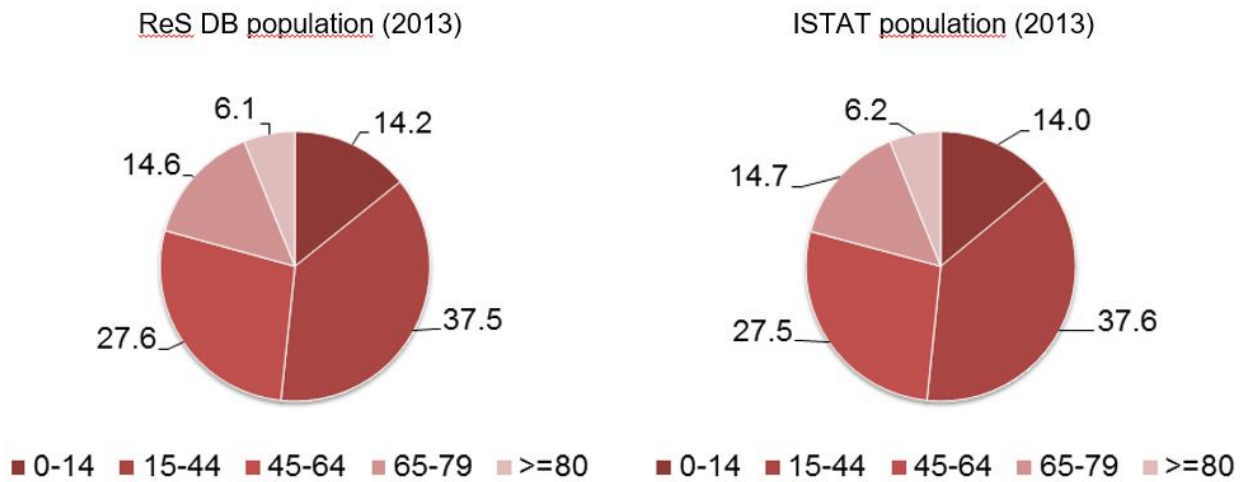
Administrative data flow	Description
Cardiovascular diseases	
Hospital admissions	<p>At least <u>one</u> hospital admission with main and/or secondary diagnosis (ICD-IX-CM code):</p> <ul style="list-style-type: none"> • 425.x Cardiomyopathy • 427.x Cardiac dysrhythmias • 428.x Heart failure • 402.01 Malignant hypertensive heart disease with heart failure • 402.11 Hypertensive heart disease with heart failure • 402.91 Unspecified hypertensive heart disease with heart failure • 404.01 Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified • 404.11 Hypertensive heart and chronic kidney disease, benign, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified • 404.91 Hypertensive heart and chronic kidney disease, unspecified, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified • 405.x Secondary hypertension • 518.4 Acute oedema of lung, unspecified
AND/OR	
Exemption	<p>Exemption codes for circulation problems:</p> <ul style="list-style-type: none"> • 002.394 Mitral valve disease • 002.395 Aortic valve disease • 002.396 Mitral and aortic valve disease • 002.397 Other endocardial structure diseases • 002.414 Other forms of chronic ischaemic cardiomyopathy • 002.416 Chronic cardiopulmonary disease • 002.417 Other pulmonary circulation diseases • 002.424 Other diseases of the endocardium • 002.426 Conduction disorders • 002.427 Cardiac dysrhythmias • 002.429.4 Functional disorders following heart surgery • 002.745 Bulbus cordis and cardiac septum abnormalities • 002.746 Other heart malformations • V42.2 Heart valve replaced by transplant • V43.3 Heart valve replaced by other means • V45.0 Cardiac device in situ <p>Exemption codes for arterial hypertension with organ damage:</p> <ul style="list-style-type: none"> • 031.402 Hypertensive heart disease • 031.403 Hypertensive nephropathy • 031.404 Hypertensive cardio-nephropathy • 031.405.0 Malignant secondary hypertension • 023 Chronic renal insufficiency • 050 Subjects awaiting a transplant (kidney, heart, lung, liver, pancreas, cornea, bone marrow)

Administrative data flow	Description
Chronic obstructive pulmonary disease (COPD)	
Exclusion of	
Exemption	007 - Asthma
Hospital admissions	493 - Asthma
Inclusion of	
Pharmaceutical	Prescription of <u>at least 2</u> packs of: R03 - Drugs for obstructive airway diseases (excluding R03DC and R03BC) for a period of at least 3 months (distance between the most recent and previous dates \geq 90 days)
AND/OR	
Hospital admissions	<u>At least one</u> hospital admission with main diagnosis of COPD : <ul style="list-style-type: none"> • 490 - Bronchitis, not specified as acute or chronic • 491.x - Chronic bronchitis • 492.x - Emphysema • 494.x - Bronchiectasis • 496 - Chronic airway obstruction, not elsewhere classified
	<u>At least one</u> hospital admission with main diagnosis for COPD-related causes and secondary diagnosis of COPD : <ul style="list-style-type: none"> • 518.81- 518.84 - Respiratory insufficiency • 786.0x - Dyspnoea and respiratory abnormalities • 786.2 - Cough • 786.4 - Abnormal sputum
Administrative data flow	Description
Diabetes	
Exemption	013. 250 - Diabetes Mellitus
AND/OR	
Pharmaceutical	Prescription of <u>at least one</u> oral antidiabetic <u>either alone or in combination</u> with insulin: <ul style="list-style-type: none"> • A10A - Insulin and analogues • A10B - Oral blood glucose-lowering drugs (excluding insulin)
AND/OR	
Hospital admissions	<u>At least one</u> hospital admission with main and/or secondary diagnosis of: 250.x - Diabetes mellitus

Administrative data flow	Description
Immunosuppression	
Pharmaceutical	Prescription of <u>at least one</u> of: <ul style="list-style-type: none"> • L04A - Immunosuppressant • L03AB - Interferons • L03AX13 - Glatiramer acetate • N07XX09 – Dimethylfumarate Cancer drugs were not considered.
AND/OR	
Hospital admissions	At least <u>one</u> hospital admission with main/secondary diagnosis of: 279.x - Disorders involving the immune mechanism

Supplemental Table 1 shows the selection criteria for patients aged ≥ 50 years with risk factors for herpes zoster, according to the Italian National Vaccine Prevention Plan 2017-2019, in the accrual period (2013), by the administrative database analysed and the disease/condition.

Supplemental Figure 1 – Percentage distribution of the 2013 Italian population by age group, from the ReS database and from Italian Institute of Statistics (ISTAT).



Supplemental Figure 1 depicts the percentage distribution by age group of the 2013 Italian population, from the ReS database and the Italian Institute of Statistics.