

# Healthcare Resource Use and Costs Associated with Herpes Zoster/Post-herpetic Neuralgia Episodes in Italy: A Retrospective Observational Study

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HZ presents a significant economic and resource burden on the healthcare system among older adults and individuals with comorbidities, particularly when complicated by PHN

Digital poster  
Supplemental data  
Narrated summary



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## Aims

- 1 Estimate **Health Care Resource Utilization (HCRU)** and **costs** associated with outpatient and inpatient management of HZ or/and PHN, stratified by age groups (≥50y)
- 2 Compare **HCRU and costs** for HZ/PHN vs no-HZ/PHN patient (overall, immunocompromised\*, chronic condition\* and oncology subsets)
- 3 Estimate **proportion of overall HZ cases** that progress to PHN or non-PHN complications, stratified by age groups
- 4 Estimate **proportion of HZ cases by setting**, as well as the **proportion of HZ outpatient cases** that were only treated in an outpatient or progressed to an inpatient setting, for HZ and/or PHN, stratified by age groups

\*Definitions provided in supplementary slide (QR-code).

## Methods



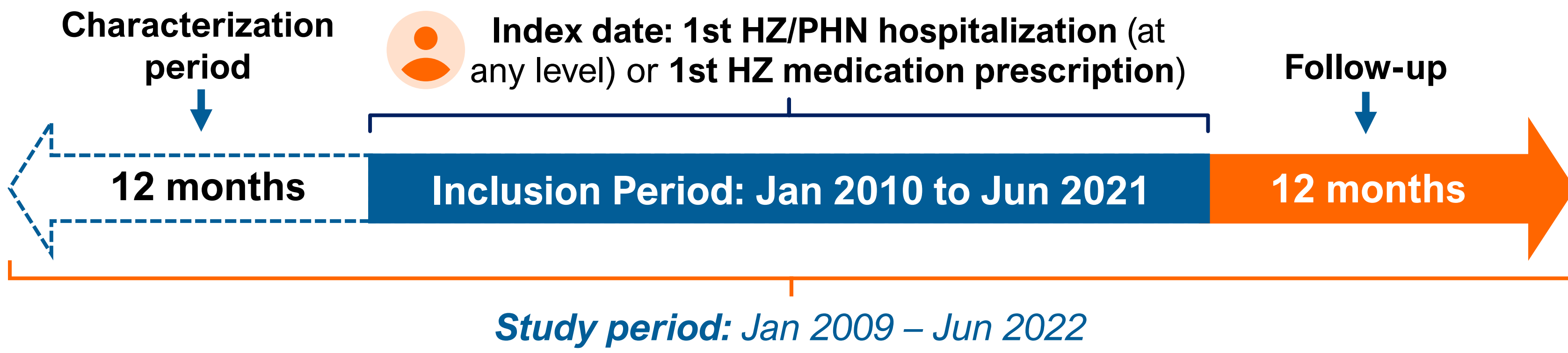
Retrospective analysis of data from databases derived from a subset of Italian Local Health Authorities, covering almost 12 million of health-assisted individuals



Included patients (≥18y) with at least one record of hospitalizations with a primary discharge diagnosis of HZ and/or PHN (inpatient) or treated with brivudine (outpatient) for HZ



Propensity Score Matching methodology applied to abate potential unbalances in baseline characteristics for comparison in the cost



## Results



### Characteristics of HZ adult patients 50+y

HZ cases: 145,923  
PHN progressing cases: 27,499

Antiviral: 98.4%  
Brivudine: 97.6%

IC: 29.9%  
CC: 76.1%

Age: 69.6y  
♀: 60.9%

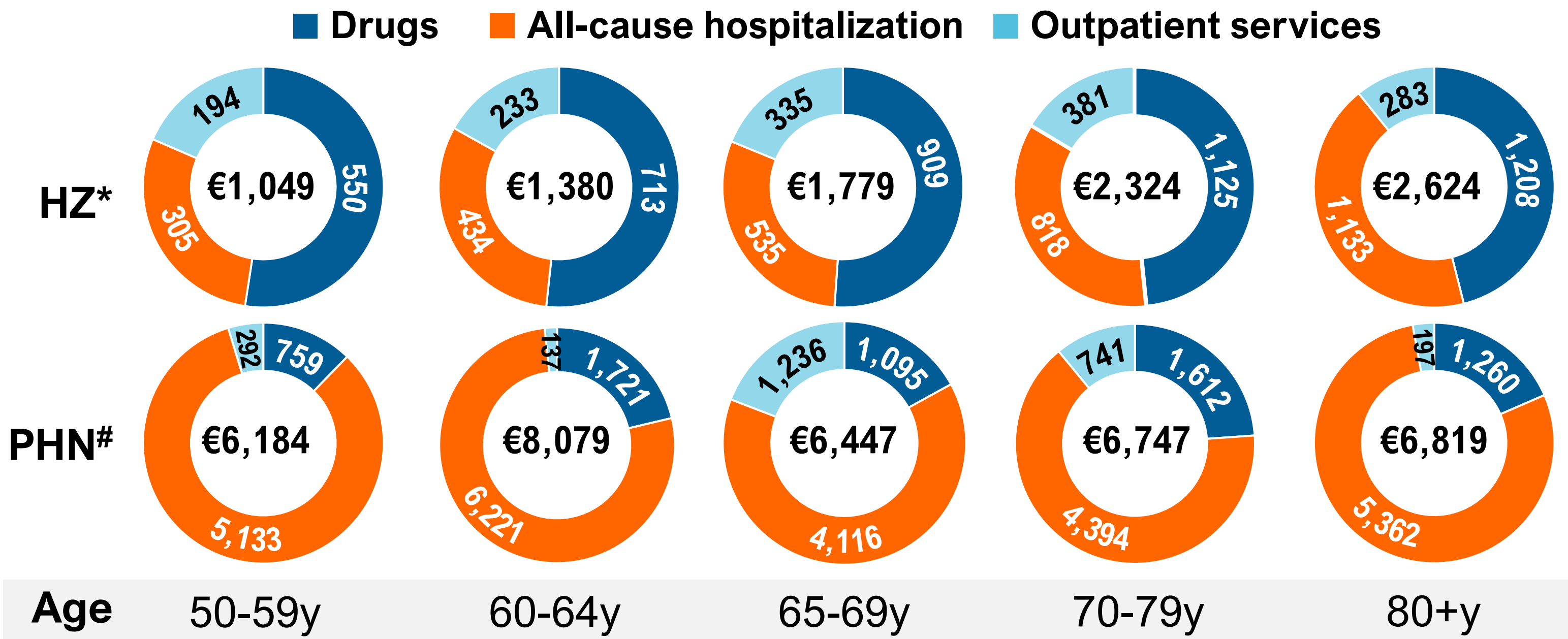
Outpatients: 142,305

Progress to inpatient: 0.31%  
Length of stay: 11.3d

Complications:  
PHN: 18.84%  
Non-PHN: 0.35%



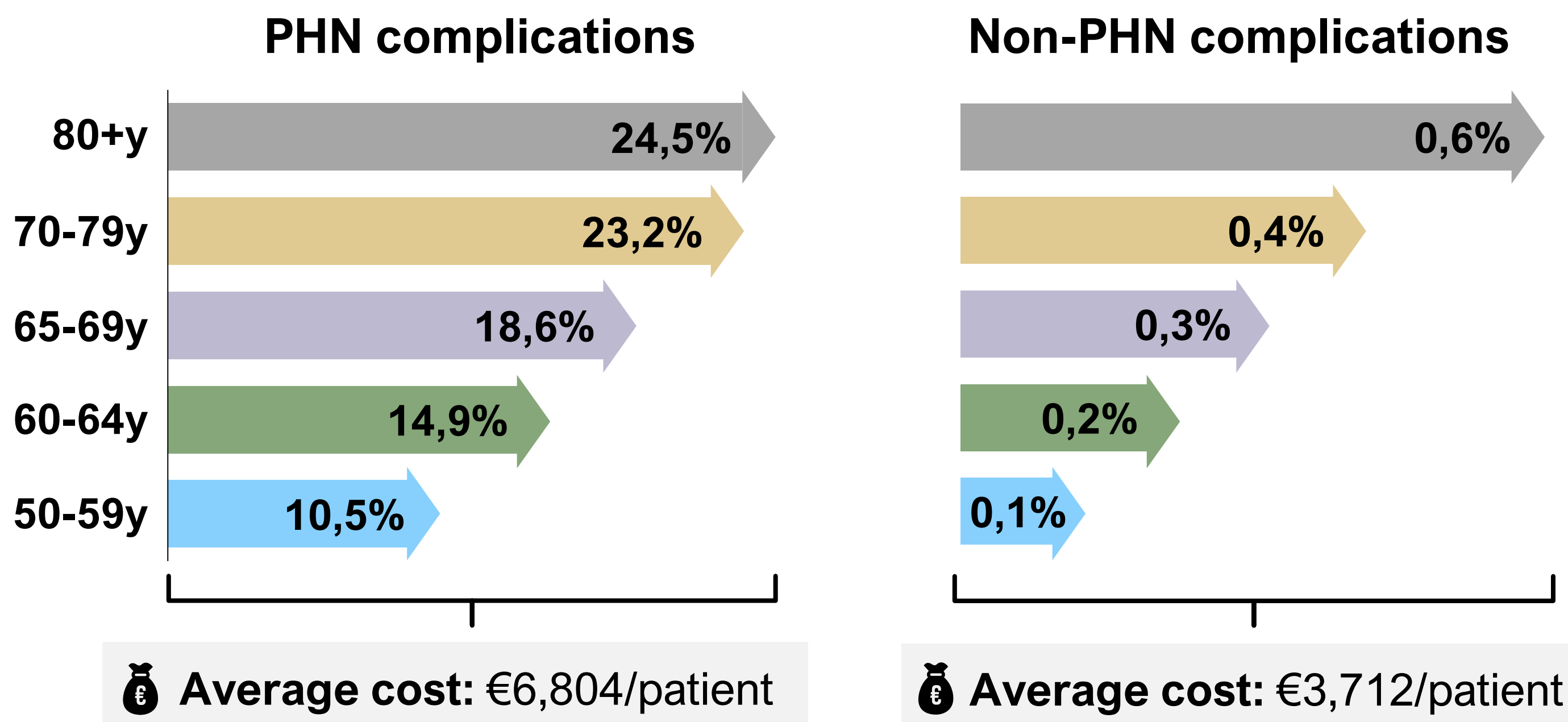
HZ/PHN condition for overall population is associated with HCRU costs which increase with age and are mainly driven by drug prescriptions and all cause hospitalizations



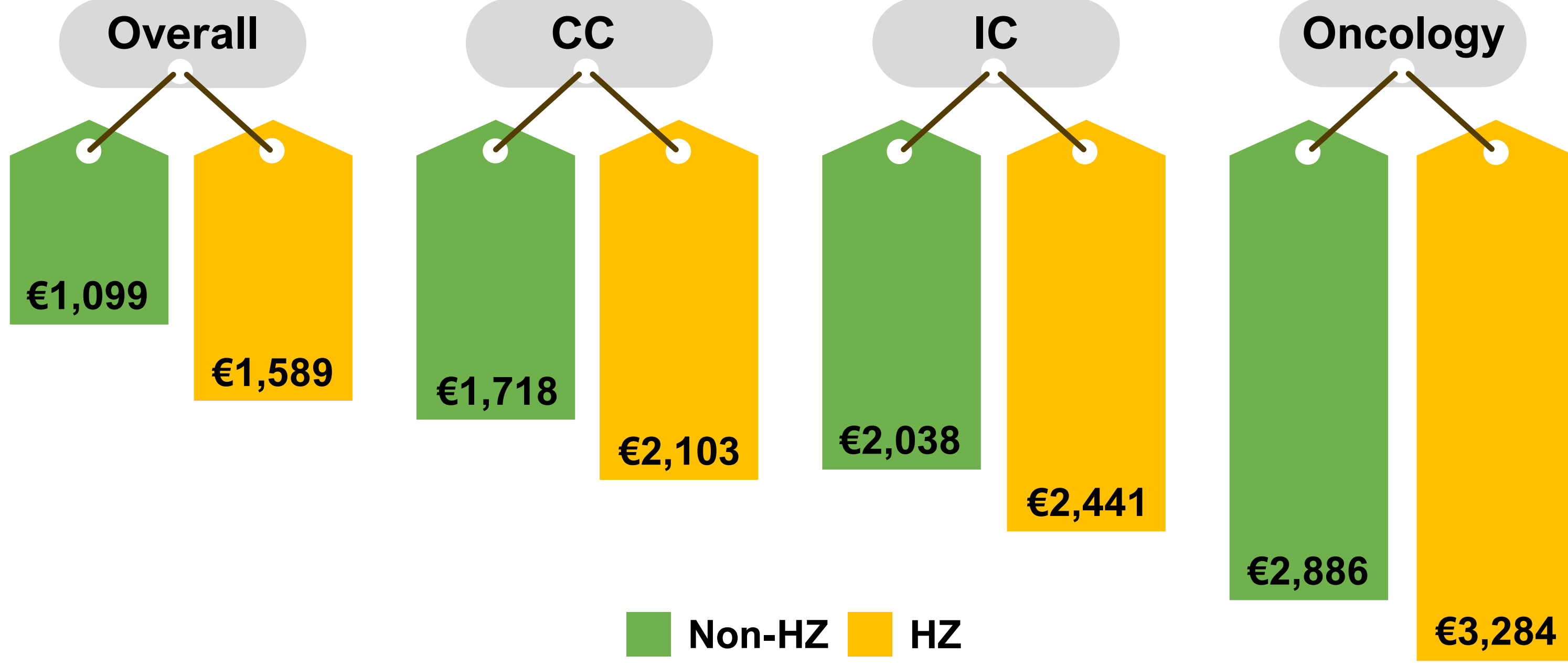
\*HZ are patients included by inpatients (only) HZ hospitalization code or outpatient setting; #PHN are patients included in inpatient setting by using PHN specific hospitalization code



HZ patients progressing to PHN and non-PHN complications increased with age during one year of follow-up period



HZ compared with non-HZ patients is associated with higher costs and can worsen the underline condition in comorbid subjects



## Background

- HZ caused by reactivation of latent VZV<sup>1</sup>.
- Europe: >95% of adults are at risk of developing HZ due to previous VZV infection & decline in immunity with age<sup>2,3</sup>.
- HZ results in complications in 5%-30% of cases<sup>4</sup>. PHN is the most common complication.
- RZV, a vaccine against HZ, has proven a long-term efficacy in preventing HZ<sup>5</sup>.

### Abbreviations

CC, chronic condition; d, days; HCRU, health care resource utilization; HZ, herpes zoster; IC, immunocompromised; ISPOR, International Society for Pharmacoeconomics and Outcomes Research; PHN, postherpetic neuralgia; RZV, recombinant zoster vaccine; VZV, varicella zoster virus; y, year-old

### References

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