DISEASE: No Additional Disease & Conditions/Specialized Treatment Areas, Sensory System Disorders (Ear, Eye, Dental, Skin)

Acceptance Code: EPH256

Healthcare Resource Utilization and Related Cost Among Patients Hospitalized for Prurigo Nodularis: A Retrospective Cohort Study Using Italian Health Claims Data

CLICON S.R.L. SOCIETÀ BENEFIT, HEALTH, ECONOMICS & OUTCOMES RESEARCH

ISPOR EU, 12-15 November 2023, Copenhagen, Denmark

ELISA GIACOMINI[1], CHIARA VERONESI[1], LUCA DEGLI ESPOSTI[1], GIANLUCA RONCI[2], MARIA PAOLA PEDONE[2], DANIELLE L. ISAMAN[3], DONIA BAHLOUL[4]

[1]CliCon S.r.l., Società Benefit-Health, Economics & Outcomes Research, Bologna, Italy; [2]Sanofi S.p.A., Milan, Italy; [3]Sanofi, Cambridge, MA, USA; [3]Sanofi, Chilly Mazarin, France

BACKGROUND AND OBJECTIVES

Prurigo nodularis (PN) is a chronic, inflammatory skin disease characterized by intense itch.[1]
Besides the known repercussions on quality of life, PN is associated with several comorbidities including hypertension, dyslipidemia, metabolic disease, autoimmune conditions and psychiatric disorders.[2,3]
To date, little evidence exists on PN burden of in Italy.

AIMS: This real-world analysis aimed to investigate the healthcare resource consumption and the related direct costs of patients hospitalized for PN and the prevalence of associated comorbidities.

METHODOLOGY

DATA SOURCE: The analysis utilized the administrative databases of healthcare units that cover approximately 12 million health-assisted inhabitants across Italy (nearly 20% of the country population).

POPULATION AND STUDY COHORTS: Adult patients with at least one hospital discharge diagnosis at any level for PN (ICD-9-CM: 698.3) were included and compared with subjects without PN (non-PN cohort) matched for age, sex and year of index-date (ratio 1:2).

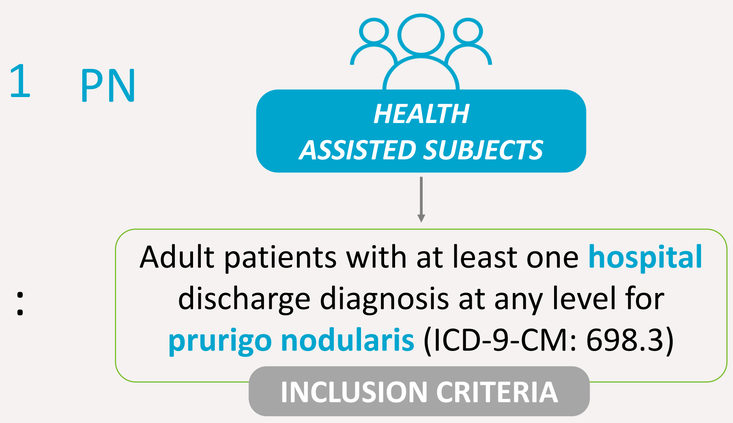


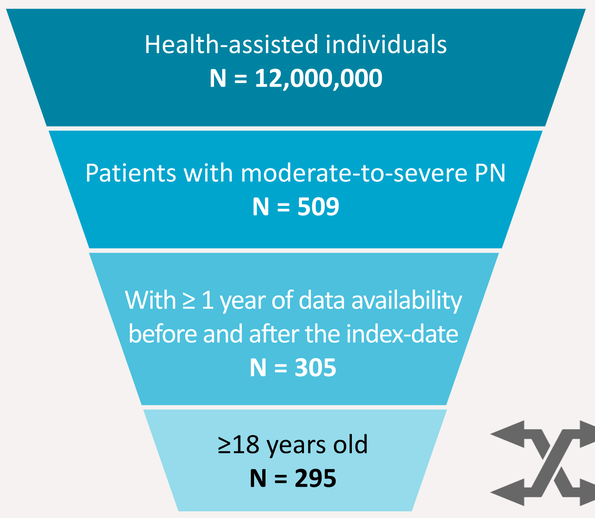
Figure 1. Selection of the study population.

TIMEPOINTS OF THE ANALYSIS

DATA AVAILABILITY: from Jan-2009 to Sep-2022.
INCLUSION PERIOD: from Jan-2010 to Sep-2021.
INDEX DATE: date of the first hospitalization for PN.
CHARACTERIZATION PERIOD: all available period before the index date (at least 1 year).
FOLLOW-UP PERIOD: all available period after the index date (at least 1 year).

RESULTS

IDENTIFICATION OF STUDY POPULATION



- In the sample of 12 million health-assisted subjects, 509 were identified as PN patients.
- Of them, 295 adult patients with at least one year of data availability before and after the index date were included in the study.
- The population without PN consisted of 590 subjects matched for age (63.2 years) and gender distribution (56.3% male).

COMORBIDITIES: At baseline, PN patients had a greater comorbidity burden than no-PN controls (**Table 1**), including higher prevalence of hypertension (56.6% vs 36.6%, respectively), dyslipidemia (26.4% vs 18.0%), diabetes (24.4% vs 12.5%) and mental health conditions (14.9% vs 7.8%).

Table 1. Comorbidity profile in the two cohorts	PN cohort (N=295)	No-PN cohort (N=590)	SMD
Systemic comorbidities, n (%)	**202 (68.5%)**	**272 (46.1%)**	**0.464**
Diabetes	72 (24.4%)	74 (12.5%)	0.309
Dyslipidemia	78 (26.4%)	106 (18.0%)	0.205
Hypertension	167 (56.6%)	216 (36.6%)	0.409
Cardiovascular diseases	59 (20.0%)	47 (8.0%)	0.352
Chronic kidney disease (CKD)	17 (5.8%)	11 (1.9%)	0.204
End-stage renal disease (ESRD)	NR	0 (0.0%)	-
Malignancies	31 (10.5%)	30 (5.1%)	0.203
Mental health, n (%)	**44 (14.9%)**	**46 (7.8%)**	**0.225**
Antidepressants	43 (14.6%)	46 (7.8%)	*0.216*
Anxiolytics	NR	NR	-
Hypnotics and sedatives	NR	0 (0.0%)	-
Type 2 inflammatory diseases	**39 (13.2%)**	**22 (3.7%)**	**0.345**
Asthma	9 (3.1%)	5 (0.8%)	0.160
Eosinophilic esophagitis	0 (0.0%)	0 (0.0%)	-
Chronic obstructive pulmonary disease (COPD)	21 (7.1%)	16 (2.7%)	0.205
Dermatological comorbidities			
Psoriasis (PSO)	14 (4.7%)	NR	-
Atopic dermatitis	35 (11.9%)	6 (1%)	-
Urticaria	NR	0 (0.0%)	-

ANALYSIS OF HEALTHCARE CONSUMPTIONS AND COSTS: At 1-year follow-up, PN patients showed significantly **higher resource consumption** than no-PN, in terms of mean number of prescriptions for PN-related drugs (5.1 vs 1.9, p<0.001), other drugs (11.7 vs 6.5, p<0.001), all-cause hospitalizations (1.4 vs 0.1, p<0.001) and outpatient services (5.4 vs 2.5, p<0.001).

The mean all-cause healthcare costs per patient at 1-year follow-up (**Figure 2**) were €3,847 total (€875 drugs, €2,652 hospitalization, €320 outpatient services), higher than those for the matched controls, of €711 total (p<0.001) (€353 drugs, €228 hospitalization, €130 outpatient services).

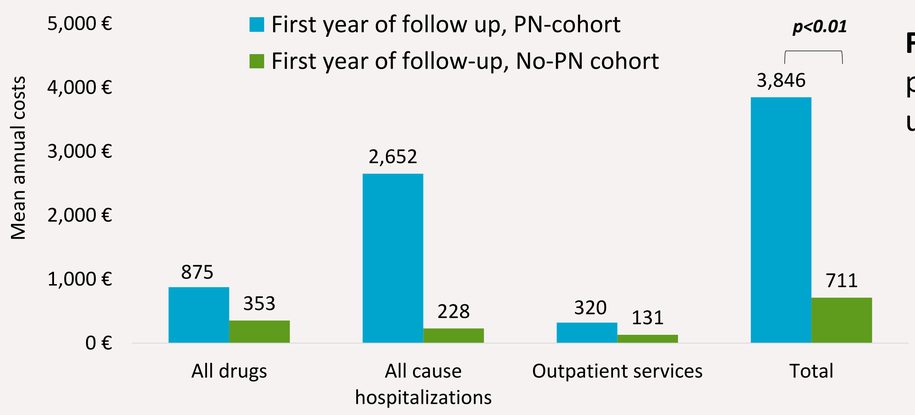


Figure 2. Healthcare costs per patient at 1-year follow-up in PN and no-PN cohorts.

CONCLUSIONS

Patients hospitalized for PN had a higher comorbidity burden at baseline and greater healthcare resource consumption at 1-year follow-up compared to matched controls without PN, with a 6-fold increase in all-cause healthcare costs, indicating a substantial clinical burden and remaining unmet need in PN patients.

References

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