

Epidemiology of Patients Revascularized for Peripheral Artery Disease in France (2016-19): A Retrospective Observational Cohort Study Using the French Hospital Discharge Database (PMSI)

Objectives

There is a lack of up-to-date epidemiological data regarding patients with lower extremity peripheral artery disease (PAD) who underwent lower-limb revascularization in France¹. The objectives of the study were to quantify the number of patients with PAD who annually undergo lower-limb revascularization in France, and to assess the onset of atherothrombotic events (AE) in this population.

Methods

Using the French Hospital Discharge Database (PMSI), patients hospitalized for revascularization for PAD (index date) were followed from January 1, 2016, to December 31, 2019. AE (a composite of acute limb ischemia, major amputation for vascular cause, myocardial infarction, ischemic stroke/TIA -Transient Ischemic Attack- and in-hospital death) as well as comorbidities were identified using ICD-10 codes, medical procedure code, or medication dispensing, and the cumulative incidence of AE was assessed.

Conclusion

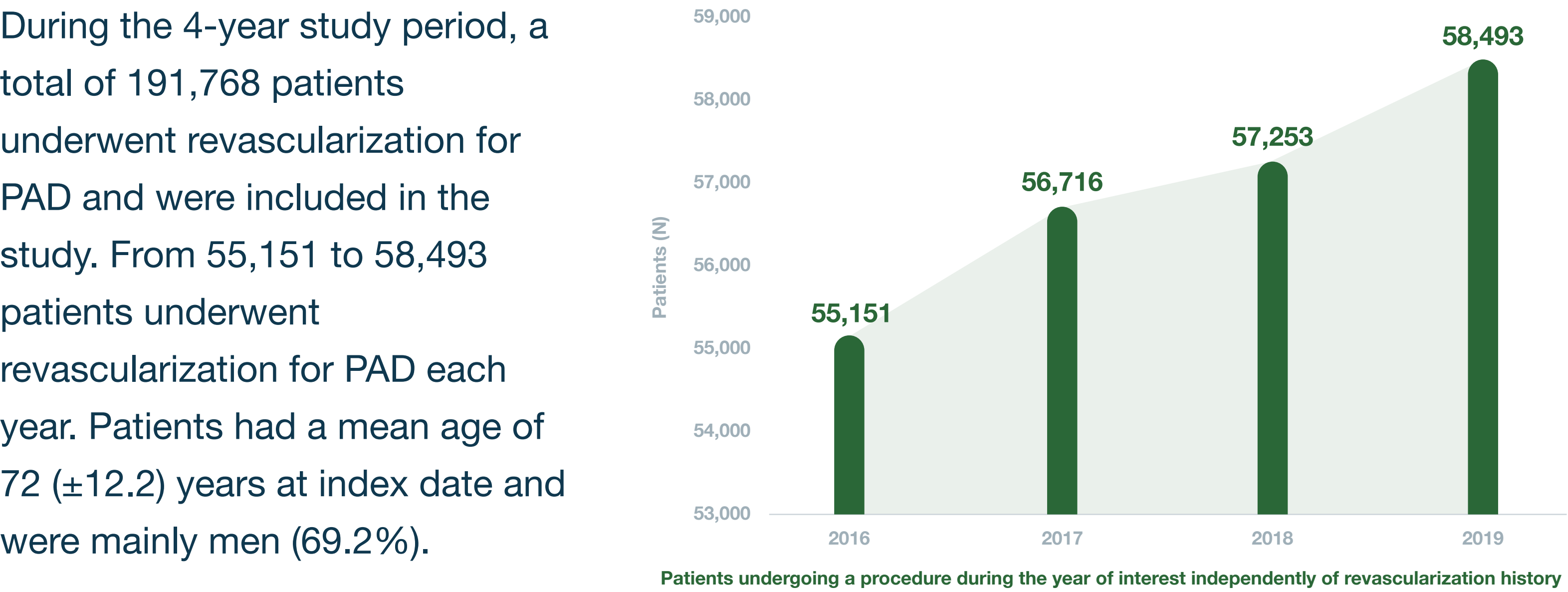
This study provides a comprehensive and contemporary overview of patients treated by revascularization for PAD in our country in the recent years. Adjusted comparative results will allow to compare these occurrences between the different events of interest.

To our knowledge, this is the second study assessing French patients affected by PAD and treated by revascularization in a comprehensive way through French HealthCare data. The first study was carried out by EPI-PHARE between 2017 and 2019 and identified 113,766 patients having undergone angioplasty revascularization. Patients' profiles were similar to our results with a majority of men (1/3 of women) and a mean age of 71 years. Patients were also affected by comorbidities in a similar way with 80% of patients affected by a cerebral ischemic, or coronary, or peripheral artery disease, and diabetes in 40% of the population².

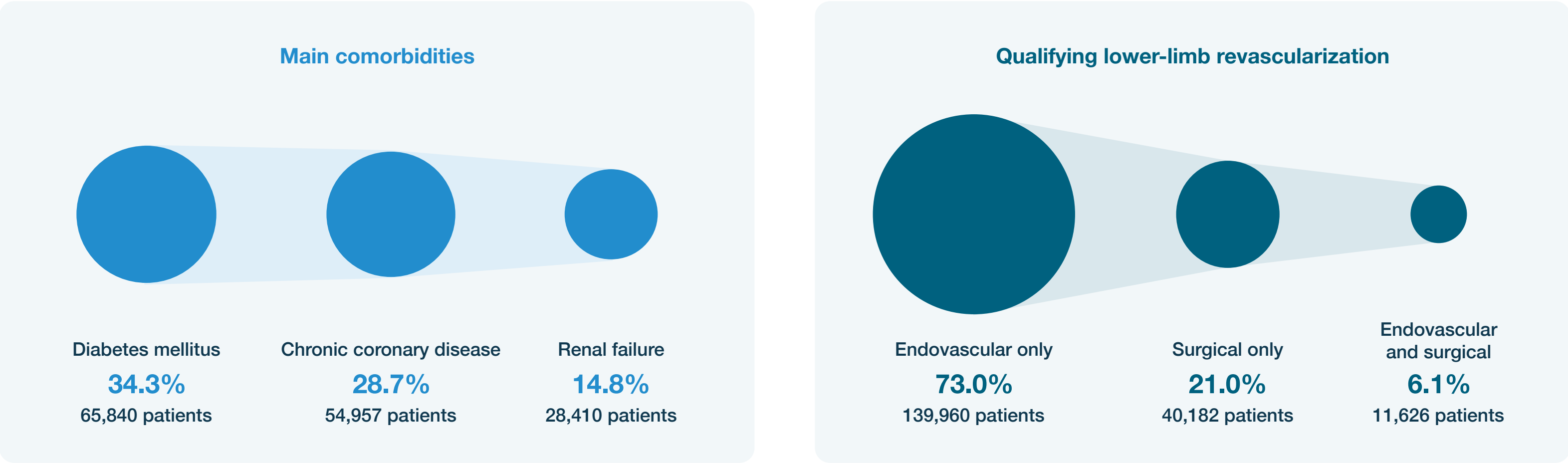
Results

191,768 patients: whole population

Number of patients identified per year



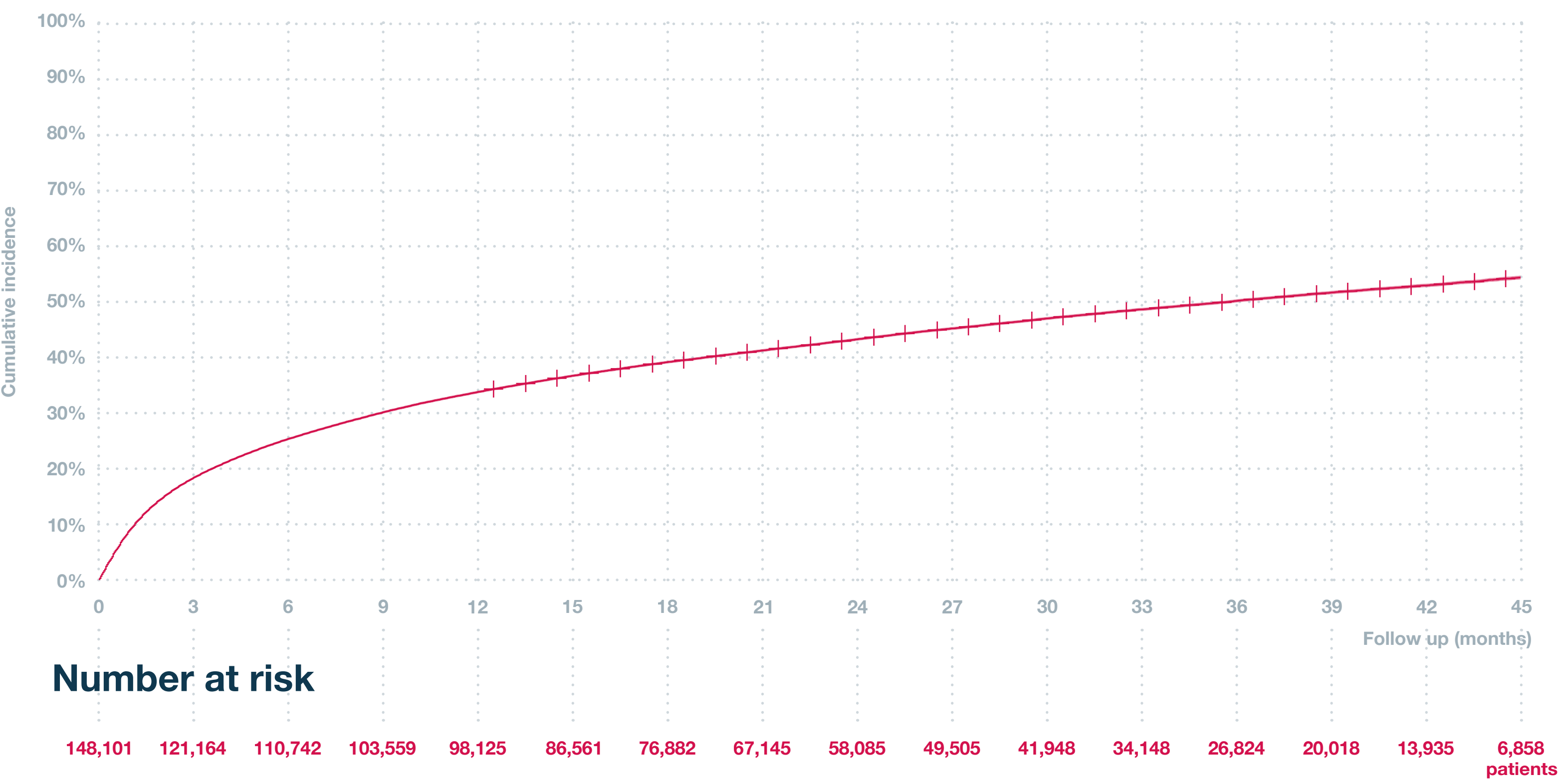
Comorbidities distribution and medical history



The three most frequent comorbidities were diabetes mellitus (34.3%), chronic coronary disease (28.7%), and renal failure (14.8%).

148,132 patients: patients with at least a year of follow-up

Cumulative incidence of the first atherothrombotic event (secondary revascularization excluded)



148,132 patients had at least one year of follow-up. Cumulative incidence of the first AE at 12, 24 and 36 months were 33.8%, 43.2% and 50.1%.

Atherothrombotic events



The three most frequent events that occurred were ALI (26.3%), all-cause in-hospital death (19.1%), and major amputation for vascular causes (11.0%). Secondary revascularization occurred in 32.4% of patients.

References :

¹ Fowkes FGR, Aboyans V, Fowkes FJL, McDermott MM, Sampson UKA, Criqui MH. Peripheral artery disease: epidemiology and global perspectives. Nat Rev Cardiol. 2017;14(3):156–70.

² Dufour E, Herlemont P, Zureik M. Stents et ballons utilisés dans l'artériopathie oblitérante des membres inférieurs (AOMI) en France entre 2017 et 2019: étude menée à partir des données du SNDS. 2021 Mar.