

Evolution of the Number of Metastatic Lung Cancer Patients Before and During the COVID 19 Pandemic: A French National Hospital Database analysis

Code : SA25

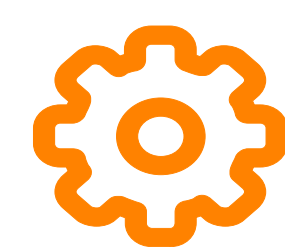
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CONTEXT

Healthcare professionals have emphasized that the COVID-19 pandemic has resulted in significant gaps in the number of new cancer diagnosis. The National Authority of Health estimates that 30,000 cases were undiagnosed in France between March and May 2020.¹

Lung cancer is a public issue as it is responsible for 21% of all cancer deaths (2018).² It is associated with a fast progression and metastatic potency.



OBJECTIVES

The objective of this study was to describe the evolution of the number of patients with metastatic lung cancer in France, by considering the patients' characteristics and health center's localization.



RESULTS

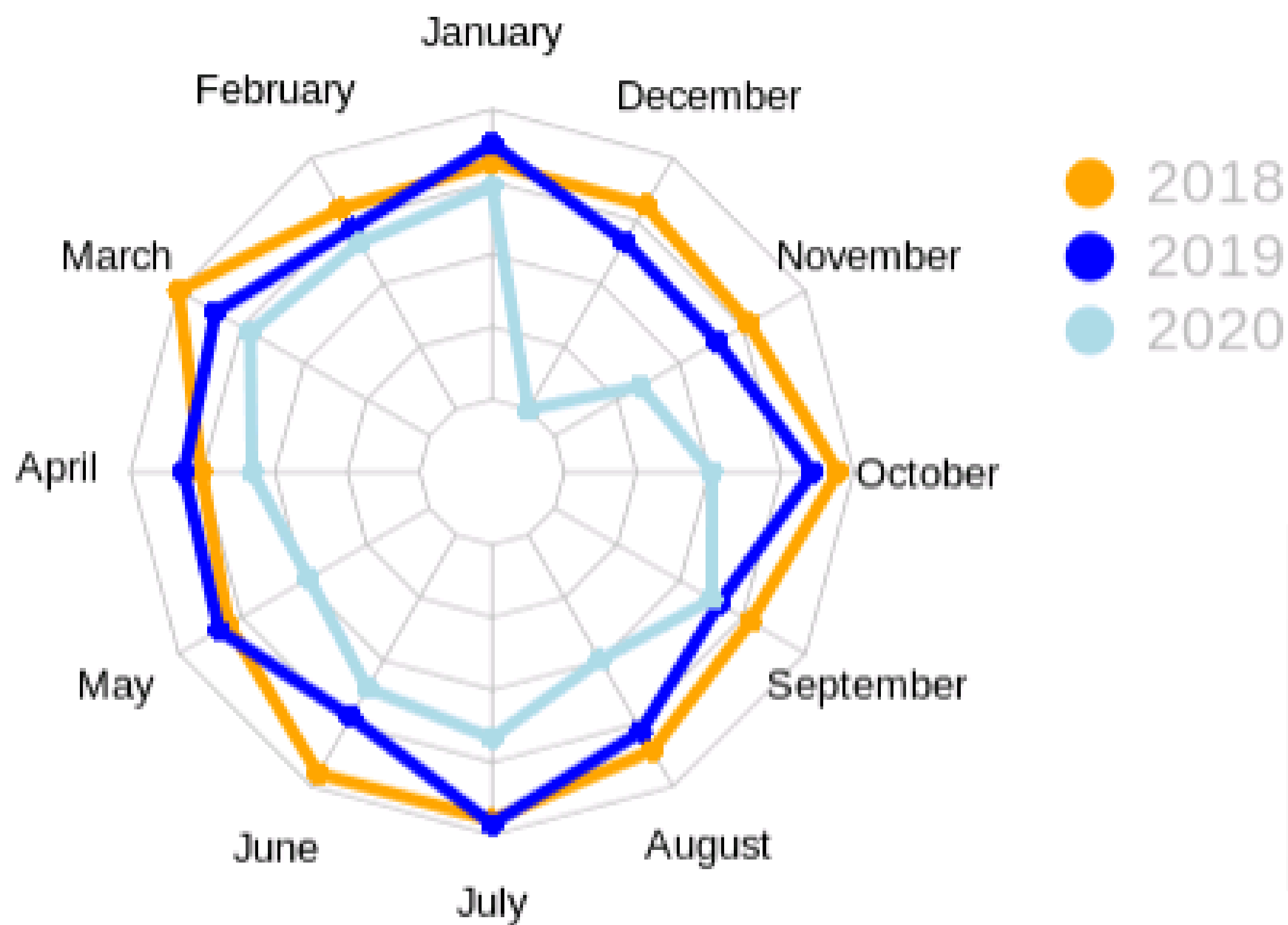
Overall 81,532 patients were identified. An increase of the proportion of mLC women is observed through inclusions years.

Table 1: Patients characteristics by year of inclusion

	Overall	2018	2019	2020
Number of patients	81,532	29,697 (36.4%)	28,350 (34.8%)	23,485 (28.8%)
Age distribution*				
Mean (SD)	66 (10.5)	66 (10.5)	66 (10.5)	67 (10.5)
Age category				
Under 50	32,155 (39.4%)	11,464 (38.6%)	11,167 (39.4%)	9,524 (40.6%)
Between 50 and 70	19,546 (24.0%)	7,340 (24.7%)	6,838 (24.1%)	5,368 (22.9%)
Over 70	29,831 (36.6%)	10,893 (36.7%)	10,345 (36.5%)	8,593 (36.6%)
Gender				
Men	53,331 (65.4%)	19,731 (66.4%)	18,427 (65.0%)	15,173 (64.6%)
Women	28,201 (34.6%)	9,966 (33.6%)	9,923 (35.0%)	8,312 (35.4%)
Number of death during the follow-up				
n (%)	35,833 (43.9%)	16,147 (54.4%)	13,127 (46.3%)	6,559 (27.9%)
Length of follow-up (days)				
Mean (SD)	271 (247.3)	380 (307.2)	279 (198.4)	125 (94.1)

* Mean and median age are consistent.

Figure 1: Number of mLC patients included per month and year



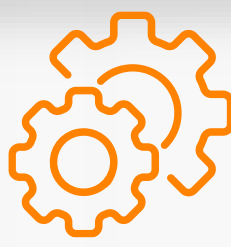
The number of diagnosed mLC patients is globally lower in 2020 compared to the other years, regardless of the months. There is a particular drop in the number of diagnosed mLC patients from March to December 2020 (2,249 vs 1,085 patients), with strong decrease in December.



CONCLUSION

This study shows a gap in diagnosis of metastatic lung cancer in 2020, which is certainly due to the consequences of the COVID-19 pandemic on the hospital care system. This observed gap varied by region, gender and age.

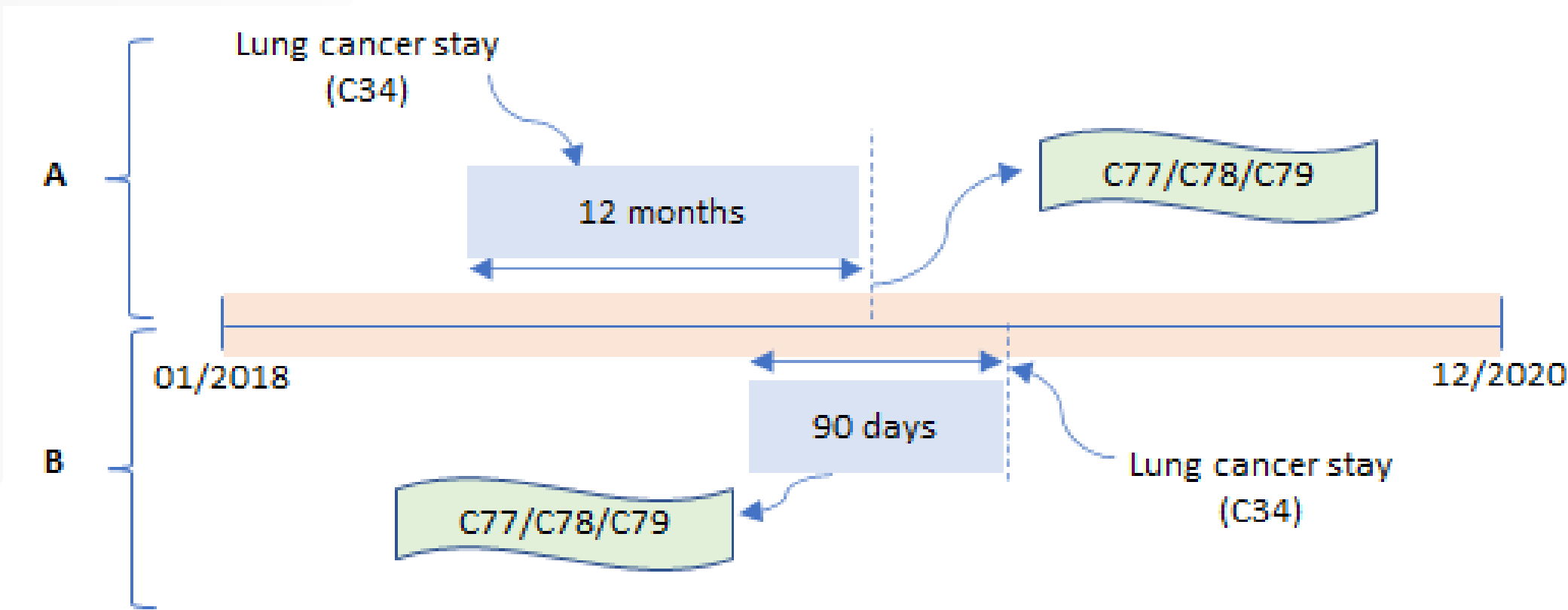
Disclosure : Nicoleta Petrica, Mathieu Rosé, Romain Finas : consulting activity of Alira Health
PMSI bases provided by ATIH.
Data controller and Processing implementation officer: Alira Health.
Study registered under MR006 with the Health Data Hub on 05/18/2022



METHODOLOGY

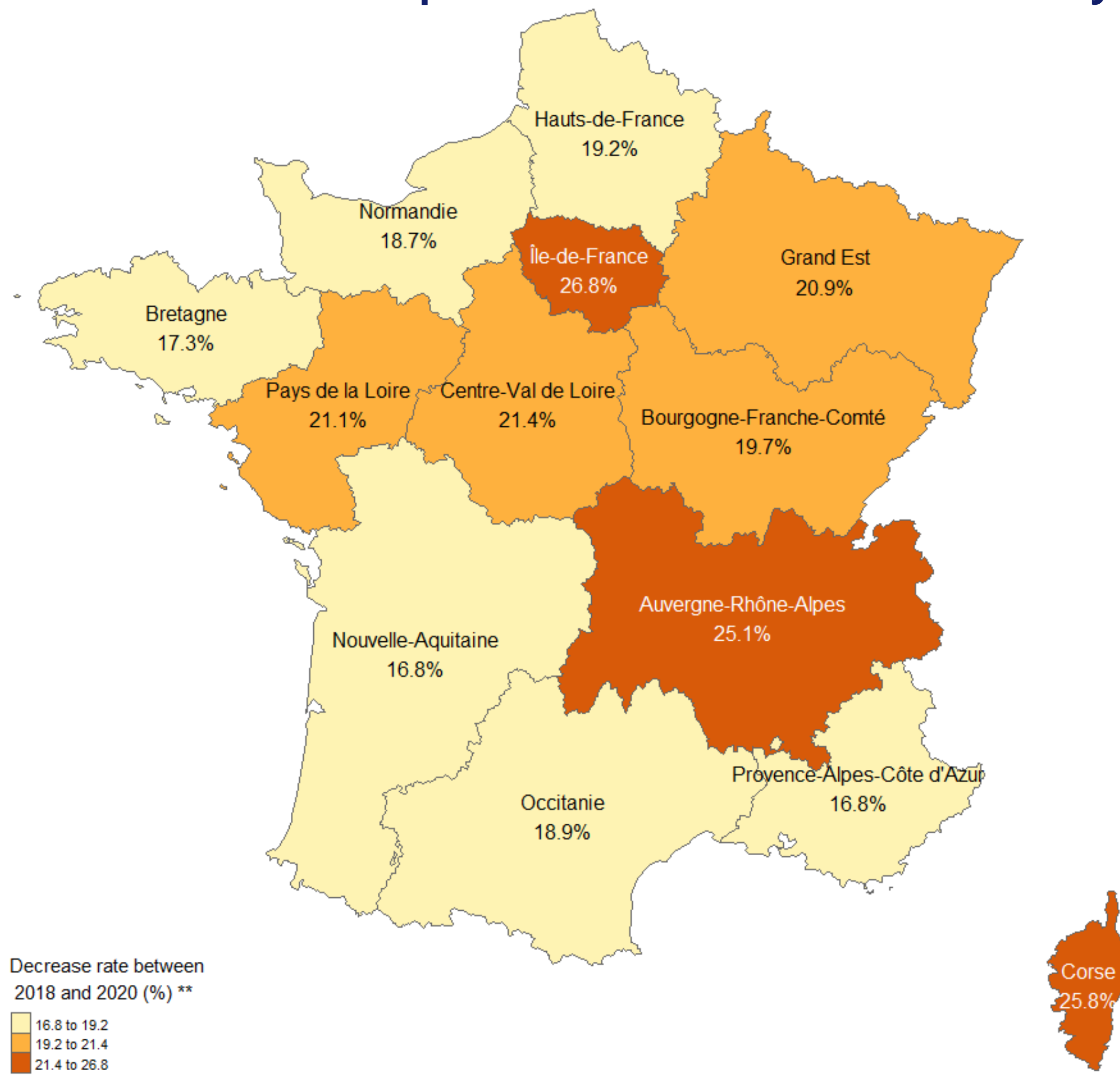
Study design : a retrospective study based on the French national claims hospitals database (PMSI), covering all public and private care centers in France. The inclusion period goes from January 2018 to December 2020 and patients are followed-up until death or December 31st, 2020.

Study population : A : Adult patients with a lung cancer hospitalization, in the 12 month prior to the metastasis hospitalization OR B : Adult patients with a metastasis hospitalization, in the 90 days prior to the lung cancer hospitalization as illustrated below.³



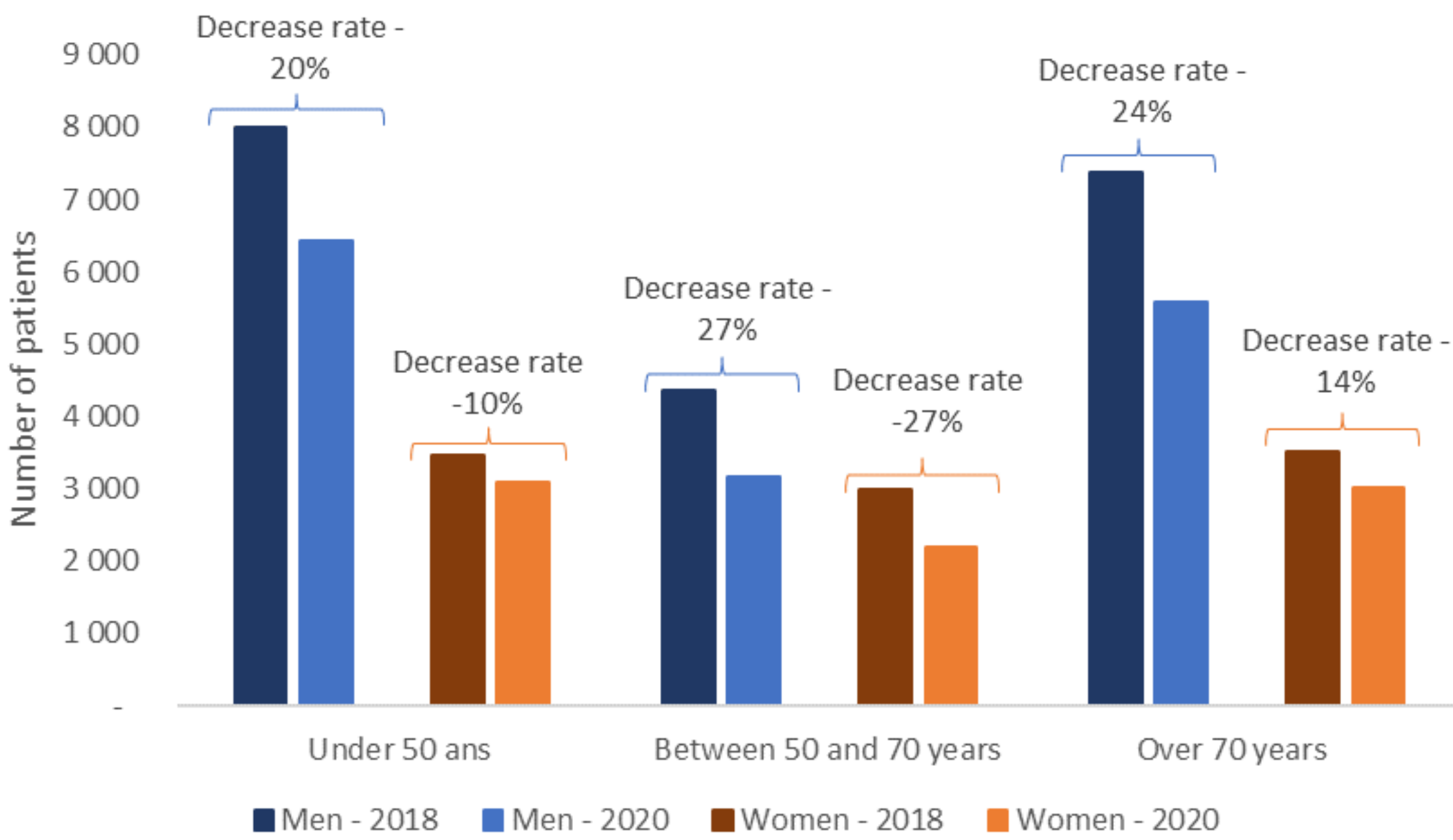
Between 2018 and 2020, the number of patients diagnosed for mLC decreased by 21% in France. The proportion varied between regions,

Figure 2 : Decrease rate of mLC patients between 2018 and 2020 by region



**The three decrease rate ranges were estimated with the Jenks discretization method.

Figure 3: Decrease of the number of mLC patients between 2018 and 2020



Men aged 50-70 years were the sub-population most affected by the decrease in mLC diagnoses in most regions.



REFERENCES

- ¹ https://www.risqual.net/system/files/2020-12/RQ_XVII_4_Cabarrot.pdf
- ² https://www.e-cancer.fr/pdf_inca/preview/303372/4327939/file/Panorama%20des%20cancers%20en%20France_2021.pdf
- ³ <https://www.sciencedirect.com/science/article/abs/pii/S0398762018306333>