



Objective

There is a few data’s on the burden of the last month lung cancer patients and on economic impact of end of life (EOL) aggressiveness of cares. The aim of this study was to assess the costs of the month before death in patients with lung cancer and the impact of aggressiveness of cares during this period.

Methods

Data extraction

• STUDY PERIOD:

January 1st, 2015 to December 31st, 2016.

• DESIGN:

Retrospective study of the PMSI-MCO (French Medical Information System – Medicine, Surgery, Obstetrics) database, a comprehensive collection of all inpatient stays in France and using International Classification of Diseases, 10th Revision (ICD-10).

• DATA EXTRACTION:

All adult patients with ICD-10 codes for lung cancer (C34*) associated with a hospital death exit mode during the same stay were extracted in 2015-2016.

Study population

A 3-year retrospective analysis was realized from the date of death of each patient to track the first stay with a ICD-10 C34* code. This first stay define the lung cancer **diagnosis date**.

From the diagnosis date, a 1-year retrospective analysis was performed in order to select only the **incident adult patients** with lung cancer (absence of C34* codes).

Assessment criteria

Aggressiveness of EOL cares was assessed by the following criteria's:

- Chemotherapy administrated within last 14 days of life (DOL)
- > 1 hospitalization within 30 DOL
- ICU admission within 30 DOL
- Palliative care < 3 days before death

So, each patient will have a unique score between **0 point and 4 points**.

Economic evaluation

Costs were limited to directs costs (hospitalizations, drugs, radiotherapy), from the French public health insurer perspective, based on 2017 DRG tariffs and on expensive drugs tariffs.

Conclusion

The study highlights a major EOL economic burden for the healthcare system, with an extra cost of more than € 3,000 per patient in case of EOL aggressiveness markers. The extra cost can be explained by hospitalizations costs and intensives cares costs. The expensive drugs, implants and radiotherapy does not impact the extra cost of patients.

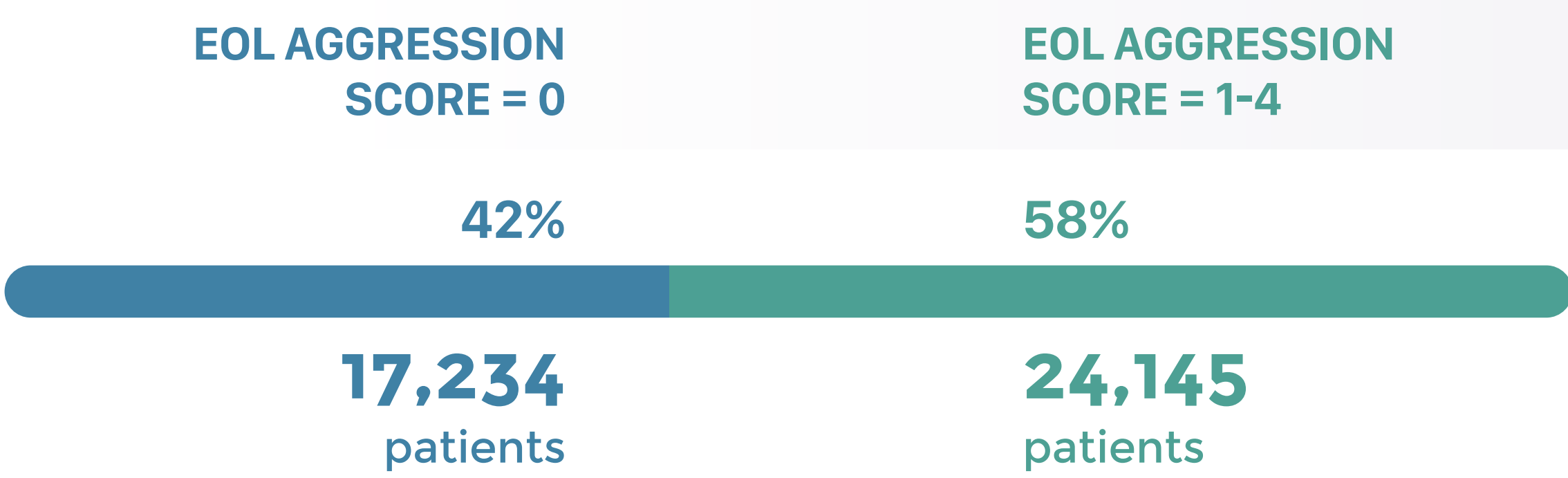
Economic burden of end-of-life aggression in lung cancer patients from the French Health Insurer perspective



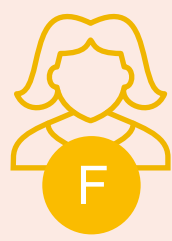
Eligible
population
41,379
patients

Extracted population (2015-2016)

46,965
patients



GENDER (PATIENTS)

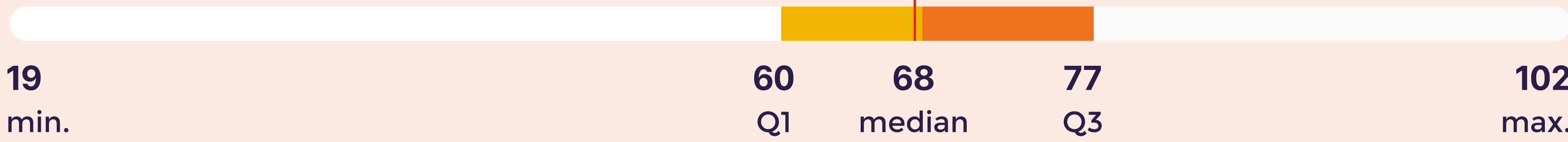


11,139
27%



30,240
73%

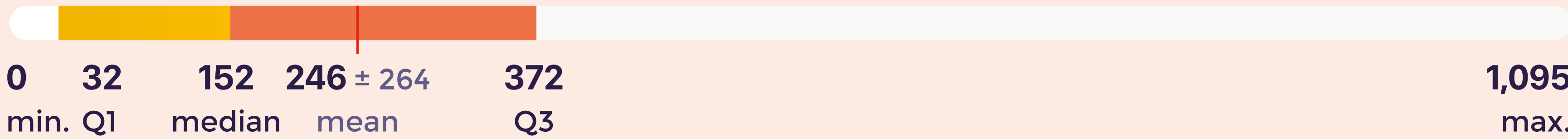
AGE OF PATIENT AT DEATH (YEARS)



METASTATIC AT DIAGNOSIS (PATIENTS)

29,386
71%

FOLLOW-UP DURATION OF PATIENTS (DAYS)



Total cost of EOL last month

€ 343,715,727

mean € 8,307
± € 5,092

Hospitalization costs (DRG official tariffs)

89.6%
mean € 7,446
± € 3,843

Daily supplements costs

8.1%
mean € 671
± € 2,292

Drugs costs

1.8%
mean € 146
± € 660

Implants costs

0.4%
mean € 29
± € 308

Radiotherapy costs

0.2%
mean € 15
± € 143

