

# THE IMPACT OF COVID-19 ON

## POPULATION-LEVEL DRUG UTILIZATION OF ALENDRONATE

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### OBJECTIVE

Alendronate [ALN] is the most common osteoporosis medication prescribed in Europe.

During the COVID-19 pandemic, non-urgent visits to primary care were restricted, affecting the initiation of new treatments.

We aimed to describe the effect of COVID-19 on the prescription of ALN to new users in three European databases.

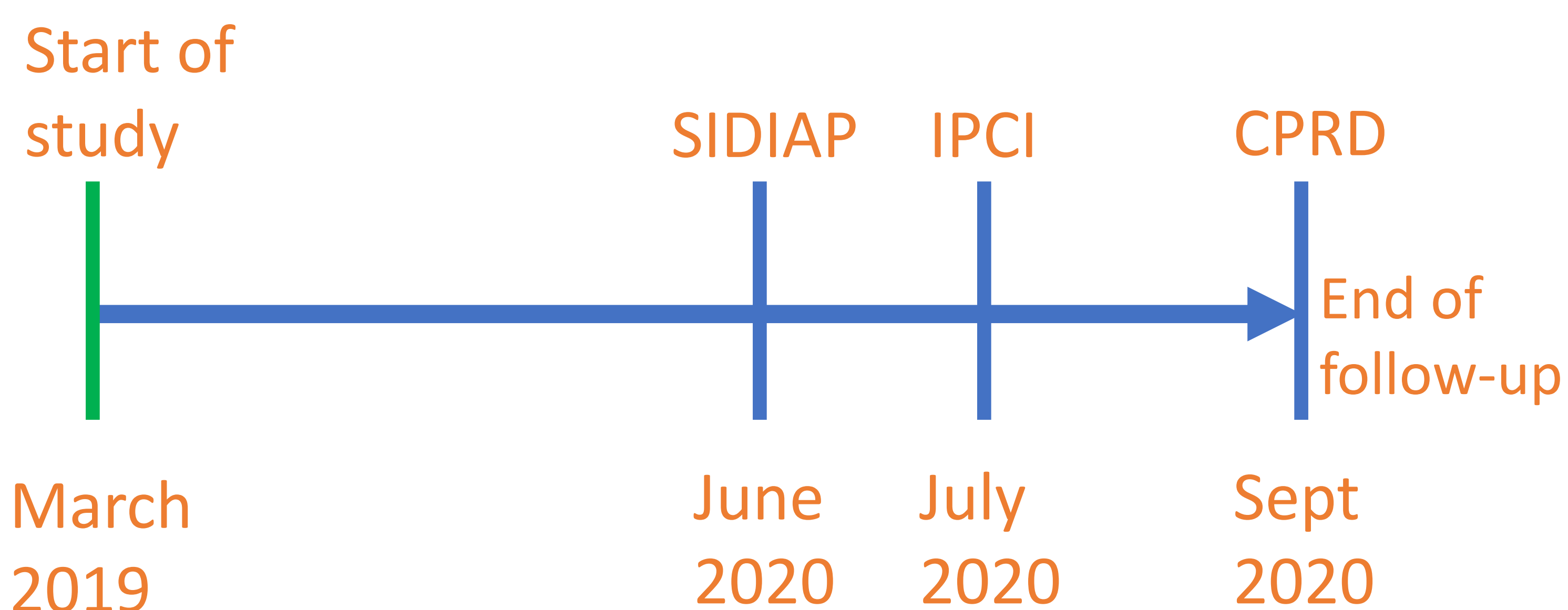
### METHODS

We included new users aged  $\geq 18$  years and registered for  $\geq 1$  year in the following databases:

- Clinical Practice Research Datalink (CPRD, UK)
- Integrated Primary Care Information Project (IPCI, Netherlands)
- Sistema d'Informació per al Desenvolupament de la Investigació en Atenció Primària (SIDIAP, Spain)

New users were defined as patients without a prescription for ALN in the preceding year.

The number of new users of ALN was obtained from prescription records.



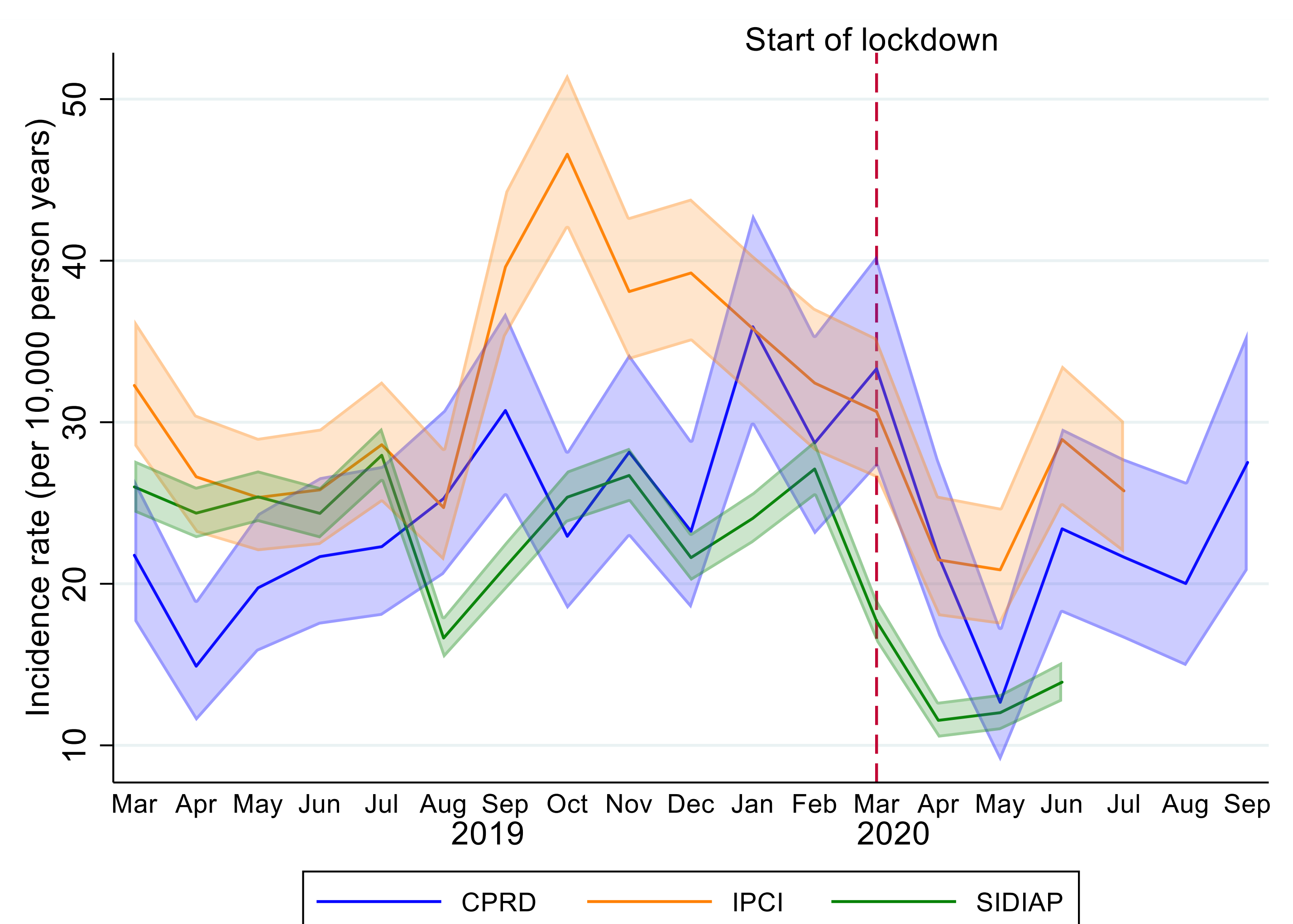
Monthly incidence rate (IR) was calculated as

$$\frac{\text{Number of new users of ALN in a given calendar month}}{\text{Person – years (PY) of patients in database on given calendar month, who were not users of ALN as of the last day of prior calendar month}}$$

The IR was compared before and after March 2020, when lockdown was imposed due to COVID-19.

### RESULTS

- The total number of new users of ALN in the study period were 1,582 in CPRD, 3,898 in IPCI and 13,109 in SIDIAP.



- Prior to lockdown, there was a general upwards trend of new use of ALN in CPRD, with IR (per 10,000 PY) increasing from 21.8 to 33.3 between March 2019 and March 2020. A similar trend was seen in IPCI. Rates were mostly stable in SIDIAP.
- After March 2020, the start of lockdown, rates of new use of ALN rapidly decreased in all countries from 33.3 to 12.7 for CPRD, 30.7 to 20.9 for IPCI and 27.1 to 11.6 for SIDIAP.
- Recovery after the initial lockdown was observed with IR of new use of ALN reaching pre-pandemic levels in IPCI (28.9) and CPRD (27.5) as of June and September 2020, respectively. As of June 2020, new ALN use in SIDIAP (13.9) had not reached pre-pandemic levels.

### CONCLUSION

Following the COVID-19 pandemic lockdowns in March 2020, the initiation of ALN declined in three European countries, with some recovery to pre-pandemic rates observed within 6 months.

### ACKNOWLEDGMENTS

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