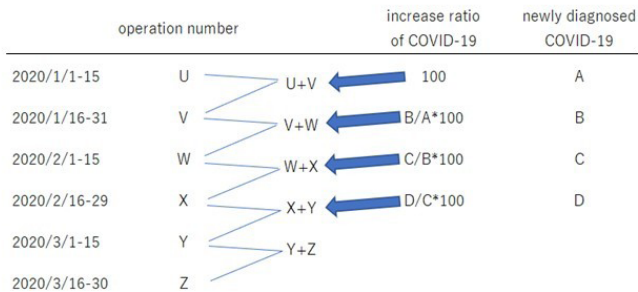
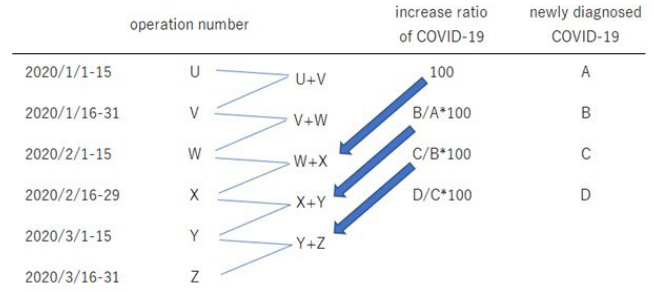


Correlation between increase ratio of COVID-19 and number of operation in present month



Correlation between increase ratio of COVID-19 and number of operation in next month



Pairing of correlation in present month

U+V	100
V+W	$B/A*100$
W+X	$C/B*100$
X+Y	$D/C*100$
⋮	⋮

Pairing of correlation in next month

W+X	100
X+Y	$B/A*100$
Y+Z	$C/B*100$
⋮	$D/C*100$
⋮	⋮

Figure S1 Calculation method for the correlation between the increase ratio of COVID-19 patients and volume of operation in our hospital. The increase ratio of COVID-19 patients was calculated as follows. In a given month, the anterior and posterior half-month cumulative total number of patients diagnosed each day with COVID-19 in Japan was calculated, and the present half-month cumulative total was divided by the previous value and multiplied by 100. To calculate the Spearman correlation, this increase ratio was compared with the number of surgeries conducted in the current month or the following month.

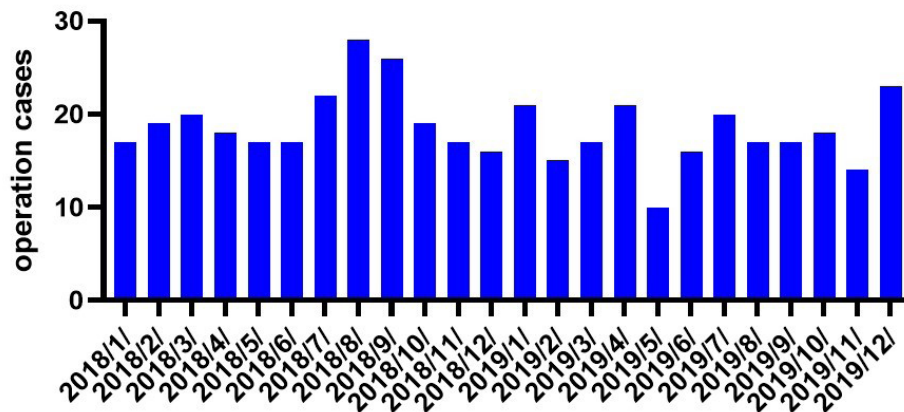


Figure S2 Bar graph showing the volume of lung cancer surgery in the pre-pandemic period.

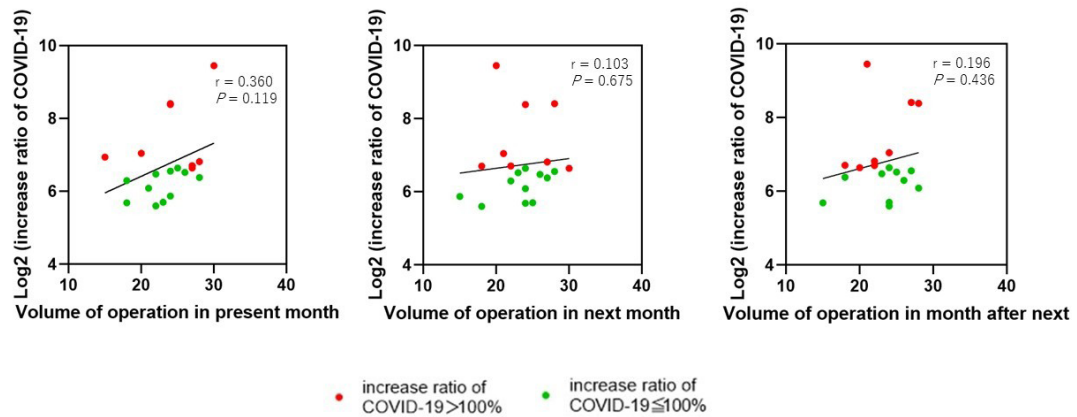


Figure S3 Scatter plots showing the relationship between the increased ratio of new COVID-19 cases in Japan and the operation volume in the present month, next month, and the month after next. The data were derived from January to October 2022.

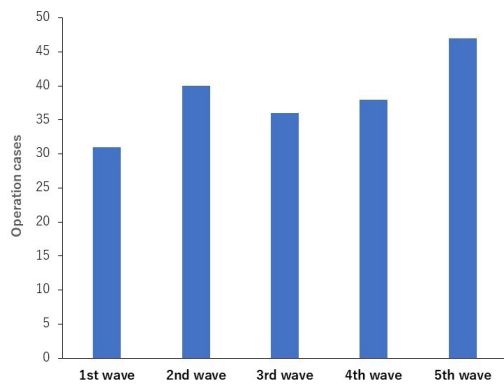


Figure S4 Bar graph showing the lung cancer surgery volume for each COVID-19 wave. The number of surgical cases shows the sum of the cases for the continuous 2 months which include the month on top of the wave and the succeeding month.