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Table 1. Outcomes of Patients With Lung Cancer Without SARS-CoV-2 Infection Treated at the Zhongnan Hospital of Wuhan University

	RT n = 28, n (%)	CT and Immunotherapy n = 206, n (%)	TKI n = 42, n (%)	Total n = 276, n (%)
Treatment on schedule	0	14 (6.8)	42 (100.0)	56 (20.3)
Switching from intravenous CT to an oral therapy	0	23 (11.2)	0	23 (8.3)
Treatment interruption	28 (100.0)	169 (82.0)	0	197 (71.4)
Reports of suspicious symptoms associated with progression	3/28 (10.7)	44/169 (26.0)	NA	50/197 (25.4)

CT, chemotherapy; NA, not applicable; RT, radiotherapy; SARS-CoV-2, severe acute respiratory syndrome coronavirus 2; TKI, tyrosine kinase inhibitor.

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References

1. Russano M, Citarella F, Vincenzi B, Tonini G, Santini D. Coronavirus disease 2019 or lung cancer: what should we treat? *J Thorac Oncol.* 2020;15:e105.
2. Liang W, Guan W, Chen R, et al. Cancer patients in SARS-CoV-2 infection: a nationwide analysis in China. *Lancet Oncol.* 2020;21:335-337.
3. Yu J, Ouyang W, Chua MLK, Xie C. SARS-CoV-2 transmission in cancer patients of a tertiary hospital in Wuhan [e-pub ahead of print]. *JAMA Oncol.* <https://doi.org/10.1001/jamaoncol.2020.0980>, accessed April 25, 2020.
4. Zhang H, Huang Y, Xie C. Treatment and outcome of a patient with lung cancer infected with severe acute respiratory syndrome coronavirus-2. *J Thorac Oncol.* 2020;15:e63-e64.
5. Meng H, Guo X, Sun D, et al. Genomic profiling of driver gene mutations in Chinese patients with non-small cell lung cancer. *Front Genet.* 2019;10:1008.

Lessons Already Learnt From the Coronavirus Disease 2019 Pandemic



To the Editor:

The first patient with coronavirus disease 2019 (COVID-19) in Spain was registered on January 31, 2020. Since then, the escalating growth of the disease has affected more than 150,000 patients, has caused over 15,000 deaths, and a similar number of health professionals have been infected. As of April 10, 2020, Spain has the highest number of patients in Europe and the third highest number of deaths in the world.¹

The thoracic surgery service of our 400-bed hospital serves a population of 1.2 million, and performs about 120

lung resections for lung cancer and over 90 surgical explorations of the mediastinum per year. In early March, the commission in charge of the hospital organization during the pandemic restricted the outpatient clinic to the day hospital for oncohematologic treatments, and also restricted surgical activities to priority oncologic operations. However, with the exponential increase of patients with COVID-19, the outpatient clinics and the postsurgical recovery rooms have had to be transformed into hospital wards and intensive care units, respectively, and the respirators in the operating rooms have had to be used for patients with COVID-19. The result is that no surgical procedure, except for emergency cases, can be performed, and no new patients can be accommodated in the outpatient clinics.

Our hospital is like a casualty hospital; all wards are filled with patients with COVID-19. Nearly 300 health professionals have been infected, and more are in quarantine for having been in close contact with infected patients or colleagues. Those who can still work are devoted exclusively to patients with COVID-19. Some patients have been externalized in a nearby hotel because there was no room in the hospital. Pulmonologists, thoracic surgeons, and oncologists, who usually meet in tumor boards, are now working as part of improvised medical teams attending infected patients. There is only one thoracic

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surgeon who controls the chest tubes and performs tracheostomies. Tumor boards are now conducted virtually if there is a need to discuss some patients. The numbers in surgical waiting lists and of patients waiting to be diagnosed are increasing. The consequences of delays are difficult to quantify, but most likely will jeopardize the fate of many patients. The workload, once we can resume normal activities, will be enormous.

The COVID-19 pandemic may not be the only disease that we will have to face in our professional lives. Should there be another one, all measures should be taken to keep a section of the hospital clean so that the regular activities can continue for as long as possible. Sooner or later, patients will have to be transferred to makeshift hospitals. If this were done in the early phase of the disease,² normal activities could be continued for much longer and priority patients with cancer would be one of those to benefit from timely treatment. The early testing of health personnel and patients, coupled with the use of adequate protective gear, would prevent the dissemination of disease in the hospital, which has been catastrophic in our case. These measures would reduce the number of infections among the health care personnel, would maintain cleanliness in areas of the hospital, and would increase the capacity to continue the regular activities involving patients without COVID-19.

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Challenges in the Diagnosis of NTRK Fusion- Positive Cancers



To the Editor:

In a recent issue of the *Journal of Thoracic Oncology*, the National Lung Cancer Roundtable recommended

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References

1. Johns Hopkins University and Medicine. COVID-19 dashboard by the Centers for Systems and Engineering (CSSE). <https://coronavirus.jhu.edu/map.html>. Accessed April 10, 2020.
2. Thoracic Surgery Outcomes Research Network, Inc. COVID-19 guidance for triage of operations for thoracic malignancies: a consensus statement from Thoracic Surgery Research Network. *J Thorac Cardiovasc Surg*, in press.

neurotrophic tyrosin kinase receptor (NTRK) fusion testing as new part of diagnostic routine workup in advanced NSCLC.¹ Because NTRK-targeted therapy is approved and highly active, many oncologists are now ordering tests, and laboratories are challenged with the implementation of suitable methods.^{2,3} These include immunohistochemistry (IHC), fluorescence in situ hybridization (FISH), polymerase chain reaction, and next-generation sequencing (NGS) using DNA or RNA. Each method has advantages and disadvantages.^{4,5}

Our center is participating in a diagnostic study for patients with previously untreated, advanced adenocarcinoma of the lung. This study (NEOlung, NEO New Oncology, Cologne, Germany) is prospectively comparing the performance of two DNA-based NGS test panels for actionable driver mutations in tissue (NEOplus) and blood (NEOliquid). In 2018, NTRK1 was added to the