Provision of essential bronchoscopy during COVID-19 pandemic

To the Editors:

We read with interest the recent commentary by Dr Leong 'Delayed access to lung cancer screening and treatment during the COVID-19 pandemic: are we headed for a lung cancer pandemic?'.[1] This discusses the potential effects of widespread re-organization of healthcare provision during the coronavirus disease 2019 (COVID-19) pandemic on lung cancer diagnosis and prognosis. Bronchoscopy, a key component of the diagnostic process, has widely been identified as a potential superspreading aerosol-generating procedure (AGP) that confers a high risk of viral transmission. Hence, access to bronchoscopy for many indications has been reduced to protect key healthcare staff. International guidelines have suggested bronchoscopy should be used cautiously in the evaluation of patients with suspected COVID-19 infection and that when safe to do so and if necessary, to perform bronchoscopy in other patient populations; this should be done in negative-pressure rooms with careful use of personal protective equipment (PPE).[2] Subsequently, it has been shown that, when indicated, bronchoscopy can be performed safely in those with COVID-19.[3] Data from our centre indicate that bronchoscopy can be undertaken for multiple indications when there is careful adherence to PPE use, enabling continuation of essential services, particularly in the aforementioned timely diagnosis of lung cancer.[4]

St Vincent's University Hospital, an 836-bed academic health centre in Dublin, Ireland, is one of the eight designated national cancer centres which provides rapid access diagnostic and treatment options for the management of suspected lung cancer. During the COVID-19 pandemic, the hospital intermittently operated at surge capacity with over 150% occupancy of the intensive care unit (ICU) and with multiple redeployments of staff to preserve provision of essential medical care. Between April and December 2020, the 14-day incidence case rate in Ireland of COVID-19 ranged from 484.9 to 1857.23 cases per 100 000 people. Due to limited availability of polymerase chain reaction (PCR) testing, to continue bronchoscopy safety, a specific COVID-19 questionnaire was employed as a pre-procedure screening tool and all healthcare workers wore full PPE including gown, gloves, mask and eye protection during procedures. During this period 313 bronchoscopies were performed; 71% to investigate a possible primary lung cancer, with the next most common indication being bronchoalveolar lavage in immunocompromised patients (16%). Forty-two staff members had a cumulative AGP exposure of 855 procedural hours. No staff member tested positive for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in this period either by routine staff testing or by symptomatic testing. Importantly, of the procedures done primarily for investigating lung malignancy, 19% directly provided the diagnosis by histology/cytology.

The COVID-19 pandemic has derailed the provision of many critical services across multiple specialties internationally and notable among these are cancer services.[5,6] We have shown that bronchoscopy, when safely conducted according to the best practice guidelines, can continue through the COVID-19 pandemic with no increased risk of transmission to staff or patients, thus preserving the provision of important diagnostic services. As community transmission of SARS-CoV-2 was low during the study period (i.e. the first two waves of the pandemic), our institutional policy did not include routine PCR testing. As the level of community transmission has increased substantially during our current third wave, and with the increased predominance of the UK variant[7] and in line with the suggested practices by the American Thoracic Society (ATS),[2] we have now instituted routine pre-procedural screening with PCR.

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A note on lung cancer in the COVID-19 era

To the Editors:

We thank Dr Leong for her timely article about the possibility of a lung cancer pandemic once the coronavirus disease 2019 (COVID-19) one is better controlled.[1] We have been actively contributing to the TERAVOLT study[2] described and agree that concurrent COVID-19 infection with any form of lung cancer carries a poor prognosis. Locally, we run a large pleural unit with high rates of lung cancer and mesothelioma and provide a regional interventional service.[3] As per known literature, we have noticed a dramatic drop in referrals. New patient referrals to pleural clinic for any cause in 2020 were only 43% compared to 2019 numbers (unpublished local data) (clinics were kept open during the pandemic as multi-site working is possible locally) and we also noted a drop in interventions performed (57 in 2020 vs 97 in 2019, even allowing for 6 weeks where no elective theatre lists ran). However, there has been substantial work locally and nationally to mitigate the impact of COVID-19, and we believe Dr Leong's article will be greatly enhanced by pointing out some of this. 'COVID light' or 'free' pathways with regular COVID-19 swabs have enabled re-starting elective interventional services and provide chemotherapy in a safer fashion.[4] The United Kingdom Lung Cancer Coalition have listed a number of points to support lung cancer care, namely to restart screening programmes, revise visiting restrictions, establish diagnostic hubs, enable virtual discussions and straight to computed tomography (CT) referrals amongst others.[4] A campaign has also been recently launched by the Lung Cancer Clinical Expert Group (CEG) and the Roy Castle Foundation, 'Differentiate between the C's', which provides a template to differentiate between lung cancer and COVID-19 for healthcare professionals (Fig. 1).[5] An appraisal of the various discussion points and proformas produced by the CEG is beyond the scope of this article, and not unique. Various other oncological societies have also provided such guidance, and perhaps a further commissioned article would complement this letter. It would be also important for all centres to collate data on the outcomes of patients presenting late with lung cancer, what symptoms they have and how long they had those for and why they did not present earlier. However, such qualitative and quantitative data will be very difficult to collate prospectively, and might be an option for large-scale audits such as the

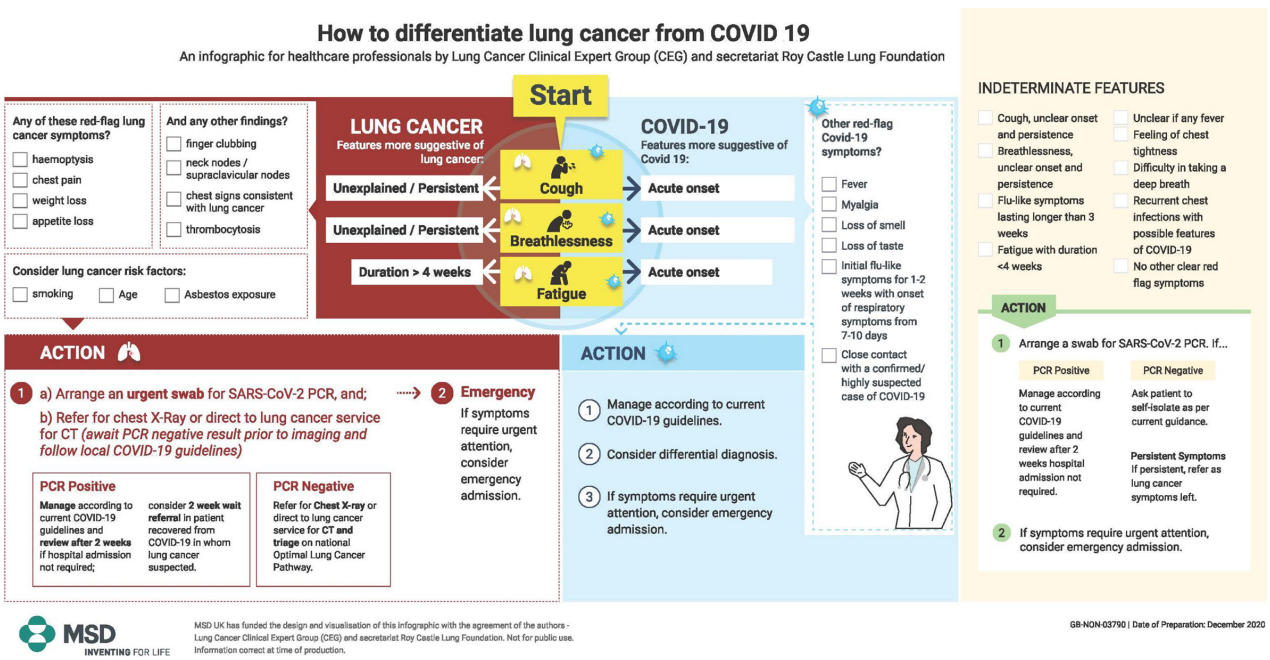

Figure 1 How to differentiate lung cancer from COVID-19. An infographic for healthcare professionals by Lung Cancer Clinical Expert Group (CEG) and secretariat Roy Castle Lung Cancer Foundation (RCLCF): freephone number (0333 323 7200) within the UK and the website address (www.roycastle.org) for use overseas.

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