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## Clinical Oncology Editorial

# Coronavirus Disease 2019: The pivotal role of UK Clinical Oncology and the UK Coronavirus Cancer Monitoring Project

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# Coronavirus Disease 2019: The pivotal role of UK Clinical Oncology and the UK Coronavirus Cancer Monitoring Project

The United Kingdom (UK) is currently in the middle of the COVID-19 pandemic. The causative virus, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), is a novel strain of coronavirus previously unidentified in humans and thought to be of zoonotic origin (1). SARS-COV-2 exposure may result in a wide variety of outcomes, ranging from asymptomatic infection to the development of respiratory failure requiring ventilatory support (2). COVID-19 is extremely contagious and as of 6th May 2020, there were over 200,000 cases and 30,000 deaths reported in the UK alone (3,4).

Globally there has been huge disruption to everyday life. Without a vaccine or effective treatment, governments are reliant upon strategies such as social distancing and quarantine measures to limit SARS-CoV-2 infection to a level which can be managed by healthcare systems (5). Furthermore, the additional burden placed on healthcare services is likely to impact the quality of care for patients suffering with unrelated health problems. This is of particular relevance to oncologists as prompt diagnosis and treatment can make significant difference to patient outcomes. In addition, individuals with a significant co-morbidity such as cancer may be particularly vulnerable to coronavirus infection as a potential consequence of their immunosuppressed state (6–8).

This leaves us as oncologists faced with challenging decisions about how to proceed with treatment for patients with cancer. The risks of COVID-19 infection have to be incorporated into our decision making and will impact on our practice for months or potentially years to come. This has led to the need to have difficult conversations with patients about how the COVID-19 pandemic affects their treatment, with realistic weighing up of the potential benefits and harms that can occur. In our experience, most patients have been remarkably pragmatic about the current situation and the measures we are putting in place, but this is an emotive area and conversations about stopping or delaying treatment are difficult. To effectively and compassionately have these conversations we need to be informed by the best evidence available and at present this is limited. Much of the current published literature around COVID-19 and cancer is guidelines and the published studies we have are largely based around smaller numbers of patients in the Chinese population.

Despite the uncertainty about which treatments are safe to continue and the full extent of the risks from the COVID-19 pandemic significant changes to the delivery of cancer services have already been made. With the limitations on hospital resources meaning the usual support to manage anticancer treatment toxicities are potentially reduced or unavailable and with the additional risk to patients with cancer who contract a concurrent COVID-19 infection (7,8), oncological treatments which may confer an unacceptable risk as perceived by patients and clinicians are being altered, cancelled or deferred. Guidance has been produced as to how to best balance the risks of treating against the risks of changing away from the standard treatment, such as the Royal College of Radiologist (RCR) guidelines for radiotherapy during the Covid-19 pandemic (9,10).

Pragmatically in the absence of a definite understanding of how COVID-19 will impact patients with cancer the key approach has been to minimise the chance of the patient contracting COVID-19 infection. A number of strategies have already been adopted by the majority of UK cancer centres to mitigate this risk, including delivery of outpatient reviews by

1 telephone rather than in the clinic, deferral of non-urgent anticancer treatments, and  
2 shortening of radiotherapy fractionation schedules. The available evidence of efficacy(11–16)  
3 has been balanced against what we know of the risks from COVID-19. To form consensus  
4 guidance As more evidence of the true impact of COVID-19 on the UK population becomes  
5 available we will need to continue to review the guidelines to make the best use of the  
6 evidence we have to support safe practice and enable an informed discussion with our  
7 patients about the risks of treatment (17–20).  
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10 Despite the increased difficulty of treating cancer patients at present, medical professionals  
11 from around the UK have shown themselves to be adaptable and resilient. This collaborative,  
12 cross-disciplinary approach has been hugely important in optimising the delivery of patient  
13 care, enabled by our ability to share information about our experiences. A core part of this  
14 going forward will be the UK Coronavirus Cancer Monitoring Project, which aims to monitor  
15 the impact of COVID-19 on cancer patients and enable oncologists to gain crucial insights  
16 and inform clinical- and infrastructure-based decision-making.  
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18  
19 The UK Coronavirus Cancer Monitoring Project (UKCCMP), was launched on 18<sup>th</sup> March  
20 2020 following discussions between clinical oncologists in our cancer centres. The project  
21 consists of a Local Emergency Response Reporting Group at each of our cancer centres  
22 and enables data collection on SARS-CoV-2-positive cancer patients. The primary endpoint  
23 measure of this study will be all-cause mortality following a hospitalization for a laboratory  
24 confirmed SARS-CoV-2 infection. The project will attempt to define factors that are  
25 associated with increased mortality/morbidity from COVID-19, including patient factors (age,  
26 sex, co-morbidities, smoking status, and ethnicity), cancer factors (subtype, stage), cancer  
27 treatment (intent, modality, line of treatment) and COVID-19 symptoms and treatments.  
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29  
30 To date, there are over a 1000 patients in the registry. Potentially of interest to the  
31 readership, is that there are 92 patients who have had radiotherapy within 4 weeks of  
32 admission. This subgroup is increasing in size and will hopefully enable the clinical oncology  
33 community to answer some of the aforementioned clinical questions given enough time and  
34 collaboration. Therefore, we believe this pan-UK information is key to understanding the  
35 interactions between COVID-19 and our treatment regimes.  
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38 The project will continue to analyse and disseminate data in real time. This will enable our  
39 cancer centres to assess the impact coronavirus is having on cancer patients, assess the  
40 impact of our treatment interventions and potentially allow the maintenance of the best  
41 possible standard of cancer patient care within challenging circumstances.  
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44 For more information about the UKCCMP, see <https://ukcoronaviruscancermonitoring.com>  
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## References:

1. Lake MA. What we know so far: COVID-19 current clinical knowledge and research. Clin Med [Internet]. Royal College of Physicians; 2020 Mar 5 [cited 2020 Mar 26];20(2):124–7. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/32139372>
2. Yang X, Yu Y, Xu J, Shu H, Xia J, Liu H, et al. Clinical course and outcomes of critically ill patients with SARS-CoV-2 pneumonia in Wuhan, China: a single-centered, retrospective, observational study. Lancet Respir Med. Lancet Publishing Group; 2020;
3. Coronavirus COVID-19 (2019-nCoV) [Internet]. [cited 2020 Mar 26]. Available from: <https://www.arcgis.com/apps/opstdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>
4. Coronavirus disease 2019 (COVID-19) Situation Report-72 HIGHLIGHTS [Internet]. [cited 2020 Apr 2]. Available from: [www.who.int/epi-win](http://www.who.int/epi-win).
5. Gt Walker P, Whittaker C, Watson O, Baguelin M, Ainslie KEC, Bhatia S, et al. The Global Impact of COVID-19 and Strategies for Mitigation and Suppression.
6. Guan W, Ni Z, Hu Y, Liang W, Ou C, He J, et al. Clinical characteristics of 2019 novel coronavirus infection in China. N Engl J Med. 2020;
7. Liang W, Guan W, Chen R, Wang W, Li J, Xu K, et al. Cancer patients in SARS-CoV-2 infection: a nationwide analysis in China. Vol. 21, The Lancet Oncology. Lancet Publishing Group; 2020. p. 335–7.
8. Yu J, Ouyang W, Chua MLK, Xie C. SARS-CoV-2 Transmission in Patients With Cancer at a Tertiary Care Hospital in Wuhan, China. JAMA Oncol [Internet]. 2020 Mar 25 [cited 2020 Mar 26]; Available from: <https://jamanetwork.com/journals/jamaoncology/fullarticle/2763673>
9. The timely delivery of radical radiotherapy: guidelines for the management of unscheduled treatment interruptions Fourth edition [Internet]. 2019 [cited 2020 Apr 2]. Available from: [www.rcr.ac.uk](http://www.rcr.ac.uk)
10. Jones B, Dale RG, Hopewell J. Additional guidance on management of unscheduled radiotherapy treatment interruptions in patients during the COVID-19 pandemic [Internet]. [cited 2020 Apr 9]. Available from: [www.rcr.ac.uk/cancer-treatment-documents](http://www.rcr.ac.uk/cancer-treatment-documents)
11. Brunt AM, Haviland J, Sydenham M, Al-hasso A, Bloomfield D, Chan C, et al. OC-0595: FAST-Forward phase 3 RCT of 1-week hypofractionated breast radiotherapy:3-year normal tissue effects. Radiother Oncol. Elsevier BV; 2018 Apr 1;127:S311–2.
12. Brunt AM, Haviland J, Sydenham M, Algurafi H, Alhasso A, Bliss P, et al. FAST Phase III RCT of Radiotherapy Hypofractionation for Treatment of Early Breast Cancer: 10-Year Results (CRUKE/04/015). Int J Radiat Oncol. Elsevier BV; 2018 Dec 1;102(5):1603–4.
13. Chan AK, Sanghera P, Choo BA, McConkey C, Mehanna H, Parmar S, et al. Hypofractionated Accelerated Radiotherapy with Concurrent Carboplatin for Locally Advanced Squamous Cell Carcinoma of the Head and Neck. Clin Oncol. Elsevier; 2011 Feb 1;23(1):34–9.

14. Fong CTK, McConkey C, Sanghera P, Hartley A, Rahman JK, Nutting C, et al. OC-0274: Effect of radiotherapy technique/fractionation on 2-year primary local control in the PET-NECK study. *Radiother Oncol*. Elsevier BV; 2018 Apr 1;127:S139.
15. Nutting CM, Morden JP, Harrington KJ, Urbano TG, Bhide SA, Clark C, et al. Parotid-sparing intensity modulated versus conventional radiotherapy in head and neck cancer (PARSPORT): A phase 3 multicentre randomised controlled trial. *Lancet Oncol*. Elsevier; 2011 Feb 1;12(2):127–36.
16. Benghiat H, Sanghera P, Cashmore J, Hodson J, Mehanna H, Simmons R, et al. Four Week Hypofractionated Accelerated Intensity Modulated Radiotherapy and Synchronous Carboplatin or Cetuximab in Biologically Staged Oropharyngeal Carcinoma. *Cancer Clin Oncol*. Canadian Center of Science and Education; 2014 Jun 24;3(2):p1.
17. Simcock R, Thomas TV, Mercy CE, Filippi AR, Katz MA, Pereira IJ, et al. COVID-19: Global Radiation Oncology's Targeted Response for Pandemic Preparedness. *Clin Transl Radiat Oncol* [Internet]. Elsevier; 2020 Mar 24 [cited 2020 Apr 2]; Available from: <https://linkinghub.elsevier.com/retrieve/pii/S2405630820300227>
18. Coles CE, Aristei Yz C, Bliss J, Boersma L, Brunt AM, Chatterjee S, et al. International Guidelines on Radiation Therapy for Breast Cancer During the COVID-19 Pandemic. *Clin Oncol* [Internet]. 2020 [cited 2020 May 6];32:279–81. Available from: <https://doi.org/10.1016/j.clon.2020.03.006>
19. Head and neck cancer and COVID-19 [Internet]. [cited 2020 Apr 2]. Available from: [www.rcr.ac.uk/cancer-treatment-documents](http://www.rcr.ac.uk/cancer-treatment-documents)
20. Synopsis of ILROG Recommendations for Administering Radiotherapy for Hematological Malignancies During Emergency Conditions of the COVID-19 Pandemic | The Royal College of Radiologists [Internet]. [cited 2020 Apr 3]. Available from: <https://www.rcr.ac.uk/sites/default/files/ilrog-emergency-guidelines-covid19.pdf>