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Letter

Optimal Timing for COVID-19 Vaccination in Oncology Patients Receiving Chemotherapy?



Madam — Preliminary data on vaccines against SARS-CoV-2 (COVID-19) are encouraging [1,2] and the vaccination programme has now begun in the UK. Questions are being asked about when to give COVID-19 vaccines to patients about to undergo or having chemotherapy, with little evidence-based advice available.

Guidance for patients receiving chemotherapy who require vaccines has been relatively clear until now [3]. In general, live virus vaccines risk infecting patients and are not recommended during or for 6 months after chemotherapy. The flu vaccine is recommended either 2 weeks before or in-between cycles if logistically possible. The pneumococcal vaccine should be given a minimum of 2 weeks before chemotherapy, but ideally 10 weeks in advance.

With regards to the COVID-19 vaccines, developers have used different production methods and the optimal time to vaccinate patients receiving chemotherapy is not clear. Pfizer and Moderna use a novel mRNA vaccine, Novavax are using a protein adjuvant vaccine, AstraZeneca an adenovirus vector vaccine and Valneva a traditional whole inactivated virus [4]. At the time of writing, the only published data available are from the University of Oxford. Ramasamy *et al.* [5] reported median anti-spike SARS-CoV-2 IgG responses 28 days after boost vaccinations, with neutralising antibody titres seen in all age groups. T-cell responses, required for controlling a natural infection, peaked at day 14 from a single standard dose. Data from other vaccine developers are awaited.

Although guidelines reinforce the safety of vaccinations through chemotherapy (except for live vaccines), patients are less likely to mount an optimal immune response necessary to confer immunity. This potential limited response must be balanced against the vulnerability of

patients receiving chemotherapy and the risk of serious adverse outcomes from COVID-19.

Conflicts of interest

The authors declare no conflict of interest.

A. Sudan*, R. Iype†, C. Kelly*, M.S. Iqbal*

* Northern Centre for Cancer Care, The Newcastle Hospital Foundation Trust, High Heaton, Newcastle upon Tyne, UK

† The Christie NHS Foundation Trust, Manchester, UK

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