

The carbon footprint of pathology testing

TO THE EDITOR: The Royal College of Pathologists of Australasia (RCPA) is concerned with some of the conclusions drawn in the article by McAlister and colleagues.¹ We support the suggestion that there are opportunities for reducing waste and carbon dioxide emissions in pathology laboratories and, with the RCPA Quality Assurance Programs, we encourage laboratories to reduce their environmental impact whenever possible. There are laboratories already active in this space.^{2,3} Furthermore, we unequivocally support and encourage clinicians to exercise due consideration in choosing appropriate pathology tests. However, the reduction of pathology testing purely to reduce carbon footprint brings significant public health and economic consequences to the community.

Pathology is an essential health service, vital for the diagnosis of medical conditions (eg, cancer) as well as for monitoring chronic diseases (eg, diabetes). Providing quality medical testing to the Australian population

of about 25.6 million⁴ is likely to have some environmental impacts. Despite the pathology community facilitating time-critical testing, and often running 24 hours a day with appropriate clinical governance, the carbon footprint of pathology, as acknowledged by the authors, is small.

On an individual level, delayed testing may lead to a late diagnosis, so that the disease moves past a manageable, treatable phase and into an advanced stage. This increases the chances of complications⁵ and produces its own environmental impacts. In the community, reducing pathology testing can also increase the risk to public health. In the current climate, we have a convenient example of this with coronavirus disease 2019 (COVID-19). Increased testing is a strategy outlined by governments in Australia, New Zealand and across the world to manage the COVID-19 pandemic.

As treatment regimens intensify for more advanced conditions, there is an increased financial burden. When the demand grows for more costly medical care, it channels funds away from other

health initiatives, including research and preventive health programs.

Pathologists' important work is often undervalued and, unfortunately, the article by McAlister and colleagues fails to acknowledge the steps laboratories have already undertaken to reduce waste and environmental impacts. The RCPA strives to encourage and educate clinicians on appropriate test requesting through activities and publications; however, we must apply caution and essential tests should not be missed for the sake of the overall pathology carbon footprint.

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References are available online.

- 1 McAlister S, Barratt AL, Bell KJ, McGain F. The carbon footprint of pathology testing. *Med J Aust* 2020; 212: 377–382. <https://www.mja.com.au/journal/2020/212/8/carbon-footprint-pathology-testing>
- 2 Reid E, Kehrer S, Badrick T. Outcomes and challenges of implementing an ISO14001:2004 environmental management system in a clinical laboratory. *Aust J Med Sci* 2012; 33: 88–95.
- 3 Lopez JB, Jackson D, Gammie A, Badrick T. 2017. Reducing the environmental impact of clinical laboratories. *Clin Biochem Rev* 2017; 38: 3–11.
- 4 Australian Bureau of Statistics. National, state and territory population, March 2020. <https://www.abs.gov.au/statistics/people/population/national-state-and-territory-population/latest-release> (viewed Oct 2020).
- 5 Pathology Awareness Australia. Australians urged not to delay health tests due to COVID-19 restrictions [media release]. 15 Apr 2020. <https://www.rcpa.edu.au/getattachment/dac52407-a17d-4a1c-b31f-129fbfe50c85/Australians-urged-not-to-delay-health-tests-due-to.aspx> (viewed May 2020). ■