



Ein cyf/Our ref VG/08421/20

Janet Finch-Saunders MS  
Chair  
Petitions Committee

13 April 2021

Dear Janet,

Thank you for your letter of 27 October on behalf of the Petitions Committee concerning 'Petition P-05-1062 Abandon the RT-PCR test for covid-19 testing'. I apologise for not replying sooner. The Welsh Government has received an unprecedented amount of correspondence regarding the pandemic and we are working to respond to each enquiry as quickly as possible.

The major elements for evaluation of test accuracy are diagnostic sensitivity and specificity, which determine the likelihood of false positive or false negative results:

- The likelihood of false positive results is primarily determined by the specificity of the test.
- The likelihood of false negative results is determined by the sensitivity of the test and the prevalence of COVID-19 in the test population.

The performance or accuracy of any given test is not only determined by the test performance but the context in which testing takes place. For example, if the testing targets symptomatic individuals this increases the pre-test probability of a positive result and therefore would reduce the proportion, although not the number, of positive results that were false positive results. Also, if the testing protocol adopted involved repeat testing, each round of repeat testing would reduce the numbers of false negative results.

As agreed by the Technical Advisory Group, the principles for using RT-PCR tests include:

- That clinically-led testing associated with the medical needs of an individual should have primacy over testing for other purposes.
- The utility of additional RT-PCR testing be considered in the wider context of other testing that is taking place, including the Test, Trace and Protect programme.
- The performance of the RT-PCR is at its best when its use is targeted, for example, when used to support diagnosis in symptomatic individuals. It is unsuited to the non-targeted screening of asymptomatic individuals, especially in populations with a low prevalence of infection. Use in asymptomatic individuals should, wherever possible, be on the basis of effective targeting, for example following tracing that has indicated a high-probability of exposure and thus likely infection.

Canolfan Cyswllt Cyntaf / First Point of Contact Centre:  
0300 0604400

Bae Caerdydd • Cardiff Bay  
Caerdydd • Cardiff  
CF99 1SN

[Gohebiaeth.Vaughan.Gething@llyw.cymru](mailto:Gohebiaeth.Vaughan.Gething@llyw.cymru)  
[Correspondence.Vaughan.Gething@gov.wales](mailto:Correspondence.Vaughan.Gething@gov.wales)

Rydym yn croesawu derbyn gohebiaeth yn Gymraeg. Byddwn yn ateb gohebiaeth a dderbynnir yn Gymraeg yn Gymraeg ac ni fydd gohebu yn Gymraeg yn arwain at oedi.

We welcome receiving correspondence in Welsh. Any correspondence received in Welsh will be answered in Welsh and corresponding in Welsh will not lead to a delay in responding.

- The purpose of testing (either 'single' or 'repeat') within defined target settings or cohorts should be clearly defined and agreed prior to the implementation of that testing.
- Criteria for the cessation of repeat testing within defined target setting or cohorts should be clearly defined and agreed prior to the implementation of that testing.

The use of PCR tests is supported by advice from Public Health Wales who confirm that a positive test corresponds extremely well with the presence of SARS-CoV2 RNA, indicating that the person is, or has been, infected with the disease. The PCR antigen test used in Wales has an analytic specificity of 99.96%, which means that there would only be approximately four false positive results for every 10,000 tests performed.

We consider the use of new technologies as they emerge. You will be aware that we have moved to using lateral flow testing (LFT) as well as RT-PCR tests. Lateral flow devices (LFD) are hand-held and can produce results in 30 minutes as no laboratory processing is required. They can also be self-administered. While LFDs are not as sensitive as lab-based RT-PCR tests, scientific advice has indicated that by testing more frequently with LFDs their accuracy is on a par with RT-PCR tests.

I hope this information is helpful.

Yours sincerely,

A handwritten signature in black ink that reads "Vaughan Gething". The signature is written in a cursive, flowing style.

**Vaughan Gething AS/MS**

Y Gweinidog Iechyd a Gwasanaethau Cymdeithasol  
Minister for Health and Social Services