



Canolfen Iechyd Genomig Cymru  
Parc busnes ymyl Caerdydd  
Eglwys Newydd  
Caerdydd  
CF14 7YU

Ffôn ☎ (029) 2184 2641

All Wales Medical Genomics Service  
Wales Genomic Health Centre  
Longwood Drive  
Whitchurch  
Cardiff  
CF14 7YU

Reception ☎ (029) 2184 2641

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Dear Colleagues,

**RE: 'NEW' gene targets added and eligibility criteria update to the breast cancer service to guide diagnosis and treatment decisions; the multi-target next generation sequencing (NGS) gene panel will now include *AKT1*, *PIK3CA* and *PTEN* analysis using FFPE tissue**

AWMGS are pleased to announce that a multi-target NGS testing panel for small variants in the *AKT1*, *PIK3CA* and *PTEN* genes for the breast cancer service will be implemented from the **15<sup>th</sup> May 2025**.

From this date, AWMGS will incorporate *AKT1*, *PTEN* and further *PIK3CA* small variant testing into the existing *PIK3CA* DNA NGS panel (insert TD test code here). For those patients who have not had *PIK3CA* testing previously DNA-based NGS testing will require 6x10µM tissue slides. RNA NGS testing for NTRK fusions will still require 5x10uM tissue slides.

For patients who have had *PIK3CA* testing previously at AWGL, there is the option of reanalysis of their genomic data where expanded *PIK3CA* analysis and *AKT1* and *PTEN* analysis is required to assess AKT inhibitor response. This should be indicated by ticking the relevant box on the 'new' breast solid tumour test request form which is now available on the AWMGS website ([AWMGS - Home \(medicalgenomicswales.co.uk\)](http://www.medicalgenomicswales.co.uk)). Clinical and laboratory guidance is now available on the NHS Wales Executive website via this link <http://executive.nhs.wales/functions/networks-and-planning/cancer/clinical-hub/genomics/>.

Please do not hesitate to contact us if you have any queries.

Yours sincerely,

Ruth Young  
Principal Clinical Scientist  
Solid Tumour section lead  
All Wales Medical Genomics Service  
University Hospital of Wales  
Cardiff

Ruth.young@wales.nhs.uk