

Use of PARP inhibitors in metastatic prostate cancer

PARP inhibitors have been approved by NICE for the treatment of BRCA mutation positive hormone-relapsed (castrate resistant) metastatic prostate cancer.

OLAPARIB is to be used if the following criteria have been met in the patient:

1. Hormone-relapsed (castrate resistant) metastatic prostate cancer **and**
2. Prior treatment with novel hormonal agent (e.g. Enzalutamide or Abiraterone) **and**
3. A performance status of 0,1 or 2.

Somatic BRCA testing is required on patients who meet the above criteria. It is important to note that patients progressing on novel hormone therapy can often do so quite quickly. Therefore, due to the turnaround time of the somatic testing, we would advise doing a somatic testing as soon as there is biochemical evidence that the cancer is becoming hormone resistant.

It is therefore recommended that testing is carried out when patients are experiencing a rising PSA despite suppressed testosterone, and it is anticipated that the novel hormone therapy will be stopped within the next 6 months.

The below steps should be followed to request somatic testing. Should somatic testing fail, germline testing, or re-biopsy should be considered.

Oncologists/urologists

Metastatic prostate cancer meeting the above criteria with rising PSA on novel hormone therapy

Responsible clinician obtains details of the diagnostic biopsy including date, lab number and hospital performed at

Responsible clinician initiates request by emailing the appropriate pathology department with the relevant details or by completing the clinical part of the GLH request form (depending on local practice).

The form can be found on the NW GLH page by following these steps: Documents and Forms – Test Request Forms – Cancer-Solid Tumour – Tumour Request Form-Genitourinary/Renal/Pancreatic.

Request code **M218** is required

Form should be emailed to the pathology department

Pathology

Upon receipt of the request form, the sample should be prepared and relevant sections on the request form completed (including the requesting clinician's email address).

The request form and the sample should then be sent together to the GLH, based at St. Mary's Hospital, MFT. The details can be found on the request form

Upon receipt of the results, they should also be forwarded to the referring urologist or oncologist.