

# Comparative Planning Information Sheet

While proton beam therapy (PBT) is not yet available in Australia, Australian patients wishing to access this form of treatment can apply for Federal Government funding through the Medical Treatment Overseas Program (MTOP).

MTOP applications for PBT must be submitted with a comparative proton versus photon (XRT) plan report.

https://www1.health.gov.au/internet/main/publishing.nsf/Content/strategicpolicyMTO.htm

The Australian Bragg Centre for Proton Therapy and Research (ABCPTR) provides a bulk-billed national service to generate PBT plans and perform plan comparisons between the PBT plan and XRT plan supplied by the referring institution.

This plan comparison can inform the referring Radiation Oncologist (RO) of the potential benefits, or otherwise of PBT for that individual patient.

The following process has been designed based on the draft Australian proton-photon planning consensus guidelines, a collaboration between RANZCR, ACPSEM and ASMIRT.







# **Identify suitable patient:**

RO determines if a patient may potentially benefit from PBT.

# Referring RO to complete referral form:

Visit the ABCPTR website: <a href="www.australianbraggcentre.com/referring-clinicians/">www.australianbraggcentre.com/referring-clinicians/</a> Click the referral link on this page to take you to the online referral form.



# CT simulation & contouring:

The ABCPTR strongly recommends completing a planning CT using the appropriate positioning and immobilisation tools to perform the comparative planning study. This recommendation aims to ensure the accuracy and suitability of the eventual comparative planning study for submission to MTOP, and also allows the referring institution to proceed with the XRT plan to treatment in the event that PBT is deemed not suitable for the patient.

The referring RO should perform all required contouring on the planning CT scan.

#### Planning CT & structure file transfer:

Upon submission of the referral form, an automatic email reply will be sent to the email addresses of the referring RO and all staff indicated on the referral form to be included in all correspondence. This email will acknowledge receipt of the referral and contain instructions for the secure transfer of CT and structure files to begin the comparative planning process.

Please ensure the final version of all OARs, PRVs and target volumes are transferred.

# **Pre Planning meeting:**

Once the CT and structure files have been received by ABCPTR, a teleconference meeting will be arranged between the referring RO and their team of Radiation Therapists and/or Medical Physicists along with the ABCPTR team to discuss the contours, treatment objectives and potential beam arrangements for the comparative planning study. A Paediatric specialist RO is recommended to be in attendance if discussing a paediatric or AYA patient.

# Comparative Planning Information Sheet - Continued



# XRT planning & plan data transfer:

We kindly request that the photon plan is generated by the referring institution. Instructions on how to send plan and dose files can be found on the Australian Bragg Centre website under 'Referring Clinicians'.

The XRT plan should be submitted as soon as practical (within 3-4 working days if possible) to ensure the generation of the comparative report is not delayed.

#### **PBT** planning:

The ABCPTR team is responsible for generating the PBT plan, which will be completed while the referring institution generates the XRT plan.

# Plan comparison:

Once both plans have been completed and the XRT plan and dose files have been uploaded by the referring institution, the ABCPTR team will perform the plan comparison.

# **Comparative planning report:**

A comparative planning report will be generated including all relevant plan metrics and evaluation criteria and will be returned to the referring RO.

# Plan Review meeting:

A final teleconference may be arranged to discuss the findings of the comparative planning study with the referring RO and their team.

# MTOP application (if applicable):

Applying for MTOP is in addition to the above flow chart and will depend upon the outcome of the comparative protonto-photon plan. ABCPTR can provide assistance with the MTOP application if required.

#### **Timelines**

ABCPTR aims to provide the results of the comparative planning study within 7 working days from the completed file transfer.

# Contact

If further information is required, please contact ABCPTR via: Proton.Planning@sahmri.com

# Ownership of Data and Intellectual Property

A referral to the SAHMRI/Bragg Centre comparative planning service implies the referring clinician has discussed the service we provide with the patient or patient guardian and has received consent to transfer the patient information and DICOM data necessary to provide the comparative plan and subsequent report.

The patient should be made aware that their de-identified data will be stored in a data base and may be used for future comparative planning learning and research, including future applications to the Medical Services Advisory Committee and publications on the comparative planning service provided. Should your patient not wish to have their data used in future research you should inform the comparative planning team. This will have no impact on the provision of a comparative plan being completed by our service for this patient. Their data will be stored as part of routine quality assurance reviews only and will not be used in any future research completed by the service.

Comparative plans are produced in a research environment and are not to be used for treatment. The ABCPTR accepts no responsibility for clinical decisions or outcomes.