MANAGEMENT IN CONFIDENCE

CLINICAL PRIORITIES ADVISORY GROUP
30 November 2020

Agenda Item No	2.1
National Programme	Cancer
Clinical Reference Group	Radiotherapy
URN	1923

Title
Proton Beam Therapy (PBT) for Lung Cancer (Adults)

Actions Requested	1. Support the adoption of the policy proposition.
	2. Recommend its approval as an IYSD.

Proposition
Not for routine commissioning. The policy proposition recommends that PBT, should not be made routinely available for the treatment of lung cancer. The proposition has been developed based on the findings of a review of evidence and in line with standard Methods. The review of evidence demonstrated that there was not enough clinical evidence to make the treatment routinely available at this time. Further research into the use of PBT in the treatment of lung cancer is in development.

Clinical Panel recommendation
The Clinical Panel recommended that the policy progress as a not for routine commissioning policy statement.

The committee is asked to receive the following assurance:	
1.	The Head of Clinical Effectiveness confirms the proposal has completed the appropriate sequence of governance steps and includes an: Evidence Review; Clinical Panel Report.
2.	The Head of Cancer Programme confirms the proposition is supported by an: Impact Assessment; Engagement Report; Equality and Health Inequalities Impact Assessment; Clinical Policy Proposition. The relevant National Programme of Care has approved these reports.

3.	The Director of Finance (Specialised Commissioning) confirms that the impact assessment has reasonably estimated a) the incremental cost and b) the budget impact of the proposal.
4.	The Clinical Programmes Director (Specialised Commissioning) confirms that the service and operational impacts have been completed.

The following documents are included (others available on request):	
1.	Clinical Policy Proposition
2.	Engagement Report
3.	Evidence Summary – three paper review
4.	Clinical Panel Report
5.	Equality and Health Inequalities Impact Assessment

No	*Metric*	*Summary from evidence review*
1.	Survival	Overall survival is the proportion of participants alive at specific points in the study after the intervention has been given. The best estimate for overall survival is from the Chang et al 2017 paper. The study reports the median overall survival was 26.5 months and the 5-year overall survival was 29%, 95% CI 18% - 41%) The usefulness of the study for evaluating the clinical effectiveness of PBT as an intervention in locally advanced Non Small Cell Lung Cancer (NSCLC) was limited by the absence of a comparator or control group; the authors identified the need for future multi-institutional prospective trials to address this evidence gap. The findings are therefore insufficient to draw conclusions on the superior effectiveness of proton therapy relative to photon radiotherapy for treatment of locally advanced non-small cell lung cancer.
2.	Progression free survival	Progression free survival is the length of time a patient lives with the disease without it getting worse. The best evidence on progression free survival was from the Chang et al 2017 study. In this study, patients were reported to have experienced a five-year progression free survival of 22% (95%CI, 12%-32%). As per above, the usefulness of this outcome is limited by the absence of a comparator or control group and the need for prospective trials in this area to address the gap in the evidence base is highlighted.
3.	Mobility	Not measured

4.	Self-care	Not measured
5.	Usual activities	Not measured
6.	Pain	Not measured
7.	Anxiety / Depression	Not measured
8.	Replacement of more toxic treatment	Toxicity is a measure of the presence or absence of harmful treatment related side effects. It is important because its presence can significantly impact the quality of life as well as adversely affect outcomes if they result in treatment breaks during radiotherapy. The Liao et al (2018) reported the rates of radiation pneumonitis as a measure of treatment related side effects. They reported that compared with standard intensity modulated radiotherapy, proton radiotherapy resulted in radiation pneumonitis rates at 12 months for patients enrolled before versus after the trial midpoint were 21.1% (before) versus 18.2% (after) for the IMRT group (P = .047) and 31.0% (before) versus 13.1% (after) for the PSPT group (P = .027). The difference in rates was not significant and so it cannot be concluded that proton therapy would be associated with lower rates of radiation pneumonitis. This finding should be interpreted with caution as the modality of proton therapy and standard IMRT used in the trial is very different from what is currently used in current treatment.
9.	Dependency on care giver / supporting independence	Not measured
10.	Safety	Not measured
11.	Delivery of intervention	Not measured

Patient Impact Summary
Not applicable – the policy proposition is for not routine commissioning and as such no patient impact summary has been completed.

Considerations from review by Rare Disease Advisory Group
RDAG has been regularly updated on the proposition as this is part of a suite of PBT not for routine commissioning statements required for the implementation of the trials and evaluative commissioning component of the NHS PBT Service.

Pharmaceutical considerations
Not Applicable.

Considerations from review by National Programme of Care
1) The proposal received the full support of the Cancer PoC on the 24/09/20