

Clinical Trials Research Unit

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A CTRad meeting to develop a translational research strategy for Anal Cancer within PLATO and develop wider collaboration across the HPV-related malignancies. Thursday 15th September 2016, London

On behalf of the PLATO TMG, we are grateful to CTRad for supporting and hosting a meeting to develop the translational research that forms a key component of the UK platform of Anal Cancer trials.

Background

PLATO is a platform of three clinical trials (ACT3, ACT4 and ACT5), designed to personalize dose across the loco-regional disease spectrum. Cancer research UK funded the clinical trials in 2015. PLATO was developed by a national group of investigators with involvement from CTRad and the NCRI anorectal subgroup. The PLATO group had developed a sample collection application but on two occasions felt that this was under-developed and required wider consultation with the scientific community.

Objectives

5 key objectives were identified:

- to consult with the scientific community to determine opportunities from PLATO
- to engage with other investigators working across the HPV driven cancers
- to consider the role of imaging biomarkers in any subsequent application
- to involve the PLATO biostatisticians to help justify the hypotheses
- to determine the best funding stream for an application

Attendees

The meeting was organized by Professor David Sebag-Montefiore (PLATO CI) and Duncan Gilbert (translational lead for PLATO) and chaired by Professor Anthony Chalmers. Representatives from the PLATO TMG included the leads for ACT4 (Richard Adams and Mark Harrison), the lead for ACT5 (Maria Hawkins), the trial statistician (Lucy McParland), Vicky Goh (imaging lead) and Sheela Rao (medical oncology).

External attendees were Professors Alan Melcher (Immuno-oncology, ICR), Gareth Thomas (Molecular Pathology of HPV cancers, Southampton), Terry Jones (HPV and Head and Neck



Cancer, Liverpool), Catharine West (Hypoxia and Radiogenomics, Manchester) and Mererid Evans (HPV and HNSCC, Cardiff/Liverpool). Shree Bhide (RMH/ICR) and Jackie Pierce (Manchester, Dive Lab) brought experience in plasma monitoring of disease and Jessica Eddy represented Cancer Research UK.

Agenda

The agenda is attached, and short presentations were followed by discussion. Prof Sebag-Montefiore gave an overview of the PLATO platform and then Duncan Gilbert a summary of where we are with translational research in anal cancer. There were then specific sessions on;

- DNA damage response Anthony Chalmers
- Immune translational readouts Alan Melcher
- Imaging opportunities Vicky Goh
- cfDNA in head and neck cancer Shree Bhide
- ctDNA Jackie Pierce
- Head and Neck HPV trials Mererid Evans and Terry Jones)
- Lucy McParland statistics
- GWAS Catherine West

There was also the opportunity to discuss funding streams and potential applications as a wider community with representatives from CRUK.

Outputs from meeting

Two key translational components form PLATO were progressed following the meeting;

PLATO – Personalising Radiotherapy in Anal Cancer – an integrated sample collection and biomarker validation application was submitted to CRUK December 2016 (for consideration May 2017). £264k (Co Pls Prof David Sebag-Montefiore and Dr Duncan Gilbert, for full applicant list see Appendix 2).

Agreement for the incorporation of PLATO into RAPPER Radiogenomics consortium for genomic DNA analysis (PI Catharine West, Manchester).

In addition, we have published a review summarising our progress to date; Jones CM et al. Biomarkers in anal cancer: from biological understanding to stratified treatment *British Journal of Cancer* (2017) **116**, 156–162. doi:10.1038/bjc.2016.398.



Prof David Sebag Montefiore, University of Leeds, Chief Investigator, PLATO Dr Duncan Gilbert, Sussex Cancer Centre, Translational Lead PLATO

PLATO Translational Meeting hosted by CTRad;

Thursday 15th September 2016

- 10.00 Introduction and Welcome; Anthony Chalmers
- 10.05 PLATO trial objectives and overview; David Sebag-Montefiore
- 10.25 Translational opportunities and plans the journey so far; Duncan Gilbert
- 10.55 Discussion 1 DNA repair (Anthony Chalmers)
- 11.25 Discussion 2 HPV cancers (Mererid Evans, Terry Jones / Gareth Thomas)
- 12.10 Discussion 3 Immune aspects (Gareth Thomas / Kevin Harrington / Alan Melcher)
- 13.00 Working lunch
- 13.30 Discussion 4 plasma DNA (Shree Bhide / Jackie Pierce)
- 14.15 Discussion 5 Imaging components (Vicky Goh / Giovanni Montana)
- 15.00 Discussion 6 GWAS (Catherine West)
- 15.30 Funding plans and collaborations
- 16.30 Close

Appendix 2; Application to CRUK Biomarkers call, December 2016

Research project title

PLATO - Personalising Radiotherapy in Anal Cancer - integrated sample collection and biomarker validation application

Name of Applicant	Duncan Gilbert
Host Institution	University of Leeds

People supporting this application

Name	Organisation	Role
Professor Walter Gregory	University of Leeds	Collaborator
Dr Jenny Seligmann	University of Leeds	Collaborator
Professor David Sebag- Montefiore	University of Leeds	Joint Lead Applicant
Professor Andrew Renehan	University of Manchester	Collaborator
Dr Gordon Hutchins	University of Leeds	Co-Investigator
Professor Gareth Thomas	University of Southampton	Co-Investigator
Dr Rebecca Muirhead	University of Oxford	Collaborator
Professor Phil Quirke	University of Leeds	Co-Investigator
Dr Richard Adams	Cardiff University	Collaborator
Professor Caroline Dive	Cancer Research UK Manchester Institute	Co-Investigator
Susan Richman	University of Leeds	Co-Investigator
Dr Mark Harrison	Mount Vernon Hospital	Collaborator
Henry Wood	University of Leeds	Co-Investigator
Professor Maria Hawkins	University of Oxford	Collaborator
Dr Shreerang Bhide	Royal Marsden Hospital	Co-Investigator

Miss Alex Smith	University of Leeds	Senior Trials Unit Contact
Miss Lucy McParland	University of Leeds	Named Research Staff
Dr Sheela Rao	Royal Marsden NHS Foundation Trust	Collaborator