

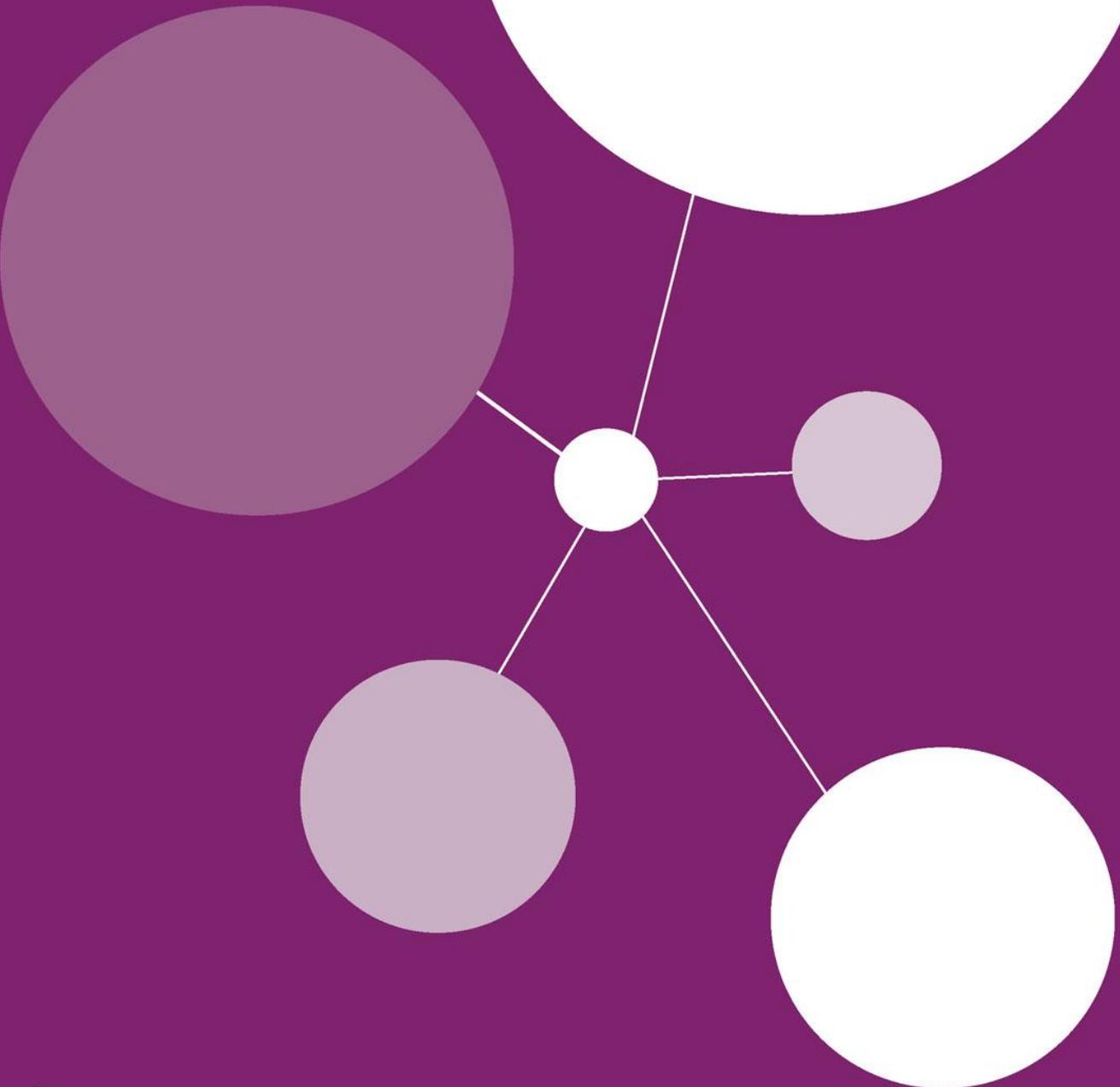


**NCRI**

National  
Cancer  
Research  
Institute

# **NCRI Lung Cancer Clinical Studies Group**

**Annual Report 2014/2015**



Partners in cancer research





## NCRI Lung Cancer CSG Annual Report 2014/15

### 1. Executive Summary (including top 3 achievements in the year)

The steady work of the Lung CSG continues to result in an increased number of patients accessing new trials developed within the group (details below) and to commercially sponsored studies. The excellent input from our public involvement representatives ensures wider engagement and relevance of the lung group. Links with NICE continue and CSG members have regularly volunteered to help with new drug applications considered for funding. International collaboration with EORTC, ETOP and the newly formed worldwide thoracic cancers alliance are all increasing, and we are keen to enhance international recognition of the NCRI CSG as a successful trials organisation.

In 2014-5, several key studies in the portfolio have started to recruit: the national MATRIX trial exploits the results from the Stratified Medicine Programme (SMP) where (in SMP1), samples from lung cancer were a major component of the biopsies submitted and examined resulting in the SMP2 programme running exclusively in lung cancer. The rolling programme of phase II studies of novel agents provided by pharma partners will result in UK lung cancer patients accessing appropriate targeted drugs early in their development for use in advanced NSCLC. The CSG was closely involved with selection of the lead centre and personnel for this important study, now led by Professor Gary Middleton and the Birmingham Clinical Trials Unit. Dr Sanjay Popat chairs the trial management group. It is fully expected that MATRIX results will be presented at major international meetings. New and young PIs are encouraged to develop novel arms under the umbrella of MATRIX.

In resectable NSCLC, the unique TRACERx trial involves analysis of the mutation patterns found in several different areas of a resected NSCLC with repeat biopsy and analysis at the time of relapse. Professor Charlie Swanton is the CI and the trial is of worldwide interest due to its original design and the likely importance of the results. Follow-on trials from TRACERx such as DARWIN will undoubtedly raise the profile of the UK lung cancer research portfolio.

The NCRI Lung CSG workshops continue to be an integral part of the annual BTOG meeting and ad hoc meeting organised by the subgroups gave the forum for interested parties to get together during the past when no UK annual lung/mesothelioma trials meeting was held. The trials meeting may be re-instated in 2016 as we seek to increase the opportunities for investigators to meet over the coming year and allow more feedback to engaged research teams as well as encourage new proposals for discussion. The other challenge is to increase patient recruitment

to trials while reorganised research networks (England) settle and NHS staffing and funding are in flux.

## **2. Structure of the Group**

The number of CSG core members has reduced slightly but the amount of work to be done between meetings with bodies such as NICE requires several people to deliver on the voluntary extra workload. There remain four subgroups – early diagnosis (prevention/screening), locally advanced disease (LORD), advanced disease and Mesothelioma. We do not anticipate change to this arrangement. There is a good record of new members applying for positions in the subgroup and feeding thereafter on to the main CSG. Recent refreshment of the main CSG will bring a new dynamism to the group, but the expert input from experienced former members with a good history of innovation (such as Professor Ming Lee) will still be appreciated. Arrangements for subgroup meetings will be the responsibility of the subgroup chairs (three of whom are being appointed) and with the support of the CSG it is hoped that the between meeting contact of members will increase to maintain momentum of trial development and recruitment.

## **3. CSG & Subgroup strategies**

### **Main CSG**

Recent refreshment of the membership with a mix of new and established participants will re-energise the Lung CSG and it is important that strong links are made with the subspecialty leads for lung cancer over the coming year to encourage and facilitate access to local NCRI budgets for clinical trials. The development of the Lung CSG members' link with their network leads should inform on any problematic issues that stifle trials locally.

Working with BTOG and other UK groups we hope to develop a more comprehensive timetable of meetings and workshops to develop trial outlines. Areas where it should be possible to develop some broad based studies which will improve overall recruitment to lung cancer trials would include immune therapies across lung cancer and mesothelioma at all stages and studies that investigate possible use of blood and urine markers as we struggle with the amount of information required from small biopsies.

Links with other CSGs and international groups will by necessity be solidified/increased through communication and collaboration via Lung CSG members. Further worldwide recruiting translational, phase II and III studies participation for even rare genetic subgroups worldwide will be developed, led and supported by the Lung CSG.

### **LOcoRegional Disease (LORD) Subgroup (Chair, Dr Matthew Hatton)**

The LORD Subgroup has maintained health, rotating members during 2014-15 with Drs Sevitt, Braybrooke, Gleeson and Mr Lang-Lazdunski leaving the Subgroup and Drs Macdonald, Devaraj, Harrison-Philips and Mr Waller invited to join. The portfolio contains two flagship studies (TRACERX and SMP2/MATRIX which are open and recruiting. The development of the portfolio of radiotherapy trials continues with recent CR-UK funding of ADSCaN and the Subgroup was encouraged to note that there are 8 funded trials currently in set up on the portfolio covering radiotherapy, surgery and adjuvant chemotherapy. The national workshop organised by the LORD Subgroup was well attended and focused on gaps in the portfolio and the issues around

improving fitness for treatment and area where there are future trial applications are being worked up. A further workshop is planned for June 2015 to brainstorm trial ideas for the radical treatment of stage III patients. Dr Yvonne Summers has accepted the role of Chair of the LORD Subgroup from June 2015.

### **Advanced Disease Subgroup (Chair, Dr Sanjay Popat)**

The Advanced Disease Subgroup continues to be active in shaping the advanced disease portfolio and promoting recruitment to the large commercial trials portfolio. With the new CSG appointments for 2015 and new chair, the Subgroup membership will rotate in the summer of 2015. For SCLC, the STOMP clinical trial is a major study for the Subgroup and continues to recruiting to expectation despite the challenging clinical group. The Subgroup has facilitated a number of successful trials submissions to CTAAC, including a trial of hydroxychloroquine in SCLC. Further academic initiatives for SCLC are warranted. For NSCLC, the portfolio map has been redesigned to reflect the biomarker stratification/selection required for many trials on the portfolio. The portfolio is dominated by many commercial trials for which the UK has recruited well, including the first European patient for TIGER2, and recruiting to target for the ACCALIA trial in the crizotinib relapsed ALK+ NSCLC subgroup. The CRUK SMP2 platform also sits in the portfolio and members have been active in the shaping of this study and implementation at local levels. The MATRIX trial also sits in the portfolio and members have taken on key roles in designing the study (TMG leadership positions) or key IMP arms (arm PI). Subgroup members are therefore hugely involved in design and delivery of this internationally important study. Complimentary to the TRACERx programme, the DARWIN studies have been developed through the CSG for patients with relapsed NSCLC. Strong collaborations with international groups are ongoing, with EORTC 08114 open, recruiting to time and target, and with a CSG overall CI and UK CI. The FGFR study has been selected for oral presentation at ASCO 2105. A portfolio workshop, in conjunction with BTOG will be held in 2016 to brainstorm ideas for SCLC studies, and to identify an academic trials strategy for immune-checkpoint inhibitors.

### **Screening/Early Diagnosis Subgroup (Chair, Dr Robert Rintoul)**

The Early Diagnosis Subgroup currently has 13 open trials on its portfolio with one in set up and one outline invited as a full application in the most recent CTAAC meeting. In general, trials have been recruiting well with particular mention of the successful recruitment of high risk patients in the SEARCH trial, which is expected to report in 2016. The Subgroup has noted that many early diagnosis studies have aspects of smoking cessation embedded within them though smoking cessation studies per se have proved difficult to develop for the lung cancer patients. The role played by Dr Rintoul over past 5 years has been crucial in the development of the group which will be chaired by Dr Navani from June 2015 who, with the members of the Subgroup, will be spearheading the Lung CSG moves to develop close ties and collaborations with the Primary Care CSG over the coming year.

### **Mesothelioma Subgroup (Chair, Professor Dean Fennell)**

Under the chairmanship of Professor Fennell, the Mesothelioma Subgroup has developed a portfolio of trials that span basic science and surgical, radiotherapy and chemotherapy treatments for both early stage and advanced mesothelioma. The Subgroup is one of the most active of all international mesothelioma research groups which will allow the Lung CSG to play a

prominent role in the 2016 International Mesothelioma Interest Group Annual Meeting in Birmingham. Professor Fennell is Chair of the organising committee for the meeting and therefore stepping down from his role as subgroup chair and will be succeeded by Dr Szlosarek.

#### 4. Task groups/Working parties

There have been no specific task forces or working parties in the Lung CSG this year.

#### 5. Patient recruitment summary for last 5 years

With 49 trials open to recruitment and a further 22 in set-up, there are too many on the complete portfolio for a full description of each one. To date in 2014-15, there have been 23 trials initiated by the Lung CSG. In summary, 30 trials are commercially sponsored (12 in set-up and 18 recruiting) with a further 22 non-commercial trials, of which 10 are in set-up. The regularly updated portfolio maps (Appendix 4b) - provided by the NCRI CSGs Secretariat, assisted by CSG member, Dr Yvonne Summers - are of great use to current and potential investigators as well as lung cancer specialist and research nurses. Lung cancer has the third largest number of commercial trials in all the CSGs portfolios, behind breast cancer and haematological oncology. Lung cancer has the 6<sup>th</sup> largest non-commercial portfolio.

There is clear and necessary overlap in trials initiated and run by the Supportive & Palliative Care CSG with 10 trials in common. For example, the Learning about Breathlessness study recruited the required first stage 25 patients in only nine months and anticipates success in the third phase that will recruit between June and September 2015. Likewise the Welsh run study of smoking status and outcomes after diagnosis (Lung CAST) recruited 1595 patients over its target 3.5 years and results are awaited.

In the Lung CSG portfolio, 19 trials closed to recruitment and 26 opened.

**Table 1 Summary of patient recruitment by RCT/Non-RCT**

Year	All subjects		Cancer patients only		% of cancer patients relative to incidence	
	Non-RCT	RCT	Non-RCT	RCT	Non-RCT	RCT
2010/2011	2336	1988	1659	1475	4.4	3.9
2011/2012	4537	2442	2032	1716	5.4	4.6

**Table 2 Summary of patient recruitment by Interventional/Non-interventional**

Year	All participants		Cancer patients only		% of cancer patients relative to incidence	
	Non-interventional	Interventional	Non-interventional	Interventional	Non-interventional	Interventional
2012/2013	2744	4445	2028	1171	4.8	2.8
2013/2014	3036	992	2665	942	6.3	2.2
2014/2015	3396	1236	3074	1236	7.3	2.9

## 6. Links to other CSGs, international groups and network subspecialty leads

We have continued to develop close links with other international lung cancer research groups. A standing agenda item is the update from those members who are closely involved with such groups. For example, through the All Ireland Cooperative Oncology Research Group (ICORG) a number of NCRI studies are recruiting in Southern Ireland and several core CSG members and their institutions are members of the EORTC and ETOP lung cancer groups. The immediate past Chair of the EORTC lung group is London based colleague, Dr Mary O'Brien. Dr Popat who chairs the Advanced Disease Subgroup is the nominated link person for several organisations – EORTC, ETOP, the thymic tumours group ITMIG and also BTOG which he currently chairs. Professor Fennell, most recent chair of the Mesothelioma Subgroup, is also the link person for the international mesothelioma group, IMIG, that he now chairs. The new international lung cancer trials group chaired by Professor Paul Mitchell in Melbourne (name and acronym currently under discussion!) has been in very regular actual and email contact with the UK Lung CSG via the immediate past chair, so the NCRI Lung CSG is recognised as a partner and relevant contributor to this new worldwide developing organisation likely to have a large impact on development and recruitment of patients to trials for (especially) rare patient subgroups with lung cancer.

We anticipate close links with the Supportive & Palliative Care CSG chaired by Professor Sam Ahmedzai and have been in contact with Professor Richard Neal, the new Chair of the Primary Care CSG, to ensure complimentary attendance at each of the CSG happens over the next year. Developing links with the new network subspecialty leads will be an important objective over the coming year, using the chair and local members as essential contacts.

## 7. Funding applications in last year

**Table 3 Funding submissions in the reporting year**

<b>Clinical Trials Advisory and Awards Committee (CTAAC)</b>			
<b>Study</b>	<b>Application type</b>	<b>CI</b>	<b>Outcome</b>
<b>July 2014</b>			
LUNG-SEARCH Extension	Full application *Extension*	Professor Stephen Spiro	Funded
LungTech: Stereotactic Body Radiotherapy (SBRT) of inoperable centrally located non-small cell lung cancer (NSCLC). A phase II study in preparation for a randomised phase III trial.	Full application	Dr Corinne Faivre-Finn	Funded
SARON: Stereotactic ablative radiotherapy for oligometastatic non-small cell lung cancer: a randomised phase iii trial	Full application	Dr David Landau	Funded
CITADEL-RT: Conventional and isotoxic accelerated and dose escalated lung radiotherapy	Outline application	Dr Joe Maguire	Full application not invited
DARWIN 2: Deciphering anti-tumour response and resistance with intratumour heterogeneity	Feasibility applications *Endorsement*	Dr Crispin Hiley	
<b>November 2014</b>			
ADSCaN - A Randomised Phase II study of	Full Application	Dr Matthew Hatton	Funded

Accelerated, Dose escalated, Sequential Chemo-radiotherapy in Non Small Cell Lung Cancer			
DARWIN 2: Deciphering Anti-tumour Response and Resistance With INtratour heterogeneity	Feasibility Application *Endorsement*	Dr Crispin Hiley	Endorsed
<b>March 2015</b>			
The PEARL Trial: Photodynamic therapy for the prevention of Lung Cancer	Outline application	Professor Sam Janes	Full application invited
MESO-02: A phase I/II study of first line ganetespib with pemetrexed/platinum, in patients with malignant pleural mesothelioma	Feasibility application	Professor Dean Fennell	Funded
The DENSITY Study: Adjuvant chemotherapy in patients with early stage NSCLC – a pilot study to document compliance and dose intensity with and without GCSF	Feasibility application *Endorsement*	Dr Mary O'Brien	Not funded

## 8. Collaborative partnership studies with industry

Thirty trials on the portfolio are commercially sponsored (12 in set-up and 18 recruiting) and lung cancer has the third largest number of commercial trials in all the CSGs portfolios, behind breast cancer and haematological oncology. It has been recognised that the number of commercial trials for small subsets of NSCLC patients with a mutation (e.g. 7% with EML-ALK translocation) presents a threat to the recruitment goals of the Lung CSG. We try to avoid competing trials arriving on the portfolio for such rare patients, but we are not always successful due to the automatic adoption of commercial trials where some UK investigators have already been signed up by the sponsoring pharmaceutical company. Members of the CSG who comment on the feasibility requests for such trials will never wish to stifle research activity, which leaves an ongoing risk of failure to recruit to time and to target with such a system.

## 9. Impact of CSG activities

One the most important recently completed trials is QUARTZ, which was presented by Dr Mulvenna at the ASCO meeting in Chicago (June 2014). NSCLC patients with cerebral metastasis and reported no addition benefit when whole brain radiotherapy added to standard dexamethasone treatment: results that will challenge and change a long established practice.

In SCLC the very active participation of the UK in the international CREST study on the addition of thoracic consolidation radiotherapy to prophylactic cranial irradiation has reported (Lancet 2014) and it expected that consolidation thoracic RT will become the norm.

In addition to trials on the commercial portfolio our flagship studies (TRACERx/DARWIN and SMP2/MATRIX) are now recruiting with the expectation that the basis science data that will come out of these studies will inform the thinking and design for future studies over the next decade.

## 10. Consumer involvement

The two consumer representatives, Mrs Janette Rawlinson and Mr Matthew Baker, have sought to support the work of the CSG at both practical and strategic levels. At a practical level, in both a

subgroup and main CSG context, they have reviewed trial proposals and contributed to the development of recruitment arrangements and documentation including Patient Information Sheets. At a strategic level they have helped facilitate discussions concerning screening and early identification, the importance of collaborating with other CSGs, the balance of the trials portfolio and the patterns of patient recruitment to lung trials. Both representatives attended the NCRI, BTOG, NAEDI and INVOLVE conferences and one attended the NCIN, Britain Against Cancer and National Cancer Patients' conferences. One attended the Mesothelioma and Brain metastasis days and undertook scientific training through NCRI (Elaine Vickers) and ICPV VOICE training at Barts' Cancer Institute.

Both have been involved in the wider development of PPI in cancer research and as members of NCRN SPADE had leading roles on projects including the review of CSG mentoring arrangements for consumer representatives, the publication of the PPI Toolkit by NIHR and NCRI, and the analysis of the NCPES data on research involvement. Posters and workshops disseminating the outputs from these and the report compiled from the annual CSG surveys from Chairs, scientific mentors and consumers on the impact and contribution consumers make have been presented at NCRI, INVOLVE and NCIN conferences this year. Posters and abstracts are available here: <http://www.crn.nihr.ac.uk/cancer/pcpie/the-consumer-liaison-group/>

Mrs Rawlinson was appointed by CRUK as a Patient representative board member for SMP2 in January 2015. Mr Baker was appointed to the CRUK Population Research Committee Expert Panel (Prevention) and the NCRI Consumer Forum Steering Group in June 2015.

Wider involvement has included board membership of the NIHR HS&DR Programme, board membership of a large CCG (HSJ CCG of the year 2013 and General Practice Commissioners of the year 2014), advisory work with a DH Research Unit, and advisory and joint applicant roles on a small number of population studies.

It is hoped that links made between these various roles and organisations will enable greater collaboration and support in future as work develops on a number of patient and lay focused themes in line with major health policies and 'The NHS 5 year Forward View' which places cancer as a major strategic priority.

## **11. Open meetings/annual trials days/strategy days**

There have been no open meetings or annual trials days in the Lung CSG this year. The Group plan to hold a strategy day in late 2015 under the new chairmanship of Dr Hatton.

## **12. Progress towards achieving the CSG's 3 year strategy**

Issues raised in the last Lung CSG review are detailed below with steps taken to address them:

- Improve recruitment: it is anticipated that new trials, such as the National Lung Matrix Trial, will improve recruitment.
- Engage directly with individual networks: ongoing engagement with CSG subspecialty leads.
- Target individuals more proactively to fill gaps in the membership (e.g. PET, radiotherapy): actioned: seen by recent membership rotations.
- Interact with CTRad to continue to address the issue surrounding radiotherapy trials: ongoing, ADSCaN now funded, further brainstorming radiotherapy workshop planned June 2015.

- Establish clear links with the academic centres with translational expertise in order to maximise involvement in CRUK's Personalised Medicine Initiative: ongoing development through the National Lung Matrix Trial.
- Increase the number of trials driven by a translational concept: ongoing TRACERx, involvement in CRUK's Stratified Medicine Programme 2 and the National Lung Matrix Trial.
- Raise the profile of lung cancer research with funders: ongoing lung cancer identified as one of the key focus areas in CRUK research strategy, 2014.
- Work with the Primary Care and Supportive & Palliative Care CSGs to develop collaborative studies: ongoing involvement with SPED, SPECIAL and screening studies.

### **13. Priorities and challenges for the forthcoming year**

Priorities for the Lung CSG are:

- Ensure smooth transfer for the New Chairs of the CSG and subgroups.
- Extend the trial portfolio by use of the annual Trials Meeting, collaborative meeting with BTOG and other partners and through individual sub group workshops.
- Improve links with other CSGs and international groups through communication and collaboration via CSG and subgroup members.

Challenges for the Lung CSG are:

- The changing landscape of molecular subtyping makes treatment studies more focused on small populations of patients.

### **14. Concluding remarks**

The landscape is changing toward identifying patients who will benefit from targeted medicine for specific subgroups of patients. The Group is ideally placed through the National Lung Matrix Trial and the CRUK's Stratified Medicine Programme 2 to meet these challenges for the systemic treatment of lung cancer. Through targeted workshops the CSG aims to continue the development of a portfolio of radiotherapy and surgical studies. Improving links with other CSGs is key to the development of trials in the early diagnosis and palliative care settings.

### **15. Appendices**

Appendix 1 - Membership of main CSG and subgroups

Appendix 2 – CSG and Subgroup strategies

- A – Main CSG Strategy
- B – LocoRegionalDisease (LORD) Subgroup Strategy
- C – Advanced Disease Subgroup Strategy
- D – Screening/Early Diagnosis Subgroup Strategy
- E – Mesothelioma Subgroup

Appendix 3 - Portfolio Maps

Appendix 4 - Publications in previous year

Appendix 5 - Major international presentations in previous year

**Dr Marianne Nicolson (Lung CSG Chair until April 2015), and Dr Matthew Hatton (Lung CSG Chair from April 2015)**

## Appendix 1

### Membership of the Lung CSG

<b>Name</b>	<b>Specialism</b>	<b>Location</b>
Mr Matthew Baker (CLG)	Consumer	Manchester
Mrs Janette Rawlinson (CLG)	Consumer	Tipton
Dr Doris Rassl	Histopathologist	Cambridge
Dr Matthew Hatton	Clinical Oncologist	Sheffield
Dr David Landau	Clinical Oncologist	London
Dr Noelle O'Rourke	Clinical Oncologist	Glasgow
Professor Dean Fennell	Medical Oncologist	Leicester
Dr Martin Forster	Medical Oncologist	London
Professor Gary Middleton	Medical Oncologist	Birmingham
Dr Thomas Newsom-Davis	Medical Oncologist	London
Dr Marianne Nicolson (Chair)	Medical Oncologist	Aberdeen
Dr Sanjay Popat	Medical Oncologist	London
Dr Riyaz Shah	Medical Oncologist	Kent
Dr Yvonne Summers	Medical Oncologist	Manchester
Dr Peter Szlosarek	Medical Oncologist	London
Mr John McPhelim	Nurse	Lanarkshire
Dr Anand Devaraj	Radiologist	London
Dr Neal Navani	Respiratory Medicine Consultant	London
Professor David Baldwin	Respiratory Physician	Nottingham
Professor Lucinda Billingham	Statistician	Birmingham
Mr John Edwards	Surgeon	Sheffield
Dr Tim Yap*		London

\* denotes trainee

## Membership of the Subgroups

<b>LCoRegionDisease (LORD) Subgroup</b>		
<b>Name</b>	<b>Specialism</b>	<b>Location</b>
Dr Corinne Faivre-Finn	Clinical Oncologist	Manchester
Dr Matthew Hatton (Chair)	Clinical Oncologist	Sheffield
Dr Susan Harden**	Clinical Oncologist	Cambridge
Dr David Landau	Clinical Oncologist	London
Dr Fiona McDonald**	Clinical Oncologist	London
Dr Timothy Sevitt**	Clinical Oncologist	Kent
Mr Mat Baker	Consumer	Manchester
Dr Thida Win**	General Medicine	Stevenage
Dr Tom Newsom-Davis	Medical Oncologist	London
Dr Denis Talbot	Medical Oncologist	Oxford
Mrs Lavinia Magee	Nurse	Ulster
Dr Fergus Gleeson**	Radiologist	Oxford
Dr David Baldwin	Respiratory Physician	Nottingham
Dr Richard Booton	Respiratory Physician	Manchester
Dr Loic Lang-Lazdunski**	Surgeon	London
Mr Babu Naidu	Surgeon	Birmingham

<b>Mesothelioma Subgroup</b>		
<b>Name</b>	<b>Specialism</b>	<b>Location</b>
Dr Peter Jenkins	Clinical Oncologist	Gloucestershire
Professor Mike Lind	Clinical Oncologist	Hull
Dr Michael Snee	Clinical Oncologist	Leeds
Professor Dean Fennell (Chair)	Medical Oncologist	Leicester
Dr Jeremy Steele	Medical Oncologist	London
Dr James Entwisle	Radiologist	Leicester
Mr John Edwards	Surgeon	Sheffield
Professor Andrew Ritchie	Surgeon	Gloucester
Mr David Waller	Surgeon	Leicester

<b>Advanced Disease Subgroup</b>		
<b>Name</b>	<b>Specialism</b>	<b>Location</b>
Dr Jason Lester	Clinical Oncologist	Cardiff
Dr Hannah Lord	Clinical Oncologist	Dundee
Professor Allan Hackshaw	Epidemiologist	London
Dr Fiona Blackhall	Medical Oncologist	Manchester
Dr Gary Middleton	Medical Oncologist	Birmingham
Dr Sanjay Popat (Chair)	Medical Oncologist	London
Dr Clive Mulatero	Medical Oncologist	Leeds
Dr Riyaz Shah	Medical Oncologist	Kent
Dr James Spicer	Medical Oncologist	London
Professor Charles Swanton	Medical Oncologist	London

<b>Screening/Early Diagnosis Subgroup</b>		
<b>Name</b>	<b>Specialism</b>	<b>Location</b>
Professor Paul Aveyard	Behavioural Medicine	Oxford
Professor John Field	Clinical Oncologist	Liverpool
Dr Sam Janes	General Medicine	London
Professor Richard Neal	GP	Wrexham
Professor David Weller	GP	Edinburgh
Professor Tim Eisen	Medical Oncologist	Cambridge
Professor Fergus Gleeson	Radiologist	Oxford
Professor David Baldwin	Respiratory Physician	Nottingham
Dr Mick Peake	Respiratory Physician	Leicester
Dr Robert Rintoul (Chair)	Respiratory Physician	Cambridge

\*denotes trainee

\*\*denotes non-core member

## Appendix 2

### CSG & Subgroup Strategies

#### A – Main CSG Strategy

Recent refreshment of the membership with a mix of new and established participants will re-energise the Lung CSG. The finalisation of arrangements with the trials networks in England will provide really useful information about the local leads for lung cancer who may be expected to encourage and facilitate access to local NCRI budgets for clinical trials. The information regarding which networks and regions are not recruiting well (available from the national lung cancer audit data – formerly LUCADA) will make links with the networks easier. All of these factors should help to improve achievement of accrual targets. One strategy will be to link Lung CSG members link with their networks and report back on any problematic issues that stifle trials locally.

Studies on immune therapies in NSCLC are already appearing on the portfolio and it should be possible, to develop some broad based studies to improve overall recruitment across lung cancer and mesothelioma at all stages. Studies that investigate possible use of blood and urine markers will be another of interest we struggle with the amount of information required from small biopsies.

Links with other CSGs international groups will by necessity be solidified / increased through communication and collaboration via CSG members who are members of cross cutting committees.

The CSG Strategy will be further developed at a strategy day planned for November 2015.

## **B – LocoRegionalDisease (LORD) Subgroup Strategy**

Key strategic points for the LORD Subgroup are:

- Ensure a smooth transfer to the new chair of the LORD CSG
- Extend the trial portfolio by the use of workshops to discuss / develop the research ideas needed to fill current gaps in the portfolio
- To continue to develop a comprehensive portfolio of radiotherapy trials so that all patients requiring radiotherapy will have a trial treatment option.
- Develop a program of research aimed at improving patient fitness before, during and after radical treatment (surgery or radiotherapy).

The LORD Subgroup will further develop their strategy at the CSG Strategy Day in November 2015 and under the chairmanship of Dr Yvonne Summers, who will chair the Subgroup from June 2015.

## **C – Advanced Disease Subgroup Strategy**

A new strategy for the Subgroup will be devised at the CSG Strategy Day in November 2015.

## **D – Screening/Early Diagnosis Subgroup Strategy**

The Screening/Early Diagnosis Subgroup will further develop their strategy at the CSG Strategy Day in November 2015 and under the chairmanship of Dr Neal Navani, who will chair the Subgroup from June 2015.

## **E – Mesothelioma Subgroup**

The Mesothelioma Subgroup will further develop their strategy at the CSG Strategy Day in November 2015 and under the chairmanship of Dr Peter Szlosarek, who will chair the Subgroup from June 2015.

# Appendix 3

## Portfolio maps

LUNG CSG PORTFOLIO MAP A		LUNG CANCER	
		WHITE=OPEN ON MULTIPLE PORTFOLIOS	YELLOW=OPEN/RECRUITING PURPLE=IN SET-UP/FUNDED
		<b>Small Cell Lung Cancer</b>	
Risk Factor/ Screening		<div style="border: 1px solid black; padding: 2px; display: inline-block;"> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">C</span> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">A</span>                      ICBP                      MODULE 4                 </div>	
1 <sup>st</sup> Line Treatment		<div style="display: flex; gap: 10px;"> <div style="border: 1px solid black; padding: 2px; display: inline-block;"> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">O</span> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">A</span>                      PE-induced                      changes in                      ICMT-11                 </div> <div style="border: 1px solid black; padding: 2px; display: inline-block;"> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">O</span> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">I</span>                      NCRN 2560                 </div> </div>	
1 <sup>st</sup> Line Maintenance		<div style="border: 1px solid black; padding: 2px; display: inline-block;"> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">C</span> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">P</span>                      STOMP                 </div>	
2 <sup>nd</sup> Line Treatment		<div style="display: flex; gap: 10px;"> <div style="border: 1px solid black; padding: 2px; display: inline-block;"> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">O</span> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">I</span> </div> <div style="border: 1px solid black; padding: 2px; display: inline-block;"> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">O</span> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">I</span> </div> </div>	
3 <sup>rd</sup> Line Treatment		<div style="display: flex; gap: 10px;"> <div style="border: 1px solid black; padding: 2px; display: inline-block;">                     NCRN 396:                      VE BASKET                 </div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">                     NCRN – 2808:                      CheckMate032                 </div> </div> <p>NCRN 396 VE BASKET: Vemurafenib in patients with BRAF V600 mutation-positive cancers                      NCRN – 2808 CheckMate032: Nivolumab monotherapy or Nivolumab combined with Ipilimumab in advanced/metastatic solid tumours                      NCRN – 2560: Carfilzomib, Carboplatin, and Etoposide in Subjects with Previously Untreated Extensive-stage SCLC</p>	
Supportive Care		<div style="border: 1px solid black; padding: 2px; display: inline-block;"> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">C</span> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">A</span>                      COAST                 </div>	
Palliative/QoL/ Observational		<div style="display: flex; gap: 10px;"> <div style="border: 1px solid black; padding: 2px; display: inline-block;"> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">O</span> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">A</span>                      TAPPS                 </div> <div style="border: 1px solid black; padding: 2px; display: inline-block;"> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">O</span> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">I</span>                      AVALPROFS                 </div> <div style="border: 1px solid black; padding: 2px; display: inline-block;"> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">O</span> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">A</span>                      Respiratory                      and peripheral                      muscle function                 </div> <div style="border: 1px solid black; padding: 2px; display: inline-block;"> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">O</span> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">A</span>                      Clarithromycin                      for cachexia                 </div> </div>	

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Version: February 2015

D: CSG-developed  
 C: CSG-consulted  
 O: Other  
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 P: Academic/Industry Partnership  
 I: Industry-sponsored

LUNG CSG PORTFOLIO MAP B		LUNG CANCER		WHITE=OPEN ON MULTIPLE PORTFOLIOS	YELLOW=OPEN/RECRUITING PURPLE=IN SET-UP/FUNDED
<b>Mesothelioma</b>					
Risk Factor/ Screening					
Diagnosis					
1 <sup>st</sup> Line Treatment					
1 <sup>st</sup> Line Maintenance					
2 <sup>nd</sup> Line Treatment					
3 <sup>rd</sup> Line Treatment					
Palliative/QoL/ Observational					

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 I: Industry-sponsored

### Non-Small Cell lung Cancer Industry Study Key

CANC 3336:	OAK: A phase III, open label, multicentre randomised study to investigate the efficacy and safety of MPDL3280A (anti PD-L1 antibody) compared with docetaxel in patients with NSCLC after failure with platinum-containing chemotherapy
CANC 3376:	ATLANTIC: A Phase II, Noncomparative, Open label, Multicentre, International Study of MEDI4736, in Patients with Locally Advanced or Metastatic NSCLC (Stage IIIB/IV) who have received at least Two Prior Systemic Treatment Regimens Including One Platinum-based Chemotherapy Regimen
NCRN 396:	An open-label, phase II study of vemurafenib in patients with BRAF V600 mutation-positive cancers (VE BASKET )
NCRN 400:	GSK2118436 in subjects with advanced non-small cell lung cancer and BRAF mutations
NCRN 523:	A Phase II, Randomized Trial of Two Doses of MK-3475 (SCH 900475) versus Docetaxel in Subjects with Squamous Histology Non-Small Cell Lung Cancer Previously Treated
NCRN 552:	ASCEND V: A phase III, multicenter, randomized, open-label study of oral LDK378 versus standard chemotherapy in adult patients with ALK-rearranged (ALK-positive) advanced non-small cell lung cancer who have been treated previously with chemotherapy (platinum doublet) and crizotinib
NCRN 569:	ASCEND IV: A phase III multicenter, randomized study of oral LDK378 versus standard chemotherapy in previously untreated adult patients with ALK rearranged (ALK-positive), locally advanced or metastatic, non-squamous non-small cell lung cancer
NCRN 570:	GALAXY 2: Ganetespib +/- docetaxel in advanced NSCLC
NCRN 575:	A Phase Ib/II study of docetaxel with or without buparlisib as second line therapy for patients with metastatic squamous non-small cell lung cancer
NCRN 2226:	A Randomized, Multi-Center Phase 2 Trial of Denosumab in Combination with Chemotherapy as First-Line Treatment of Metastatic NSCLC
NCRN 2652:	SELECT-1: A Phase III, Double-Blind, Randomised, Placebo-Controlled Study to Assess the Efficacy and Safety of Selumetinib in Combination with Docetaxel, in Patients receiving second line treatment for KRAS Mutation-Positive Locally Advanced or Metastatic NSCLC (Stage IIIB – IV)
NCRN 2888:	A Phase 1 Study to Evaluate the Safety, Tolerability, and Pharmacokinetics of MEDI4736 in Subjects With Advanced Solid Tumors
NCRN 2974:	VESTA: A Randomized, Double-Blind, Multicenter, Phase 3 Study Comparing Veliparib Plus Carboplatin and Paclitaxel Versus Placebo Plus Carboplatin and Paclitaxel in Previously Untreated Advanced or Metastatic Squamous Non-Small Cell Lung Cancer (NSCLC)
NCRN 3003:	TRAP: Phase 1 Study in Subjects with MPM, PM or NSCLC Requiring Arginine to Assess ADI-PEG 20 with Pemetrexed and Cisplatin (ADIPemCis)
NCRN 3014:	AURA3: A Phase III, Open Label, Randomised Study to Assess the Safety and Efficacy of AZD9291 versus platinum- based doublet chemotherapy in second-line patients with EGFRm+/T790M+, locally advanced or metastatic NSCLC who have progressed following treatment with an approved EGF TKI
NCRN 3043:	CA209-026: An Open-Label, Randomized, Phase 3 Trial of Nivolumab versus Investigator's Choice Chemotherapy as First-Line Therapy for Stage IV or Recurrent PD-L1+ Non-Small Cell Lung Cancer (NSCLC)
NCRN 3146:	A Randomized Open-Label Phase III Trial of MK-3475 versus Platinum based Chemotherapy in 1L Subjects with PD-L1 Positive Metastatic Non-Small Cell Lung Cancer
NCRN 3160:	TIGER-2: A Phase 2, Open-Label, Multicenter, Safety and Efficacy Study of Oral CO 1686 as 2nd Line EGFR-Directed Therapy in Patients with Mutant EGFR Non-Small Cell Lung Cancer (NSCLC) with the T790M Resistance Mutation

LUNG CSG PORTFOLIO MAP C		LUNG CANCER					WHITE=OPEN ON MULTIPLE PORTFOLIOS	YELLOW=OPEN/RECRUITING	PURPLE=IN SET-UP/FUNDED		
Non-Small Cell Lung Cancer											
Biomarker selected									Non-biomarker selected		
EGFR		ALK	KRAS	Others		Non-squamous	Squamous	All types			
Supportive Care/Observational	3 <sup>rd</sup> Line Treatment	2 <sup>nd</sup> Line Treatment	1 <sup>st</sup> Line Maintenance	1 <sup>st</sup> Line Treatment	Adjuvant/Neoadjuvant						
GEM EORTC 08114	NCRN3160 TIGER-2 National Lung Matrix	NCRN3014 AURA3 National Lung Matrix		TIMELY	Lung ART ABLE						
GEM EORTC 08114	NCRN552 ASCEND V			NCRN 569 ASCEND IV							
GEM EORTC 08114	National Lung Matrix	NCRN2652 SELECT-1 National Lung Matrix									
GEM EORTC 08114	NCRN 400 FGFR Study NCRN2888 NCRN 396: VE BASKET National Lung Matrix	NCRN 575 NCRN 523		NCRN3003 TRAP NCRN 3043 CA209-026 NCRN3146							
GEM EORTC 08114		NCRN 570 GALAXY		TIMELY Effects of P <sup>18</sup> Fretex - PET							
COAST	CANC3370 ATLANTIC RT + BKM120 VanSel1	CANC3336 OAK RT + BKM120 VanSel1									
AVALPROFS Respiratory and peripheral muscle function											
REPLICA Clarithromycin for cachexia											

\*study currently suspended

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		All Lung Cancers – Non-treatment					
		Risk Factors/ Screening	Diagnosis/Imaging	Biomarkers	Quality of Life/Symptom Control	Data Collection	
Pre-diagnosis		<ul style="list-style-type: none"> <li>MEDLUNG (O A)</li> <li>Approaches to early detection- study 1a (C A)</li> <li>Approaches to early detection- study 2 (C A)</li> </ul>	<ul style="list-style-type: none"> <li>SPUNIK (O A)</li> <li>PE Biomarker study (O P)</li> <li>The SYMPTOM study (D A)</li> <li>EARLY Project (C P)</li> </ul>		<ul style="list-style-type: none"> <li>(O A)</li> </ul>	<ul style="list-style-type: none"> <li>The role of information sources (O A)</li> </ul>	<ul style="list-style-type: none"> <li>CANDID</li> </ul>
Post-diagnosis	<ul style="list-style-type: none"> <li>ReSolucENT (C A)</li> </ul>	<ul style="list-style-type: none"> <li>CR-UK Stratified Medicine (O P)</li> <li>Streamline L (NSCLC only) (O A)</li> <li>ICBP Module 4 (O A)</li> </ul>	<ul style="list-style-type: none"> <li>REQUIRE (O A)</li> <li>Quantification of neutrophil accumulation (O A)</li> <li>FREELUNG v4.0 (O A)</li> <li>Magnitude of uptake of [18F]D4 FCH (O A)</li> <li>Tumour Angiogenesis (O A)</li> <li>LLP/Liverpool Lung Project (C A)</li> <li>CLUB (C A)</li> <li>TRACERx (C A)</li> <li>Dev. a blood test for early stage NSCLC (I)</li> </ul>	<ul style="list-style-type: none"> <li>HYPREL (O A)</li> <li>EMBRACE (O A)</li> <li>LaB (C A)</li> <li>EORTC IC13 Revision (O A)</li> <li>Rehab for operated lung cancer (D A)</li> <li>IPC-PLUS (O P)</li> <li>TAPPS (O A)</li> </ul>	<ul style="list-style-type: none"> <li>LungCAST (O P)</li> <li>TargetLung (O A)</li> </ul>		

\*study currently suspended

(D): CSG-developed (C): CSG-consulted (O): Other (A): Academically-sponsored (P): Academic/Industry Partnership (I): Industry-sponsored

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## Appendix 4

### Publications in the reporting year

#### FGFR

Smyth, E. C., Turner, N. C, Popat, S., Morgan, S., Owen, K., Gillbanks, A., Jain, V. K., Cunningham, D. (2013), "Proof-of-concept study of AZD4547 in patients with FGFR1 or FGFR2 amplified tumours," *ASCO Annual Meeting*.

#### QUARTZ

Langley, R. E., Stephens, R. J., Nankivell, M., Pugh, C., Moore, B., Navani, N., Wilson, P., Faivre-Finn, C., Barton, R., Parmar, M. K., Mulvenna, P. M. (2013), "Does Whole Brain Radiotherapy Affect the Survival and Quality of Life of Patients with Brain Metastases from Non-small Cell Lung Cancer?" *Clin Oncol*, 25(3) pp 23-30.

#### UKLS

McRonald FE, Yadegarfar G, Baldwin DR, Devaraj A, Brain KE, Eisen T, Holemans JA, Ledson M, Screaton N, Rintoul RC, Hands CJ, Lifford K, Whynes D, Kerr KM, Page R, Parmar M, Wald N, Weller D, Williamson PR, Myles J, Hansell DM, Duffy SW, Field JK. The UK Lung Screen (UKLS): demographic profile of first 88,897 approaches provides recommendations for population screening. *Cancer Prev Res (Phila)*. 2014 Mar;7(3):362-71. doi: 10.1158/1940-6207.CAPR-13-0206. Epub 2014 Jan 17. PMID: 24441672 [PubMed - in process]

#### TACTIC

Lee SM, Lewanski CR, Counsell N, Ottensmeier C, Bates A, Patel N, Wadsworth C, Ngai Y, Hackshaw A, Faivre-Finn C. Randomised phase II placebo-controlled trial of whole brain radiotherapy and erlotinib in patients with advanced non-small cell lung cancer with multiple brain metastases *Journal of the National Cancer Institute*, in press

#### CaDiAS

Cancer diagnosis in the acute setting (CaDiAS): A study on behalf of the London Cancer Alliance.). Hughes C, Sarafraz-Shekary N, Kausha A, Ramirez A, Benepal T, Watts C, Forbes L & Newsom-Davis T. *J Thor Oncol* (2013); 8(2): S690-1.

#### ASTER trial

Rintoul RC, Glover MJ, Jackson C, Hughes V, Tournoy KG, Dooms C, Annema JT, Sharples LD. Cost effectiveness of endosonography versus surgical staging in potentially resectable lung cancer: a health economics analysis of the ASTER trial from a European perspective. *Thorax*. 2013 Sep 24. doi: 10.1136/thoraxjnl-2013-204374. [Epub ahead of print]

#### MesoVATS

Rintoul RC, Ritchie AJ, Edwards JG, Waller DA, et al. Efficacy and cost of video-assisted thoracoscopic partial pleurectomy versus talc pleurodesis in patients with malignant pleural

mesothelioma (MesoVATS): an open-label, randomised, controlled trial. *Lancet* 2014;384:1118-27

### **CHART-ED**

Hatton M, Hill R, Wilson P, Atherton P, Morgan S, Dickson J, Murray K, Paul J. Continuous Hyperfractionated Accelerated RadioTherapy – Escalated Dose: A Phase I study. *Radiotherapy and Oncology* 111suppl 1 S231;2014

### **REST**

Slotman BJ, van Tinteren H, Praag JO, et al. Use of thoracic radiotherapy for extensive stage small-cell lung cancer: a phase 3 randomised controlled trial. *Lancet* 2015; 385: 36–42

Slotman BJ, Faivre-Finn C, van Tinteren H, Praag JO, Kneijens JL, El Sharouni SY, Hatton M, Keijser A, Senan S.

C. Faivre-Finn, M. Hatton, M Snee, P Jain, P Wilson, R McMenemin, C Peedell, A Bates, A Garcia, j Ironside, S Falk, H. van Tinteren, J.L. Kneijens, B.J. Slotman, REST – A Dutch/UK randomized, (2015), *Lung Cancer* 87 Suppl 1 S60:1015

### **Isotoxic IMRT Study**

Groom N, Tsang Y, Hatton M, Hanna G, Franks K, Harden S, McDonald F, Harrow S, Faivre-Finn C. Quality assurance programme for the Isotoxic Intensity Modulated Radiotherapy Feasibility Study, (2015), *Lung Cancer* 87 Suppl 1 S68:1015 (Abstract)

Groom N, Tsang Y, Hatton M, Hanna G, Franks K, Harden S, McDonald F, Harrow S, Faivre-Finn C, Isotoxic Intensity Modulated Radiotherapy (IMRT) in stage III Non-Small Cell Lung Cancer (NSCLC) – A Feasibility Study (2015), *Lung Cancer* 87 Suppl 1 S51:1015 (Abstract)

## Appendix 5

### Major international presentations in the reporting year

#### FGFR

Smyth, E. C., Turner, N. C, Popat, S., Morgan, S., Owen, K., Gillbanks, A., Jain, V. K., Cunningham, D. (2013), "Proof-of-concept study of AZD4547 in patients with FGFR1 or FGFR2 amplified tumours," *50<sup>th</sup> American Society of Clinical Oncology Meeting, Chicago, 2014.*

#### QUARTZ

Langley, R. E., Stephens, R. J., Nankivell, M., Pugh, C., Moore, B., Navani, N., Wilson, P., Faivre-Finn, C., Barton, R., Parmar, M. K., Mulvenna, P. M. (2013), "Does Whole Brain Radiotherapy Affect the Survival and Quality of Life of Patients with Brain Metastases from Non-small Cell Lung Cancer?" *51<sup>st</sup> American Society of Clinical Oncology Meeting, Chicago, 2015*

#### CaDiAS

Hughes C, Sarafraz-Shekary N, Kausha A, Ramirez A, Watts C, Forbes L & Newsom-Davis T. Cancer diagnosis in the acute setting (CaDiAS): A study on behalf of the London Cancer Alliance. *9<sup>th</sup> NCRI Annual Conference, Liverpool, November 2013.*

#### MesoVATS

Randomised controlled trial of video-assisted thoracoscopic partial pleurectomy compared to talc pleurodesis in patients with suspected or confirmed malignant pleural mesothelioma: the MesoVATs trial. *World Conference on Lung Cancer – Sydney October 2013*

#### CHART-ED

Hatton M, Hill R, Wilson P, Atherton P, Morgan S, Dickson J, Murray K, Paul J. Continuous Hyperfractionated Accelerated RadioTherapy – Escalated Dose: A Phase I study.. *ESTRO Conference, Vienna, 2014*

#### REST

Slotman BJ, Faivre-Finn C, van Tinteren H, Praag JO, Kneegjens JL, El Sharouni SY, Hatton M, Keijser A, Senan S. Randomized trial on chest irradiation in extensive disease small cell lung cancer (ES-SCLC). *50<sup>th</sup> American Society of Clinical Oncology Meeting, Chicago, 2014*

C. Faivre-Finn, M. Hatton, M Snee, P Jain, P Wilson, R McMenemin, C Peedell, A Bates, A Garcia, j Ironside, S Falk, H. van Tinteren, J.L. Kneegjens, B.J. Slotman, REST – A Dutch/UK randomised Phase III trial on the use of thoracic radiotherapy in extensive stage small cell lung cancer (2015), *13<sup>th</sup> British Thoracic Oncology Group Meeting, Dublin.*

#### Isotoxic IMRT Study

Groom N, Tsang Y, Hatton M, Hanna G, Franks K, Harden S, McDonald F, Harrow S, Faivre-Finn C. Quality assurance programme for the Isotoxic Intensity Modulated Radiotherapy Feasibility Study 2015, *13<sup>th</sup> British Thoracic Oncology Group Meeting, Dublin.*

Groom N, Tsang Y, Hatton M, Hanna G, Franks K, Harden S, McDonald F, Harrow S, Faivre-Finn C, Isotoxic Intensity Modulated Radiotherapy (IMRT) in stage III Non-Small Cell Lung Cancer (NSCLC) – A Feasibility Study (2015), *13<sup>th</sup> British Thoracic Oncology Group Meeting*, Dublin.