



Public Health
England

Systemic Anti Cancer Therapy (SACT)

Lung SSCRG

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National Disease Registration, CKO



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How Good is the Data Nationally?

SACT data completeness, August 2013 to July 2014

England
Lung

Number of patients
16,565

% NHS Number	% Date of Birth	% Current gender	% Ethnicity	% Patient postcode
100%	100%	99%	94%	100%

Number of tumour records
17,754

% GP Practice Code	% GMC Code	% Consultant Specialty	% Primary diagnosis	% Morphology	% Stage of disease at start of programme
81%	91%	93%	100%	56%	52%

Number of regimens
24,468

% Programme number	% Regimen number	% Treatment intent	% Regimen name	% Height at start of regimen	% Weight at start of regimen	% Performance Status at start of regimen
68%	62%	83%	100%	63%	64%	46%

% Comorbidity adjustment	% Date of decision to treat	% Start date of regimen	% Clinical trial	% Chemo radiation	% Number of cycles planned
41%	89%	100%	73%	59%	58%

Number of cycles
56,669

% Cycle number	% Start date of cycle	% Weight at start of cycle	% Performance Status at start of cycle	% OPCS procurement code	% of Cycles with Drug records
100%	95%	60%	43%	59%	84%

Number of drug records
156,830

% Drug name	% Actual dose per administration	% Administration route	% Administration date	% OPCS Delivery code	% Organisation code of drug provider
100%	94%	96%	100%	66%	94%

Number of outcome records
15,099

% Date of Final Treatment	% Regimen modification (dose reduction)	% Regimen modification (time delay)	% Regimen modification (stopped early)	% Regimen outcome summary	% Date of death
27%	46%	19%	39%	8%	7%

62% of regimens



How good is my data, compared to hospitals in my area team?

[illegible]



Can I find out how complete my hospital's lung data is?

SACT Data Completeness Profile						
Trust All diagnostic groups, activity between 01/09/2013 and 30/09/2013						
Trust Name	Total Patients	Total Tumours	Total Regimens	Total Cycles	Total Drugs	Total Outcomes
NHS Foundation Trust	781	788	805	1,149	8,576	805
Key: * = 100% complete * = Better than England average * = Worse than England average						
% NHS Number* % Date of Birth* % Gender % Ethnicity % Post Code*						
Total Patients: 781	* 100.0%	* 100.0%	* 100.0%	* 89.0%	* 100.0%	
England average:	100.0%	100.0%	98.2%	92.5%	100.0%	
% GP Practice Code % Consultant GMC code % Consultant Speciality % Primary Diagnosis* % Morphology* % Stage						
Total Tumours: 788	* 100.0%	* 72.0%	* 70.9%	* 100.0%	* 64.5%	* 24.2%
England average:	76.6%	87.5%	90.1%	100.0%	46.3%	28.1%
% Programme Number % Regimen Number % Treatment Intent % Height at Regimen Start % Weight at Regimen Start % Performance Status at Regimen Start						
Total Regimens: 805	* 100.0%	* 100.0%	* 96.0%	* 82.2%	* 82.2%	* 99.8%
England average:	54.0%	67.2%	79.9%	55.7%	55.7%	38.5%
% Co-Morbidity Adjustment % Decision To Treat Date % Regimen Start Date* % Clinical Trial % Chemo Radiation % Cycles Planned						
Total Regimens: 805	* 0.0%	* 66.8%	* 100.0%	* 100.0%	* 100.0%	* 100.0%
England average:	38.4%	84.9%	100.0%	76.6%	55.6%	58.7%
% Regimen Name* % Regimen matching OPCS 4.6 % Regimen mapped by CIU % Regimen mapped to TRIAL % Regimen mapped to NOT CHEMO						
Total Regimens: 805	* 100.0%		42.6%	50.0%	7.4%	0.0%
England average:	100.0%					
% Cycle Number* % Cycle Start Date % Weight at Cycle Start % Performance Status at Cycle Start % OPCS Procurement Code						
Total Cycles: 1,149	* 100.0%	* 99.0%	* 13.8%	* 99.7%	* 69.4%	
England average:	100.0%	95.9%	48.8%	31.5%	48.9%	
% Drug Name % Dose % Route of Administration % Date of Administration % Organisation Code of Drug Provider % OPCS Delivery Code						
Total Drugs: 8,576	* 100.0%	* 98.0%	* 100.0%	* 100.0%	* 100.0%	* 70.9%
England average:	100.0%	94.5%	91.3%	100.0%	94.6%	58.0%
% Final Treatment Date % Regimen Modification Dose Reduction % Regimen Modification Time Delay % Regimen Modification Stopped Early % Regimen Outcome Summary % Date of Death						
Total Outcomes: 805		3.5%	100.0%	100.0%	100.0%	0.5%

* Mandatory fields are denoted with an asterisk

Report executed on 12 November 2013. Source: SACT.

SACT Data Quality Profile

Trust
Reported activity taking place between 01/09/2013 and 30/09/2013



1. Morphology completion for critical diagnostic groups

Proportion of patients in each diagnostic group with morphology recorded

Gynae (Ovarian)	Lung	Urology (Testis)
98% 53 out of 54 patients	80% 35 out of 44 patients	80% 4 out of 5 patients

2. Intent of Treatment by diagnostic group

Total number of patients treated between 01/09/2013 and 30/09/2013 with treatment intent recorded.

Percentages are aggregated by diagnostic group. Patients with multiple treatment intent recorded will be double-counted.

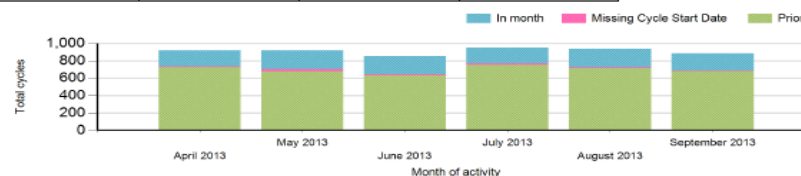
	Adjuvant	Curative	Disease Modification	Neo-adjuvant	Palliative	Not recorded
Brain/CNS	9 (24%)	15 (39%)	0 (0%)	0 (0%)	14 (37%)	0 (0%)
Breast	63 (47%)	7 (5%)	0 (0%)	19 (14%)	39 (29%)	5 (4%)
Gynae	20 (24%)	7 (8%)	0 (0%)	9 (11%)	48 (58%)	1 (1%)
Head and Neck	0 (0%)	8 (80%)	0 (0%)	0 (0%)	2 (20%)	0 (0%)
Leukaemia	2 (4%)	13 (27%)	0 (0%)	0 (0%)	34 (68%)	0 (0%)
Lower GI	24 (35%)	6 (9%)	0 (0%)	2 (3%)	36 (52%)	1 (1%)
Lung	2 (4%)	4 (9%)	0 (0%)	0 (0%)	39 (87%)	0 (0%)
Lymphoma	0 (0%)	36 (55%)	0 (0%)	0 (0%)	29 (45%)	0 (0%)
Miscellaneous	2 (5%)	4 (9%)	0 (0%)	0 (0%)	36 (82%)	2 (5%)
Myeloma	2 (4%)	2 (4%)	0 (0%)	0 (0%)	42 (91%)	0 (0%)
Sarcoma	1 (17%)	0 (0%)	0 (0%)	0 (0%)	5 (83%)	0 (0%)
Skin	0 (0%)	2 (8%)	0 (0%)	0 (0%)	23 (92%)	0 (0%)
Upper GI	2 (5%)	5 (12%)	0 (0%)	1 (2%)	32 (76%)	2 (5%)
Urology	11 (16%)	3 (4%)	0 (0%)	0 (0%)	43 (64%)	10 (15%)

3. Number of cycles reported

Number of cycles reported by cycle start date and corresponding regimen start category ('In month' or 'Prior').

Percentages are aggregated by month of cycle start.

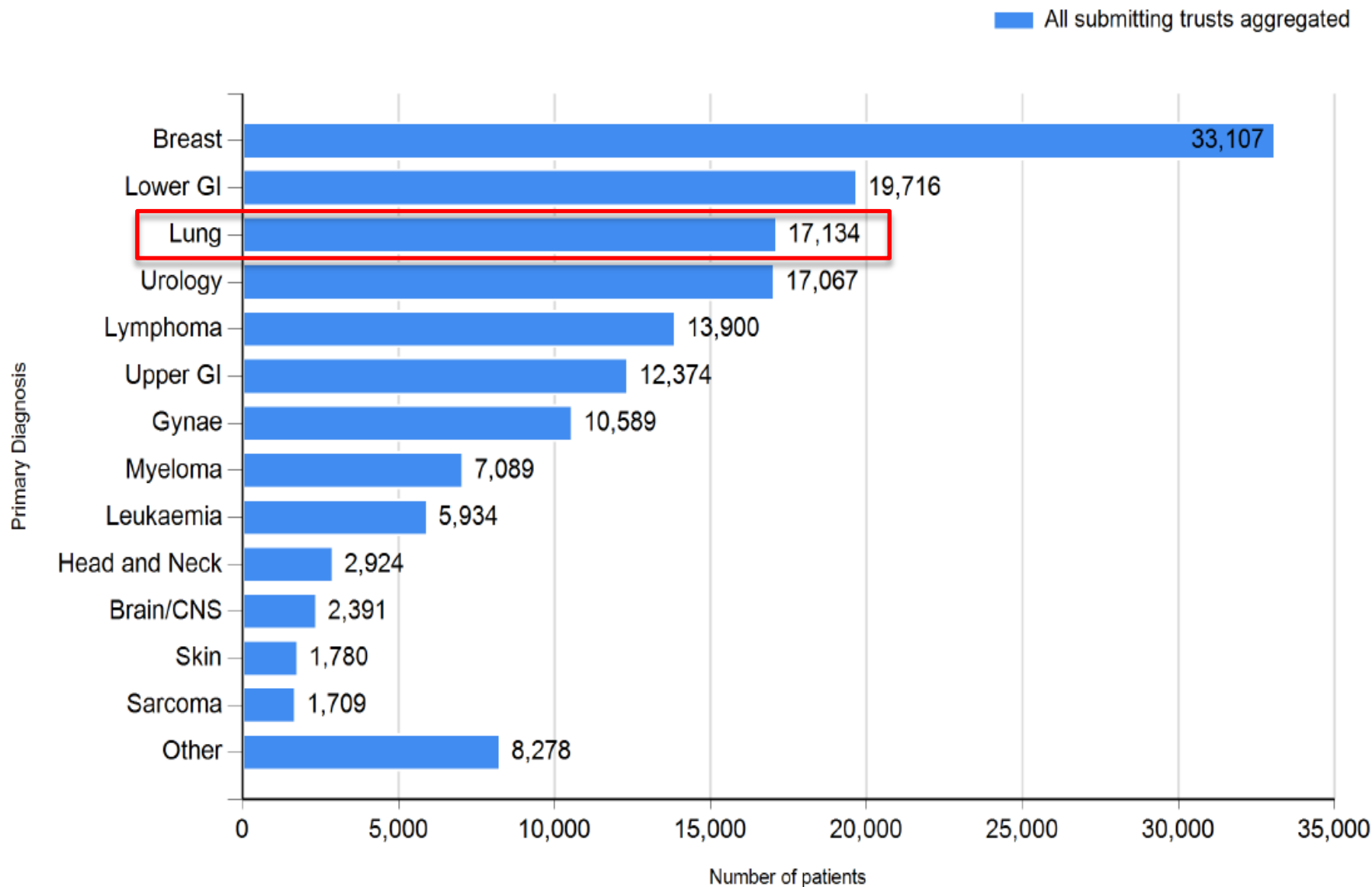
Month of cycle start	Regimen Start Date		
	In month	Missing Cycle Start Date	Prior
April 2013	183 (20%)	10 (1%)	726 (79%)
May 2013	214 (23%)	25 (3%)	679 (74%)
June 2013	206 (24%)	17 (2%)	629 (74%)
July 2013	181 (19%)	15 (2%)	756 (79%)
August 2013	213 (23%)	10 (1%)	714 (76%)
September 2013	195 (22%)	10 (1%)	680 (77%)



Number of Patients by Diagnostic Group

All submitting trusts aggregated

Data received for July 2013 - June 2014. Patients aged 16 and over



Top Regimens by Diagnostic Group

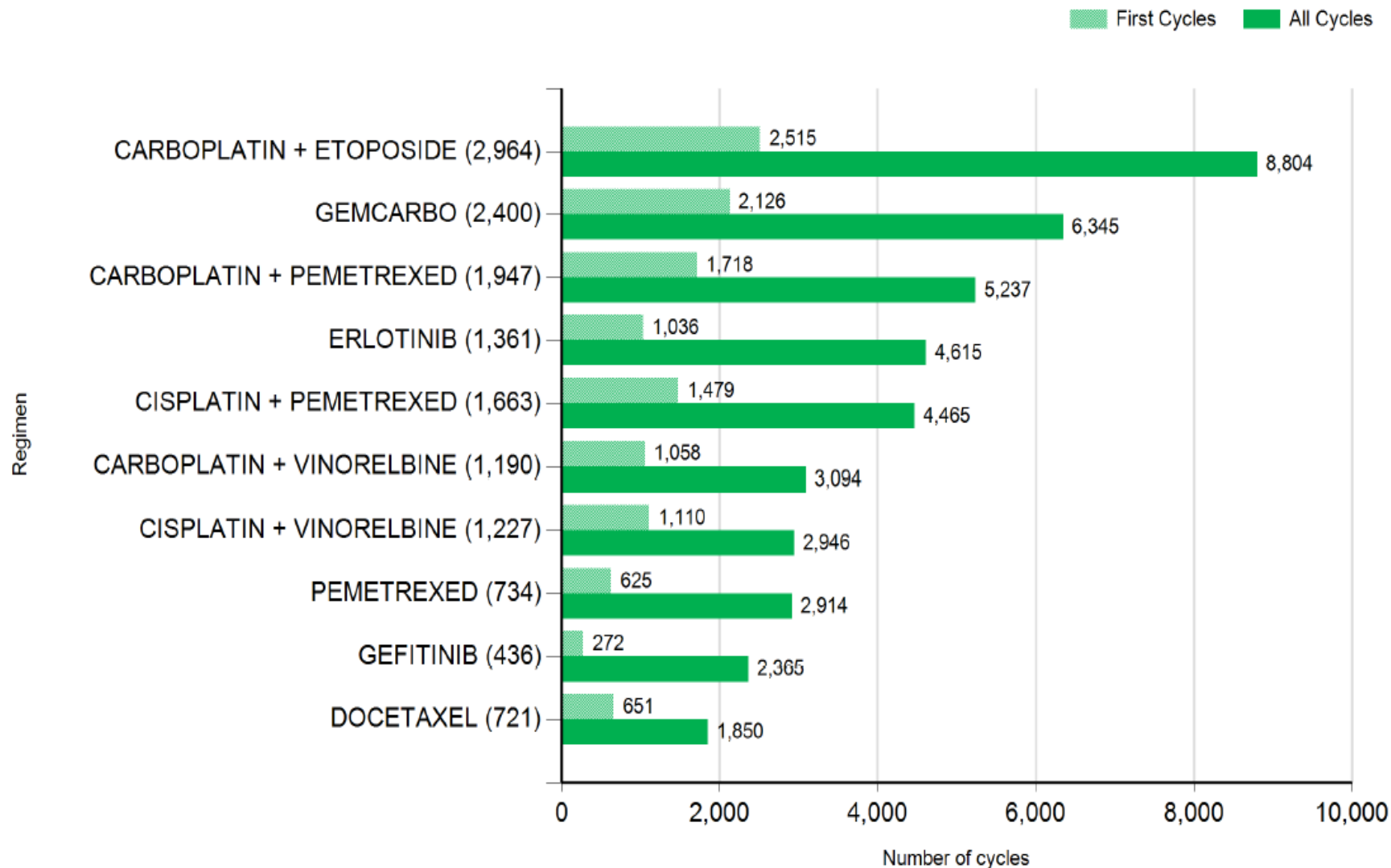
Lung (all excluding Mesothelioma)

ICD10: C33-C34, C37-C39

All submitting trusts aggregated

Data received for July 2013 - June 2014. Patients aged 16 and over

- These reports are available at a provider level
- There are in excess of 191 regimens for this disease group



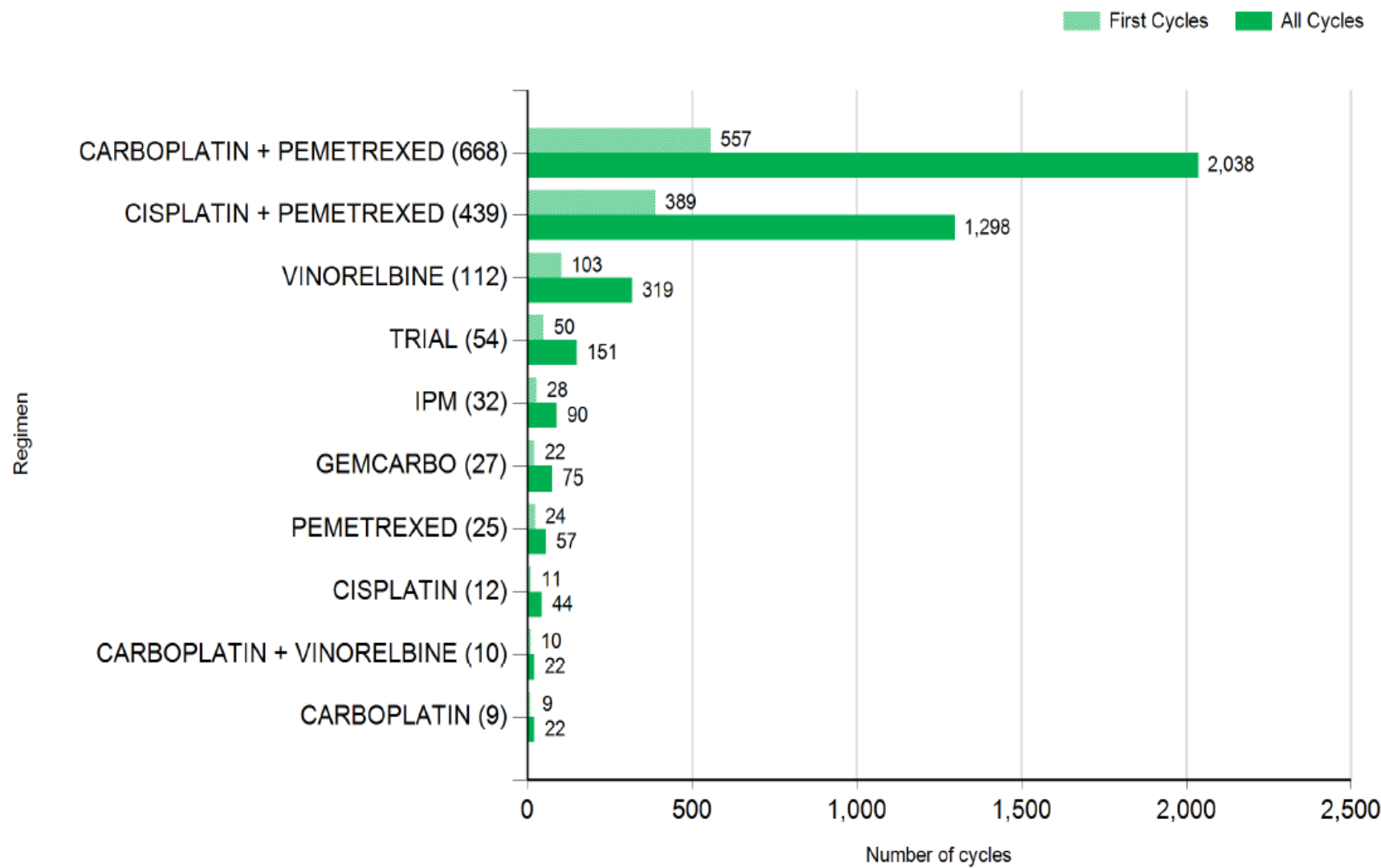
Top Regimens by Diagnostic Group

Lung (Mesothelioma)

ICD10: C45; Morphology: M9050/3, M9052/0, M9052/3, M9053/3

All submitting trusts aggregated

Data received for July 2013 - June 2014. Patients aged 16 and over



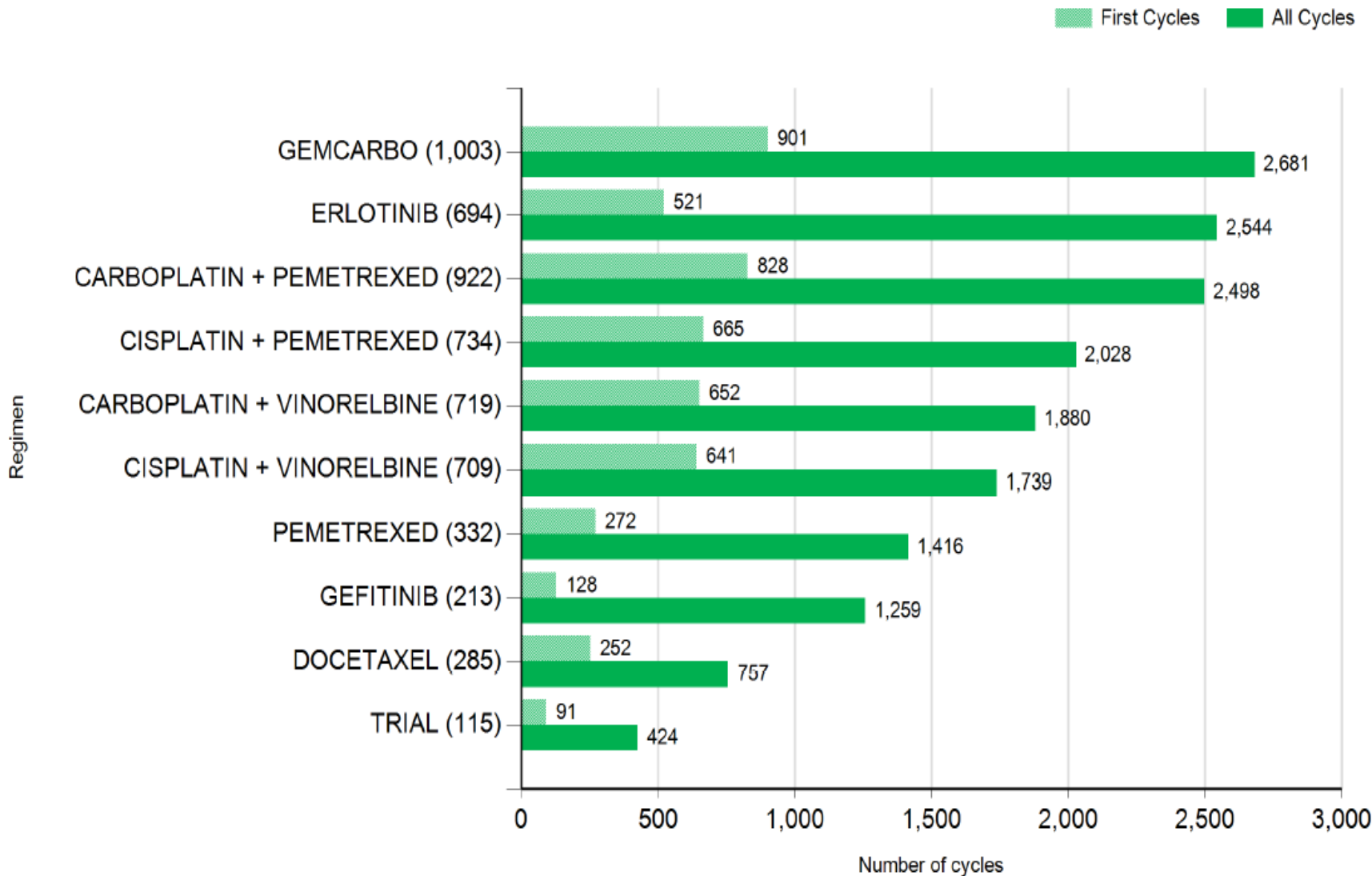
Top Regimens by Diagnostic Group

Lung (NSCLC)

ICD10: C33-C34, C37-C39; Morphology: M8012/3, M8013/3, M8046/3, M8070/3, M8070/6, M8075/3, M8140/3, M8140/6, M8246/3, M8250/3, M8255/3, M8310/3, M8560/3

All submitting trusts aggregated

Data received for July 2013 - June 2014. Patients aged 16 and over



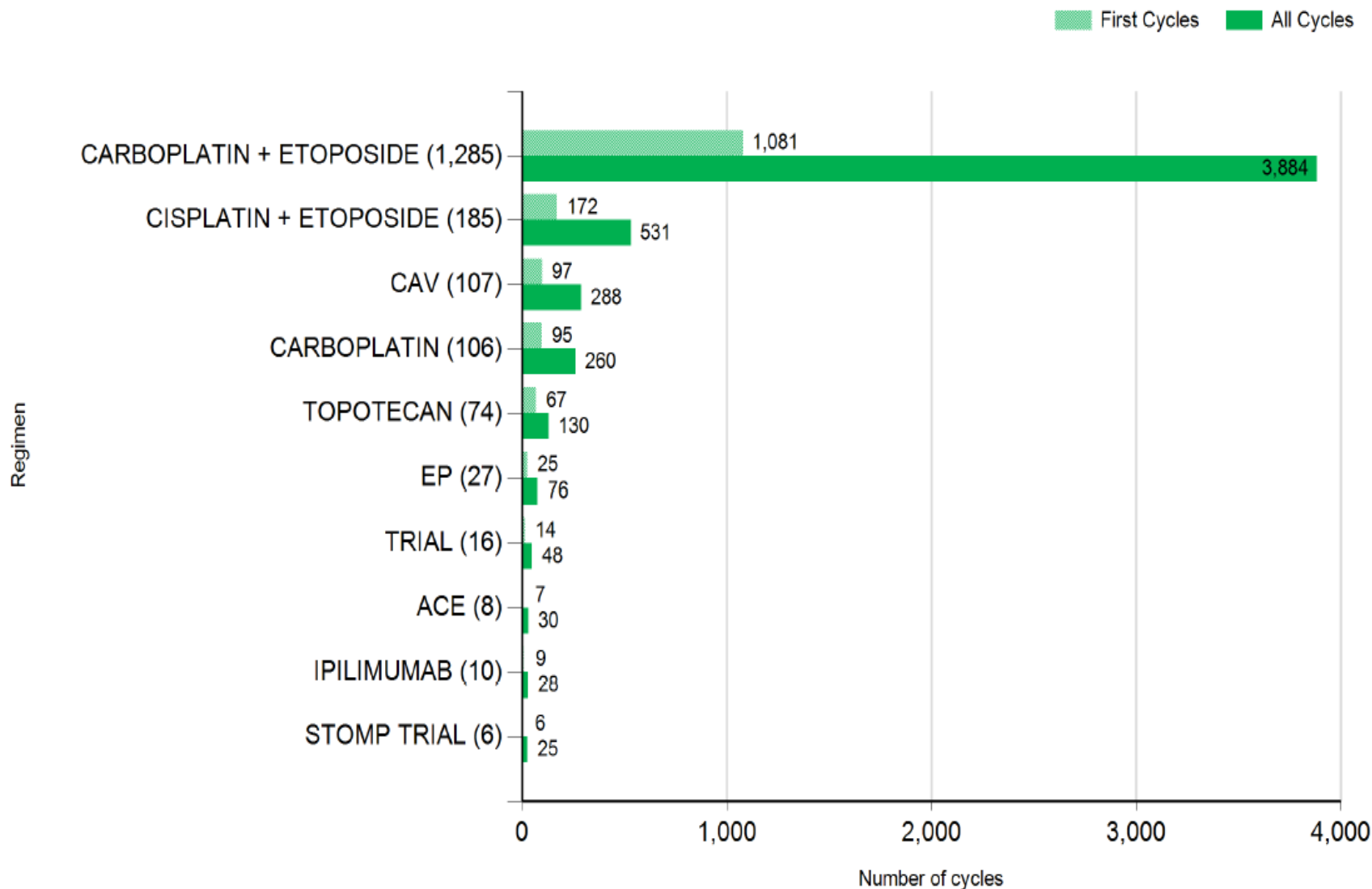
Top Regimens by Diagnostic Group

Lung (SCLC)

ICD10: C33-C34, C37-C39; Morphology: M8002/3, M8041/3

All submitting trusts aggregated

Data received for July 2013 - June 2014. Patients aged 16 and over

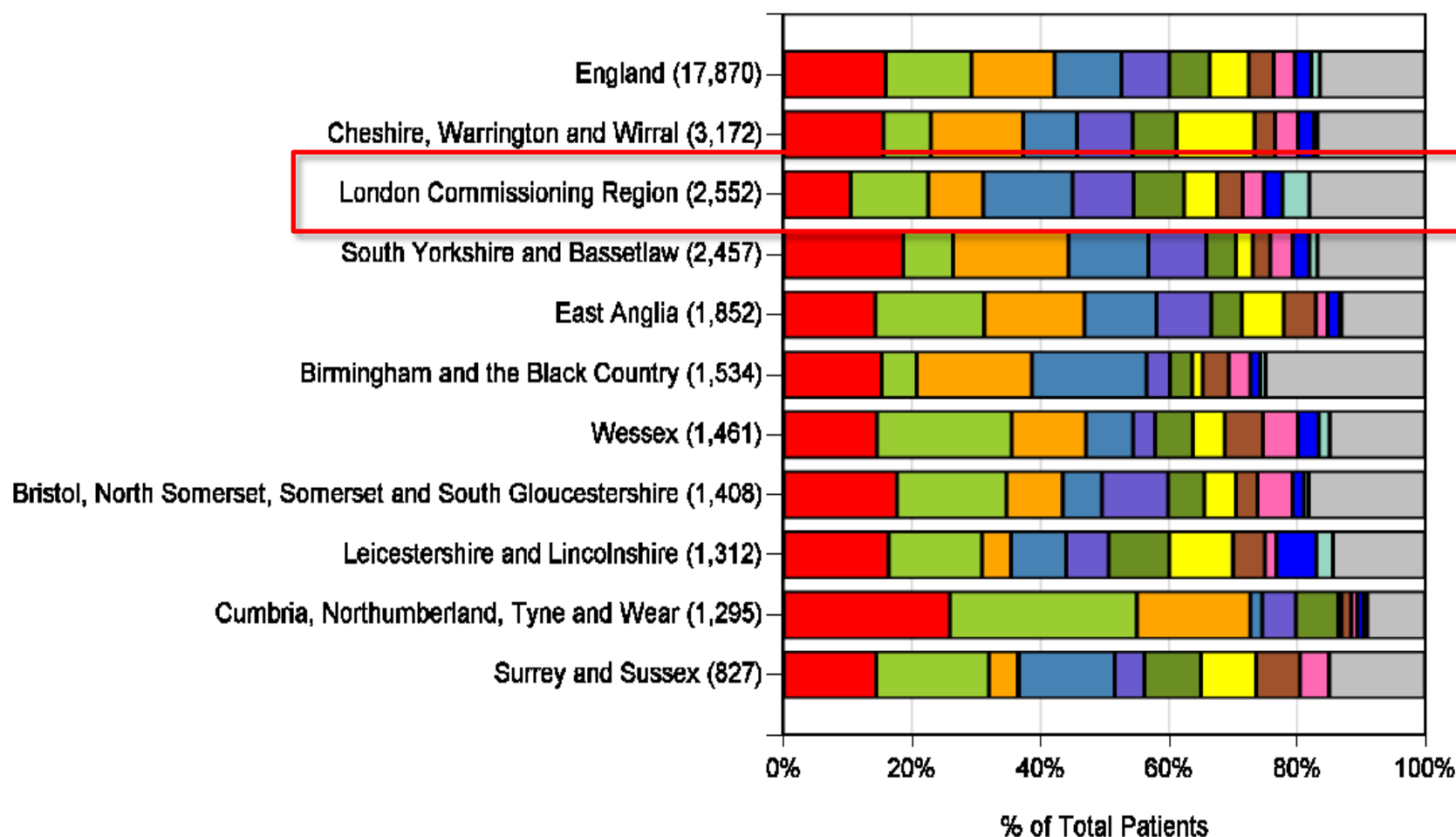
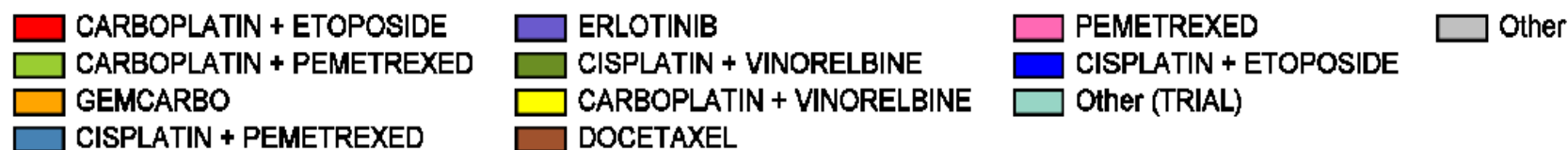


Regimen benchmarking

Lung (All except Mesothelioma) ICD10: C33-C34, C37-C39

Data received for April 2013 - March 2014.

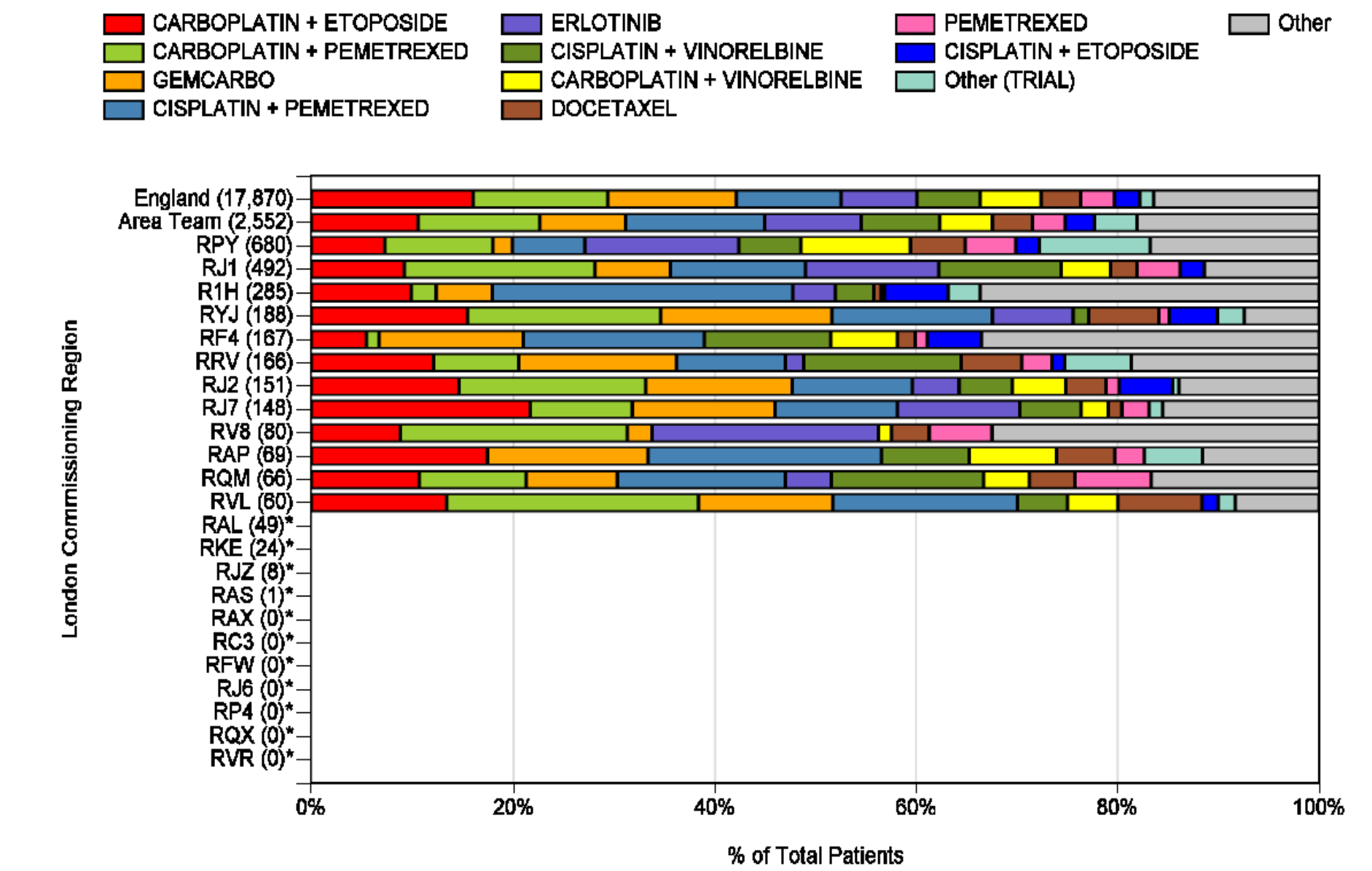
NHS England Area Team comparison; Includes activity from trusts where more than 50 patients aged 16 and over received treatment



Regimen benchmarking

Lung (All except Mesothelioma) ICD10: C33-C34, C37-C39

Data received for April 2013 - March 2014.
London Commissioning Region; Trusts included where more than 50 patients aged 16 and over received treatment



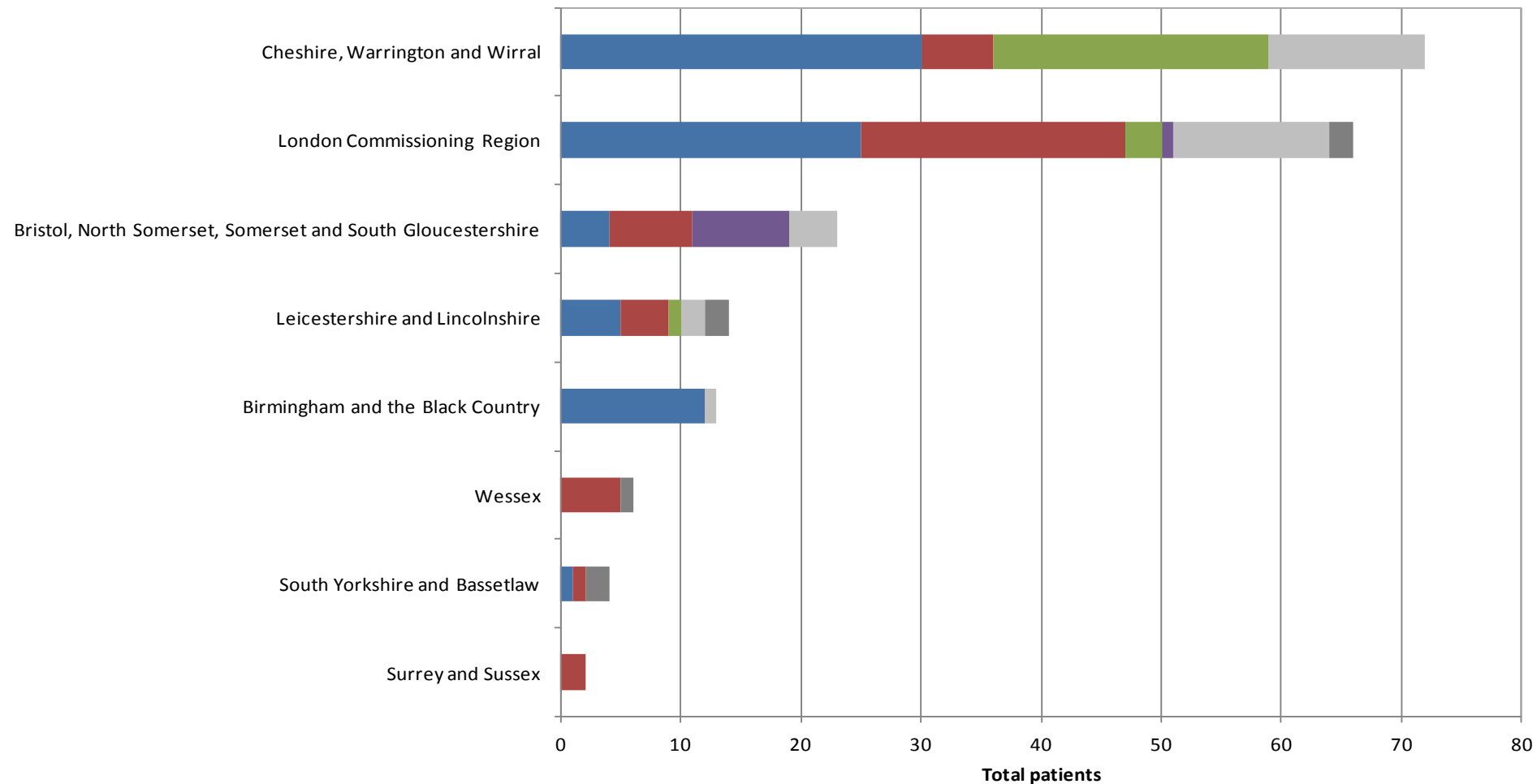


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What do patients with NSCLC receive prior to single agent PEMETREXED ?

Source: SACT, accessed 27th February 2014

■ CISPLATIN + PEMETREXED ■ CARBOPLATIN + PEMETREXED ■ PLATIN* + VINORELBINE ■ PLATIN* + PACLITAXEL ■ Other regimens ■ Other TRIAL regimens



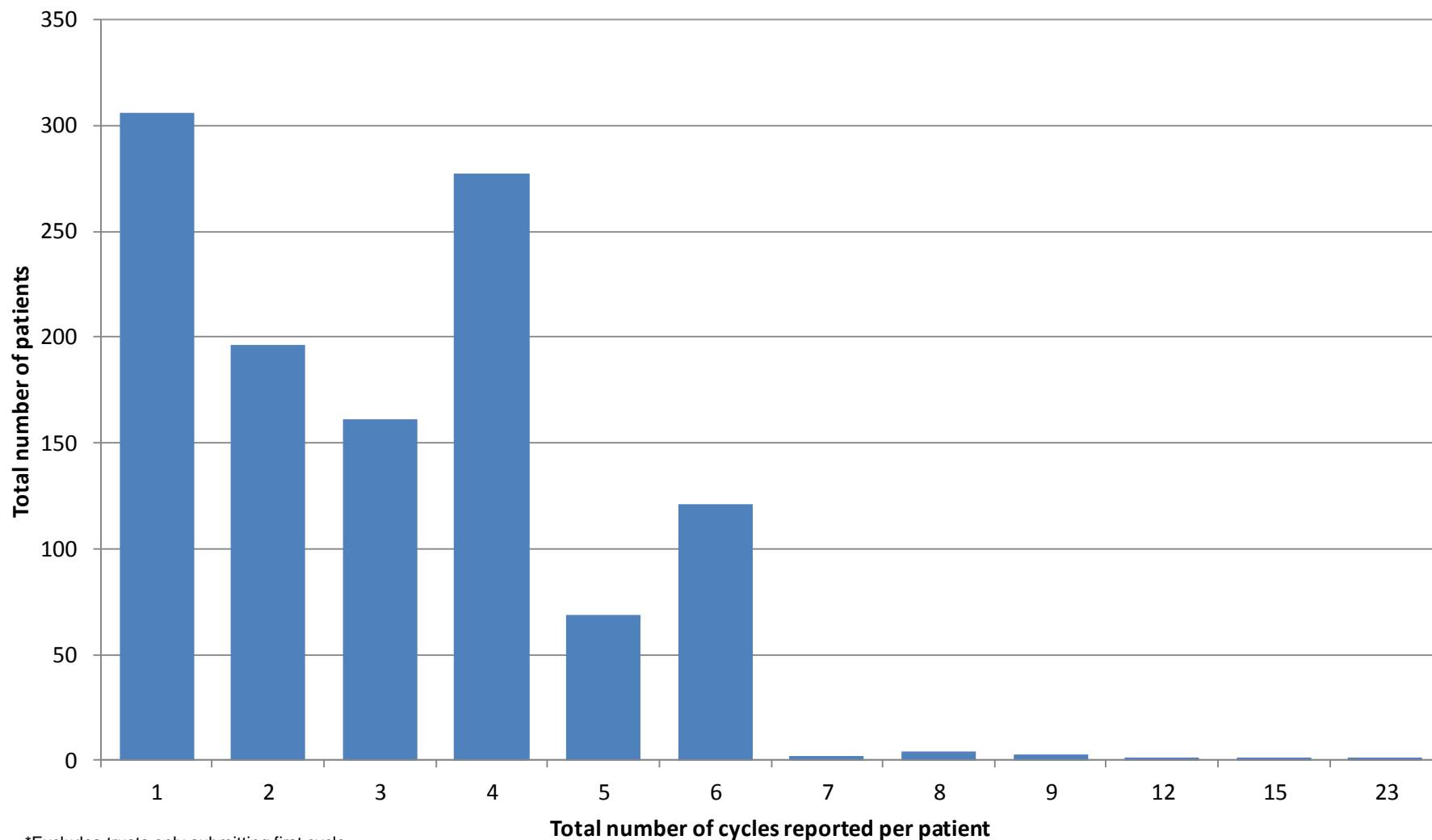
*CARBOPLATIN or CISPLATIN



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Patients with NSCLC or mesothelioma receiving CISPLATIN + PEMETREXED

Source: SACT, accessed 7th May 2014



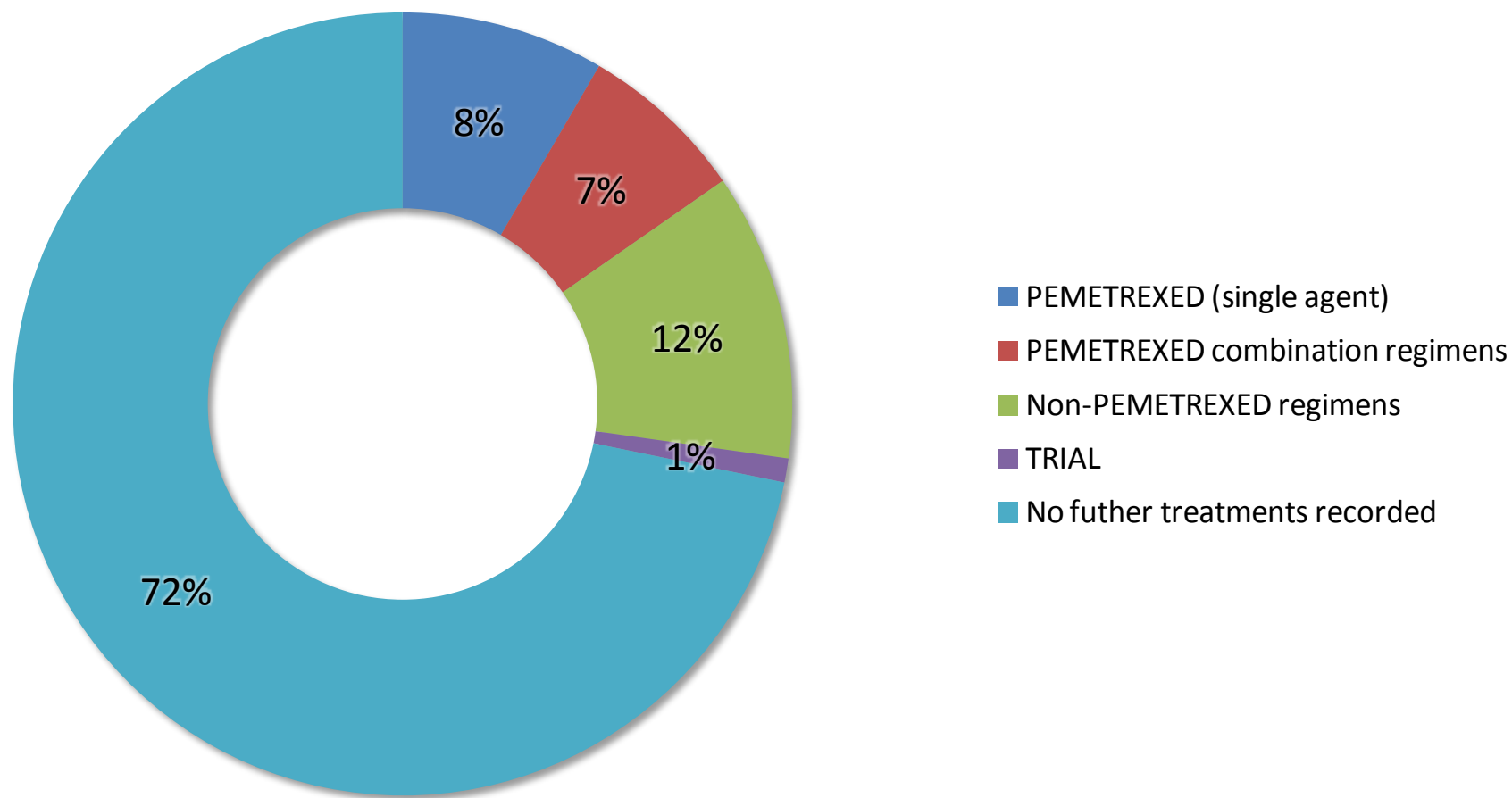
*Excludes trusts only submitting first cycle



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What do patients with mesothelioma or NSCLC that have received more than five cycles of CISPLATIN + PEMETREXED subsequently receive?

Source: SACT, accessed 7th May 2014





NSCLC: Erlotinib

Total number of unique patients receiving ERLOTINIB, by diagnostic group, year of treatment start and estimated line of treatment

Source: SACT, accessed 5th September 2015

	2012/13		2013/14		2014/15 (incomplete)		Prior to April 2012
Diagnostic Group	First line	Second or subsequent	First line	Second or subsequent	First line	Second or subsequent	
Lung	878	372	668	840	197	278	52
NSCLC	181	109	158	319	74	138	11
SCLC	17	4	21	16	12	5	1
Mesothelioma	40	15	43	21	8	16	0
<i>Morphology not recorded</i>	<i>640</i>	<i>244</i>	<i>446</i>	<i>484</i>	<i>103</i>	<i>119</i>	<i>40</i>
Total (all diagnostic groups)	3,434	1,188	3,093	2,264	668	585	358

Notes:

Line of treatment estimated by detecting earlier treatment records within SACT database for patient.



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Post Chemotherapy Mortality Analysis

- ✓ From **25th July 2014** all NHS providers of Chemotherapy in England will be able to access their post chemotherapy mortality analysis for 30, 60 and 90 days through the **secure online portal**.
- ✓ This analysis is available by tumour group and will provide a national comparison.
- ✓ **It is essential that clinical teams** within provider organisations check the accuracy of their data and contact the team in Oxford where there are **any possible discrepancies**.
- ✓ A letter to Medical Directors and Lead Chemotherapy Consultants has been sent out raising awareness of these reports.



Post Chemotherapy Mortality Analysis

(2)

Intent of treatment:

Sort by:

End Date:

Show regimens with no deaths?:

Start Date:

2 of 2

Find | Next

Post-chemotherapy mortality analysis (January 2013 - December 2013)

Source: SACT, ENCORE (CAS) and Personal Demographics Service (PDS), accessed 15th May 2014

For demonstration purposes only

	Total patients	Deaths 0-30 days	Death 0-60 days	Deaths 0-90 day	Total deaths
NHS Foundation Trust	1,667	194	322	422	679
Lung	261	48	72	94	153
Palliative	179	38	60	77	125
ERLOTINIB	37	8	16	19	29
CARBOPLATIN + ETOPOSIDE	29	6	7	10	20
GEMCARBO	18	5	6	8	16
CARBOPLATIN + PEMETREXED	45	5	13	20	30
CISPLATIN + PEMETREXED	16	4	5	5	8
CISPLATIN + ETOPOSIDE	3	2	2	2	2
CARBOPLATIN + PACITAXEL	1	1	1	1	1
VINORELBINE	7	1	1	1	5
CAV	1	1	1	1	1
DOCETAXEL	8	2	3	4	6
CISPLATIN + GEMCITABINE	2	1	1	1	1
PEMETREXED	4	1	1	1	1
CARBOPLATIN + VINORELBINE	4	1	2	3	3
SUNITINIB	1	0	0	0	1
TOPOTECAN	2	0	1	1	1

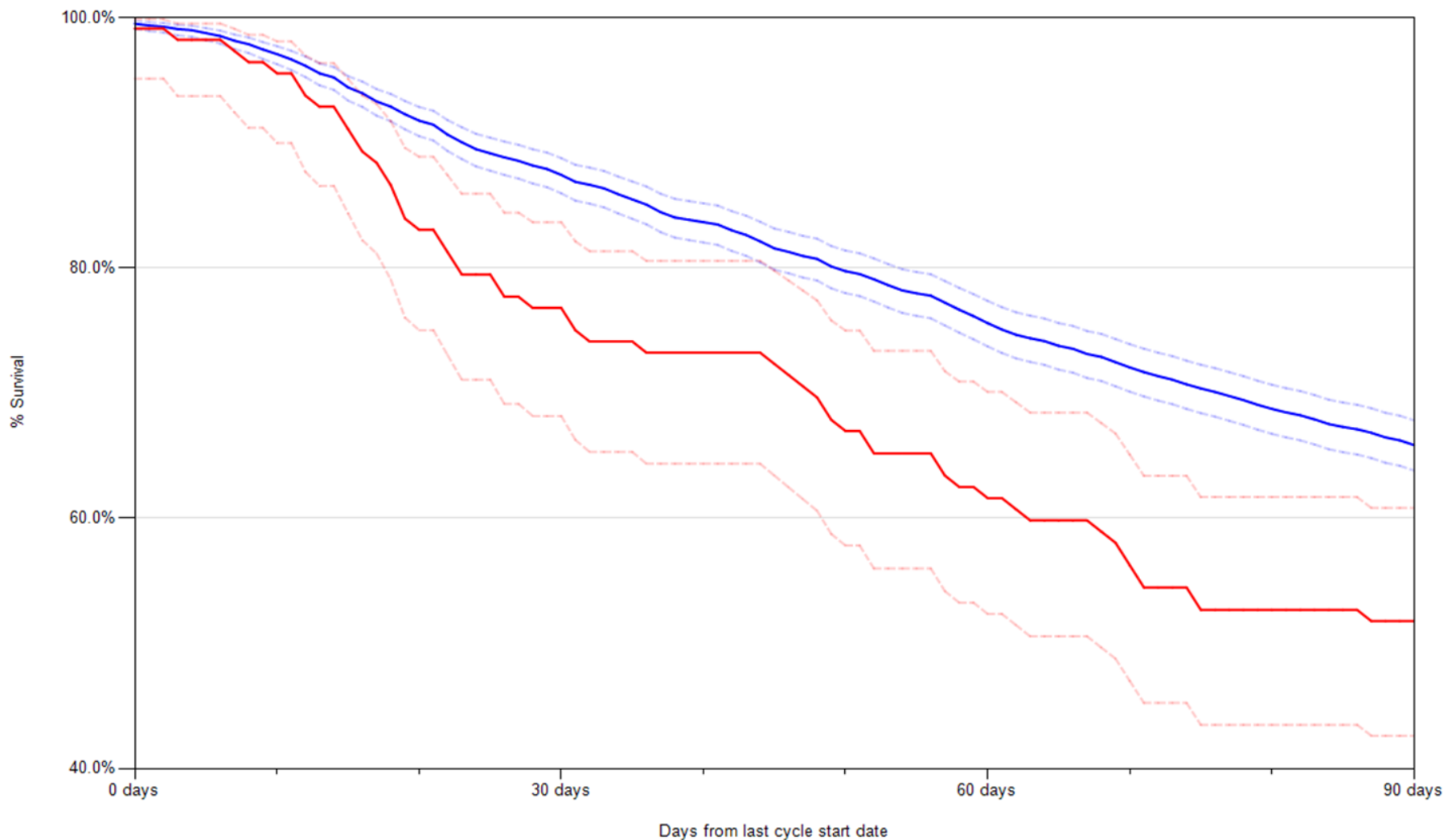


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Post Chemotherapy Survival Analysis NSCLC with Palliative Intent

For demonstration purposes only

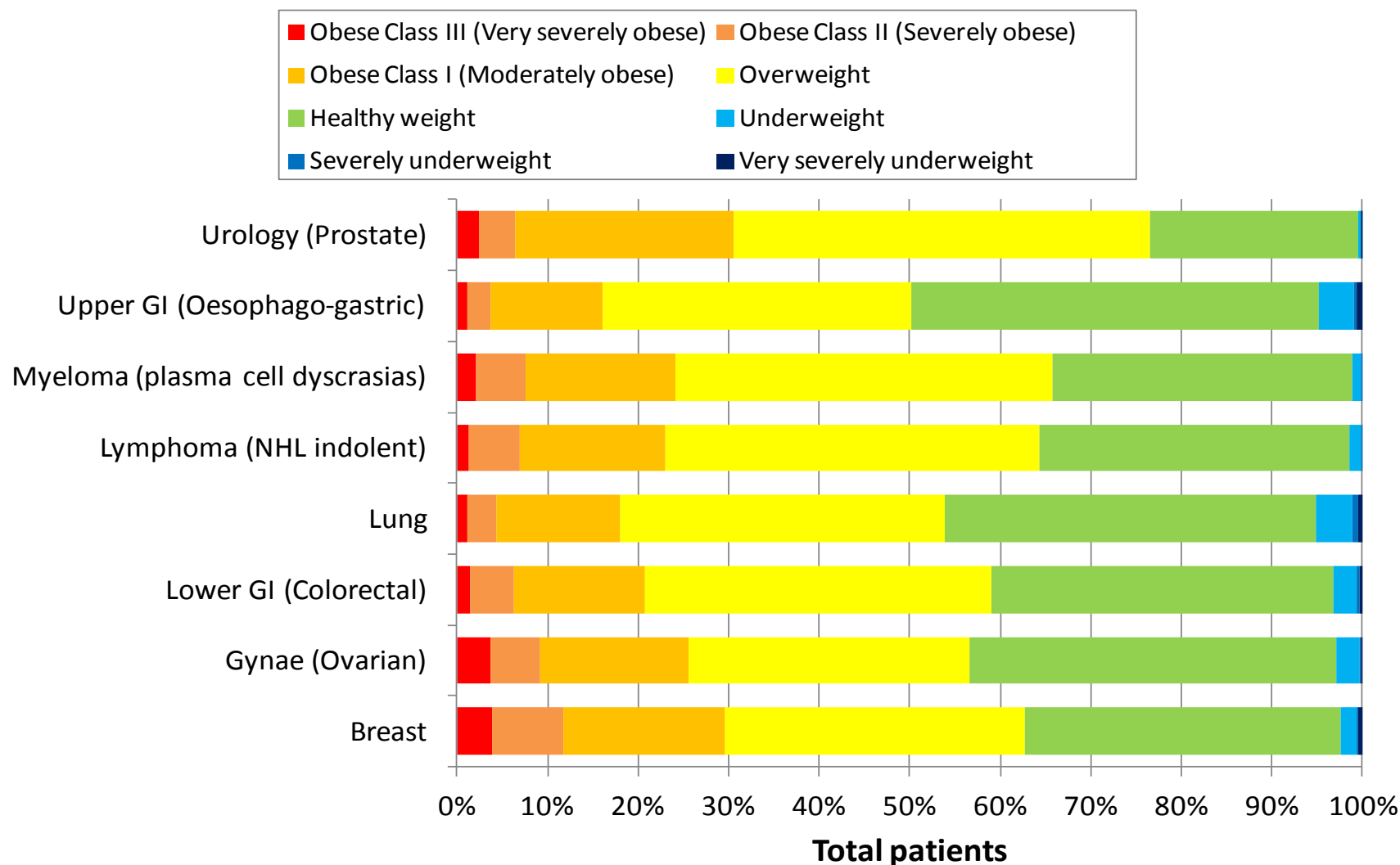
— All submitting trusts aggregated — NHS Foundation Trust





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Body Mass Index of patients receiving chemotherapy





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Online Regimen Mapping Tool Launched

- ✓ Providers now have the responsibility to map their local regimen names to nationally recognised regimen nomenclature using the new mapping tool.
- ✓ The tool was tested by members of the SACT User Group, before being launched on the upload portal.
- ✓ Using feedback, the written guidelines and step by step guide have been produced in conjunction with senior pharmacists who are supporting the team.
- ✓ We currently have over 50 registered users with the new role of “Regimen mapping”



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We want to identify best practice across England and share it!

- **Have You:**

- Improved SACT data quality by introducing new processes?
- Used your local SACT data to improve services, or your understanding of chemotherapy?
- Shared all SACT reports (Data Quality, Top Regimen, Benchmarking and the mortality reports) with your pharmacy and oncology teams members in order to improve understanding SACT and its purpose?
- If yes, please contact us at CIU@phe.gov.uk!



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Improving Stakeholder Engagement

Members of the CIU team will be attending the following meetings in August / September:

- NHS England Area Team Pharmacist Meeting
- NCIN Breast Site Specific Clinical Reference Group (SSCRG)
- NCIN Lung SSCRG
- NHS England Chemotherapy Clinical Reference Group
- NCIN Central Nervous System SSCRG
- NCIN Haematology SSCRG
- **Would you like to know more about SACT? Please contact the team, we are always happy to discuss the project or meet with you.**



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Any Questions ??