

Systemic Anti Cancer Therapy (SACT)

Brain/CNS SSCRG

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National Disease Registration, CKO



What is currently available and how do I gain access?

Coverage Map

Nationally Numbers in Treatment
Top Regimens

Area Team Data Completeness

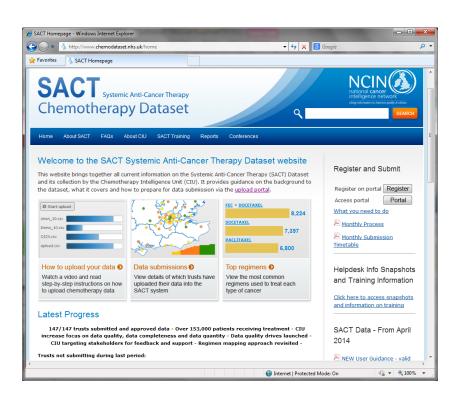
Benchmarking

Post Chemo Mortality

Hospital

Data Completeness

Top Regimens



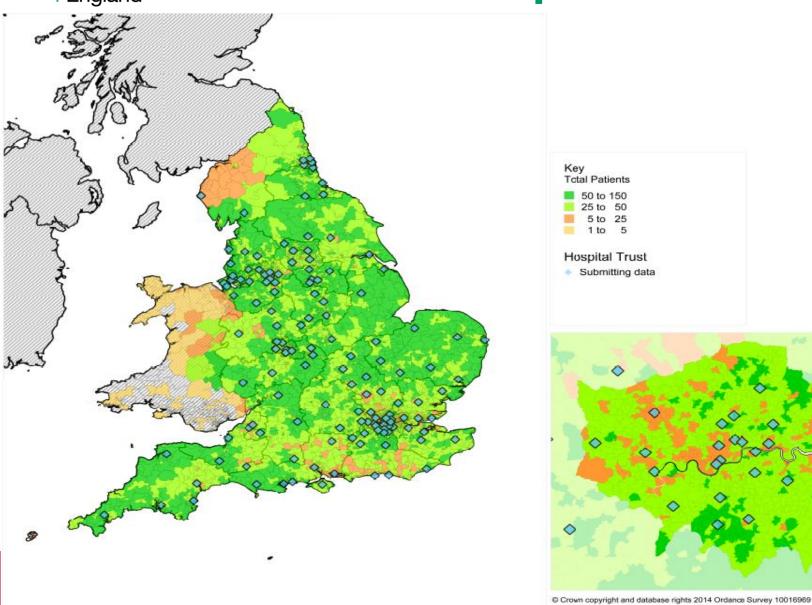
www.chemodataset.nhs.uk



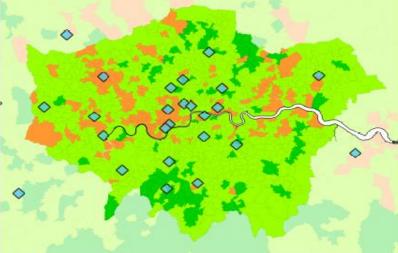
Coverage Map: A National Perspective



London detail









So... what do the numbers tell us?

	July '13 to June'14	August '13 to July'14
Patients Receiving Drug Treatments	153,348	154,879
Regimens Commenced	250,131	254,162
Cycles Commenced	669,937	681,073

The figures listed above represent the number of patients reported to the CIU through SACT, for whom treatment activity has been submitted for the period covering August 2013 through July 2014 inclusive.



How good is the data nationally?

SACT data completeness, January 2014 to December 2014

England		$\mathcal{A}\mathcal{C}$	i data t	JUII	ipieteries	э Э,	January					201.	т	
· ·					England						Key			
					Brain/CNS						↑ Incre	ase in compl	eteness since compariso	on period
											↓ Decre	ease in comp	leteness since comparis	on period
Number of patients	% NHS Nun	nber	% Date of E	Birth	% Current gen	der	% Ethnicity	,	% Patient postcode			nange in com	pleteness since compar	ison period
2,605 1	100%	М	100%	М	100%	\rightarrow	95%	\rightarrow		M		completion	(for non-mandatory ite	ms)
2,003	100%	IVI	10076	IVI	100%		9370		100%	IVI	M Mano	datory item (a	always 100%)	
Number of tumour records	% GP Pract	ice	% GMC Co	de	% Consultar Specialty	nt	% Primary diagnosis		% Morpholog	y	% Stage disease at of prograr	start		
2,749 🛧	88%	个	89%	\rightarrow	91%	\rightarrow	100%	\rightarrow	54%	个	21%	1		
Number of regimens	% Program number		% Regime		% Treatmen intent		% Regimen na	ame	% Height at sta of regimen		% Weight at	en	% Performa Status at st regime	art of n
4,594	70%	1	54%	lacksquare	80%	\rightarrow	100%	М	70%	\rightarrow	63%	\rightarrow	40%	\rightarrow
	% Comorbi		% Date of decision to t		% Start date regimen	of	% Clinical tri	al	% Chemo radiation		% Numbe			
	35%	个	81%	$lack \Psi$	100%	М	77%	1	67%	\rightarrow	57%	1		
Number of cycles	% Cycle nur	nber	% Start dat	e of	% Weight at s	tart	% Performan Status at star cycle		% OPCS procurement code		% of Cycles			
9,553 🔨	100%	М	96%	\rightarrow	60%	\rightarrow	38%	\rightarrow	67%	\rightarrow	89%	→		
Number of drug records	% Drug na	me	% Actual de per administrat		% Administrat route	ion	% Administrat date	ion	% OPCS Delive	ery	% Organisa code of d provide	rug		
16,849 1	100%	\rightarrow	89%	\rightarrow	93%	\rightarrow	100%	\rightarrow	73%	个	94%	\rightarrow		
Number of outcome records	% Date of F Treatmer		% Regime modification (dose reduct	on	% Regimen modification (t delay)		% Regimer modification (stopped ear	n	% Regimen outcome summary		% Date of o	death		
3,119 ↑	23%	\rightarrow	57%	\rightarrow	21%	\rightarrow	44%	↑	6%	\rightarrow	6%	1		

68% of regimens

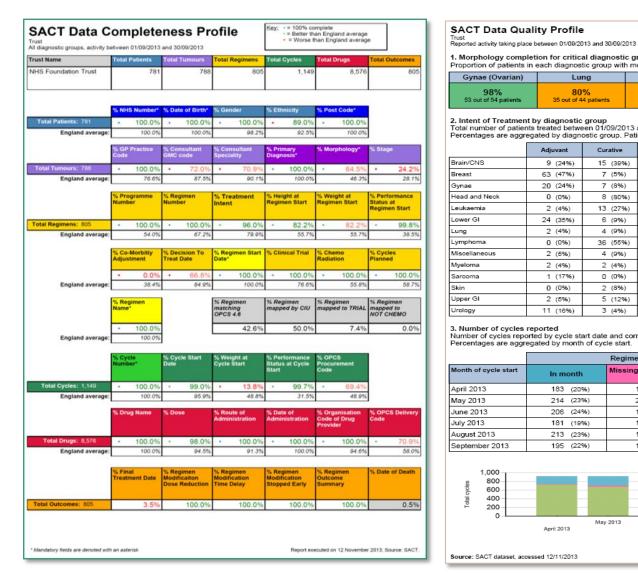


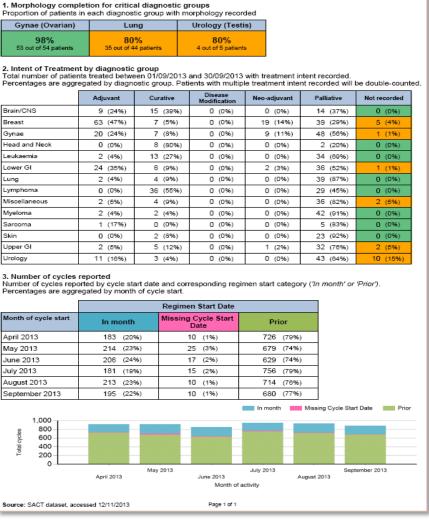
How good is my data, compared to hospitals in my area team?

NHS England Area Team > Trust	Number of patients	Number of tumour records	Number of regimens	Number of cycles	Number of drug record	Number of outcome records	% Primary diagnosis	% Morphology	% Programme number	% Treatment intent	% Drug name	% Actual dose per administration	% Administration route	% Administration date	% OPCS Delivery code	% Organisation code of drug provider	% Date of Final Treatm	% Regimen outcome summary
∃ Brain/CNS	2,605	2,749	4,594	9,553	16,849	3,119	100%	54%	70%	80%	100%	89%	93%	100%	73%	94%	23%	6%
BBristol, North Somerset, Somerset and South Gloucestershire	303	310	440	852	955	371		45%	45%	47%	100%	97%	100%		82%	100%	23%	0%
Gloucestershire Hospitals NHS Foundation Trust	42	43	54	150	150		100%	0%	0%	2%	100%	95%	100%	100%	97%	100%	0%	0%
Great Western Hospitals NHS Foundation Trust	11	11	15	54	83	15	100%	18%	100%	100%	100%	92%	100%	100%	88%	100%	0%	7%
North Bristol NHS Trust																		
Northern Devon Healthcare NHS Trust																		
Plymouth Hospitals NHS Trust	16	19	19	49	238	19	100%	89%	79%	100%	100%	95%	100%	100%	100%	100%	0%	0%
Royal Cornwall Hospitals NHS Trust	20	20	22	39	112	22	100%	50%	68%	100%	100%	99%	100%	100%	2%	100%	0%	0%
Royal Devon and Exeter NHS Foundation Trust	22	25	26	55	129	14	100%	24%	100%	96%	100%	100%	100%	100%	70%	100%	8%	0%
Royal United Hospital Bath NHS Trust	10	10	10	17	33	10	100%	0%	90%	100%	100%	100%	100%	100%	100%	100%	0%	0%
Salisbury NHS Foundation Trust																		
South Devon Healthcare NHS Foundation Trust	108	108	116	176	194	113	100%	97%	100%	97%	100%	99%	100%	100%	96%	100%	76%	0%
Taunton and Somerset NHS Foundation Trust	1	1	1	4	16	1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	0%
University Hospitals Bristol NHS Foundation Trust	73	73	177	308		177	100%	0%	0%	0%							7%	0%
Weston Area Health NHS Trust																		
Yeovil District Hospital NHS Foundation Trust																		



Can I find out how complete my hospital's Brain/CNS data is?







Quantifying missing data

Understanding what data are not currently being reported through SACT is important for planning CIU data improvement work

Key themes:

- Coverage of diagnostic groups
- Age groups (Paediatrics, TYA, Adults)
- Route of Administration (IV / Subcut / Intravesical / Oral)



Coverage of diagnostic groups: Comparing SACT data with Cancer Waits

Cancer Waiting Times (CWT) data are reported for all English NHS trusts.

Carolyn Gildea and Matthew Barclay from EMKIT provided detailed CWT data for all trusts reporting first and second/subsequent treatments for:

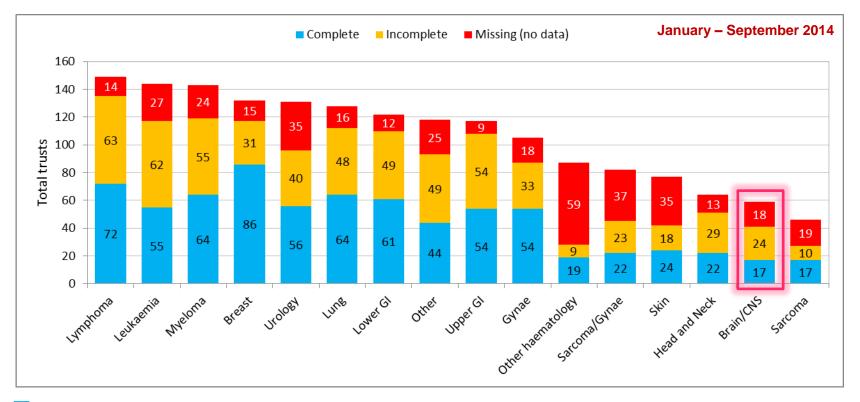
- Chemotherapy
- Hormone therapy
- Chemo-radiotherapy
- Anti-Cancer Drug Regimen (other), or
- Immunotherapy

...all split by diagnostic group

January - September 2014

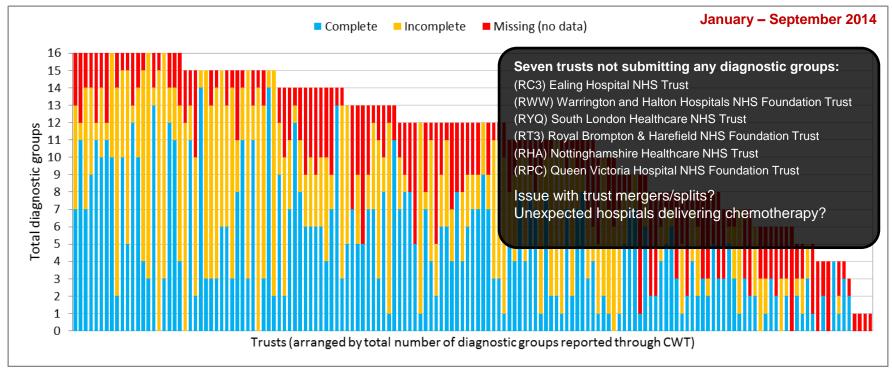


Coverage of diagnostic groups: Comparing SACT data with Cancer Waits



- Complete: 100% (or more) of expected patients matched between CWT & SACT
- Missing (no data): no data reported in SACT for groups that had been reported in CWT
- Incomplete: volume of data reported in SACT does not match that reported in CWT

Emplic Health Emplaring SACT data with Cancer Waits



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Public Health Public Health Public Health Public Health Photo SACT data with Cancer Waits

Trusts	Brain/CNS	Breast	Gynae	Head and Neck	Leukaemia	Lower GI	Fung	Lymphoma	Myeloma	Other	Other haematology	Sarcoma	Sarcoma/Gynae	Skin	Upper GI	Urology
The Christie NHS Foundation Trust																
The Royal Marsden NHS Foundation Trust																
Oxford University Hospitals NHS Trust																
University Hospitals of Leicester NHS Trust																
Cambridge University Hospitals NHS Foundation Trust																
University Hospitals of Morecambe Bay NHS Foundation Trust																
The Clatterbridge Cancer Centre NHS Foundation Trust																
Derby Hospitals NHS Foundation Trust																
Guy's and St Thomas' NHS Foundation Trust																
Northampton General Hospital NHS Trust																
University College London Hospitals NHS Foundation Trust																
Leeds Teaching Hospitals NHS Trust																
Brighton and Sussex University Hospitals NHS Trust																
East Sussex Healthcare NHS Trust																
The Whittington Hospital NHS Trust																
North Cumbria University Hospitals NHS Trust																
Luton and Dunstable University Hospital NHS Foundation Trust																
King's College Hospital NHS Foundation Trust																
Homerton University Hospital NHS Foundation Trust																

Missing (no data): no data reported in SACT for groups that had been reported in CWT Complete: 100% (or more) of expected patients matched between CWT & SACT

Incomplete: volume of data reported in SACT does not match that reported in CWT



Coverage of **Brain/CNS** diagnostic group: Comparing SACT data with Cancer Waits

University Hospital of North Staffordshire NHS Trust	Central Manchester University Hospitals NHS Foundation Trust	
Sheffield Teaching Hospitals NHS Foundation Trust	The Christie NHS Foundation Trust	
Nottingham University Hospitals NHS Trust	Derby Hospitals NHS Foundation Trust	
Alder Hey Children's NHS Foundation Trust	The Royal Marsden NHS Foundation Trust	
The Clatterbridge Cancer Centre NHS Foundation Trust	East and North Hertfordshire NHS Trust	
Barts Health NHS Trust	University Hospitals Birmingham NHS Foundation Trust	
Mid Essex Hospital Services NHS Trust	Great Ormond Street Hospital for Children NHS Foundation Trust	
Cambridge University Hospitals NHS Foundation Trust	University Hospitals of Leicester NHS Trust	
Poole Hospital NHS Foundation Trust		

Maidstone and Tunbridge Wells NHS Trust	The Newcastle upon Tyne Hospitals NHS Foundation Trust
South Tees Hospitals NHS Foundation Trust	Royal Devon and Exeter NHS Foundation Trust
Birmingham Children's Hospital NHS Foundation Trust	The Royal Wolverhampton NHS Trust
Great Western Hospitals NHS Foundation Trust	Royal Liverpool and Broadgreen University Hospitals NHS Trust
Leeds Teaching Hospitals NHS Trust	University College London Hospitals NHS Foundation Trust
University Hospitals Bristol NHS Foundation Trust	Royal Surrey County Hospital NHS Foundation Trust
United Lincolnshire Hospitals NHS Trust	University Hospital Southampton NHS Foundation Trust
Guy's and St Thomas' NHS Foundation Trust	Hull and East Yorkshire Hospitals NHS Trust
Norfolk and Norwich University Hospitals NHS Foundation Trust	North Cumbria University Hospitals NHS Trust
Royal Berkshire NHS Foundation Trust	Shrewsbury and Telford Hospital NHS Trust
Lancashire Teaching Hospitals NHS Foundation Trust	Plymouth Hospitals NHS Trust
Royal Cornwall Hospitals NHS Trust	Northampton General Hospital NHS Trust

- Complete: 100% (or more) of expected patients matched between CWT & SACT
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Coverage of **Brain/CNS** diagnostic group: Comparing SACT data with Cancer Waits

The Princess Alexandra Hospital NHS Trust	Hinchingbrooke Health Care NHS Trust	The Whittington Hospital NHS Trust
Barnsley Hospital NHS Foundation Trust	Isle of Wight NHS Trust	North West London Hospitals NHS Trust
University Hospitals of Morecambe Bay NHS Foundation Trust	Pennine Acute Hospitals NHS Trust	University Hospital of South Manchester NHS Foundation Trust
Bradford Teaching Hospitals NHS Foundation Trust	St George's Healthcare NHS Trust	Aintree University Hospital NHS Foundation Trust
Surrey and Sussex Healthcare NHS Trust	Peterborough and Stamford Hospitals NHS Foundation Trust	James Paget University Hospitals NHS Foundation Trust
Lewisham and Greenwich NHS Trust	Stockport NHS Foundation Trust	Northern Devon Healthcare NHS Trust
East Lancashire Hospitals NHS Trust	Barnet and Chase Farm Hospitals NHS Trust	Walsall Healthcare NHS Trust
Luton and Dunstable University Hospital NHS Foundation Trust	Tameside Hospital NHS Foundation Trust	Northern Lincolnshire and Goole NHS Foundation Trust
Weston Area Health NHS Trust	Chelsea and Westminster Hospital NHS Foundation Trust	West Suffolk NHS Foundation Trust
Hampshire Hospitals NHS Foundation Trust	Doncaster and Bassetlaw Hospitals NHS Foundation Trust	Northumbria Healthcare NHS Foundation Trust
Southport and Ormskirk Hospital NHS Trust	Portsmouth Hospitals NHS Trust	King's College Hospital NHS Foundation Trust
Medway NHS Foundation Trust	The Dudley Group NHS Foundation Trust	Basildon and Thurrock University Hospitals NHS Foundation Trust
Dorset County Hospital NHS Foundation Trust	Queen Victoria Hospital NHS Foundation Trust	York Teaching Hospital NHS Foundation Trust
Mid Cheshire Hospitals NHS Foundation Trust	Ealing Hospital NHS Trust	Nottinghamshire Healthcare NHS Trust
Airedale NHS Foundation Trust	Chesterfield Royal Hospital NHS Foundation Trust	South Tyneside NHS Foundation Trust
Harrogate and District NHS Foundation Trust	The Queen Elizabeth Hospital, King's Lynn, NHS Foundation Trust	Salisbury NHS Foundation Trust
Frimley Park Hospital NHS Foundation Trust	Royal Brompton & Harefield NHS Foundation Trust	Warrington and Halton Hospitals NHS Foundation Trust
Mid Staffordshire NHS Foundation Trust	The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust	Sandwell and West Birmingham Hospitals NHS Trust
West Hertfordshire Hospitals NHS Trust	City Hospitals Sunderland NHS Foundation Trust	Kettering General Hospital NHS Foundation Trust
Mid Yorkshire Hospitals NHS Trust	East Cheshire NHS Trust	Bedford Hospital NHS Trust
Wye Valley NHS Trust	Homerton University Hospital NHS Foundation Trust	Western Sussex Hospitals NHS Foundation Trust
Heart of England NHS Foundation Trust	East Kent Hospitals University NHS Foundation Trust	Croydon Health Services NHS Trust
South Warwickshire NHS Foundation Trust	Royal Free London NHS Foundation Trust	Wirral University Teaching Hospital NHS Foundation Trust
Burton Hospitals NHS Foundation Trust	East Sussex Healthcare NHS Trust	Sherwood Forest Hospitals NHS Foundation Trust
St Helens and Knowsley Hospitals NHS Trust	Countess of Chester Hospital NHS Foundation Trust	Wrightington, Wigan and Leigh NHS Foundation Trust
North Bristol NHS Trust	Epsom and St Helier University Hospitals NHS Trust	Dartford and Gravesham NHS Trust
Taunton and Somerset NHS Foundation Trust	County Durham and Darlington NHS Foundation Trust	Kingston Hospital NHS Foundation Trust
Calderdale and Huddersfield NHS Foundation Trust	Gateshead Health NHS Foundation Trust	Ashford and St Peter's Hospitals NHS Foundation Trust
The Hillingdon Hospitals NHS Foundation Trust	Blackpool Teaching Hospitals NHS Foundation Trust	Bolton NHS Foundation Trust
North Middlesex University Hospital NHS Trust	George Eliot Hospital NHS Trust	
The Rotherham NHS Foundation Trust	Salford Royal NHS Foundation Trust	

Complete: 100% (or more) of expected patients matched between CWT & SACT

North Tees and Hartlepool NHS Foundation Trust

- Missing (no data): no data reported in SACT for groups that had been reported in CWT
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South London Healthcare NHS Trust

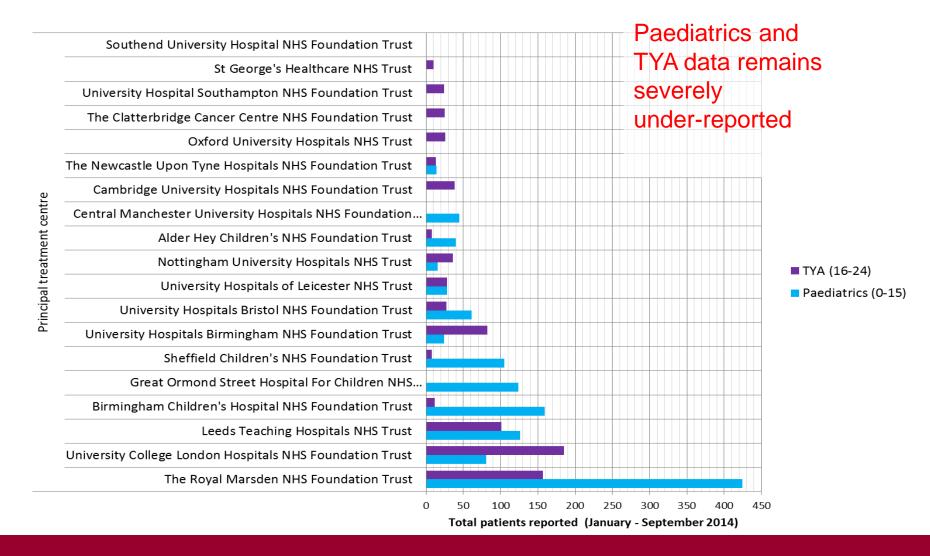


Coverage of **Brain/CNS** diagnostic group: Comparing SACT data with Cancer Waits

List of trusts that are not expected to submit chemotherapy activity (based on CWT data):

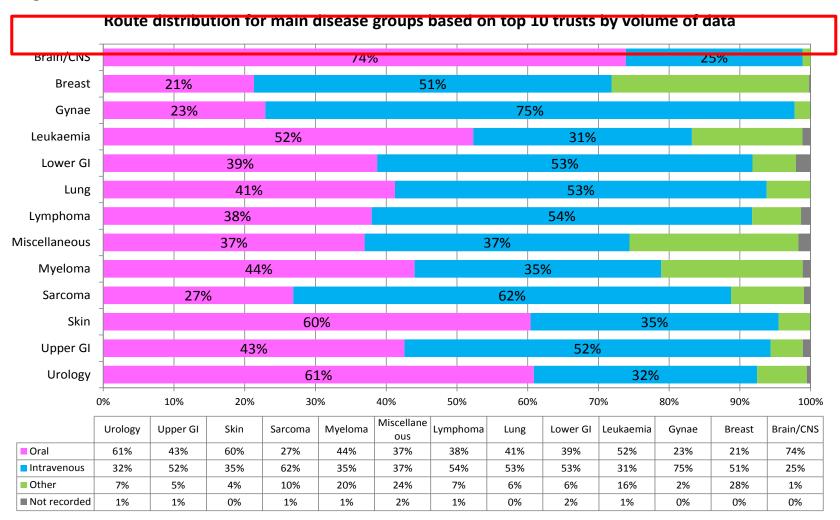
West Middlesex University Hospital NHS Trust	Brighton and Sussex University Hospitals NHS Trust
Sheffield Children's NHS Foundation Trust	South Devon Healthcare NHS Foundation Trust
Colchester Hospital University NHS Foundation Trust	Buckinghamshire Healthcare NHS Trust
Heatherwood and Wexham Park Hospitals NHS Foundation Trust	University Hospitals Coventry and Warwickshire NHS Trust
Southend University Hospital NHS Foundation Trust	Milton Keynes Hospital NHS Foundation Trust
Imperial College Healthcare NHS Trust	Worcestershire Acute Hospitals NHS Trust
Yeovil District Hospital NHS Foundation Trust	Barking, Havering and Redbridge University Hospitals NHS Trust
Ipswich Hospital NHS Trust	Oxford University Hospitals NHS Trust
Gloucestershire Hospitals NHS Foundation Trust	Royal United Hospital Bath NHS Trust

Public Health Public Health England Paediatrics, Teenagers & Young Adults





Route of administration: Oral vs. IV

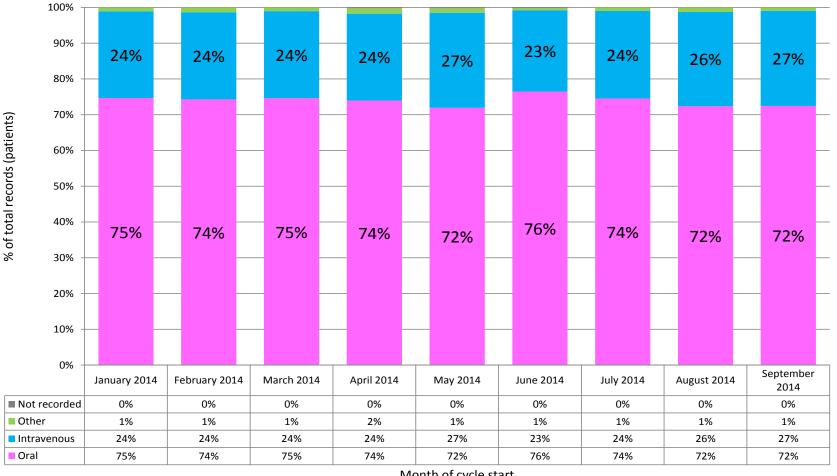


*For trusts regularly submitting data on route of administration



Route of administration: Oral vs. IV

Route distribution for top 10 trusts by volume of Brain/CNS data



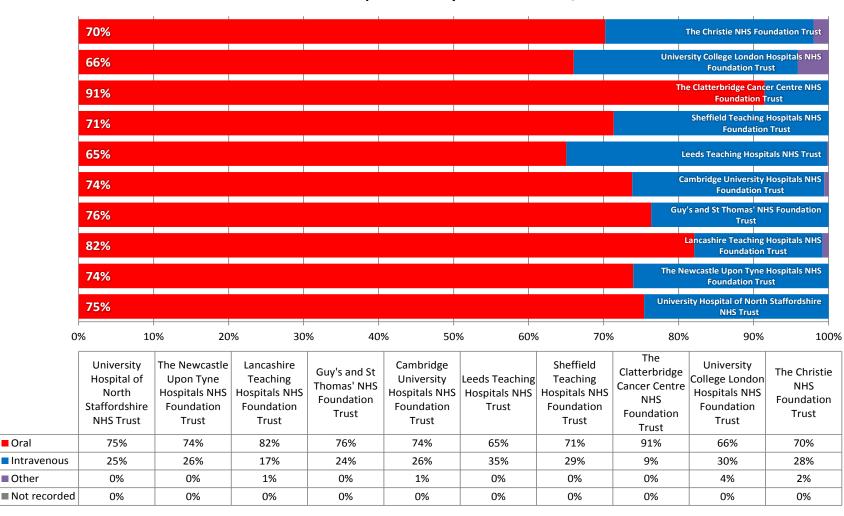
Month of cycle start

^{*}For trusts regularly submitting data on route of administration



Route of administration: Oral vs. IV

Route distribution for top 10 trusts by volume of Brain/CNS data



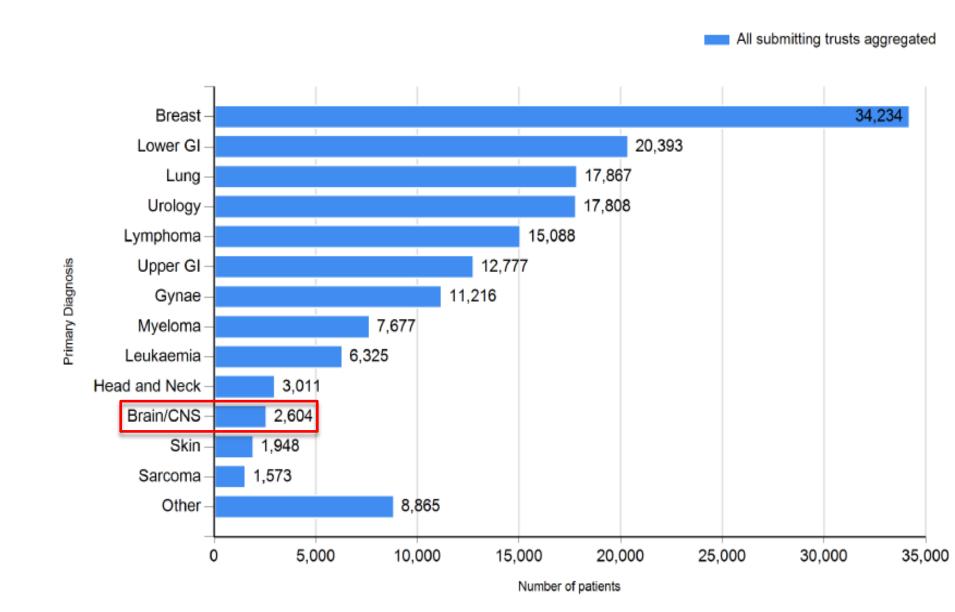
Oral

Other

Number of Patients by Diagnostic Group

All submitting trusts aggregated

Data received for October 2013 - September 2014. Patients aged 16 and over



Top Regimens by Diagnostic Group

Brain/CNS

All treatment intent

ICD10: C47, C69-C72

All submitting trusts aggregated

Data received for October 2013 - September 2014.

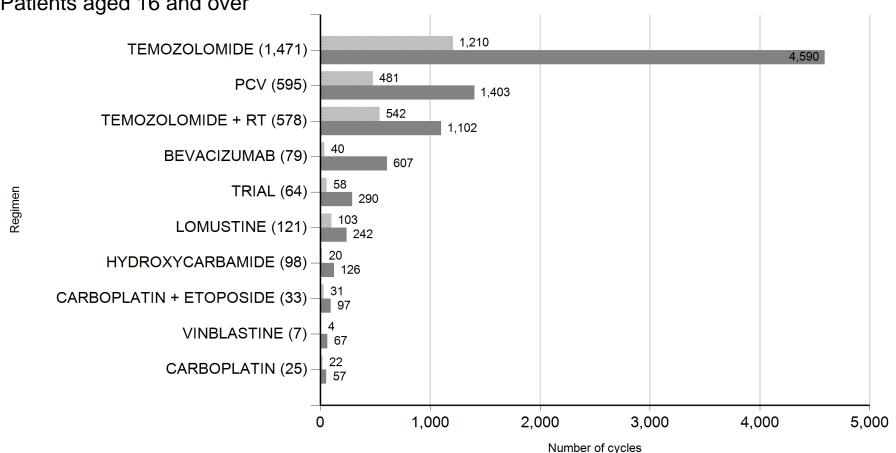
Patients aged 16 and over

These reports are available at a provider level

There are in excess of 100 regimens for this disease group

First Cycles

All Cycles





Top Regimens by Diagnostic Group

Brain/CNS

ICD10: C47, C69-C72

All submitting trusts aggregated

Data received for October 2013 - September 2014. Patients aged 16 and over

Table: List of top regimens

Regimen	Total Patients	First Cycles	Total Cycles
TEMOZOLOMIDE	1,471	1,210	4,590
PCV	595	481	1,403
TEMOZOLOMIDE + RT	578	542	1,102
BEVACIZUMAB	79	40	607
TRIAL	64	58	290
LOMUSTINE	121	103	242
HYDROXYCARBAMIDE	98	20	126
CARBOPLATIN + ETOPOSIDE	33	31	97
VINBLASTINE	7	4	67
CARBOPLATIN	25	22	57
Other (109 regimens, including 2 other TRIAL regimen and 27 unrecognised)	313	267	879



Post Chemotherapy Mortality Analysis

- ✓ From **25**th **July 2014** all NHS providers of chemotherapy in England have been able to access their 30/60/90-day post chemotherapy mortality analysis 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)

Trust	NHS Foundation Trust	•	Diagnostic Group	Brain/CNS 💌	View Report
Intent of treatment	All treatment intents		Show regimens with no deaths?	No, only show regimens with recorded death 💌	
Sort by	Total deaths within 30 days (highest to lowest)		Start Date	January 2013 ▼	
End Date	December 2013 ▼				
1 4 4 2	of 2 ▷ ▷ □ ↓ 100% ▼ Find		₩• ③	4	

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

3,766

Deaths 0-30 days
Death 0-60 days
Deaths 0-90 day
Total deaths

1,593

Total patients
Deaths 0-30 days
Death 0-60 days
Deaths 0-90 day
Deaths 0-90 day
Total deaths

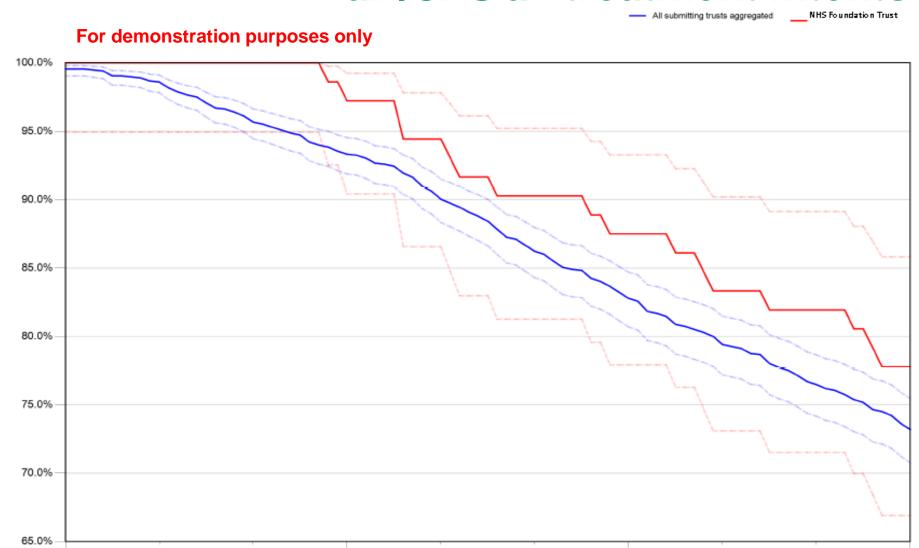
3,766	223	502	/52	1,593
Total patients	Deaths 0-30 days	Death 0-60 days	Deaths 0-90 day	Total deaths
72	2	9	16	45
15	0	2	3	11
13	0	2	3	10
2	0	0	0	1
10	0	0	1	6
5	0	0	0	3
1	0	0	0	1
2	0	0	0	1
1	0	0	1	1
47	2	7	12	28
32	2	7	12	26
1	0	0	0	1
7	0	0	0	1
	72 15 13 2 10 5 1 2 1 47 32 1	Total patients Deaths 0-30 days 72 2 15 0 13 0 2 0 10 0 5 0 1 0 2 0 1 0 47 2 32 2 1 0	Total patients Deaths 0-30 days Death 0-60 days 72 2 9 15 0 2 13 0 2 2 0 0 10 0 0 5 0 0 1 0 0 2 0 0 1 0 0 47 2 7 32 2 7 1 0 0	Total patients Deaths 0-30 days Death 0-60 days Deaths 0-90 day 72 2 9 16 15 0 2 3 13 0 2 3 2 0 0 0 10 0 0 1 5 0 0 0 1 0 0 0 2 0 0 0 1 0 0 1 47 2 7 12 32 2 7 12 1 0 0 0



% Survival

0 days

Post Chemotherapy Survival Analysis Brain/CNS all treatment intents



60 days

90 days

30 days



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"



Public Health 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!



Improving Stakeholder Engagement

Members of the CIU team will be attending the following meetings:

- NHS England Area Team Pharmacist Meeting
- NHS England Chemotherapy Clinical Reference Group
- Chemotherapy Clinical Information Group
- NCIN Site Specific Clinical Reference Groups (SSCRG)
 e.g. Breast meeting

Would you like to know more about SACT? Please contact the team, we are always happy to discuss the project or meet with you.

E-mail: <u>CIU@phe.gov.uk</u>