

# Colorectal Workshop

24<sup>th</sup> April 2013

Dr Ken Lloyd and Sue Forsey

# SACT

- **S**ystemic **A**nti-**C**ancer **T**herapy Information Standard
- NHS Information Standard Board approval
- Implementation from April 2012- April 2014
- Covers all drug treatment for cancer in all settings

# SACT field structure

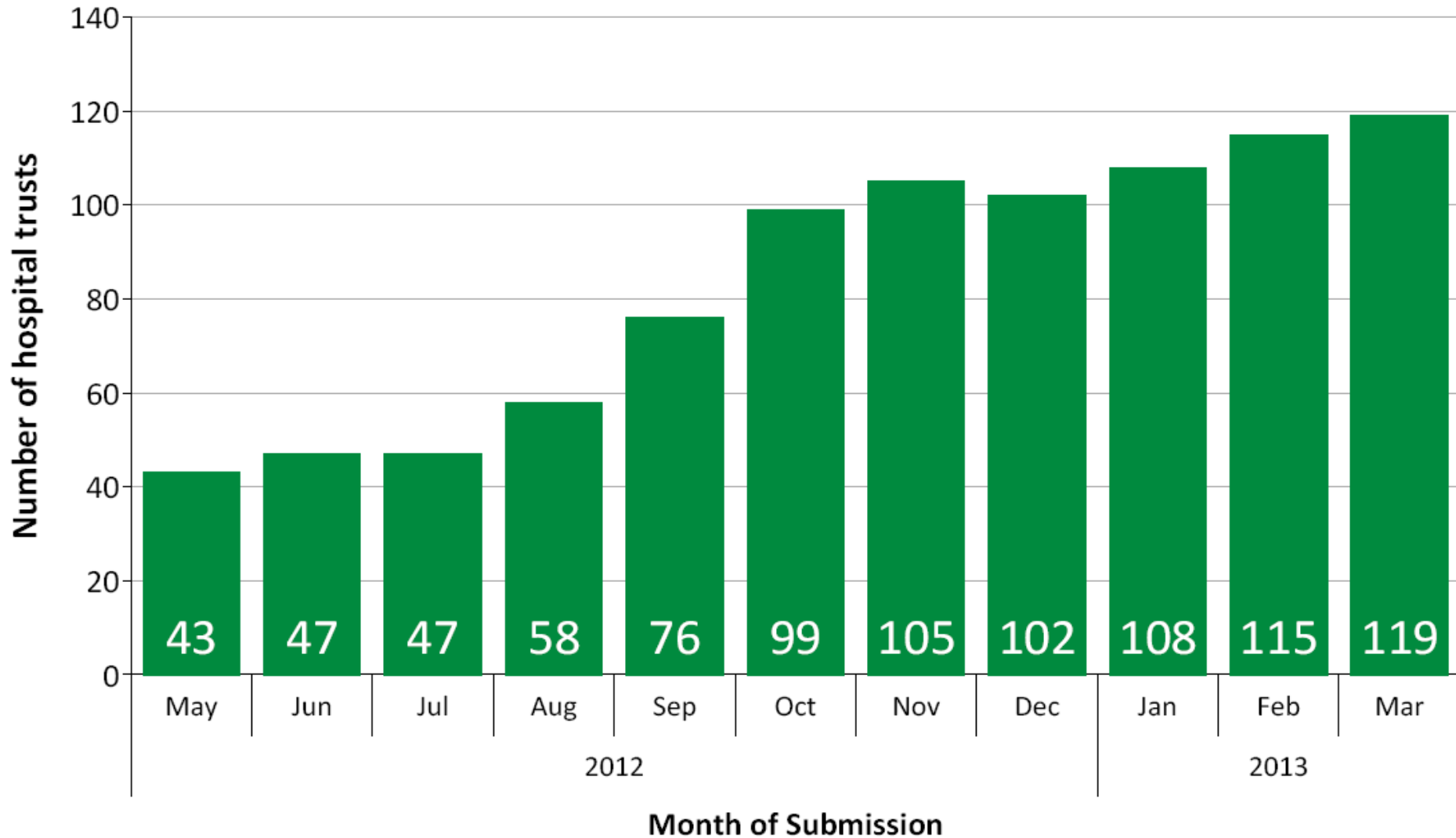
- Demographics and provider
- Clinical status
- Programme and regimen
- Cycle
- Drug details
- Outcome

[Date of death added from ONS]

# Data collection and analysis

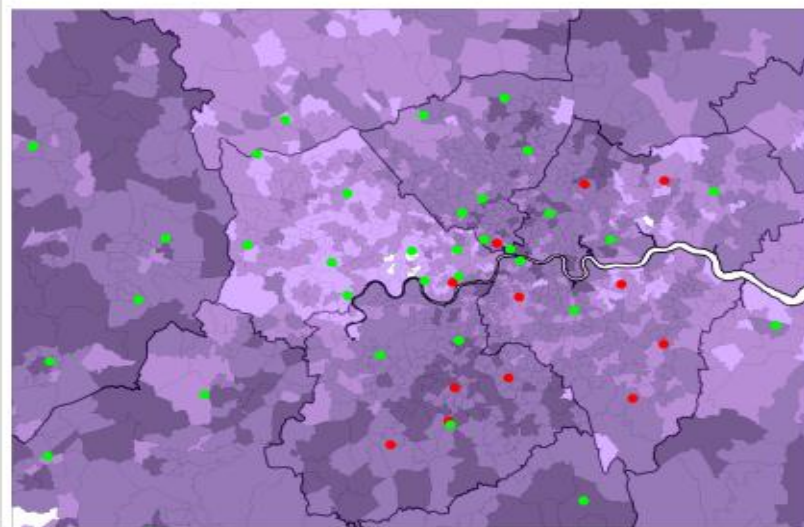
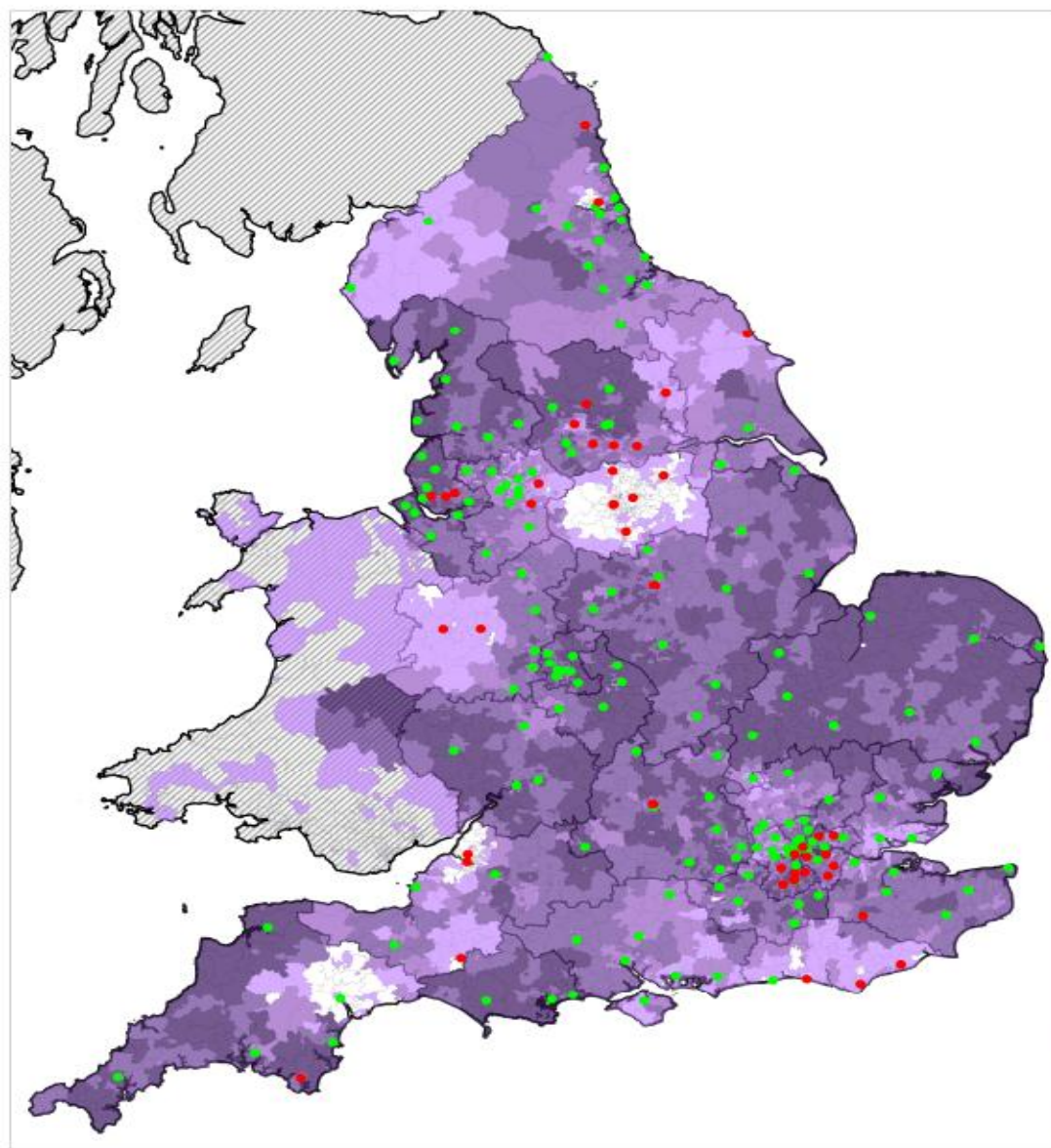
- The Chemotherapy Intelligence Unit (CIU), is based at Oxford within the Cancer Registry
- Data are sent from trusts on a monthly basis and series of validation processes are applied
- A suite of routine analyses and reporting has been developed and the first 9-month report issued

## Number of hospital trusts submitting chemotherapy data, by month of submission



# SACT Coverage

8th April 2013



London detail

# SACT Data Completeness report (April to February 2013)

## England

Number of patients
89,216

% NHS Number	% Date of Birth	% Current gender	% Ethnicity	% Patient postcode
100%	100%	97%	97%	100%

Number of tumour records
98,400

% GP Practice Code	% GMC Code	% Consultant Specialty	% Primary diagnosis	% Morphology	% Stage of disease at start of programme
79%	81%	81%	100%	37%	23%

Number of regimens
147,078

% Programme number	% Regimen number	% Treatment intent	% Regimen name	% Height at start of regimen	% Weight at start of regimen	% Performance Status at start of regimen
41%	55%	57%	100%	48%	50%	27%
% Comorbidity adjustment	% Date of decision to treat	% Start date of regimen	% Clinical trial	% Chemo radiation	% Number of cycles planned	
12%	73%	100%	65%	47%	49%	

Number of cycles
371,633

% Cycle number	% Start date of cycle	% Weight at start of cycle	% Performance Status at start of cycle	% OPCS procurement code
100%	84%	43%	20%	40%

Number of drug records
989,016

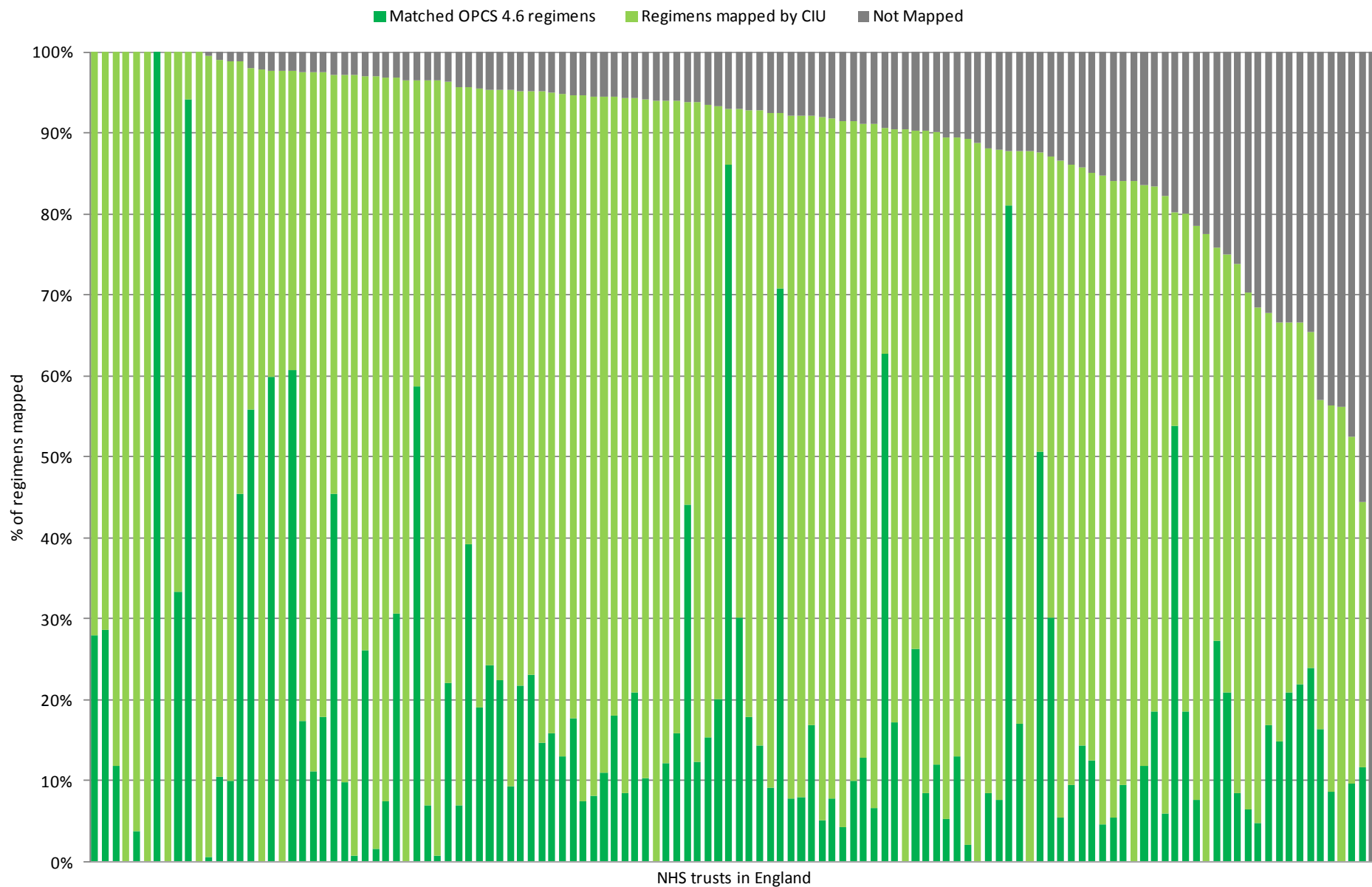
% Drug name	% Actual dose per administration	% Administration route	% Administration date	% OPCS Delivery code	% Organisation code of drug provider
100%	93%	79%	100%	39%	99%

Number of outcome records
87,336

% Date of Final Treatment	% Regimen modification (dose reduction)	% Regimen modification (time delay)	% Regimen modification (stopped early)	% Regimen outcome summary	% Date of death
27%	39%	12%	14%	4%	5%

59%

# Results of Regimen Mapping Process



Source: SACT dataset; retrieved 8th March 2013



# Clinical workshops - 1<sup>st</sup> round

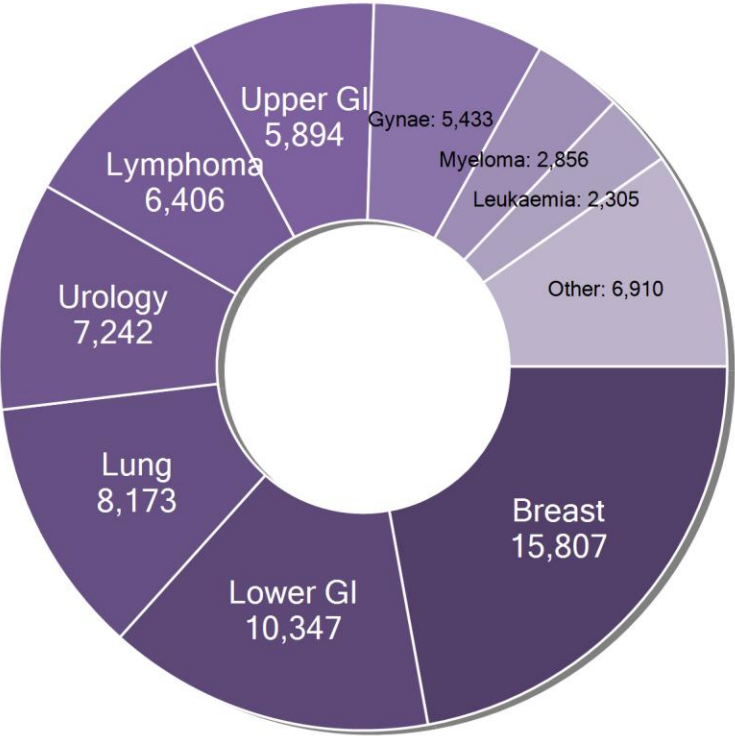
- Colorectal
- Upper GI
- Lung
- Urology
- Breast
- Gynae
- Haematology
  - Leukaemia
  - Lymphoma
  - Myeloma

# Number of Patients by Diagnostic Group

All submitting trusts aggregated

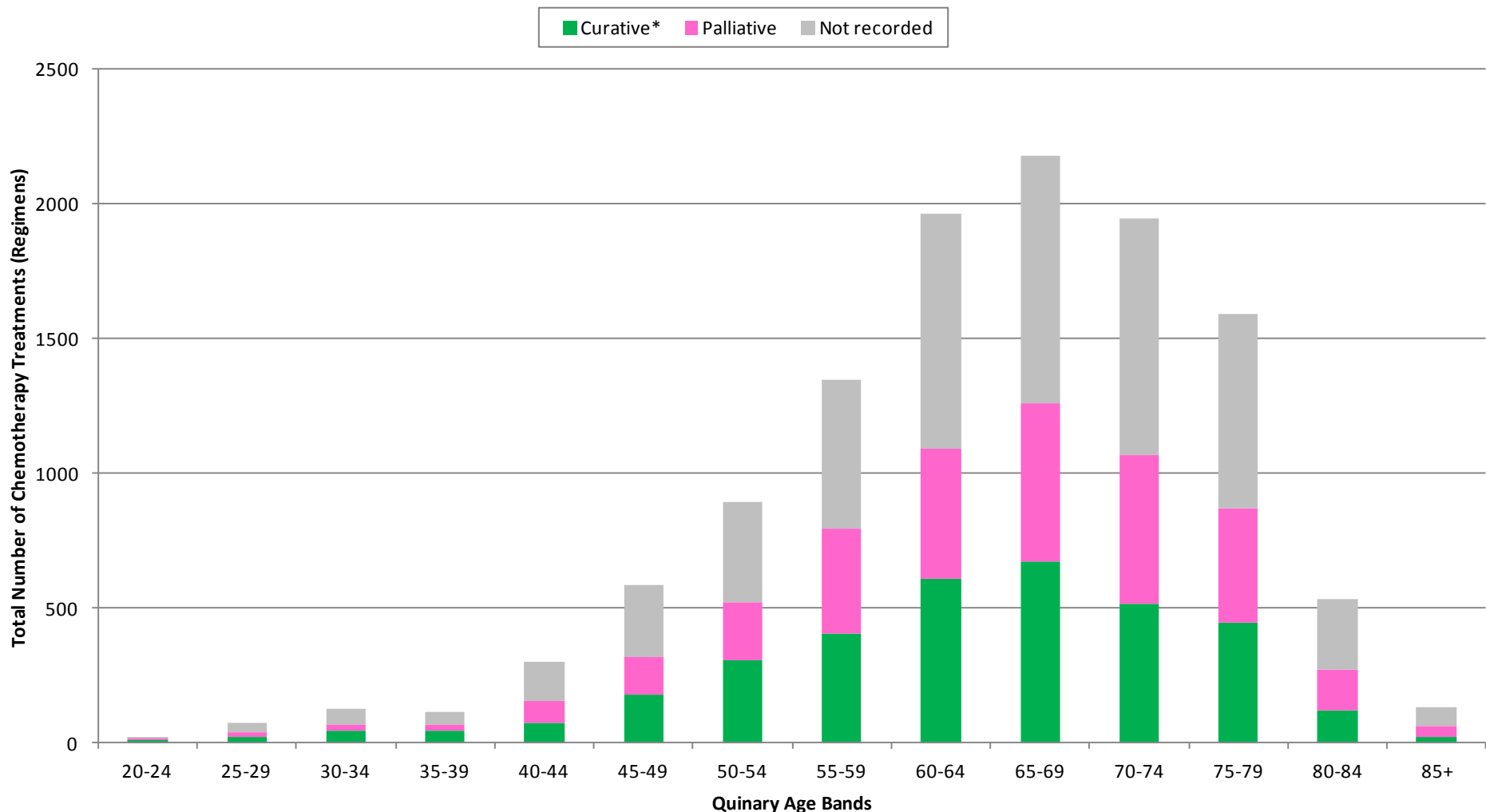
Data received for April 2012 - December 2012. Patients aged 16 and over

Breast: 15,807 (22%)	Urology: 7,242 (10%)	Gynae: 5,433 (8%)	Leukaemia: 2,305 (3%)
Lower GI: 10,347 (14%)	Lymphoma: 6,406 (9%)	Myeloma: 2,856 (4%)	Other: 6,910 (10%)
Lung: 8,173 (11%)	Upper GI: 5,894 (8%)		



Age, performance status and intent

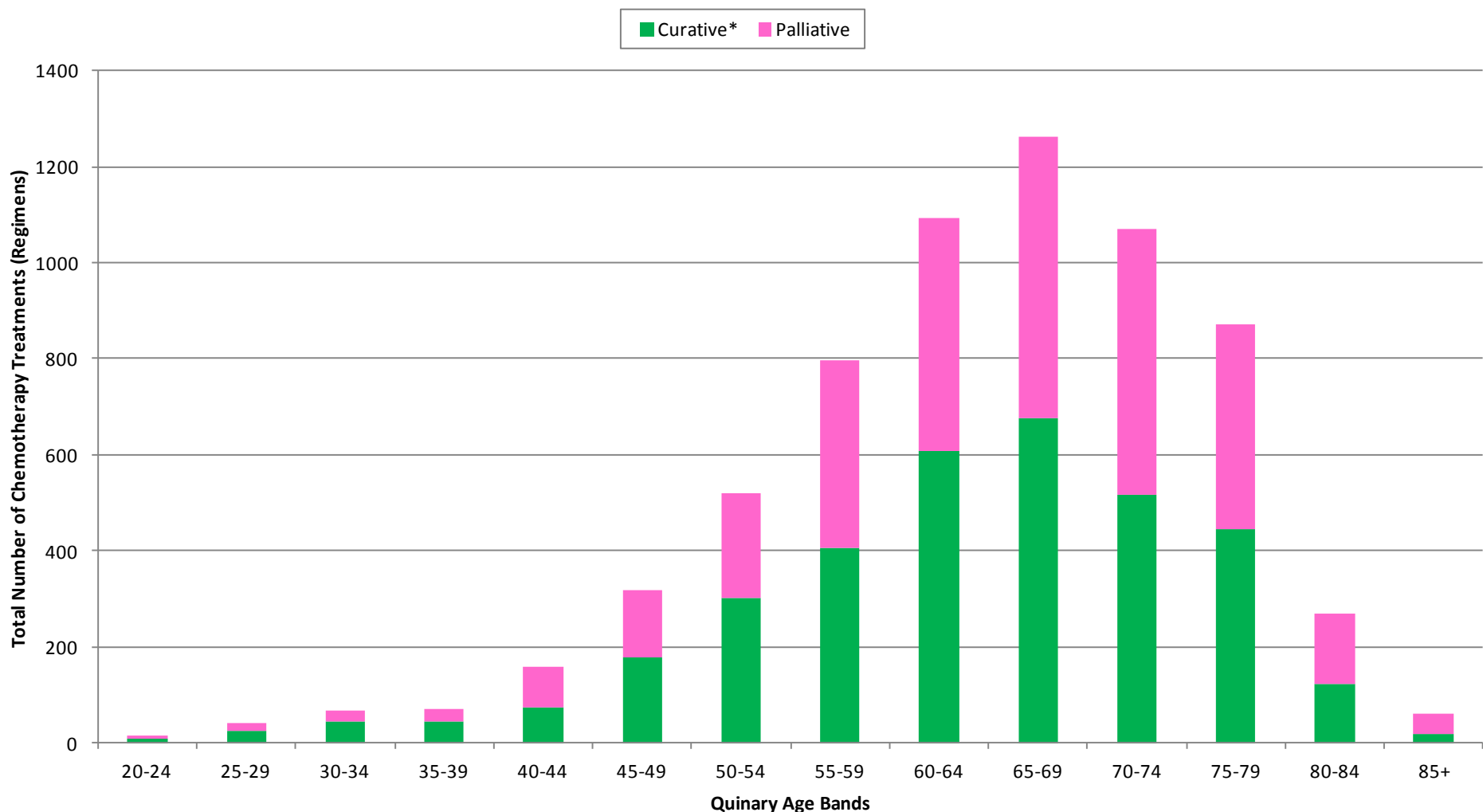
# Treatment Intent of Patients receiving Chemotherapy by Quinary Age Band Lower GI (Colorectal)



Source: SACT, accessed 8th February 2013

\*Curative also includes adjuvant and neo-adjuvant treatment

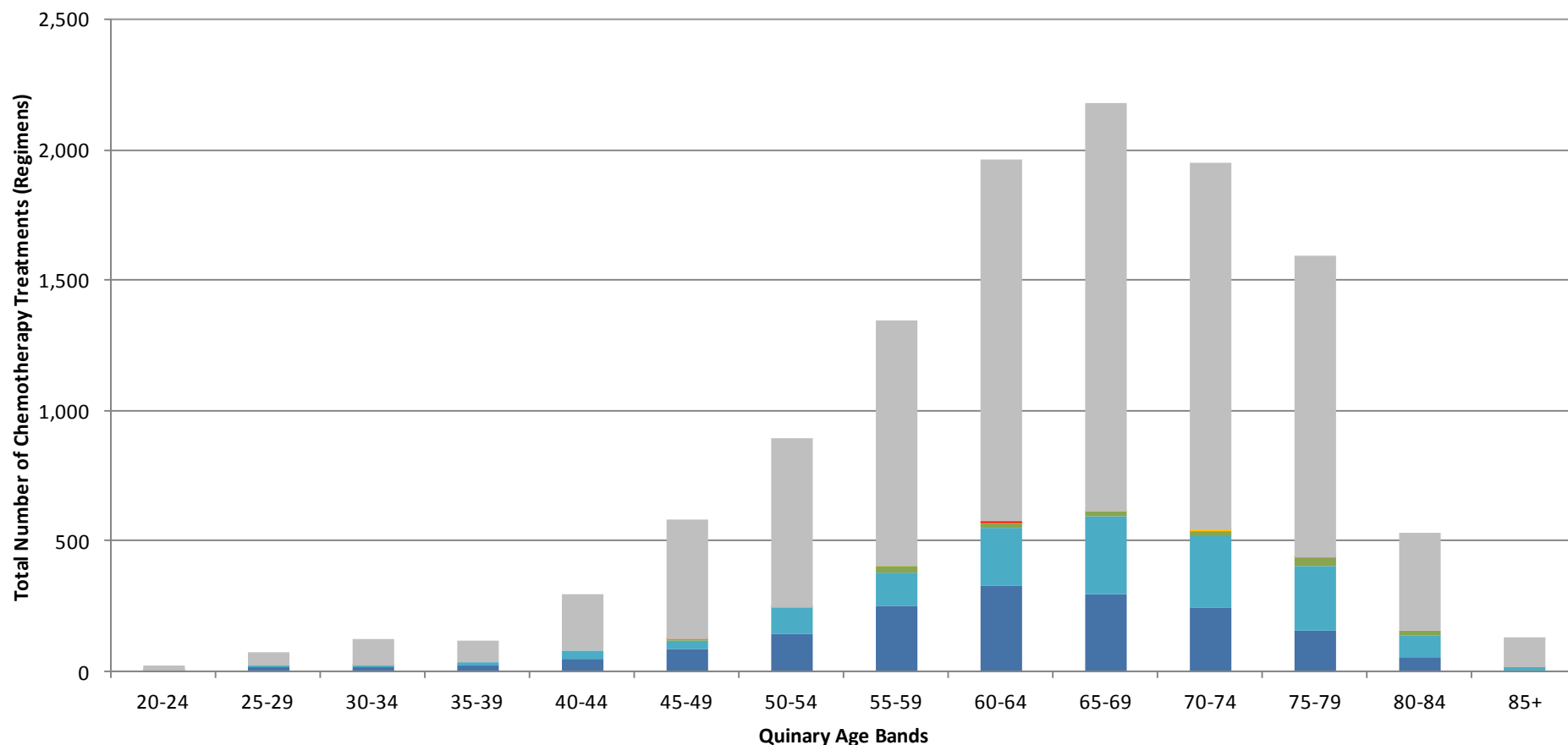
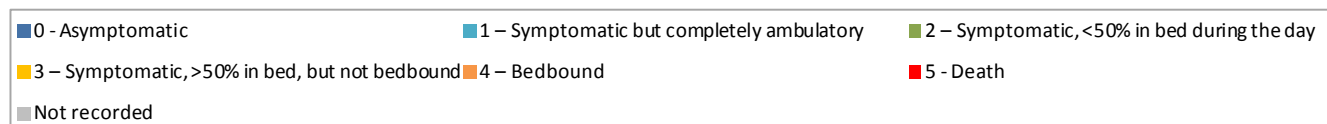
# Treatment Intent of Patients receiving Chemotherapy by Quinary Age Band Lower GI (Colorectal)



Source: SACT, accessed 8th February 2013

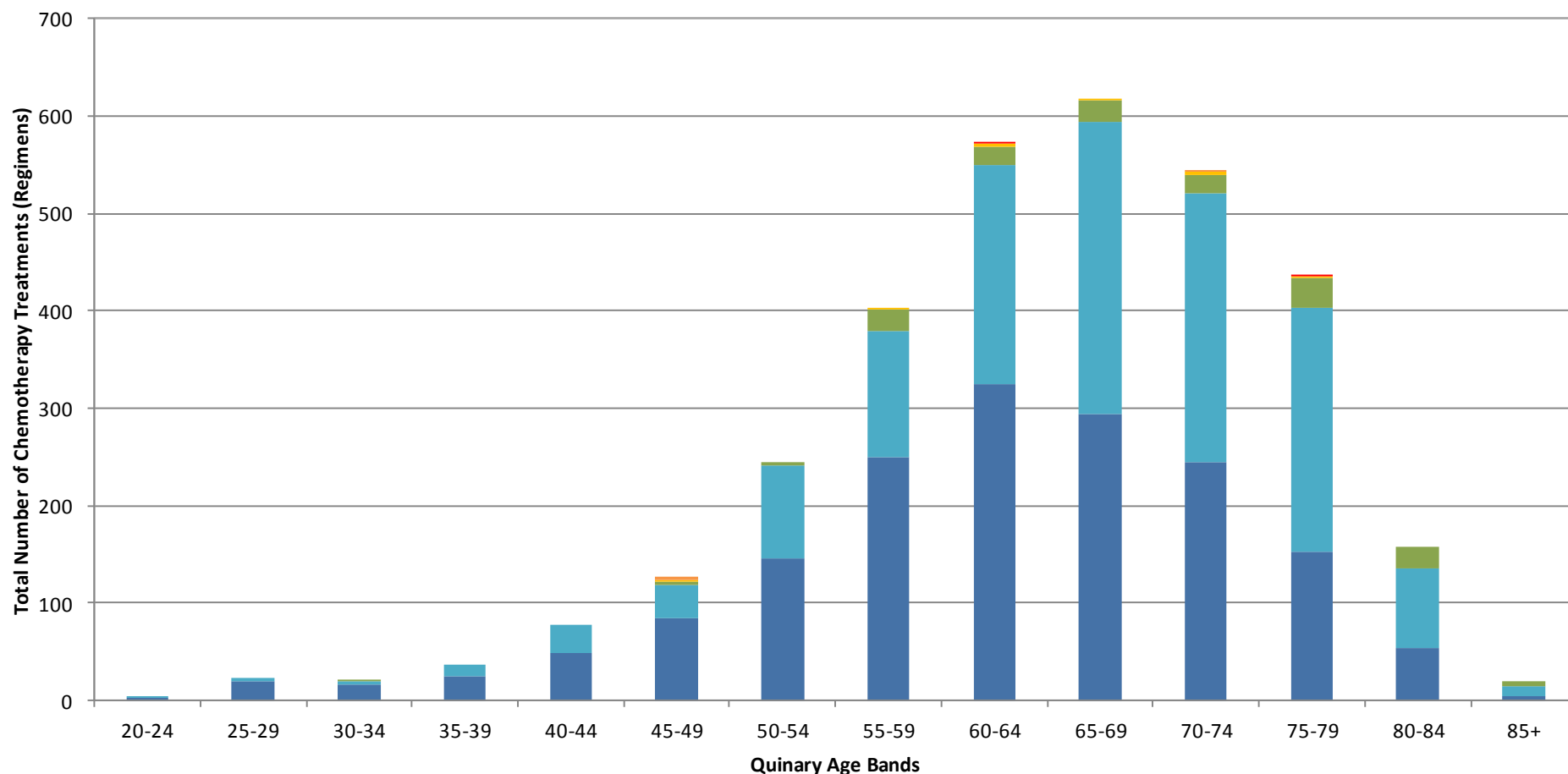
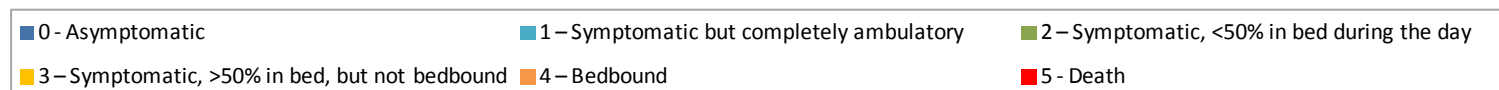
\*Curative also includes adjuvant and neo-adjuvant treatment

# Performance Status of Patients receiving Chemotherapy by Quinary Age Band Lower GI (Colorectal)



Source: SACT, accessed 8th February 2013

# Performance Status of Patients receiving Chemotherapy by Quinary Age Band Lower GI (Colorectal)

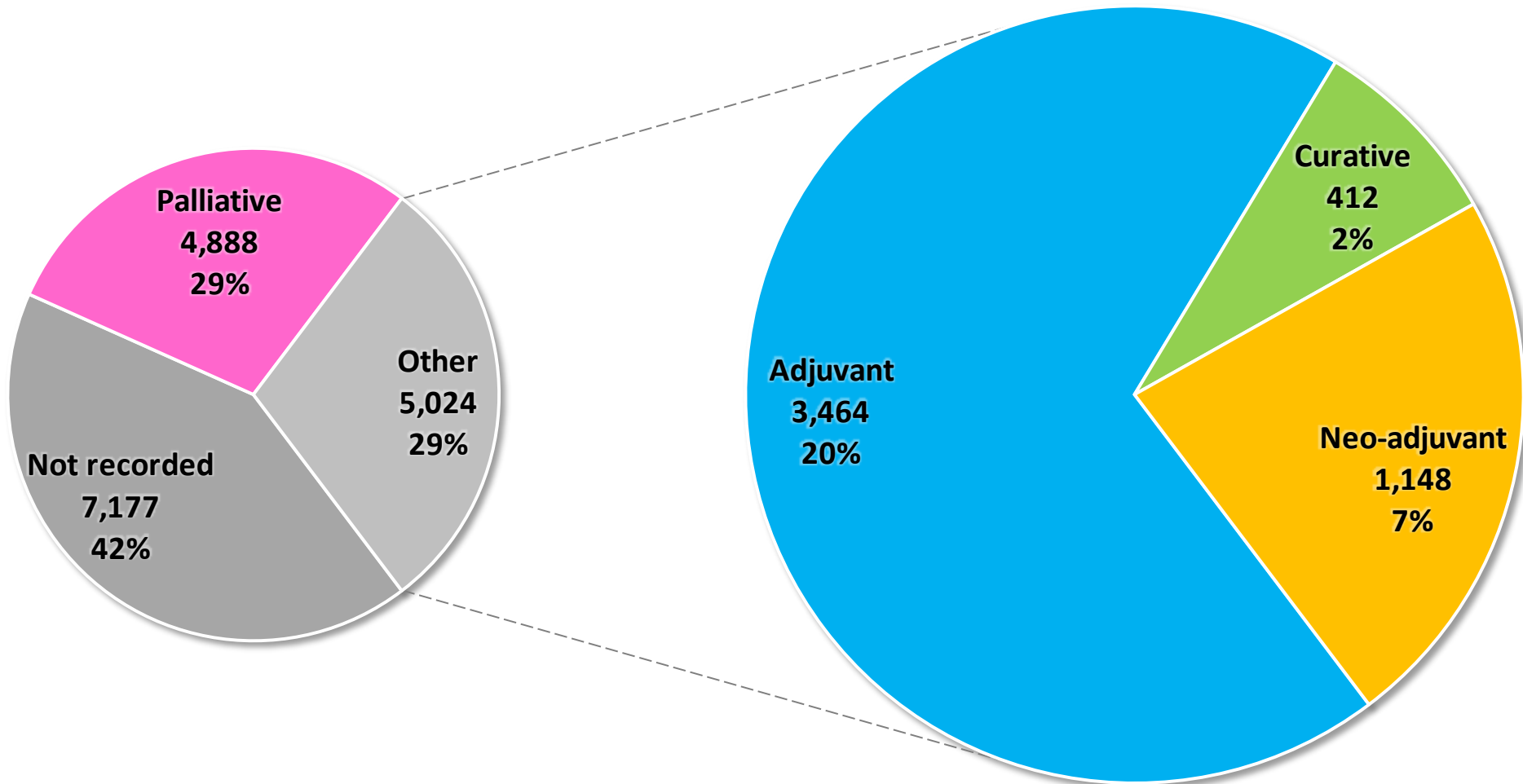


# Analysis



## Treatment intent of patients receiving chemotherapy Lower GI (Colorectal)

■ Not recorded ■ Palliative ■ Adjuvant ■ Curative ■ Neo-adjuvant



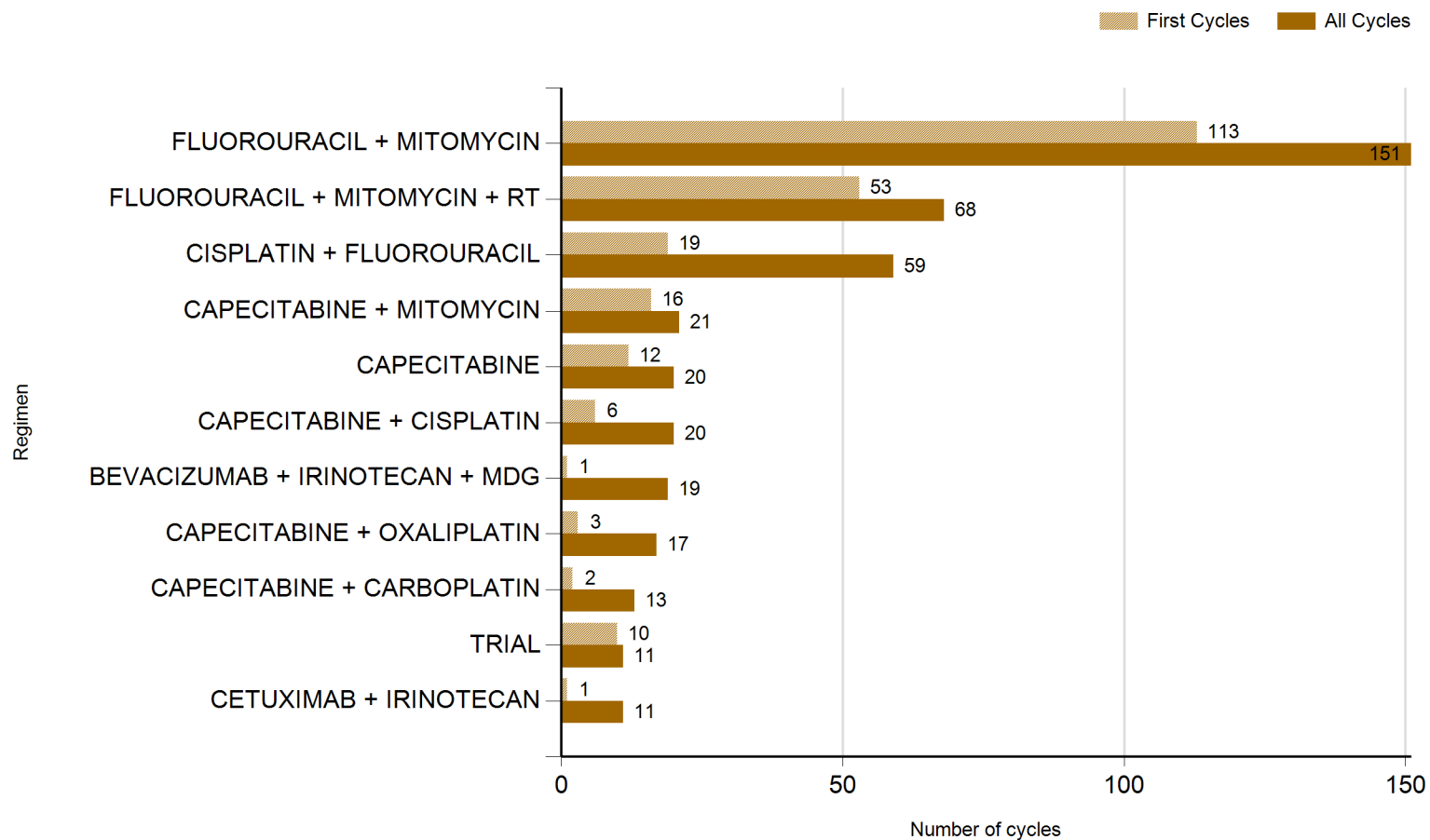
Top regimens

# Top Regimens by Diagnostic Group

Lower GI (Anus) †

All submitting trusts aggregated

Data received for April 2012 - December 2012. Patients aged 16 and over

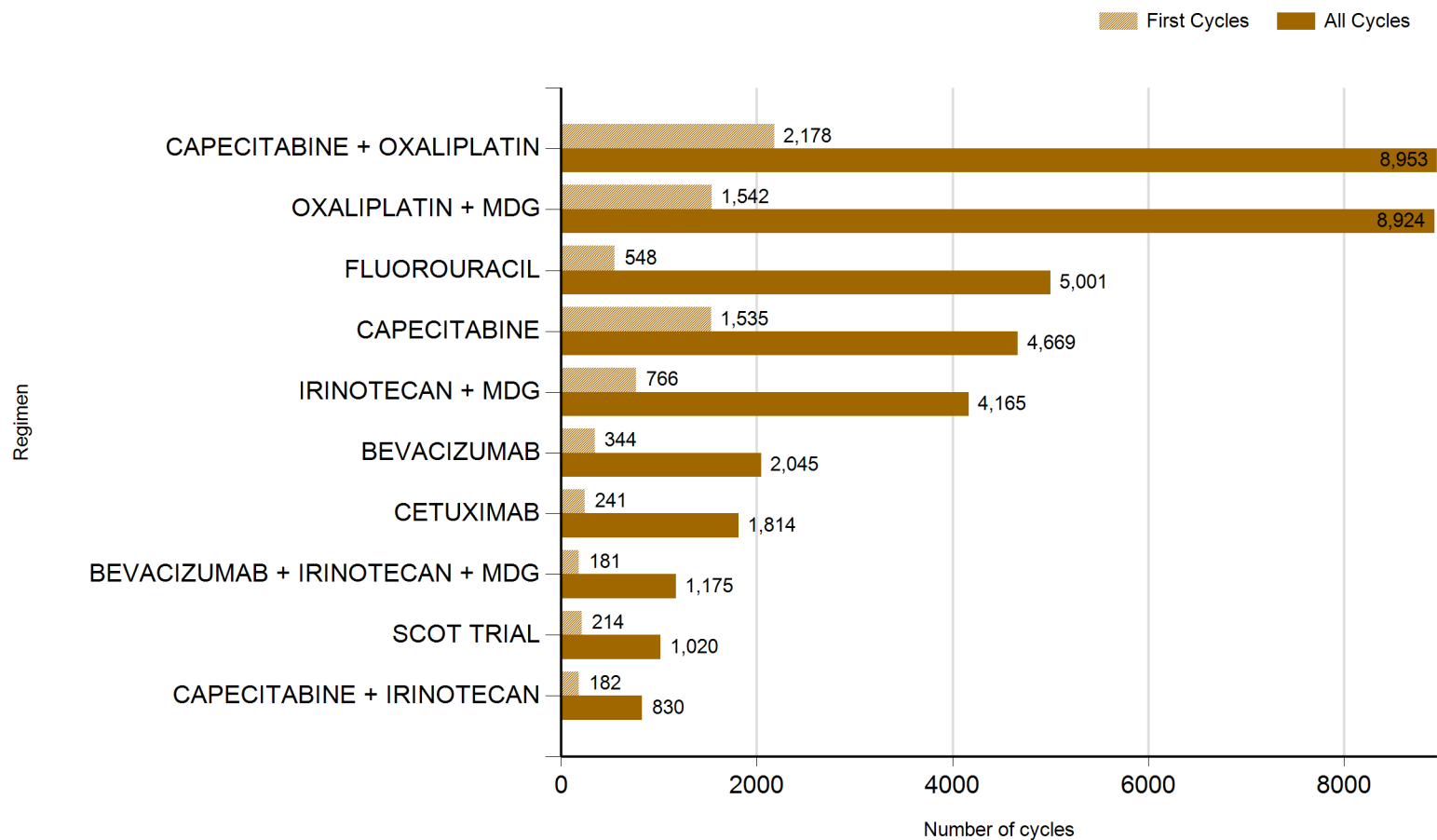


# Top Regimens by Diagnostic Group

Lower GI (Colorectal) †

All submitting trusts aggregated

Data received for April 2012 - December 2012. Patients aged 16 and over



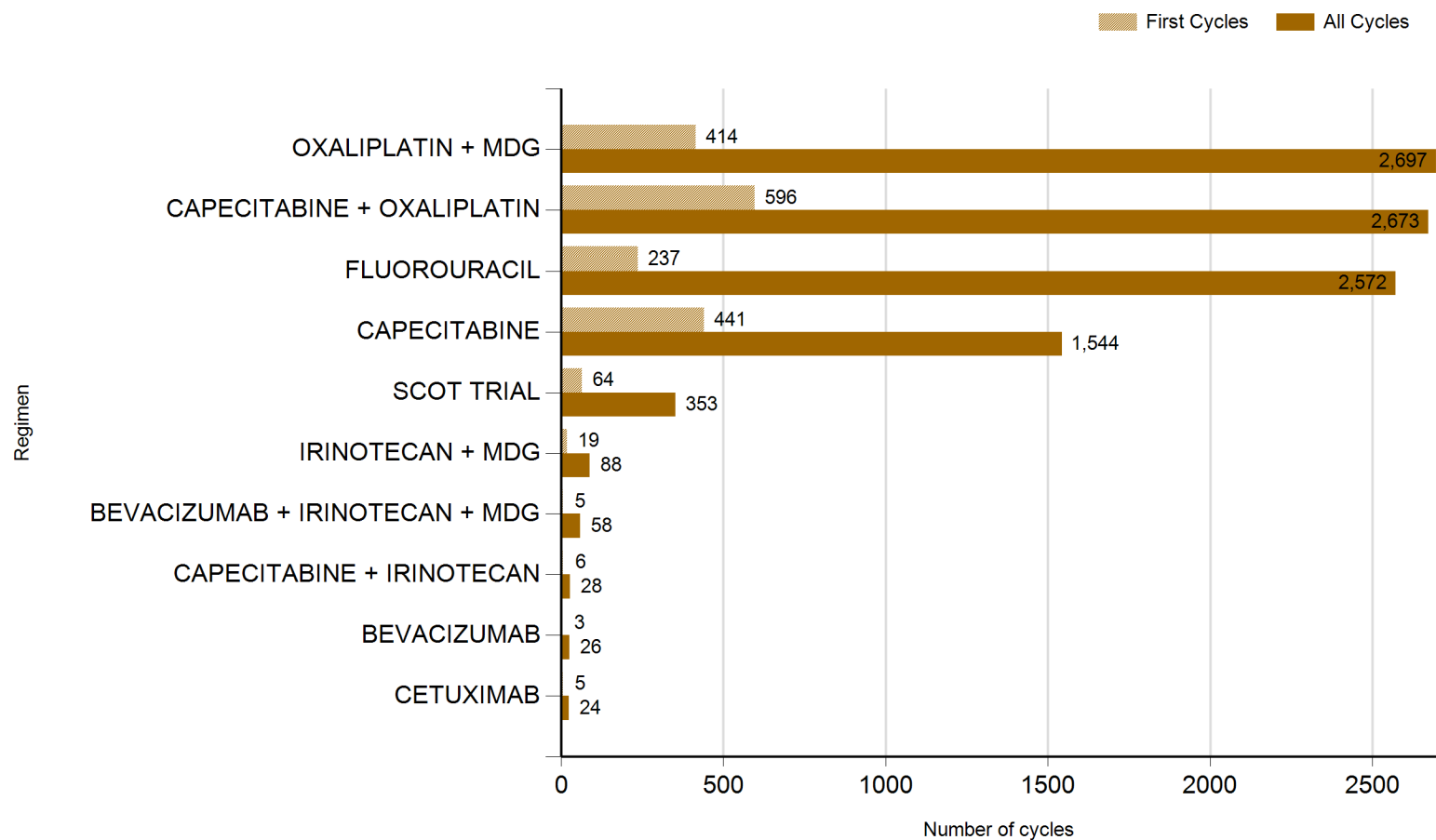
Treatment by intent

# Top Regimens by Diagnostic Group

Lower GI (Colorectal) † - Adjuvant

All submitting trusts aggregated

Data received for April 2012 - December 2012. Patients aged 16 and over

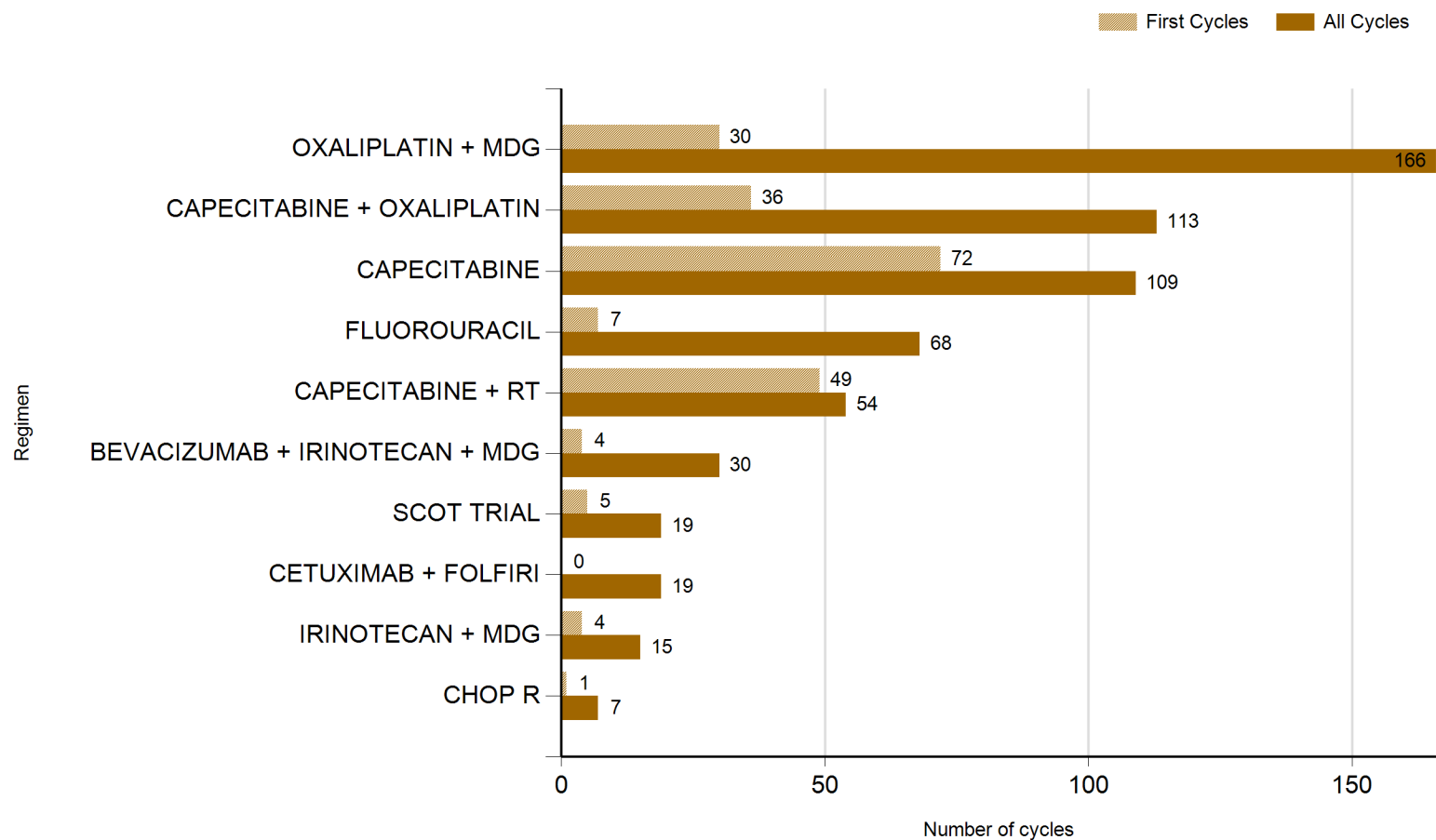


# Top Regimens by Diagnostic Group

Lower GI (Colorectal) † - Curative

All submitting trusts aggregated

Data received for April 2012 - December 2012. Patients aged 16 and over

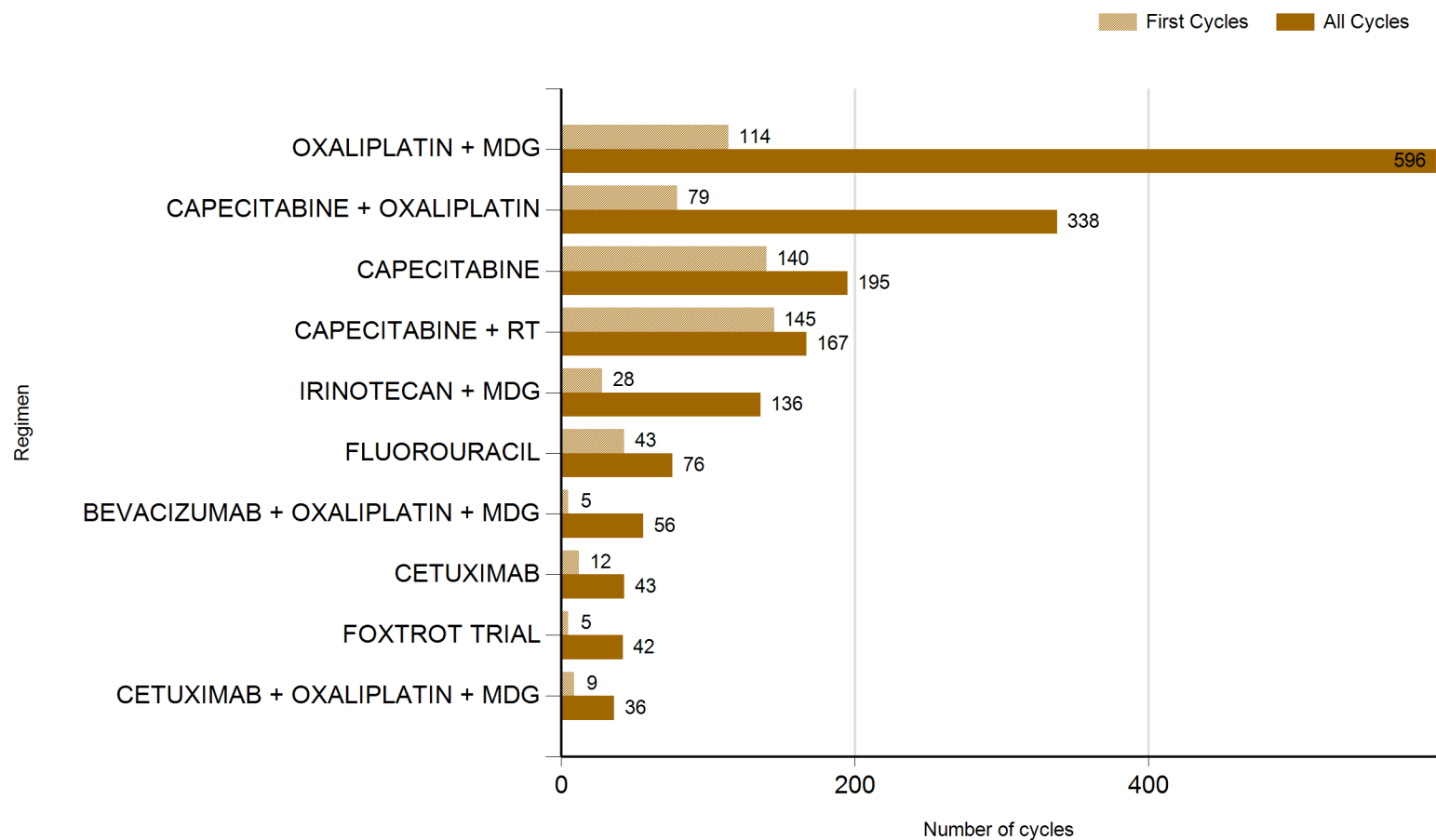


# Top Regimens by Diagnostic Group

Lower GI (Colorectal) † - Neo-adjuvant

All submitting trusts aggregated

Data received for April 2012 - December 2012. Patients aged 16 and over



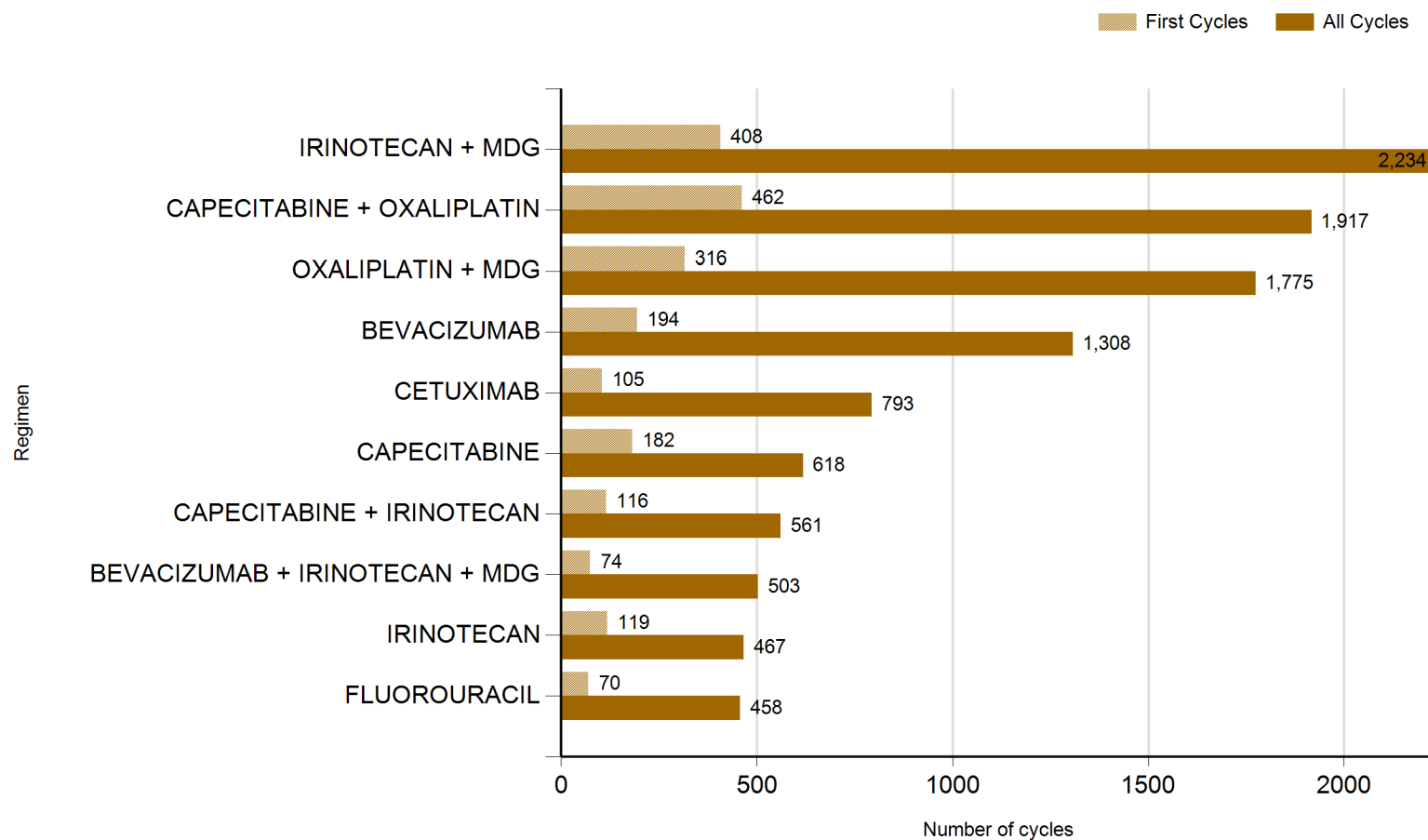


# Top Regimens by Diagnostic Group

Lower GI (Colorectal) † - Palliative

All submitting trusts aggregated

Data received for April 2012 - December 2012. Patients aged 16 and over

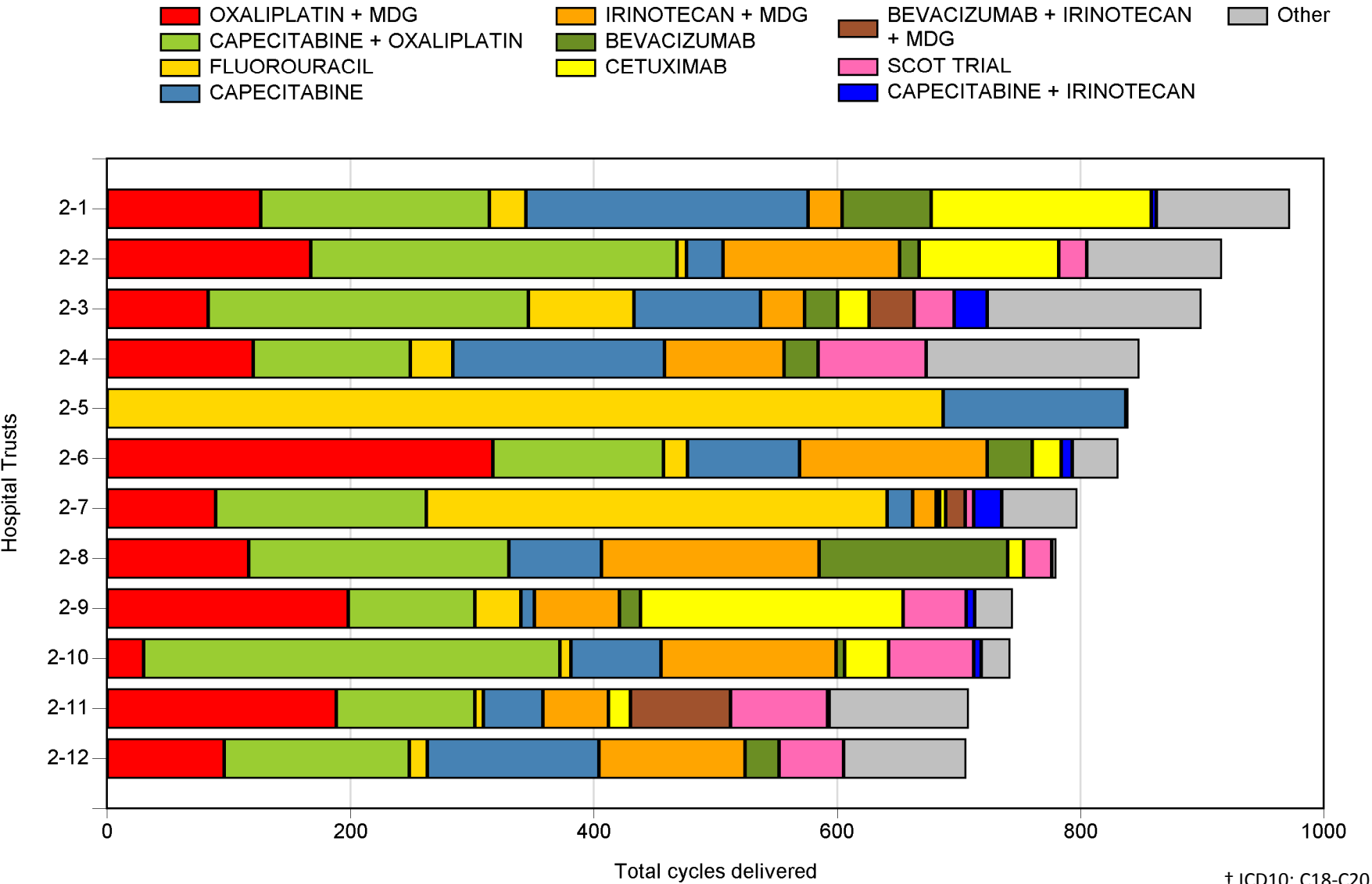


Initial benchmarking

Regimen benchmarking

Lower GI (Colorectal)

Data received for April 2012 - December 2012.  
Group 2; Patients aged 16 and over



† ICD10: C18-C20

# Reporting framework 2012-14

[illegible]

# Clinical Reporting 2012-13

- **3-monthly**

Top regimens by tumour group and selected tumour sites within each group – both national picture and by individual trust

- **6-monthly**

Benchmarking of selected tumour sites by trust

- **Annually**

Analyses on a selection of major tumour sites, to illustrate variation in chemotherapy in relation to age, intent of treatment and performance status

# Clinical Reporting 2013-14

(additional analyses)

- Linkage with RTDS for radiotherapy data to reveal patterns and outcomes of combined treatment of relevant tumours
- Linkage with HES for surgery data to reveal patterns and outcomes of combined treatment and re-admission rates following named regimens
- Linkage with ENCORE for mortality data to quantify chemotherapy treatment benefit vs. toxicity in the “real world”

# Clinical Reporting 2014-15

(additional analyses)

## **Population based analyses to show:**

- Variations in patterns and uptake of chemotherapy treatment by geographical area or network
- National variations in the rate of introduction of selected drugs and regimens
- Trends in chemotherapy usage by tumour and by major regimen groups
- Patterns and benefit of offering second and subsequent lines of chemotherapy



# Next steps

- Agree resolution to sequential/concurrent regimen interpretation
- Priorities for further analyses
- Early deaths and admissions related to adjuvant treatment
- Completing regimens - end of treatment recorded?
- Linking to RTDS and HES for surgery

[www.chemodataset.nhs.uk](http://www.chemodataset.nhs.uk)

[ciu@phe.gov.uk](mailto:ciu@phe.gov.uk)

Helpdesk 01865 334 783

Dataset fields

# SACT dataset (1)

## Demographics

1	NHS number
2	Date of birth
3	Gender - current
4	Ethnicity
5	Patient postcode
6	Registered GP practice code
7	Consultant GMC code
8	Consultant speciality code
9	Organisation code of provider

## Clinical Status

10	Primary diagnosis (ICD-10)
11	Morphology (ICD-O3)
12	Stage of disease

# SACT dataset (2)

Programme and Regimen	
13	Programme number
14	Regimen number
15	Intent of treatment
16	Regimen
17	Height at start of regimen
18	Weight at start of regimen
19	Performance status at start of regimen
20	Co-morbidity adjustment
21	Date decision to treat
22	Start date of regimen
23	Clinical trial
24	Chemo-radiation
25	Number of cycles planned

# SACT dataset (3)

Cycle	
26	Cycle number
27	Start date of cycle
28	Weight at start of cycle
29	Performance status at start of cycle
30	OPCS procurement code
Drug Details	
31	Drug name
32	Actual dose per administration
33	Administration route
34	Administration date
35	Organisation code of provider
36	OPCS delivery code

# SACT dataset (4)

Outcome	
37	Date of final treatment
38	Regimen modification - dose reduction
39	Regimen modification - time delay
40	Regimen modification - stopped early
41	Regimen outcome summary
42	Date of death