Dr Paul Benn

Central and North West London
NHS Foundation Trust

NHS England

Therapeutic tendering: an innovative strategy to reduce the cost of antiretroviral therapy

Paul Benn, Nick Larbalestier, Stephan Worrell,
Zheng Yin, Brian Gazzard, Margaret Johnson,
Peter Sharott, Jess Peck, Claire Foreman

Background

- NHS England is targeting efficiency savings of £15 billion by 2014/15
- £172 million spend on ART in London 2010/11
- The LSCG adopted a therapeutic tender approach for the procurement of ART to reduce the annual drug spend
- A multi-disciplinary panel of doctors, nurses, pharmacists, service users and commissioners oversaw the therapeutic tender, promoting the increased use of:

  i) efavirenz (EFV)

  ii) kivexa® in ART naïve

  iii) atazanavir as the first boosted protease inhibitor (rATV)

  where clinically appropriate across 23 London HIV outpatient services

Aims

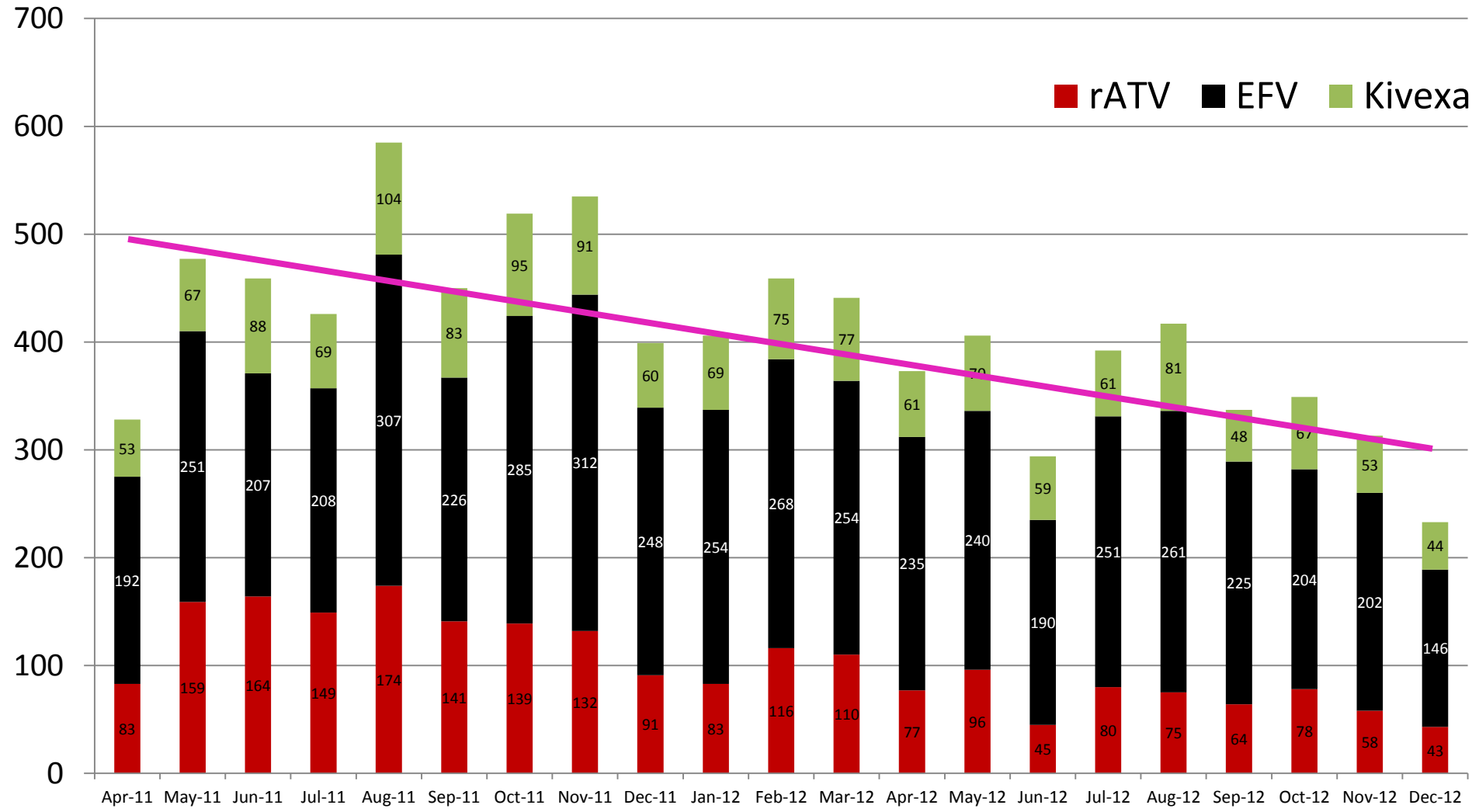
We evaluated the impact of the therapeutic tender upon:

- Prescribing choice
- Clinical outcomes
- Patient experience
- Financial savings

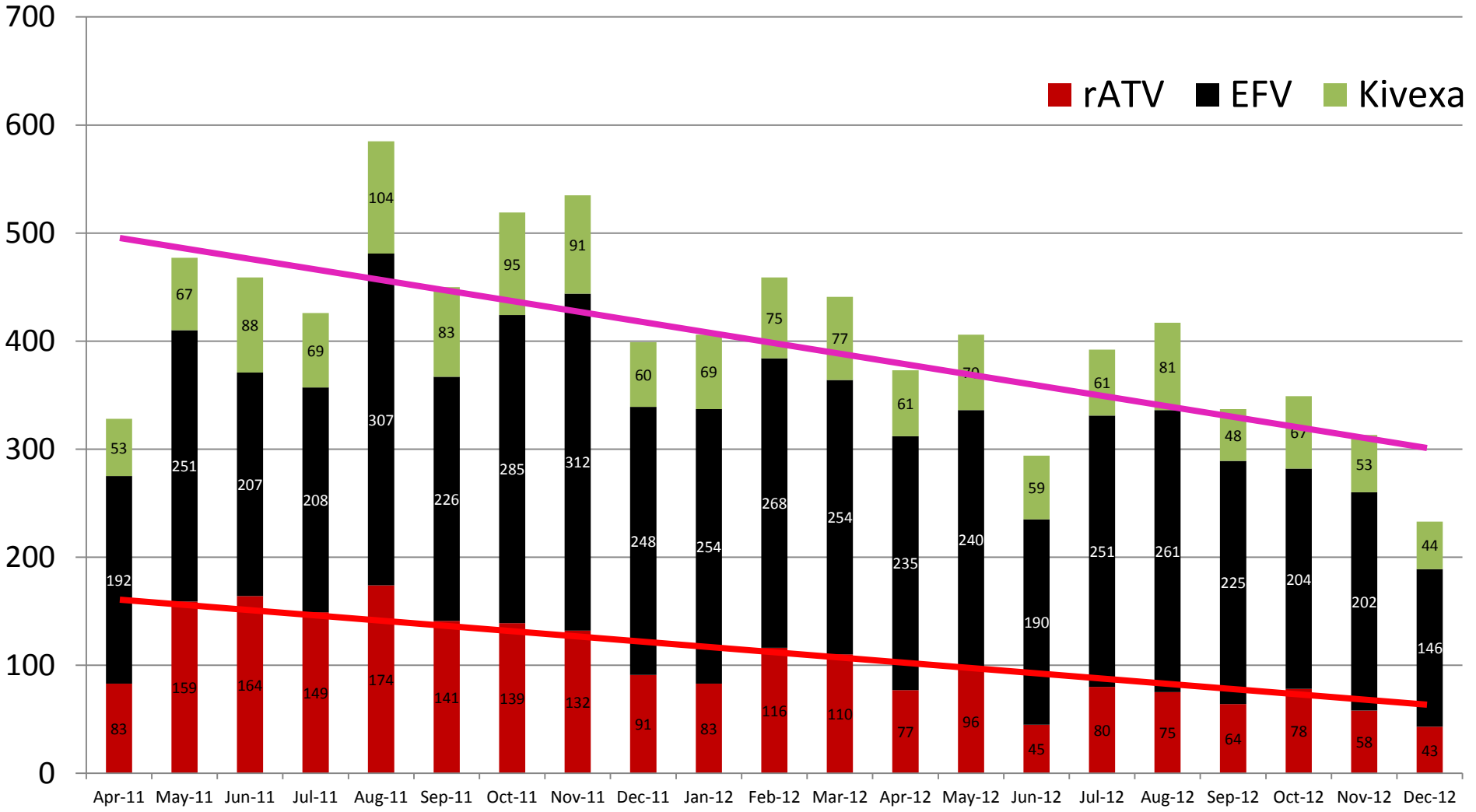
Methods

- All trusts submitted a monthly report to the LSCG including patient:
- Demographics
- ART regimens
- Reasons for starting/switching ART and non use of a therapeutic tender regimen were collected
- Clinical outcome data (CD4 and viral load) were obtained from national surveillance data (Public Health England)
- Half of patients starting/switching ART completed a questionnaire regarding their experience. Undertaken in two phases

Prescribing practice of therapeutic tender agents



Prescribing practice of therapeutic tender agents



Prescribing practice

2011/12 & Q1-3 2012/13

	Starting ART (%) n=3606 (12% London cohort)	Switching ART (%) n=4956 (16% London cohort)
Efavirenz	53.2	8.1
Kivexa®	22.4	13.1
Atazanavir/r	21.4	27.6

Prescribing practice

2011/12 & Q1-3 2012/13

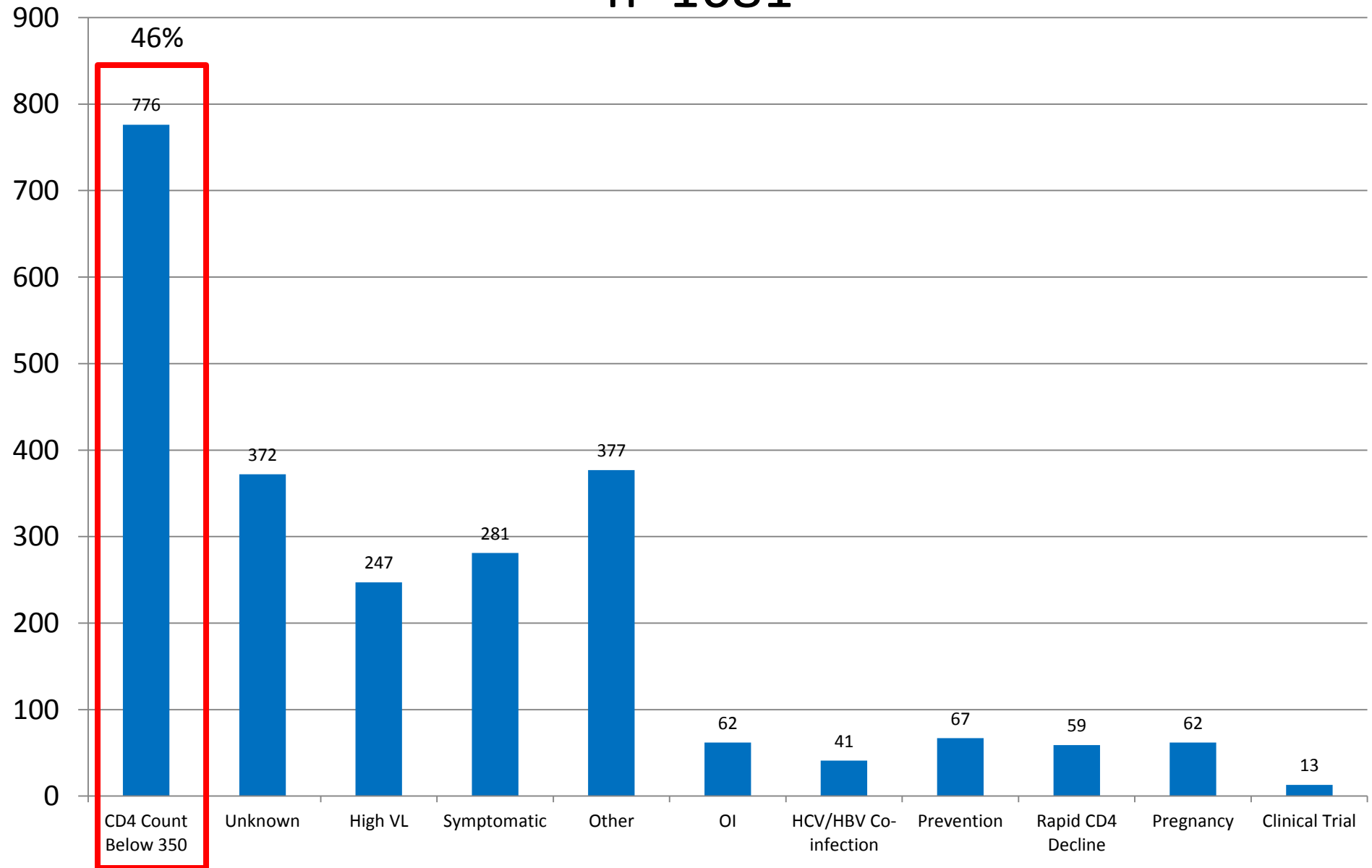
	Starting ART (%) n=3606 (12% London cohort)	Switching ART (%) n=4956 (16% London cohort)
Efavirenz	53.2	8.1
Kivexa®	22.4	13.1
Atazanavir/r	21.4	27.6

Prescribing practice

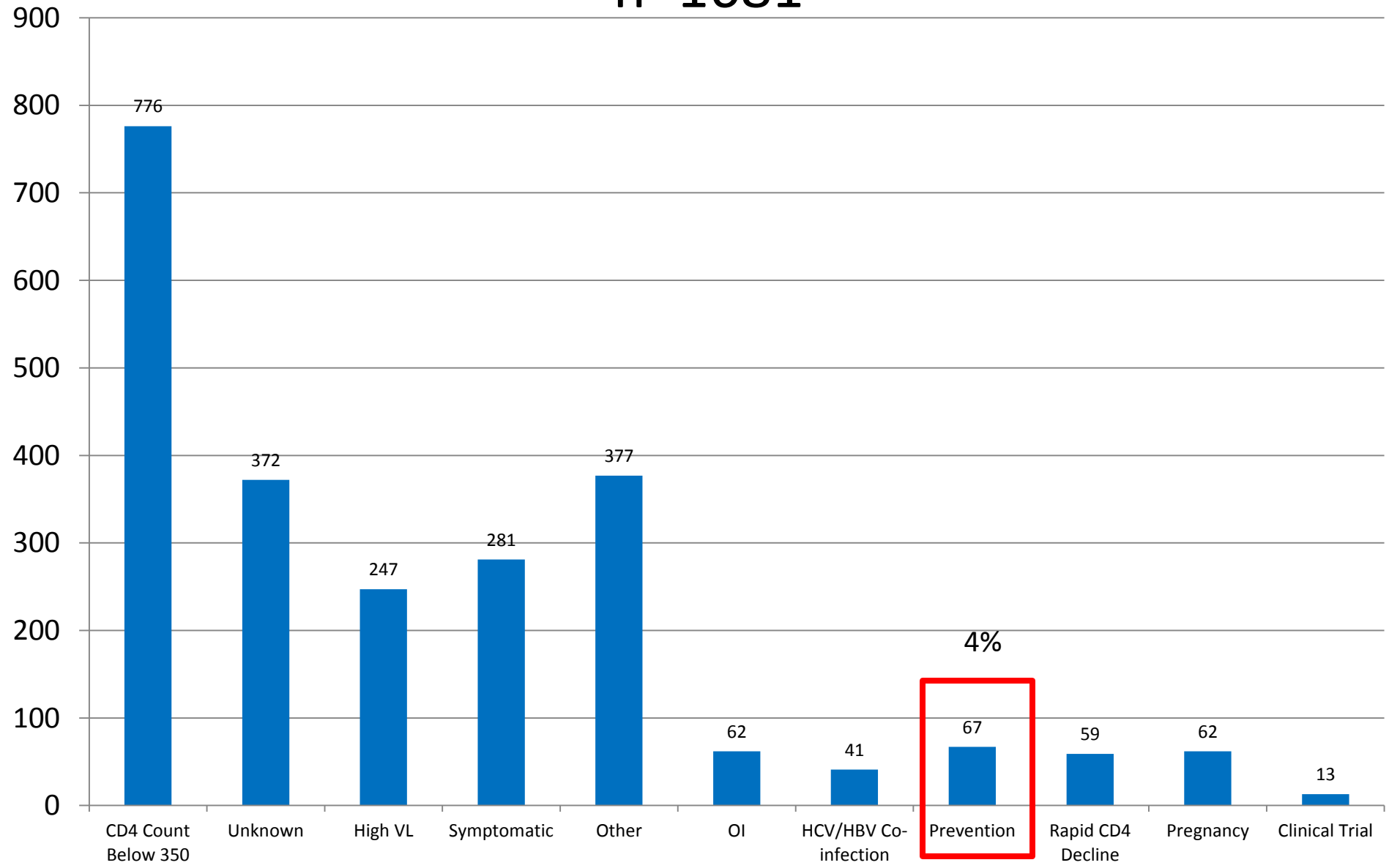
2011/12 & Q1-3 2012/13

	Starting ART (%) n=3606 (12% London cohort)	Switching ART (%) n=4956 (16% London cohort)
Efavirenz	53.2	8.1
Kivexa®	22.4	13.1
Atazanavir/r	21.4	27.6

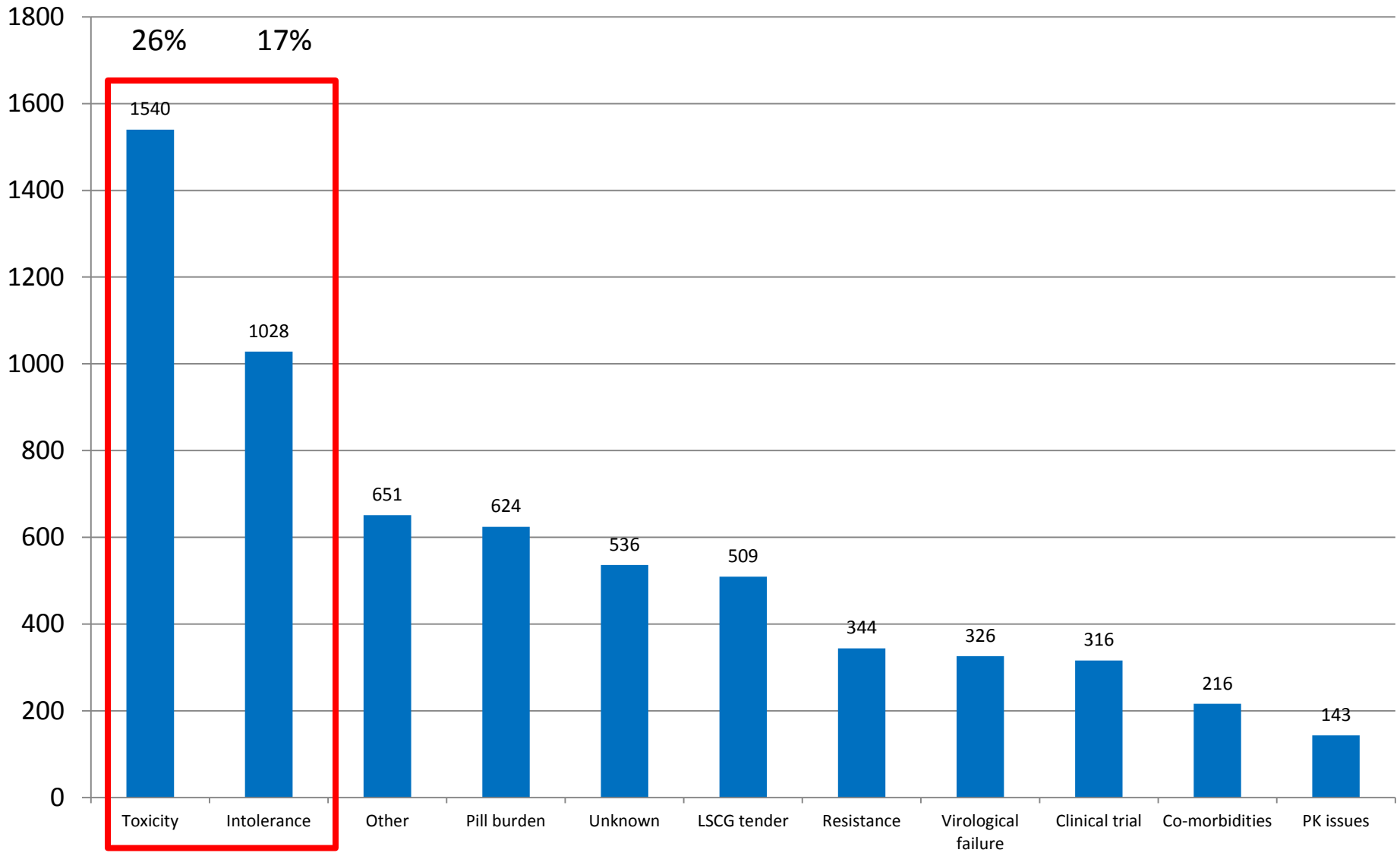
Reasons for starting ART 12/13 Q1-3
n=1681



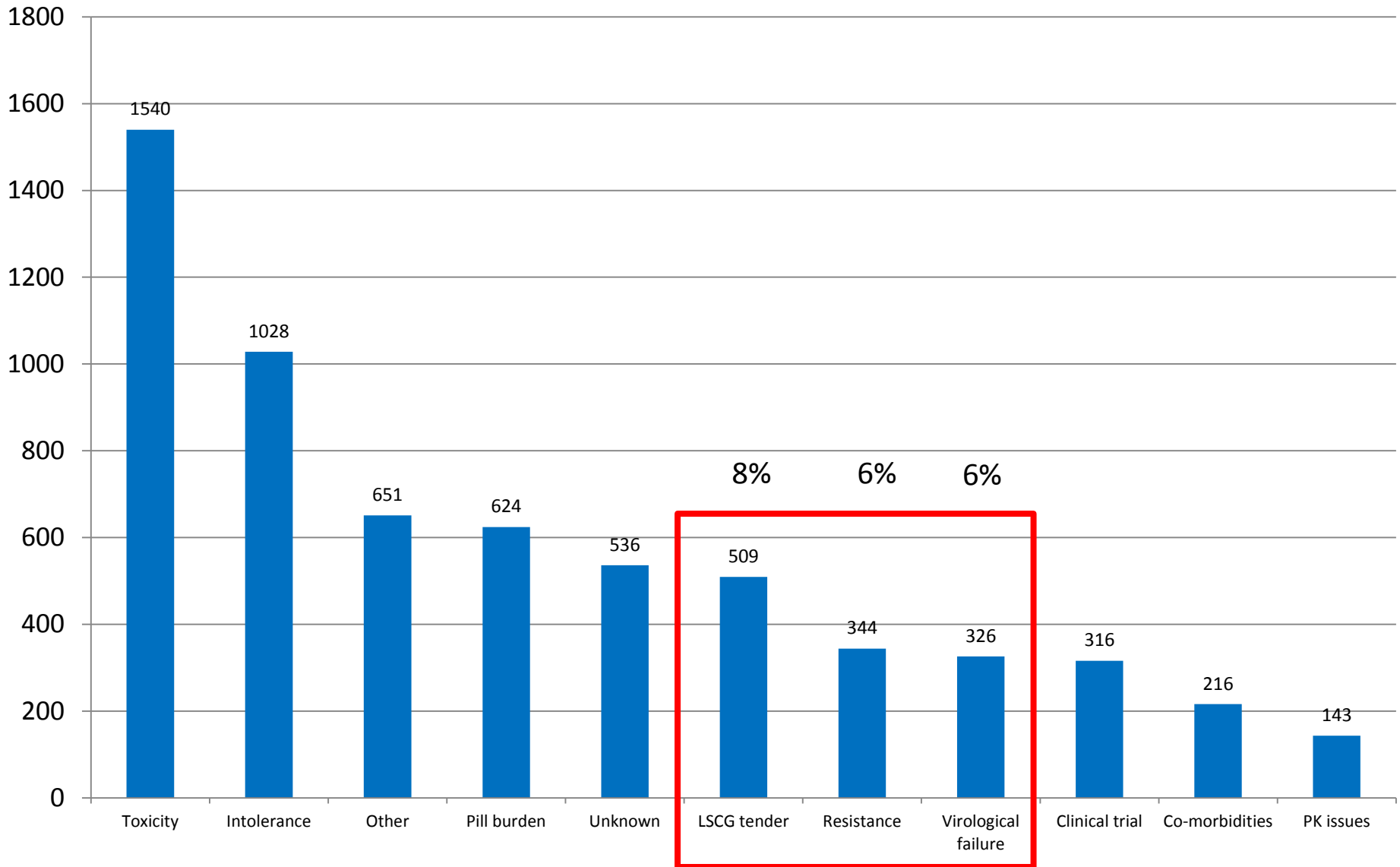
Reasons for starting ART 12/13 Q1-3
n=1681



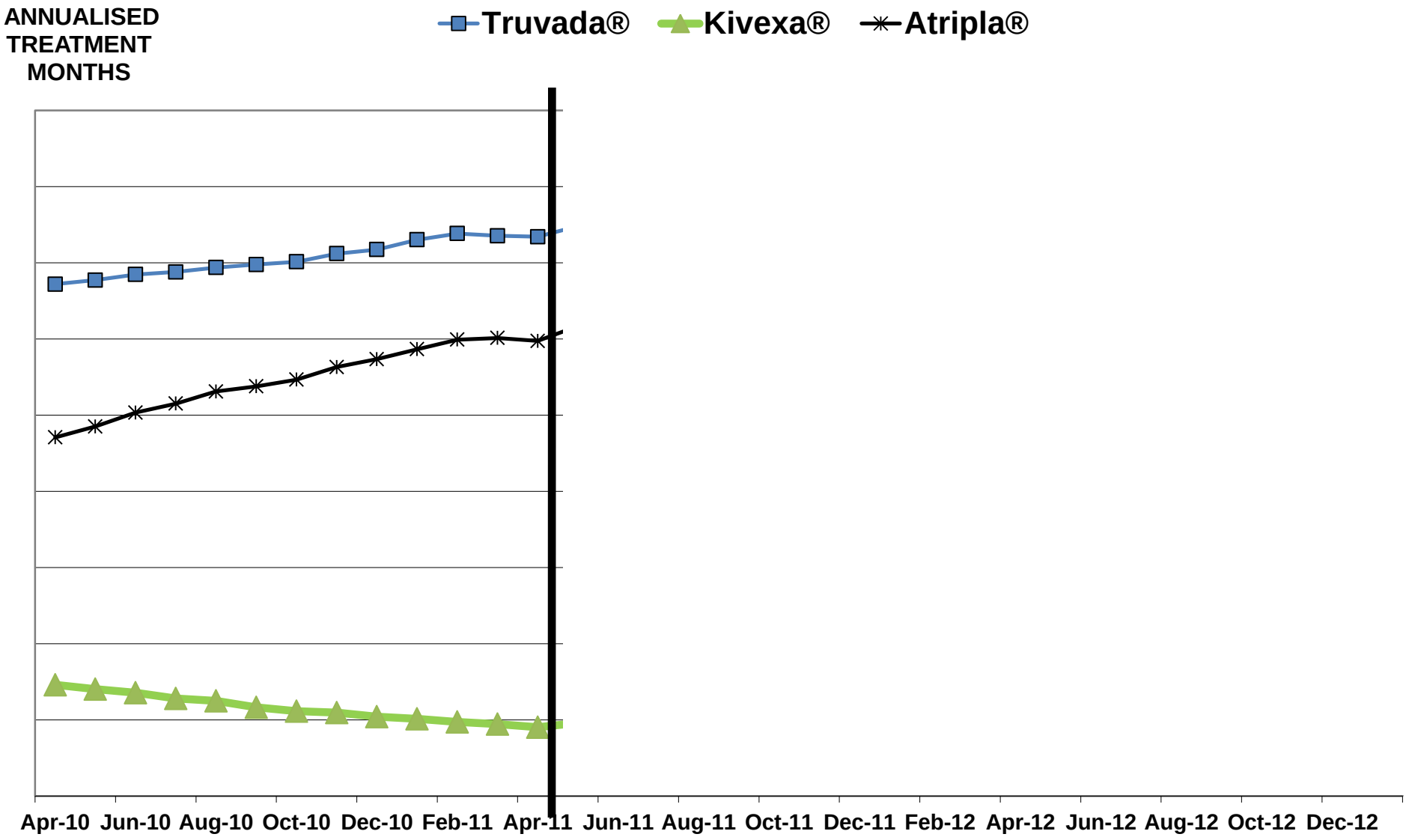
Reasons for switching ART 2011/12 & 12/13 Q1-3 n=6026



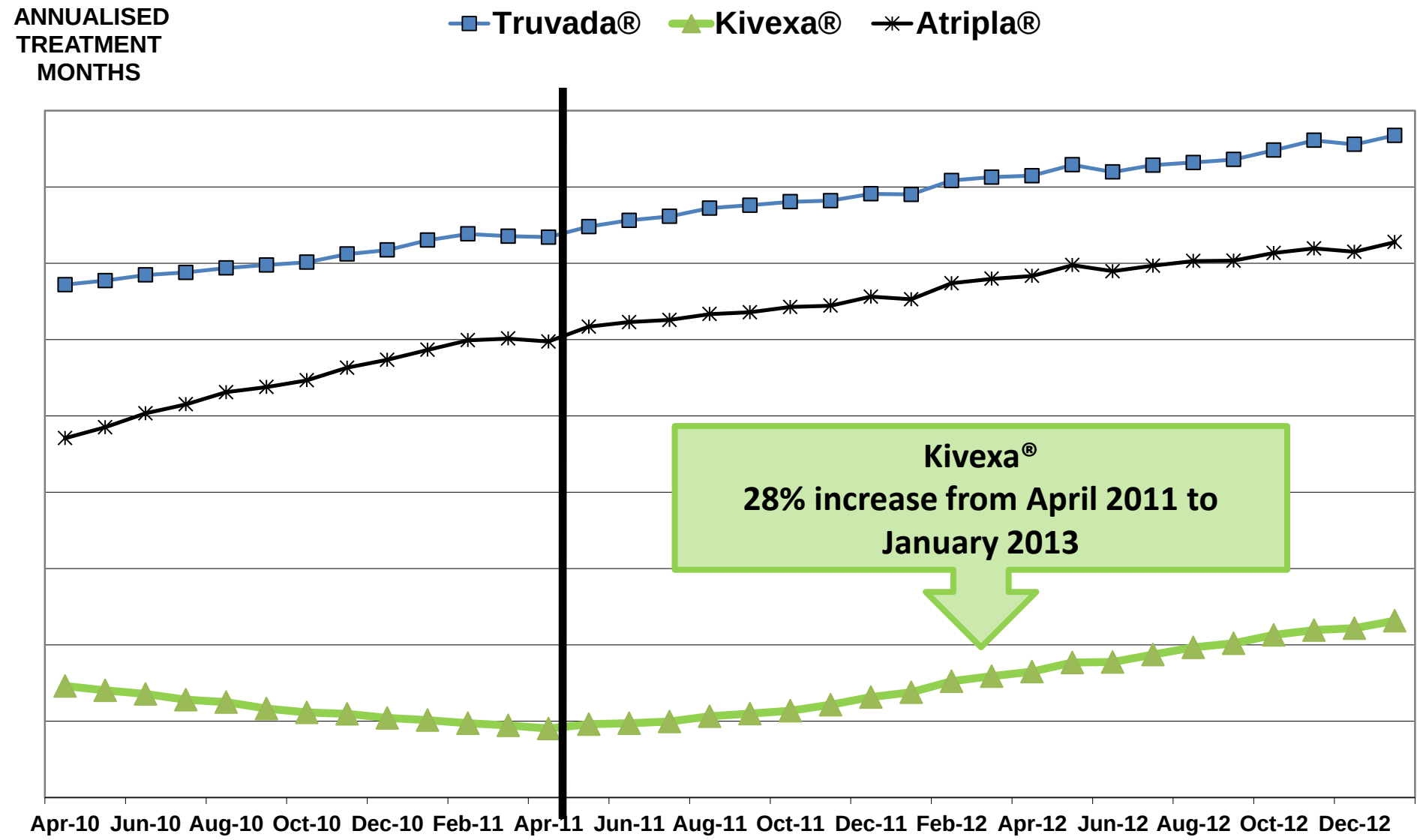
Reasons for switching ART 2011/12 & 12/13 Q1-3 n=6026



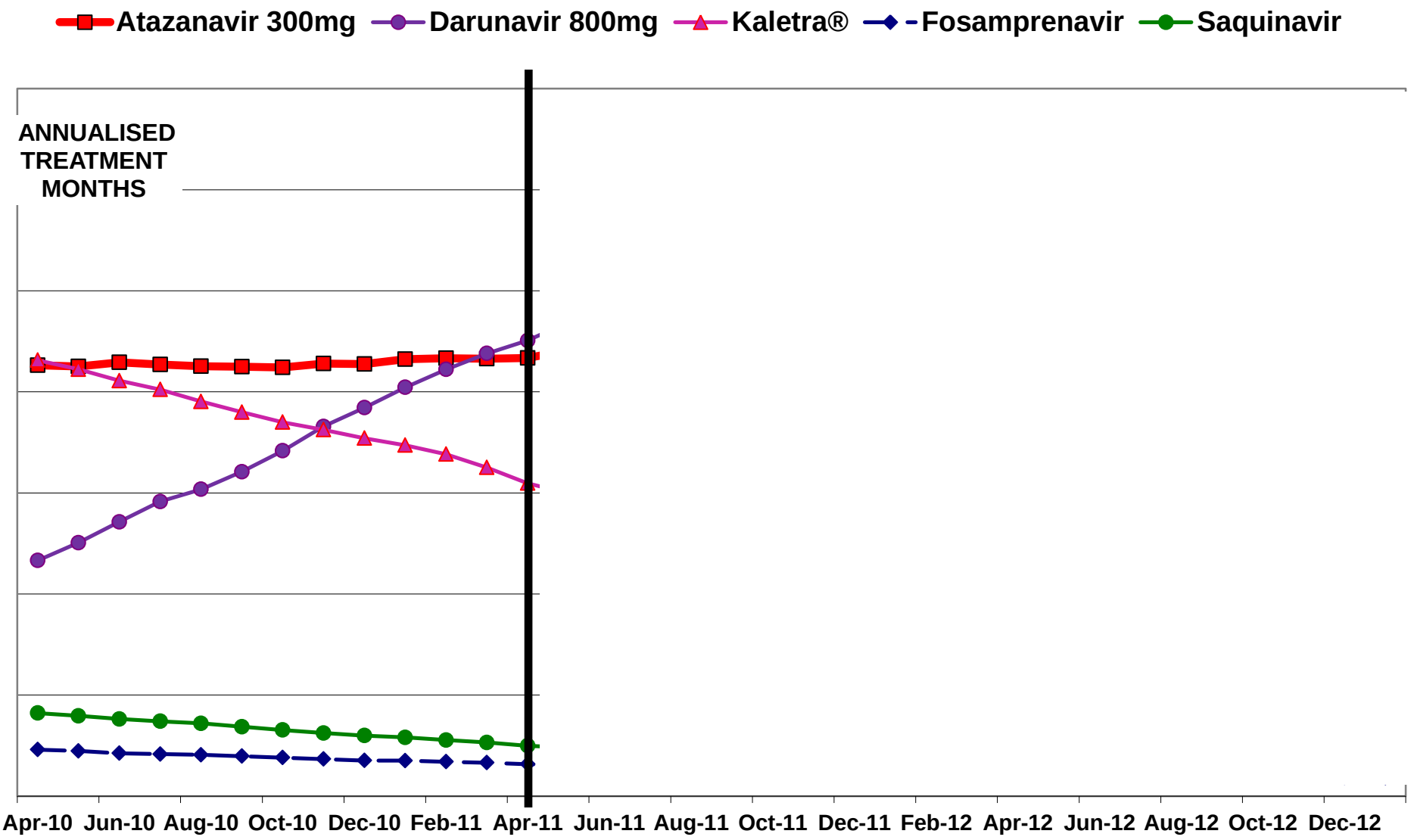
Pattern of kivexa® use pre-therapeutic tender



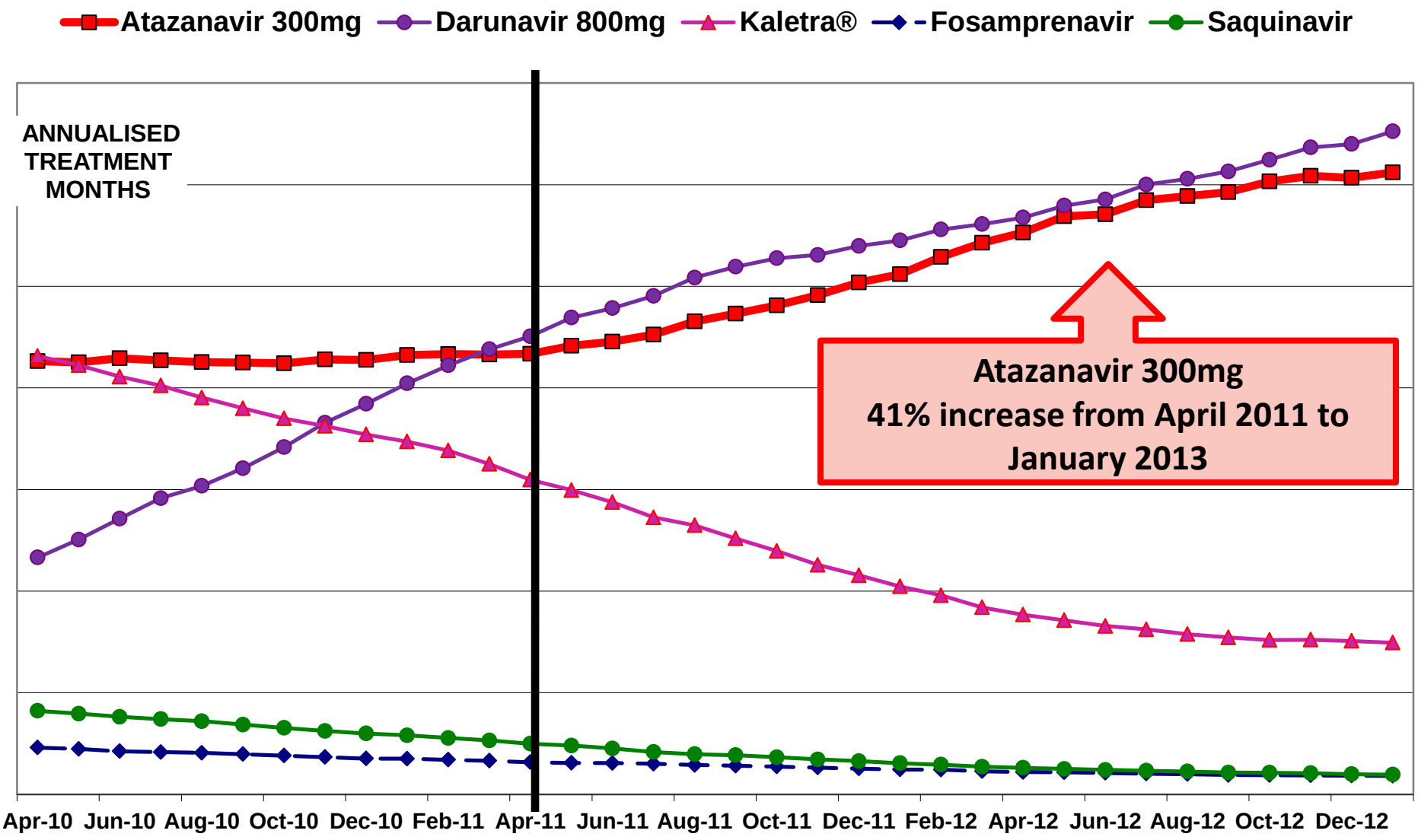
28% increase in kivexa® use post-therapeutic tender



Patterns of protease inhibitor use pre-therapeutic tender



41% increase in atazanavir/r use post-therapeutic tender



Outcomes - starting

	Kivexa®	Truvada®
Median baseline viral load log10	4.6	4.8
Median CD4 increase	69	61
% viral load <400 copies 3-6 months	92*	91#

VL available at 3-6 months post starting ART in <50%
* Median 127 days post starting ART (range 92-182)
# Median 131 days post starting ART (range 92-182)

Outcomes - starting

	Kivexa®	Truvada®
Median baseline viral load log10	4.6	4.8
Median CD4 increase	69	61
% viral load <400 copies 3-6 months	92*	91#

VL available at 3-6 months post starting ART in <50%
* Median 127 days post starting ART (range 92-182)
# Median 131 days post starting ART (range 92-182)

Outcomes - starting

	Kivexa®	Truvada®
Median baseline viral load log10	4.6	4.8
Median CD4 increase	69	61
% viral load <400 copies 3-6 months	92*	91#

VL available at 3-6 months post starting ART in <50%
* Median 127 days post starting ART (range 92-182)
# Median 131 days post starting ART (range 92-182)

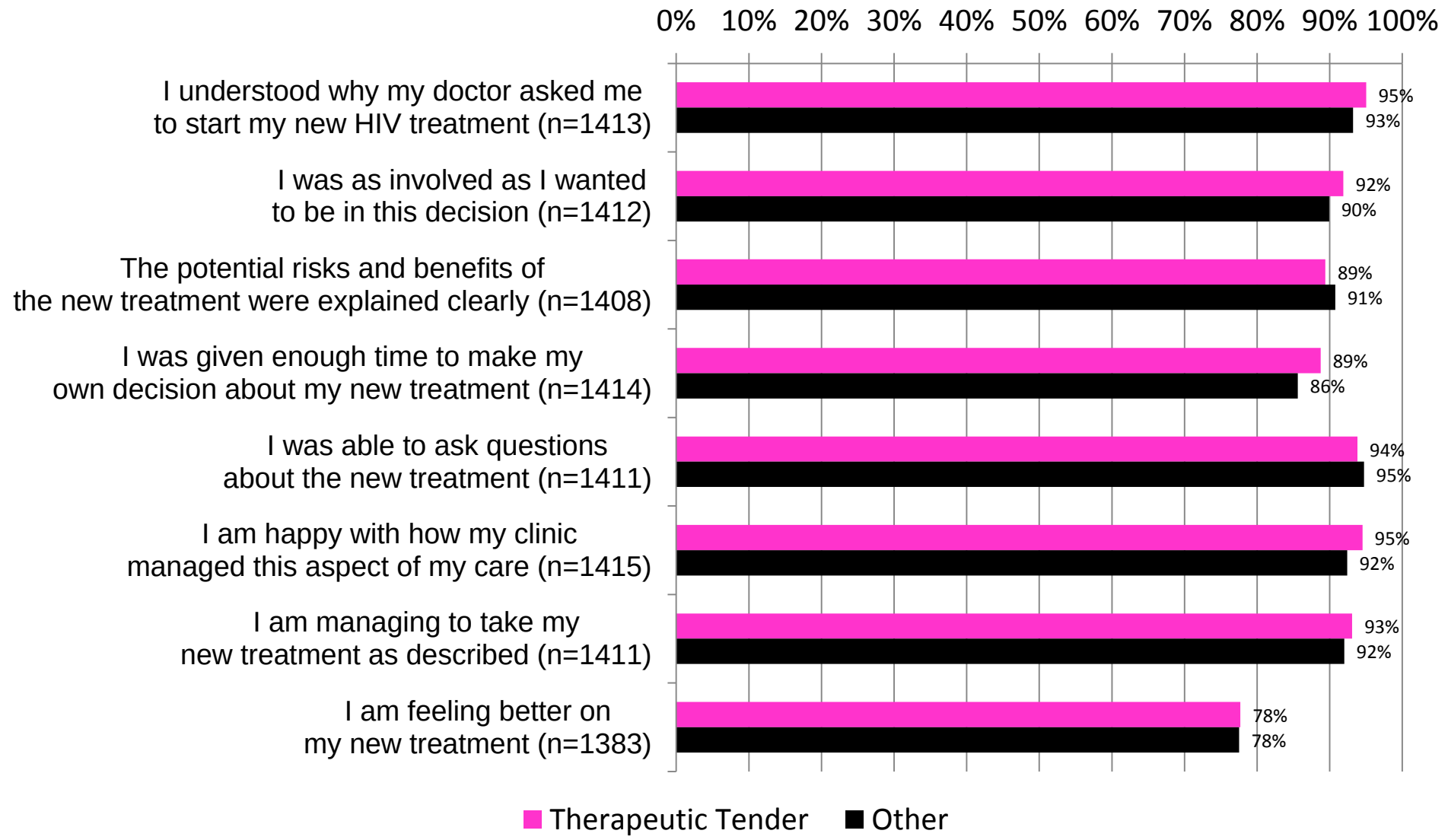
Outcomes - switching

	Atazanavir/r	Other
% viral load < 50 copies pre-switch	82	84
Median CD4 increase	11	4
% viral load <50 copies post switch	84	85
% viral load < 400 copies post switch	95	95

Outcomes - switching

	Atazanavir/r	Other
% viral load < 50 copies pre-switch	82	84
Median CD4 increase	11	4
% viral load <50 copies post switch	84	85
% viral load < 400 copies post switch	95	95

Proportion of patients who agree/strongly agree with statements (phase 1 - 2011/12)



Overall Savings

Drug	Cost saving £
Kivexa®	2,126,036
Atazanavir	2,065,132
Atripla®	923,667
Truvada®	714,288
Darunavir	1,256,383
Kaletra®	126,999
Total	7,212,505

Limitations

- Cohort data
- Incomplete data
- Limited duration of clinical data available post starting/switching ART

Conclusions

- Feasible
- Good uptake across services
- Clinical outcomes are as expected
- Patient experience positive
- Achieve significant financial savings
- Example of successful collaboration

Acknowledgments

- Patients
- HIV leads/pharmacists/clinical staff
- LSCG: Stephan Worrell
  Claire Foreman
  Jess Peck
  Peter Sharott
- HPA: Zheng Yin
  Alison Brown
  Graeme Rooney

Outcomes

- Overall 94% matched with SOPHID 2012 part 1
- CD4 available before and after start/switch: 89%
- Viral load available before and after start/switch: 80%
- Less than half had CD4 or viral loads available >3/12 after start/switch

Subsequent switchers
(Q1-3 2012/13)

- Total of 4196 start/switch episodes among 3793 individuals
- 274/3793 (7.2%) subsequently switching ≥ once (range 1-6)
- 32/550 (5.8%) subsequently switch away from kivexa
- 102/984 (10.4%) subsequently switch away from efavirenz
- 86/622 (13.8%) subsequently switch away from atazanavir/r

British HIV Association

BHIVA

19th Annual Conference of the British HIV Association (BHIVA)

16–19 April 2013

Manchester Central Convention Complex