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CD4 point of care testing improves patient satisfaction and reduces recalls to clinic (Speedy4)

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- CBJ, NEM and ACB have received funding to attend conferences from a number of pharmaceutical companies

Background

- CD4 testing remains an important prognostic marker
- The PIMA CD4 point of care (POCT) test has been validated in the UK¹, with good levels of patient acceptability
- POCT CD4 testing has been shown to increase linkage into care in South Africa² and Mozambique³

1. Herbert et al. Sexually transmitted infections (2012); 88, 413-417

2. Larson et al. JID (2012); 61; e13-e17

3. Jani et al. Lancet (2011); 378; 1572-79

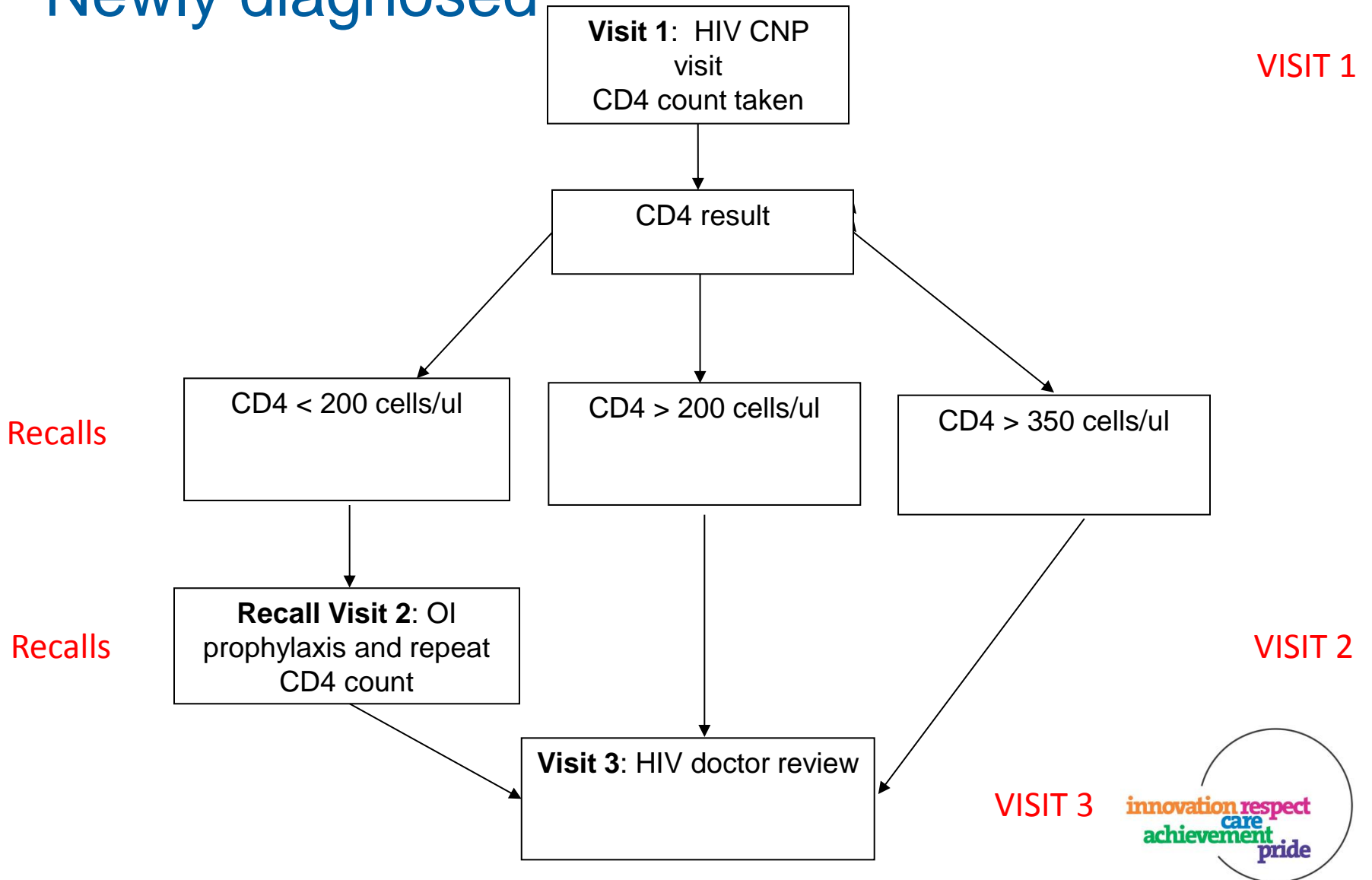
- Overall aim of Speedy4 study
 - to assess the impact of a new CD4 point of care test (POCT) on patient pathways (recalls), patient satisfaction, efficiency and costs
- This presentation
 - to assess the impact of a new CD4 point of care test (POCT) on **patient pathways, patient satisfaction, staff experience.**
 - Poster P4 – Title: Can we justify the use of a CD4 Point of Care test in a time of austerity?

Methods

- Population: Newly diagnosed patients
Not on ART (CD4>350)
- Prospective study in two phases
 - Phase 1: pathway mapping and collection of data on current pathway using venous sample for FACS CD4
 - Phase 2: implementation of PIMA CD4 and collection of data on new pathway
- Paper based participant questionnaires
 - Satisfaction, time and costs
- Staff proforma
 - Recalls, CD4 counts
- Staff questionnaire

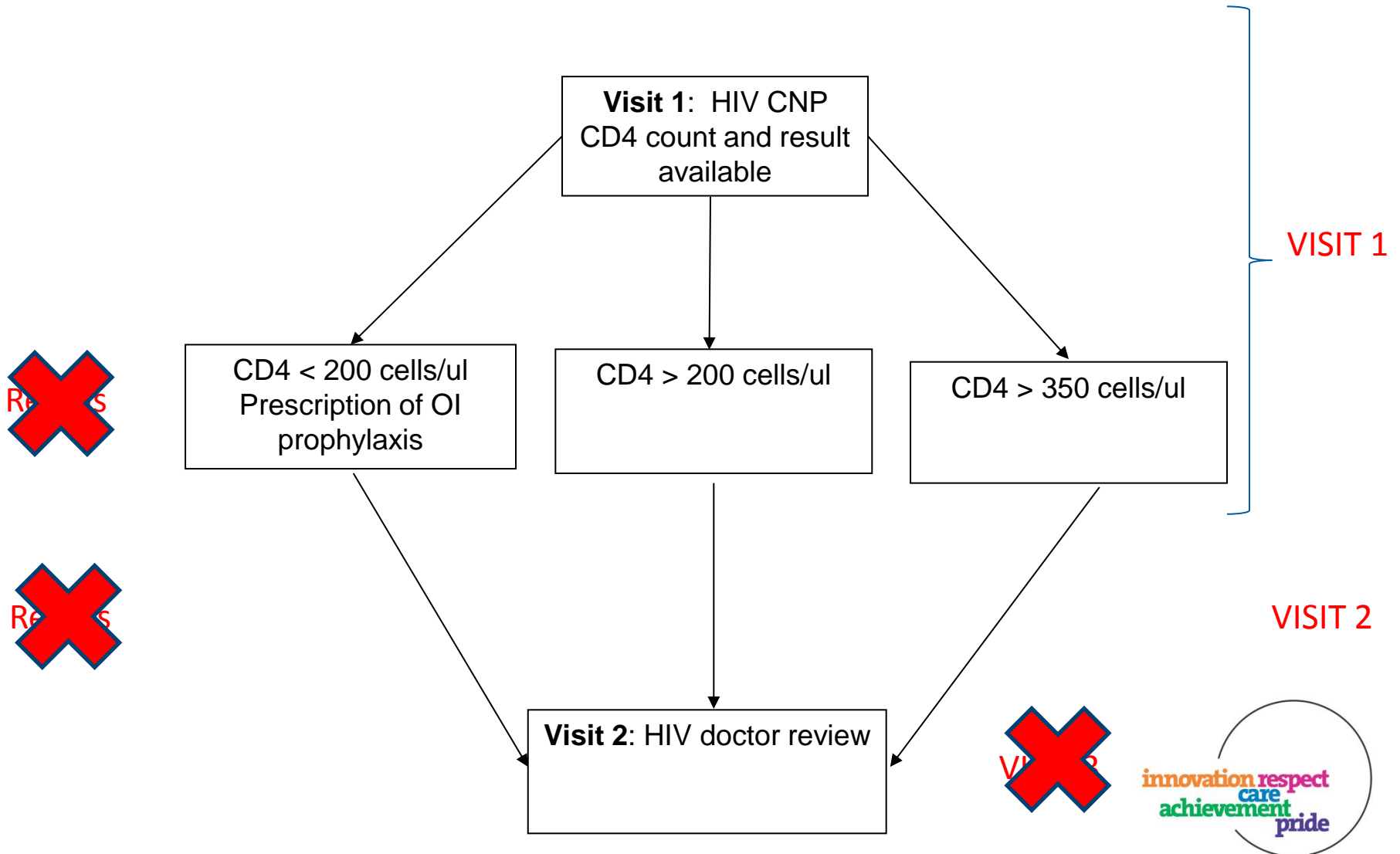
Lab pathway

Newly diagnosed



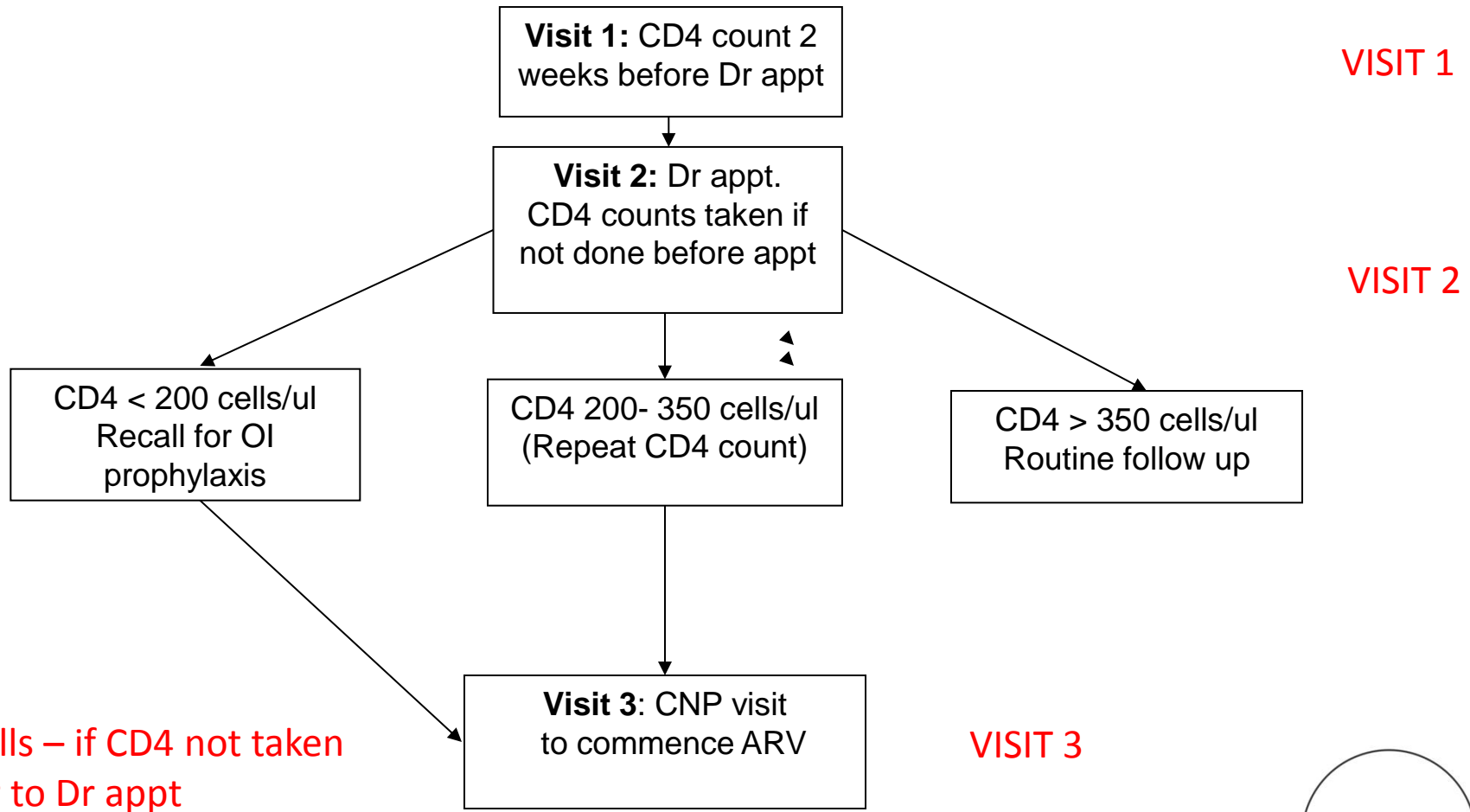
PIMA pathway

Newly diagnosed



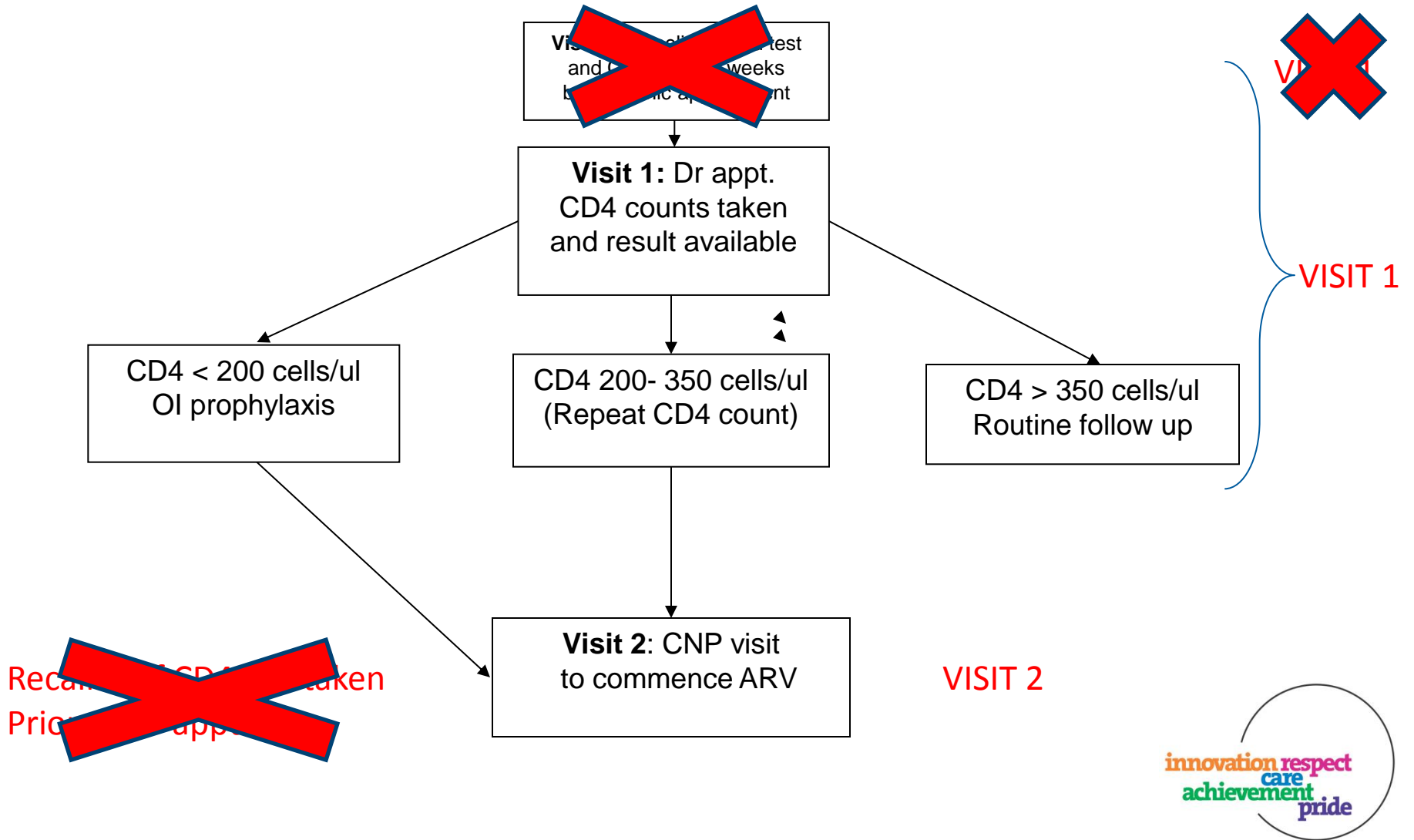
Lab pathway

Stable patients



PIMA pathway

Stable patients



Results

- Recruited between 12/9/11 and 14/9/12
- 199 participants recruited

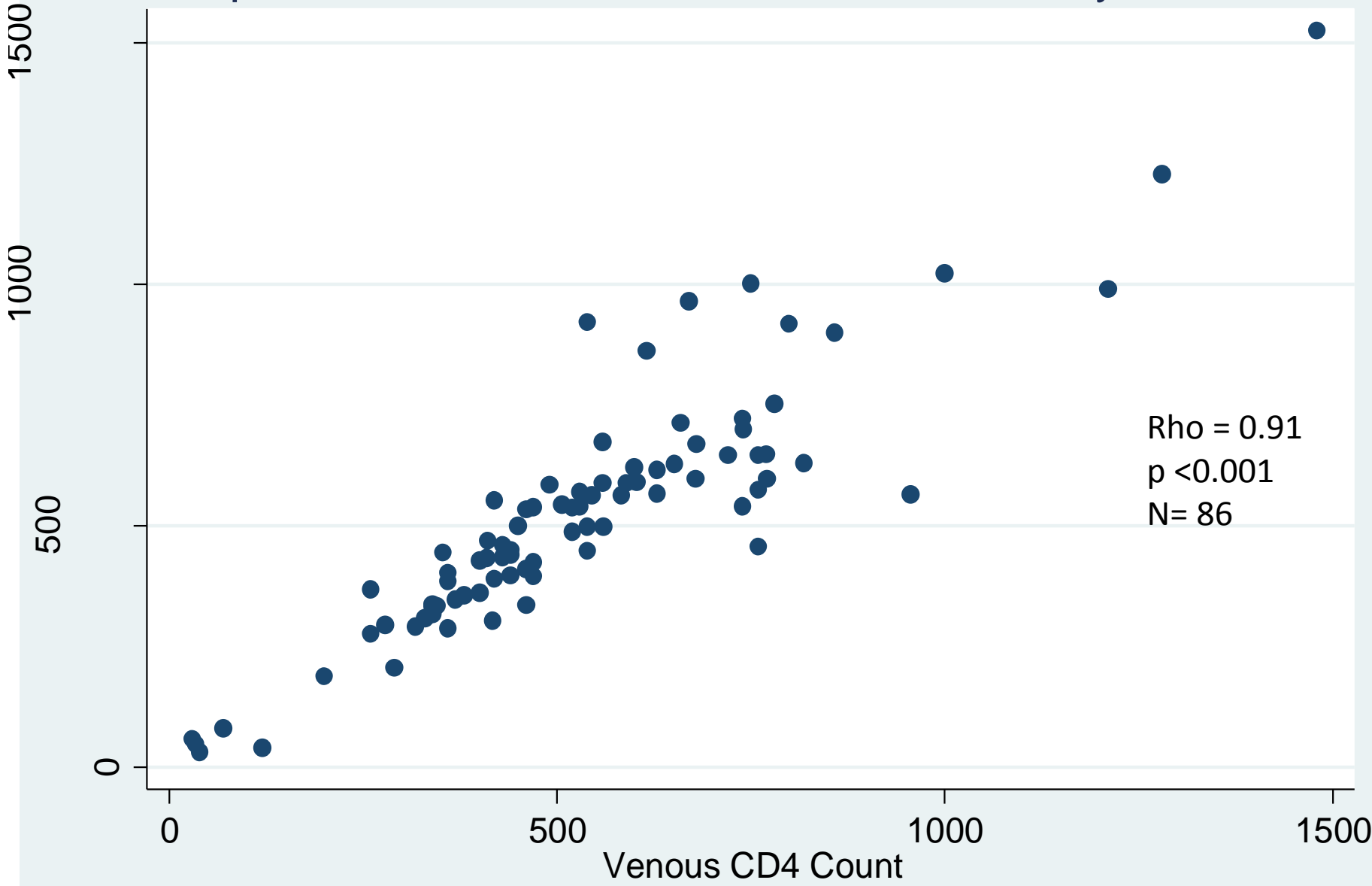
Phase	Stable	Newly diagnosed	Total
Phase 1 (lab)	85 (83.3)	17 (16.7)	102 (100)
Phase 2 (PIMA)	71 (73.2)	26 (26.8)	97 (100)
Total	156 (78.4)	43 (21.6)	199 (100)



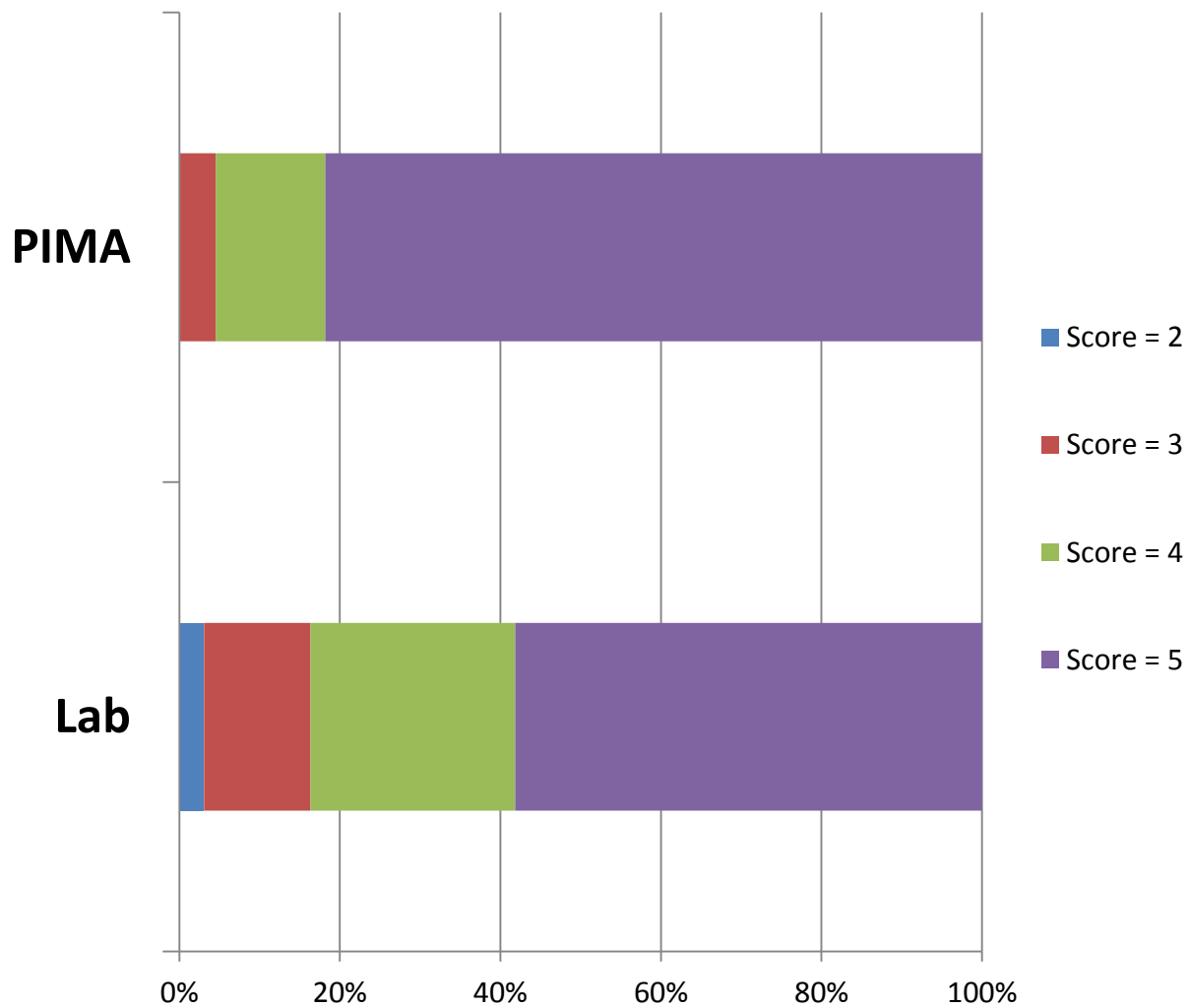
Study participants

		N (%)
Sex	Female	25 (12.6)
	Male	174 (87.4)
	Total	199 (100)
Risk Factor	Not known/not answered	5 (2.5)
	Heterosexual	40 (20.1)
	MSM	154 (77.4)
	Total	199 (100)
Age at test		Median (IQR)
		38 (31-46)
Laboratory CD4 Count result - median (IQR)	Newly diagnosed	384 (200-616)
	Stable	520 (420-660)
	All participants	506 (400-652)
Requiring PCP prophylaxis		N (%)
	Newly diagnosed	11 (26.2)
	Stable	1 (0.8)
	All participants	12 (6.8)

Comparison of PIMA CD4 counts to laboratory CD4 counts

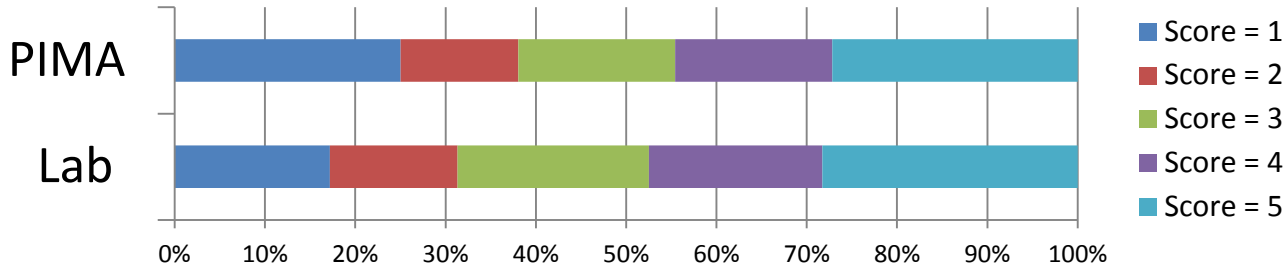


Satisfied with CD4 test



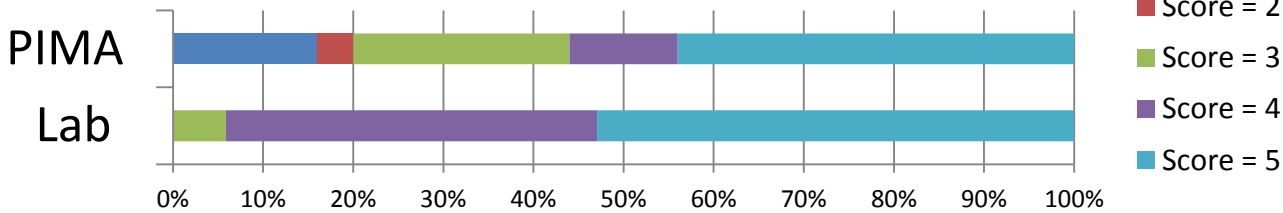
	Mean Score	P value
PIMA	4.8	<0.001
Lab	4.3	

Anxiety Scores All participants



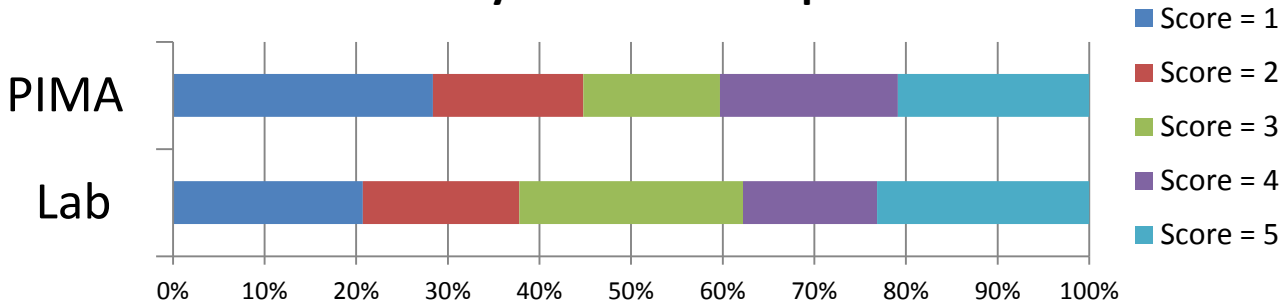
	Mean Anxiety Score	P value
Overall	PIMA 3.1	0.425
	LAB 3.3	

Anxiety Scores - Newly Diagnosed



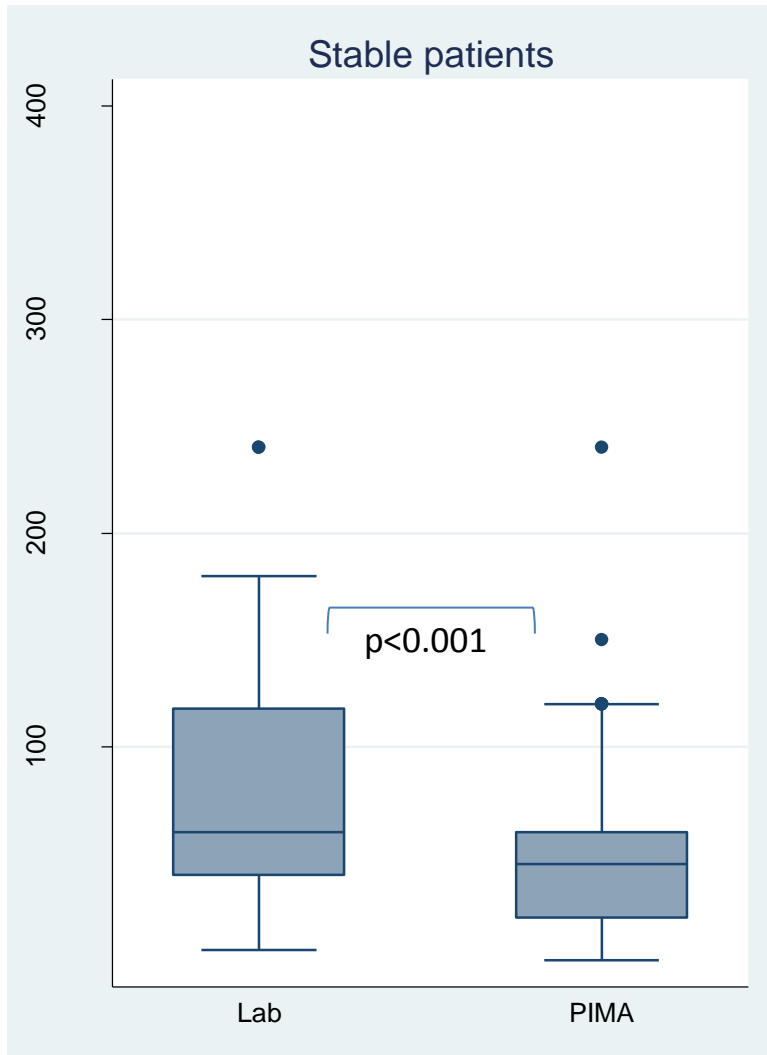
	Mean Anxiety Score	P value
Newly diagnosed	PIMA 3.6	0.108
	LAB 4.5	

Anxiety Score - Stable patients

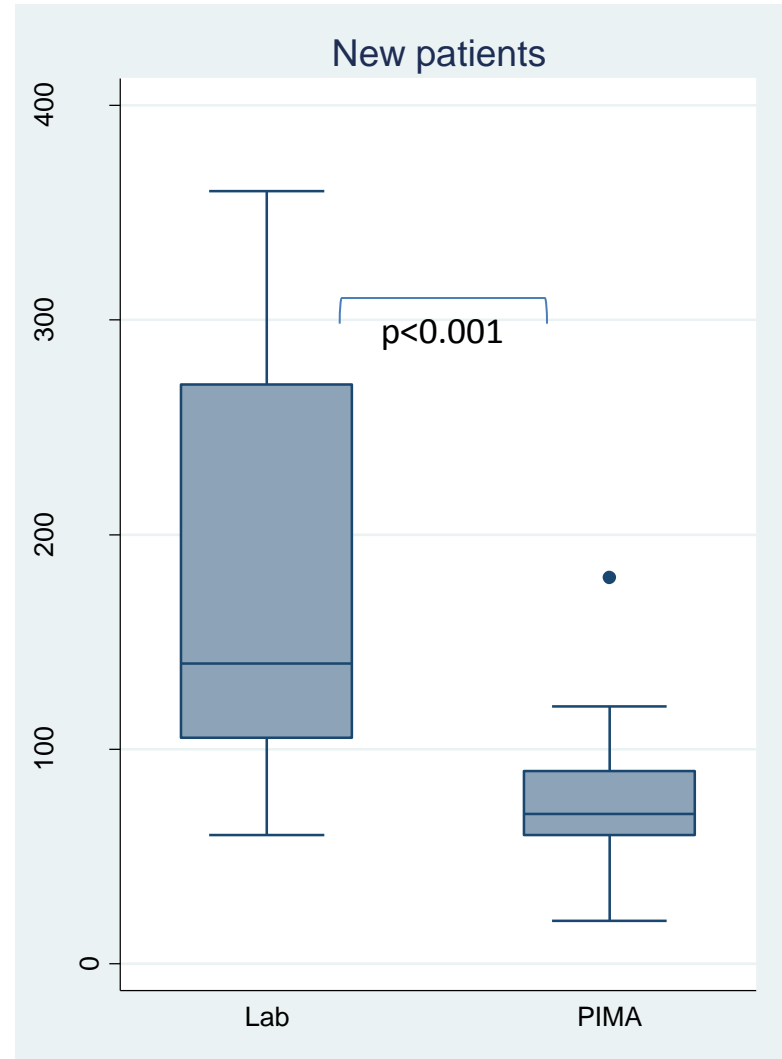


	Mean Anxiety Score	P value
Stable Patients	PIMA 2.8	0.544
	LAB 3	

Patient reported – overall time in clinic



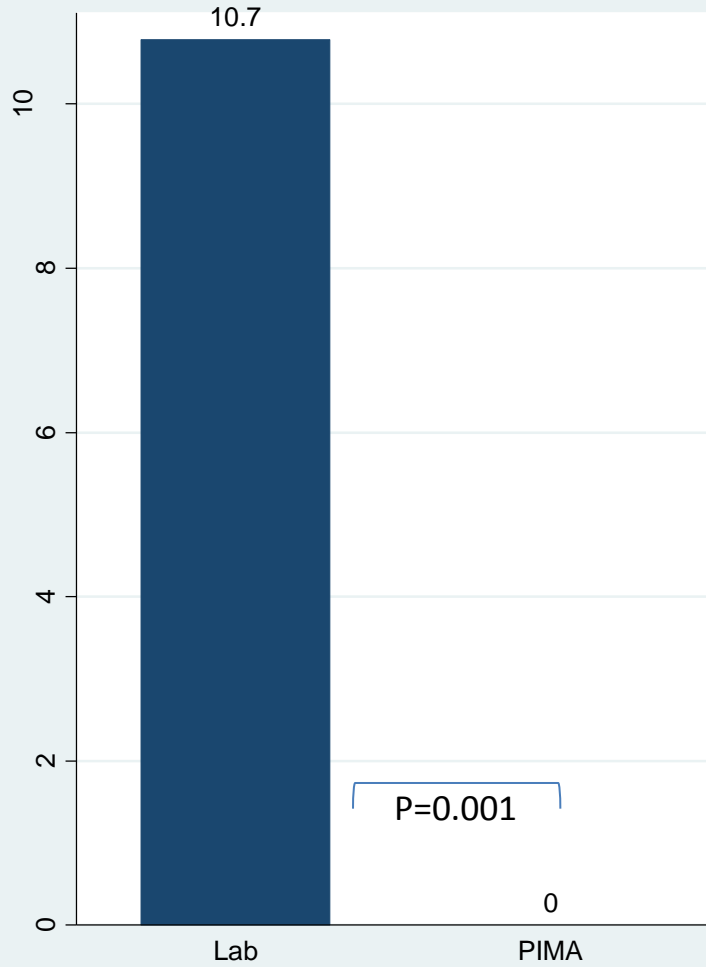
Difference in medians = 15 min



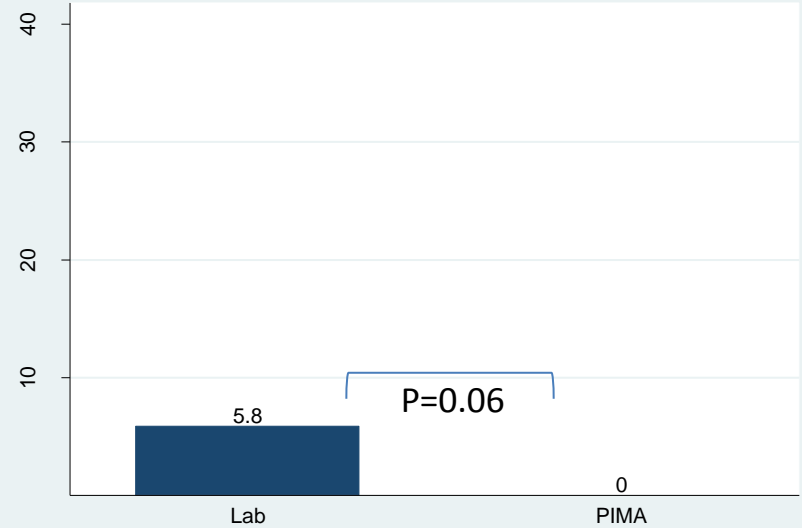
Difference in medians = 70 min

Recalls

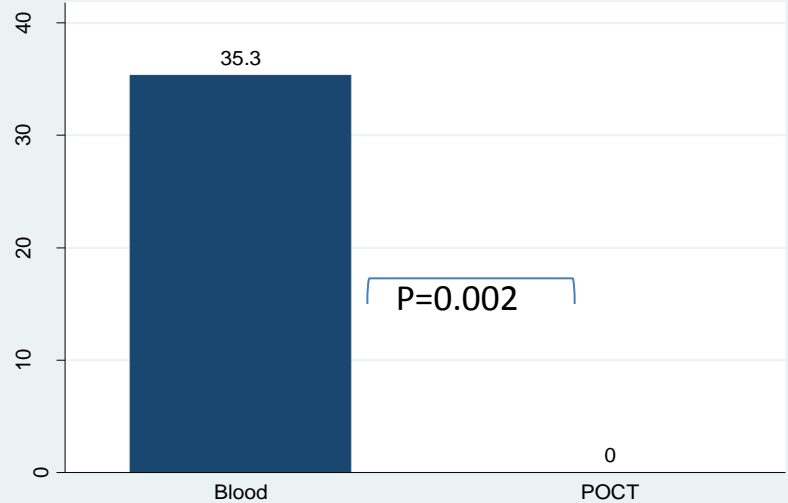
% of participants requiring recall



Recalls stable patients

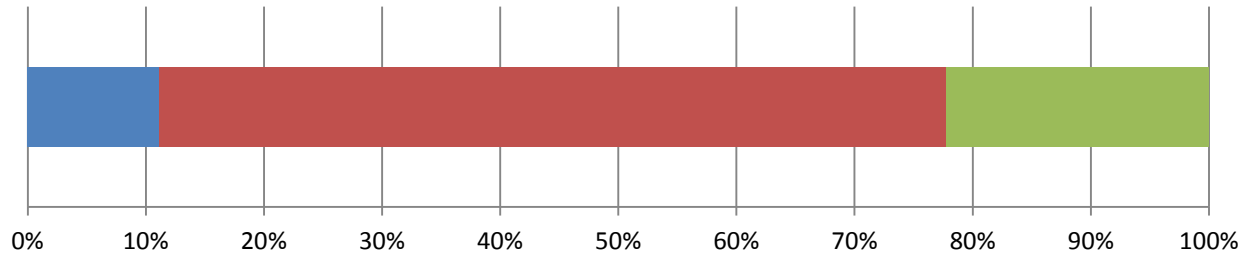


Recalls newly diagnosed



Staff satisfaction

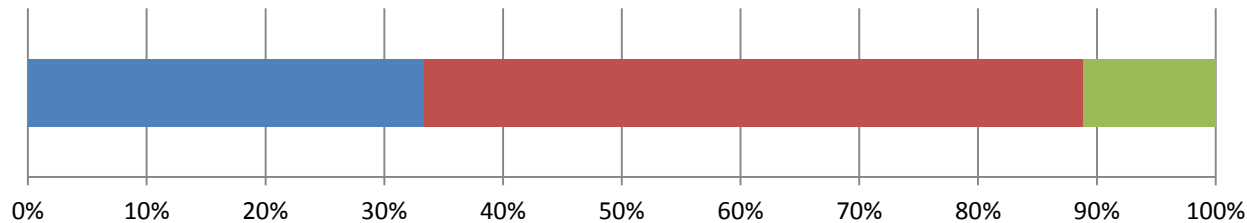
The PIMA test has assisted in the clinical management of patients



- neutral
- agree
- strongly agree

Median Score = 4 (agree)

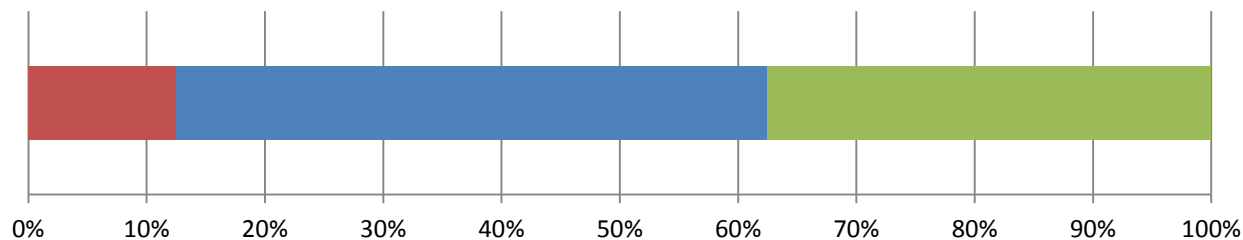
The PIMA test has helped improve communication with patients about their care



- neutral
- agree
- strongly agree

Median Score = 4 (agree)

Ease of performance of the PIMA test



Median Score = 4 (agree)

- neutral
- agree
- strongly agree

Summary

- The PIMA CD4 test
 - increased patient satisfaction (which was already high)
 - reduced the rate of recalls to clinic, particularly for new patients
 - Decreased the time patients spent in clinic for CD4 testing

Conclusion


- PIMA CD4 testing streamlined pathways, particularly for newly diagnosed individuals
- Please also see poster P4 for economic evaluation

Acknowledgements

- Study participants
- Study team
- NIHR CLAHRC for North West London
- Alere Medical

NIHR CLAHRC
for Northwest London



The logo of the British HIV Association (BHIVA) is a circular emblem with a complex, geometric pattern of lines and dots, resembling a stylized sun or a molecular structure. It is positioned behind the main title text.

British HIV Association
BHIVA

A light blue map of the United Kingdom is centered in the background. A red circular marker is placed on the map, indicating the location of Manchester in the north-western part of England.

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

16–19 April 2013

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Manchester Central Convention Complex