

# Reviewing BHIVA guidelines on screening for latent TB infection in HIV-positive patients in a high TB and HIV prevalence area in the UK

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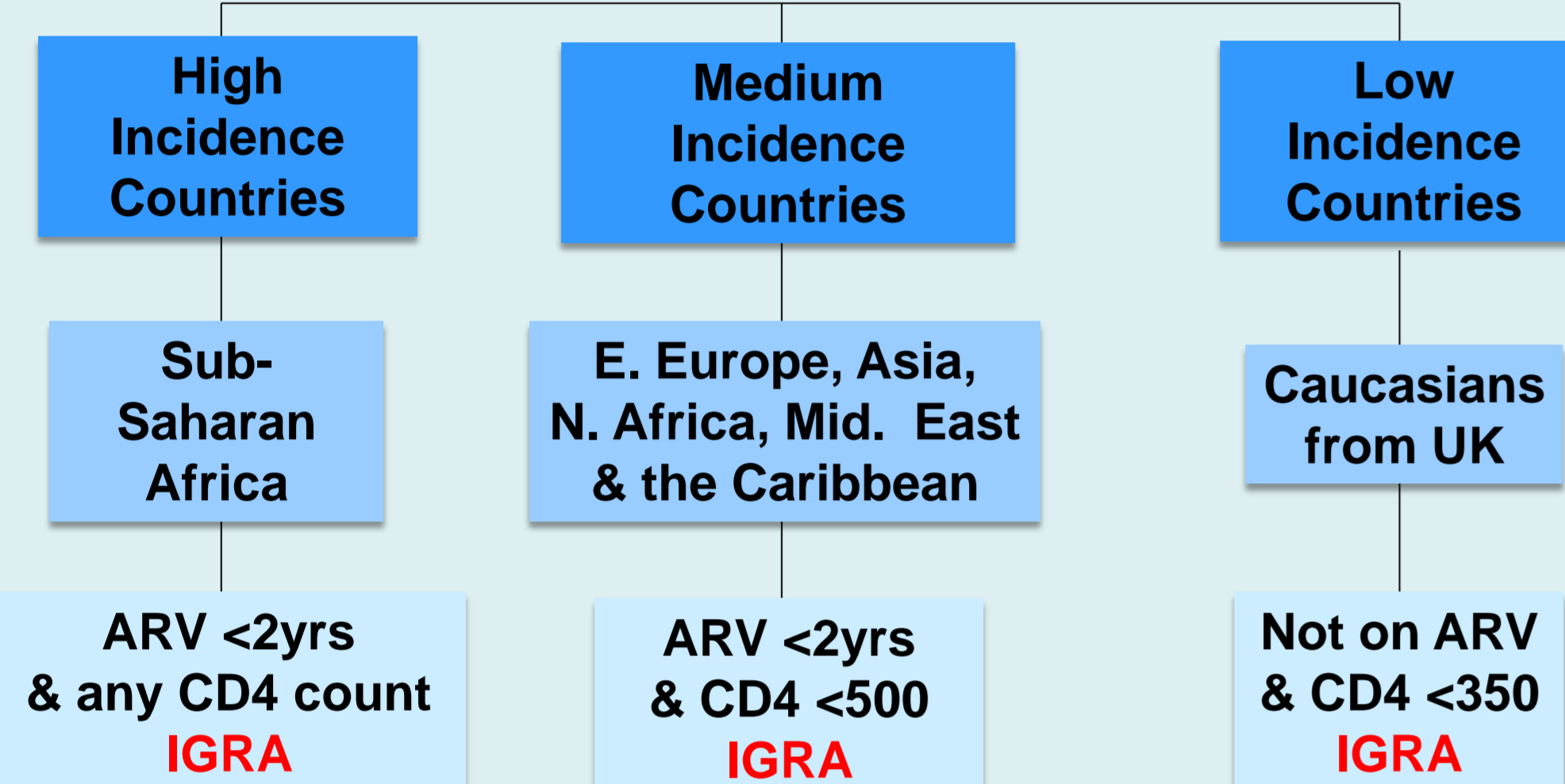
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## BACKGROUND

HIV-positive individuals with latent TB infection (LTBI) are more likely to develop rapidly progressive active TB with reactivation rates of ~10% per annum or ~50% cumulative lifetime risk<sup>1</sup>

Retention in HIV services is vital in terms of individual patient care, but also at the population level regarding transmission of TB and HIV

### BHIVA Guidelines on Screening for LTBI in HIV Positive Patients



Keywords: LTBI –latent TB infection; IGRA – interferon gamma release assay; ARV – antiretroviral therapy

## AIMS OF PROJECT

- To audit BHIVA LTBI screening guidelines at Newham HIV clinic
- To investigate timing of HIV and TB co-infection diagnoses at Newham and the Royal London Hospital (RLH), defined as:
  - HIV & TB diagnosed simultaneously
  - Known HIV in care and later diagnosed with TB
  - Known HIV, lost to follow up (LTFU), then later diagnosed with TB

## METHODS

A retrospective review of patients using paper and electronic records. Inclusion criteria:

- IGRA screening: all new HIV diagnoses attending Newham HIV clinic during 10/2011 to 10/2012 were reviewed according to BHIVA guidance
- TB/ HIV co-infection diagnoses: all HIV/TB co-infection cases
  - attending Newham in the same period
  - attending RLH from 01/2010 to 12/2012

## RESULTS

### 1) IGRA screening: new HIV diagnoses at Newham HIV Clinic

- 63 newly diagnosed HIV patients attended the clinic between 10/2011-10/2012
- 60% females; 40% males



### 1a) LTBI Screening in New HIV Diagnoses at Newham

Risk Category	Total No	Applicable for Screening	No. Screened	Positive T Spot
High*	38	34/38 ***	16/34	5/16
Medium**	23	15/23	9/15	3/9
Low	2	0	0	0

\*2/16 samples were not processed due to delivery issues

\*\*3/23 patients were screened outside of BHIVA guidelines, all were negative

\*\*\* 4 patients had active TB on HIV diagnosis

### 1b) Management of Positive T Spot Results

Of the positive T spot results 3/5 (60%) from the high incidence and 1/3 from the medium incidence countries were offered and accepted LTBI chemoprophylaxis

### 2) Review of TB/HIV Diagnoses at Newham and Royal London Hospital HIV Clinics

	HIV & TB diagnosed simultaneously	Known HIV in care and later diagnosed with TB	Known HIV LTFU later diagnosed with TB
<b>Total</b>	<b>25 (47%)</b>	<b>14 (26%)</b>	<b>14 (26%)</b>
<b>Gender</b>			
Females	12 (48%)	7 (50%)	8 (57%)
Males	13 (50%)	7 (50%)	6 (43%)
<b>Mean Age (years, range)</b>	<b>43 (29-62)</b>	<b>36 (26-46)</b>	<b>43 (26-56)</b>
<b>Ethnicity</b>			
Black Africans	18 (72%)	7 (50%)	9 (64%)
Black British/Caribbean/Other	2 (8%)	1 (7%)	2 (14%)
Indian Subcontinent	3 (12%)	0	1 (7%)
Eastern Europe	2 (8%)	3 (21%)	1 (7%)
UK Caucasian	0	2 (14%)	1 (7%)
Other	0	1 (7%)	0
<b>CD4 Cell Count</b>			
<100	18 (72%)	4 (29%)	8 (57%)
100-350	4 (16%)	6 (43%)	5 (36%)
>350	3 (12%)	4 (29%)	1 (7%)
Mean (Range)	108 (4-626)	296 (2-1313)	150 (6-855)
<b>Pulmonary TB</b>	<b>21 (84%)</b>	<b>8 (57%)</b>	<b>9 (64%)</b>
<b>Extra-pulmonary TB</b>	<b>4 (16%)</b>	<b>6 (43%)</b>	<b>5 (36%)</b>

Keywords: LTFU – lost to follow up

## CONCLUSION

### Outcome of LTBI Screening

BHIVA's stratified approach to screening for LTBI means targeting high-risk groups to avoid unnecessary tests and cost

It is essential adequate systems are in place to best perform the screening for LTBI

Our audit highlighted that LTBI screening can be improved in our clinic

### Retaining Patients in HIV Services

HIV testing in the community needs to be improved to tackle late presenters

The use of IGRA in screening for LTBI should be considered not only in new HIV diagnoses but also in patients who are lost to follow up and/or chaotic attendees

More consideration for retention in HIV care services are important to prevent morbidity

### References:

- Global Tuberculosis Control 2012, WHO, Geneva. [www.who.int/tb/publications/global\\_report/](http://www.who.int/tb/publications/global_report/)

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