MDR TB patients reported adverse events requiring a change to medication or additional therapy to control these effects—this compared to 33% of controls ($p<0.05$). Drug-induced hepatitis was no more frequent (22% vs 18%, MDR vs controls, $p=0.75$). Some patient safety investigations, such as antibiotic drug levels and audiometry, were only performed in MDR TB patients.

Abstract P162 Table 1

	MDR TB n=9 Median (range)	Drug sensitive TB n=17 Median (range)	p-Value
Inpatient total stay (days)	9 (0, 85)	0 (0, 58)	0.09
Number outpatient attendances	20 (11, 38)	8 (2, 34)	0.007
Number of anti-tuberculosis drugs	5 (4, 7)	4 (3,4)	<0.001
Duration of treatment (months)	19 (16, 24)	6 (6,15)	0.001
Full blood count	17 (1, 33)	5 (0, 39)	0.01
Liver function tests	25 (6, 38)	7 (1, 37)	0.001
C reactive protein	19 (0, 31)	5 (1, 36)	0.05
Sputum Acid Fast Bacilli	3 (0, 21)	0 (0, 17)	0.12
x-Ray chest	6 (1, 9)	2 (1, 9)	0.01
CT chest	0 (0, 1)	0 (0, 3)	0.47

Conclusion MDR TB remains a highly resource-intensive area of TB care. Modern NHS data systems are capable of recording utilisation and timing of specialist tests. These simple measures can allow services to develop patient-focussed quality outcomes as well as feedback results to clinicians to improve cost-effectiveness in specialist MDR TB management.

P163 INCIDENCE AND CLINICAL RELEVANCE OF NON-TUBERCULOUS MYCOBACTERIA ISOLATES BASED ON 10 YEARS EXPERIENCE AT YORK HOSPITAL, NORTH YORKSHIRE (UK)

doi:10.1136/thx.2010.151043.14

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Background Non-tuberculous mycobacteria (NTM) are widely distributed in the environment and are difficult to diagnose and treat. Previous non-UK studies have reported increasing incidence and geographical variation in NTM isolates.[1] We characterised the frequency and clinical relevance of positive NTM cultures in a large UK hospital and the effect of introducing a new liquid culture.

Methods We examined the notes of all patients from whom NTM had been isolated between July 1999 and September 2009. Diagnostic criteria for NTM disease published by the American Thoracic Society (ATS) were used to determine clinical relevance.[1]

Results NTM was isolated from 100 patients. 91 (91%) were respiratory tract samples. 14 (15%) of these met ATS criteria for NTM pulmonary disease. MAC (38%), *M. xenopi* (19%) and *M. malmonese* (11%) were most common. Of these, 14%; 6% and 30%, respectively, met the ATS criteria. The most clinically relevant species were *M. bovis* (1/1; 100%), *M. simlae* (1/2; 50%), *M. kansasii* (2/6; 33%) and *M. malmonese* (3/10; 30%). Cough ($p=0.02$) and night sweats ($p=0.027$) were associated with clinical relevance. Being asymptomatic was linked to not meeting ATS diagnostic criteria ($p=0.029$). Pre-existing pulmonary disease ($p=0.012$), ABPA (0.019) and dyspnoea ($p=0.013$) predicted having a second positive sputum.

The annual NTM isolates increased over 10 years. The liquid culture system was introduced in September 2006. Using a χ^2 comparison test there was no statistically significant difference in clinically relevant isolates pre and post September 2006 ($p=0.633$).

Conclusion This is the first study of NTM isolates in the north of England. Our study shows prevalence of clinically relevant disease, with isolates of *M. kansasii* and *M. malmonese* most likely meeting ATS criteria. MAC was most prevalent (38%). Since the introduction of a new liquid culture system the number of isolates increased, but the clinical relevance did not. The spread of species isolated differed from previous studies[1] which highlights the geographical variation and the importance of regional data.

REFERENCE

1. **Griffith DE,** *et al*. An official ATS/IDSA statement: diagnosis, treatment, and prevention of nontuberculous mycobacterial diseases. *Am J Respir Crit Care Med* 2007;**175**:367–416.

P164 ENABLING NEXT DAY PROCESSING OF BLOOD SAMPLES WITH T-SPOT.TB

doi:10.1136/thx.2010.151043.15

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Introduction The T-SPOT®.*TB* assay involves the collection of peripheral blood samples for analysis of the T cell response to TB-specific antigens. Traditionally the blood sample has been required to be processed on the same day as it is collected. This study was designed to investigate a new procedure, for use in combination with the T-SPOT.*TB* assay, which offers the potential to initiate the antigen stimulation the day following blood collection, thereby allowing overnight transportation of samples from the point of collection to a processing laboratory.

Methodology Subjects were enrolled at two sites; one in the UK and one in South Africa. Patients all provided informed consent and a brief medical history; blood samples were taken into two lithium heparin tubes.

One tube was selected for immediate testing by the T-SPOT.*TB* assay. The second tube was stored overnight at room temperature. Immediately prior to testing the stored blood sample, the T-Cell *Xtend* reagent (Oxford Immunotec Ltd, UK) was added to the sample and incubated for 20 min.

Results A total of 208 participants were enrolled into the study and 3/208 (1.4%) subjects were excluded due to blood collection errors at enrolment. Of the 205 samples available for analysis, 10/205 (4.9%) failed to yield a valid T-SPOT.*TB* test result with either the fresh blood (3 samples) or the stored blood (7 samples) leaving 195 paired results with both fresh and stored blood samples for analysis (see Abstract P164 Table 1).

Abstract P164 Table 1 Overall agreement in the T-SPOT.TB assay result between fresh and overnight stored blood samples (n=195)

		Stored blood	
		Positive	Negative
Fresh blood	Positive	44	2
	Negative	2	147

The overall agreement for the study was 97.9% (191/195); 95% CI 94.8 to 99.4%, with a kappa value of 0.943 which indicates excellent agreement.

Conclusions The T-SPOT.*TB* assay on overnight stored blood samples, when combined with a pre-incubation step utilising the T-Cell *Xtend* reagent, yields results that are equivalent to those obtained with fresh blood samples. This allows, when combined with overnight shipment to a central testing facility, greater flexibility in when and where blood samples can be collected.