Abstract P26 Table 1. Outcome of a negative T spot test.

Negative T spot test	n (199)	Chemoprophylaxis given	CXR changed management?	Patient outcome (immuno-suppressant)	LTBI reactivation
CXR normal	77.9%, (155)	0	No	**5.2% (8)** not commenced **7.1% (11)** patient declined **0.6% (1)** stopped (recurrent LRTIs) **0.6% (1)** stopped (new renal CA)	0
CXR abnormal (possible previous TB)	8%, (16)	0	No	**6.25% (1)** not commenced (disease activity too low) **6.25% (1)** stopped (leg ulcers) **6.25% (1)** stopped (wheeze) **6.25% (1)** stopped (leucopenia)	0
CXR abnormal (other)	6%, (12)	0	No	**8.3% (1)** patient declined	0
CXR previously normal	2.5%, (5)	0	No	**20% (1)** patient DNA f/u	0
CXR not done	5.5%, (11)	0	N/A	**9.1% (1)** patient declined **45.5% (5)** not commenced (disease activity too low)	0

patients who were being considered for immuno-suppresant therapy.

Methods All IGRAs requested from Glasgow Royal Infirmary (GRI) over a 21 month period were retrospectively assessed for the following: patient history, test indication and result, CXR report and patient outcome. GRI serves the most deprived population in the UK. A single laboratory provides TB bacteriology for the whole of Glasgow, and is the sole provider of IGRA testing for LTBI utilising the 'T-Spot.*TB*'.

Results Between August 2010-May 2012, 354 T-Spot.*TB* tests were performed. Planned immuno-suppressant therapy was the indication in 70% (n = 248); etanercept was the most commonly proposed drug (32%, n = 78), followed by adaluminab (29%, n = 72), anti-TNF not otherwise specified (11%, n = 28) and infliximab (6%, n = 15). Of those for whom immunosuppression was the indication, 80% (n = 199) of T-Spot.*TB* tests were negative, 17% (n = 41) indeterminate and 3% (n = 8) positive. A CXR was performed in all but 6% (n = 11). CXR findings and patient outcomes for patients with negative T-Spot.*TB* tests are summarised in table 1. All 16 abnormal CXRs were referred to a TB specialist for review and none had chemoprophylaxis commenced or any alterations in their management recommended.

Conclusions With increasing use of IGRAs, new guidance on screening for LTBI prior to anti-TNF therapy is required. In our cohort of 248 patients, the majority had a negative T-spot test reflecting that despite high levels of deprivation TB prevalence in Glasgow is low. CXR did not alter patient management, TB chemoprophylaxis was not given in any case and there were no cases of LTBI reactivation or *de novo* TB within the follow-up period (11–32 months). We propose that if IGRA is negative, CXR is not required as part of screening for LTBI prior to anti-TNF therapy.

P27 DOES A DIRECT RADIOLOGY REFERRAL SYSTEM TO A RAPID ACCESS TUBERCULOSIS CLINIC IMPROVE TB DIAGNOSIS?

CA Lynch, S Sabah, M Dedicoat, H Kunst; *Birmingham Heartlands Hospital, Birmingham, United Kingdom*

10.1136/thoraxjnl-2013-204457.177

Abstract P27 Table 1. Number of days between radiology rapid access referral, clinic review and initiation of treatment in subgroups of active TB cases.

	Smear positive pulmonary TB (n= 47)	Culture positive pulmonary TB (n=33)	Extrapulmonary TB (n=31)
Number of days between radiology referral to rapid access TB clinic and clinic review			
Admitted	2	4	2
< 5 days	14	10	8
5-14 days	28	16	18
>14 days	3	3	3
Number of days between radiology referral to rapid access TB clinic and starting anti-TB treatment			
Admitted	2	4	2
< 5 days	13		5
5-14 days	23	8	5
14-28 days	5	9	4
>28 days	4	12	15

Introduction Delayed diagnosis of active pulmonary tuberculosis (TB) is common and significantly contributes to transmission especially in smear-positive pulmonary TB. Persons with symptoms suggestive of pulmonary TB often have chest radiographs prior to sputum examination and clinical assessment by a specialist. There is no NICE guidance on direct radiology referral pathways to a rapid access TB clinic. This question prompted us to examine all cases referred by the radiology department to our rapid access TB clinic at a centre of England tertiary referral centre.

Method We conducted a retrospective study of consecutive patients with features of active TB on chest radiograph referred by the radiologists to the rapid access TB clinic from 2008 to 2013. All chest radiographs were reviewed by TB consultants who arranged clinic appointments according to the degree of clinical suspicion of active disease.

Results 223 cases were referred during the period of November 2008 to May 2013. All patients were requested to attend the TB clinic, 4 patients did not attend clinic.

Of 223 cases, 111 patients (50%) were diagnosed with active TB. Mean age of all active cases was 38 years (range 16–83 years) with a male predominance (62, 56%). Of 111 cases, 61 (55%) were from Indian subcontinent, 22 (19%) from Africa, 25 (22%) were UK born and 3 cases were born in other countries.

80 cases had pulmonary TB (72%), of whom 47 (59%) were smear positive. 28 cases (25%) had extra pulmonary disease, two cases had disseminated miliary disease and one case was diagnosed clinically.

Table 1 indicates that 102 (92%) cases were seen in clinic within 14 days of rapid access radiology referral and 80 (72%) were started on anti-TB treatment within 28 days of radiology referral. 103 patients (93%) had fully sensitive TB with 8 resistant cases.

Conclusion Direct radiology referral of cases with chest radiographs suggestive of pulmonary TB to a rapid access TB clinic can hasten diagnosis of active TB and should be included in NICE guidance.

P28 NOVEL BAYESIAN NETWORK ANALYSIS ALLOWS SYSTEMATIC COMPARISON OF THE SAFETY AND EFFICACY OF DIFFERENT LATENT TB INFECTION TREATMENTS

[1]HR Stagg, [2]D Zenner, [2]RJ Harris, [3]L Munoz, [4]M Lipman, [1]I Abubakar; *[1]University College London, London, UK; [2]Public Health England, London, UK; [3]Bellvitge University Hospital-*

IDIBELL, Barcelona, Spain; [4]Royal Free London NHS Foundation Trust, University College London, London, UK

10.1136/thoraxjnl-2013-204457.178

Background Although many randomised controlled trials (RCTs) and systematic reviews of treatment for latent tuberculosis (TB) infection (LTBI) have been conducted, previous analyses have not been able directly compare all utilised regimens. To address this we systematically searched for RCTs of LTBI treatment, then used a Bayesian network approach, which allows indirect head-to-head comparisons, to determine the most efficacious regimens at preventing active TB and those that caused the fewest adverse events.
Methods PubMed, EMBASE and Web of Science were systematically mined using a search strategy developed to find RCTs of LTBI treatment. Animal studies, non-RCTs, and RCTs without at least one of our two endpoints were excluded. No language restrictions were made. Extracted data were inputted into a full random effects mixed treatment compartment model, based on code by Ades, Welton and Lu, and implemented in WinBUGS. Odds ratios for all possible comparisons in the network and hierarchical rankings for the different treatments were obtained from the model with point estimates taken as the median of the posterior distribution and 95% credibility intervals (CrI) from the appropriate percentiles. Study quality was individually assessed.
Results 1,344 publications were generated by our search strategy, of which 52 fitted our criteria. 31 studies contained extractable data on adverse events and 44 on the development of active TB. 14 regimens were compared; an extract of the full results is presented (Table 1).
Conclusion Our Bayesian approach allows a novel, integrated, overview of the comparative efficacy and safety of different LTBI regimens, as well as a clear identification of the knowledge gaps where inference is difficult due to sparse data. The results of our study can therefore be used to inform guidelines and plan vital future LTBI treatment RCTs.

Abstract P28 Table 1. Extract of regimen rankings for efficacy in preventing active TB and causing lowest rates of adverse events.

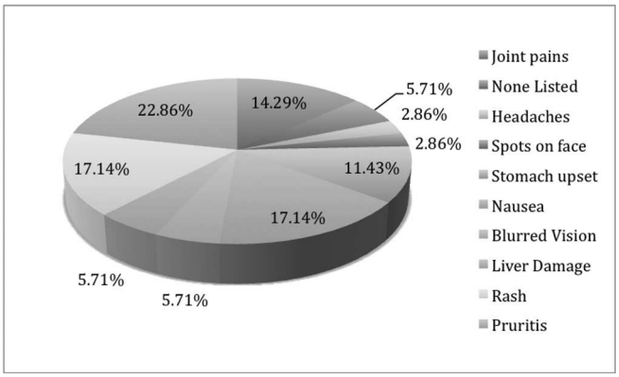
	Ranking (95% CrI)	
Regimen	**Active TB**	**Adverse events**
Isoniazid ≤4 months	11 (6, 13)	11 (10, 11)
Isoniazid 6 months	8 (5, 11)	5 (3, 8)
Isoniazid 9 months	11 (4, 14)	7 (4, 9)
Isoniazid ≥12 months	6 (4, 9)	7 (4, 9)
Rifampicin/Isoniazid ≥3 months	7 (4, 10)	4 (3, 7)

P29 THE PATIENT'S PERSPECTIVE OF ANTI-TUBERCULOSIS TREATMENT

CEJ Rang, N Sahota, A Jayaratnam; *King George Hospital, Ilford, London, United Kingdom*

10.1136/thoraxjnl-2013-204457.179

Background Tuberculosis (TB) requires prolonged antibiotic therapy with medications, which can cause a wide range of side effects. Despite this, it is essential that patients adhere to their treatment regimes to ensure treatment success and also to reduce the risk of transmission and of drug resistant TB developing. There is little in the literature regarding the patient's perspective of managing the substantial medication burden of TB treatment. However, to focus patient-centred care from local TB services and to direct future management of these patients, assessment of their perspective and quality of life is imperative.
Aim To assess patients who had completed anti-TB treatment over a 10-month period as to their perspective regarding the TB service and treatment in a district general hospital.
Methods All patients who had completed anti-tuberculosis treatment over a 10-month period were provided with an anonymous questionnaire. The data from these was collated and analysed.
Results 35 patients out of 64 patients completing TB treatment over a 10-month period returned the patient questionnaire. Of these patients 51% were female with an average age of 34 years. All the patients were aware how to contact the TB team and 94% of patients received an information leaflet which they had read. 49% of patients suffered side effects; the most common being pruritis (23%), rash (17%), nausea (17%), joint aches (14%) and stomach upsets (11%).



Abstract P29 Figure 1.

86% of the patients felt that the support from the TB nurses did make a difference to their care. Overall patients found the ease of taking medications as follows: 40% very easy, 26% easy, 14% hard, 6% very hard, 11% neither easy or hard, 3% not answered.
Conclusion This study demonstrated that nearly half of the patients suffered from side effects whilst taking their treatment, impacting on their quality of life. Furthermore, a large proportion of patients (20%) had difficulty taking their medications. However, patients do find that the TB service and the involvement of the TB specialist nurses have a positive impact on their care.

P30 ARE WE UNDER USING DIAGNOSTIC INVESTIGATIONS IN THE MANAGEMENT OF ABDOMINAL TUBERCULOSIS (TB) IN HIGH ENDEMIC AREAS OF LONDON?

C Stevens, S Sithamparanathan, T O'Shaughnessy; *Newham University Hospital, London, United Kingdom*

10.1136/thoraxjnl-2013-204457.180

Introduction Abdominal tuberculosis presents with non-specific clinical symptoms. Diagnosis is based on clinical reasoning supported by radiological findings either by ultrasound or computer tomography. The gold standard of diagnosis remains with culture *Mycobacteria tuberculosis* complex. Therefore in areas with high