



## Addendum to BTS MDR-TB Clinical Advice Service Annual Report 2023 (March 2024)

This addendum to the BTS MDR-TB Clinical Advice Service 2023 Annual Report contains updated data information that incorporates the period 1 July 2023 to 31 December 2023 and is provided to enable a change to future reporting periods.

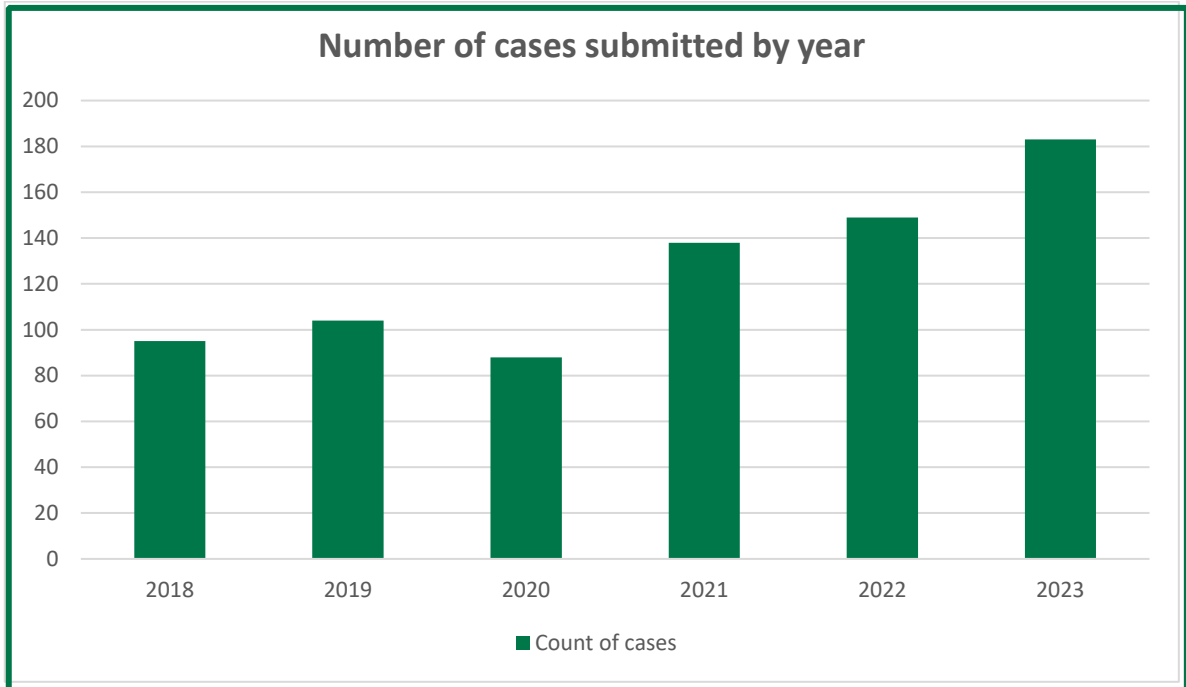
Reporting periods will change from 1 July – 30 June to 1 January – 31 December and will be effective from the next reporting period January - December 2024 onwards.

All figures contained in this addendum are to be read alongside the published 2023 report covering the period 1 July 2021 to 30 June 2023 ([here](#)).

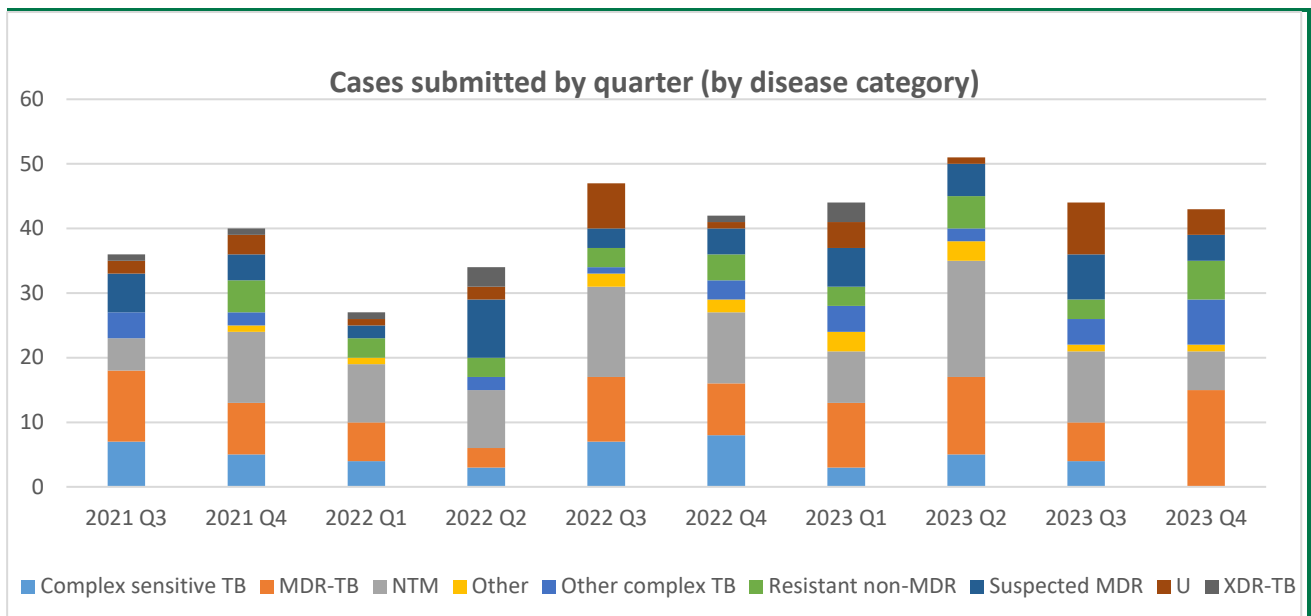
## Part 1 – Service Summary

### Cases registered to the MDR-TB Clinical Advice Service

This chart shows the increase in numbers of cases discussed through the BTS MDR-TB Clinical Advice Service over time, for all categories of disease. Cases are counted in the year they were first discussed.



**Figure 1: Cases in the MDR Clinical Advisory Service over time and shows actual figures for Jan-Dec 2023 (an update to the estimated figure published in the BTS MDR-TB Clinical Advice Service 2023 Annual Report)**



**Figure 2: Cases in the MDR Clinical Advisory Service by disease category and by quarter showing the inclusion of Q3 & Q4 2023 (an update to the BTS MDR-TB Clinical Advice Service 2023 Annual Report which recorded Q1&2 of 2023 only)**

### Provision of expert advice to clinicians (incorporating Q3 & Q4 2023)

The Service facilitates the provision of advice on a case-by-case basis. From July 2021 to December 2023 our panel of expert Clinical Service Advisers (CSAs) had advised on 402 cases, of which 37% were reported as known or suspected MDR/XDR-TB. Many other cases involved sensitive TB that was functionally MDR due to toxicity.

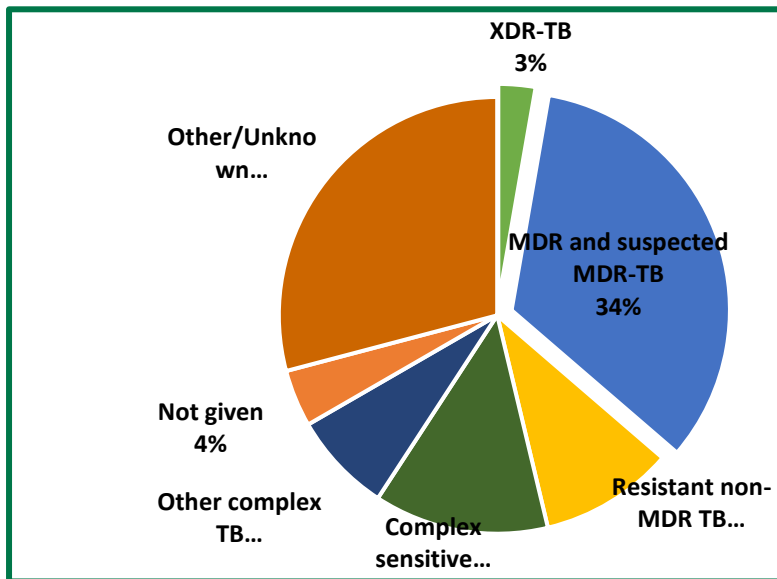


Figure 3: Advice delivered by CSAs by disease category in period July 2021 to December 2023

Clinical Service Advisers provided 2,397 written advice messages to clinicians in this period, often within hours of a case being posted. Monthly teleconference multidisciplinary team (MDT) meetings were also used to discuss 86% of cases, with treating clinicians invited to dial in to provide extra detail and ask additional questions. Interested observers from trainees and the wider TB community are also invited to dial in to the monthly virtual MDT meetings.

### Specialised commissioned and novel drugs: Bedaquiline and Delamanid

In the reporting period, 67% of cases involving XDR, MDR or suspected MDR-TB have had one or more of these drugs recommended.

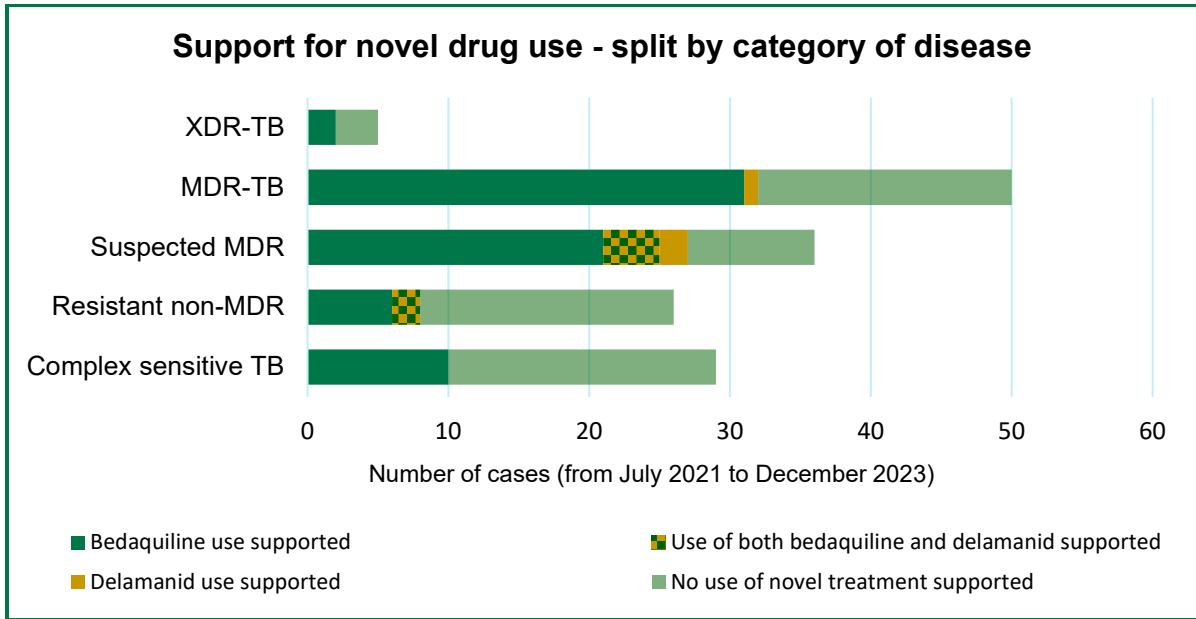


Figure 4: Support for novel drug use by disease category in period July 2021 to December 2023

### Clinical Advice Service Monthly Virtual MDTs

We have recorded 85 person-hours of clinician involvement in MDTs over this reporting period (for their own cases). However, we have not quantified the time many clinicians remain in the MDT after their own case has been discussed, which is common. Anecdotal feedback is that the MDTs provide a valuable learning opportunity for clinicians and expert advisers alike.

The MDTs also serve an important role supporting the training of Higher Specialty Trainees in Respiratory Medicine and Infectious Diseases. This has a wider implication for the future of the workforce. Over the reporting period, we recorded 345 person-hours of observer involvement of which we estimate over 60% would be trainees.

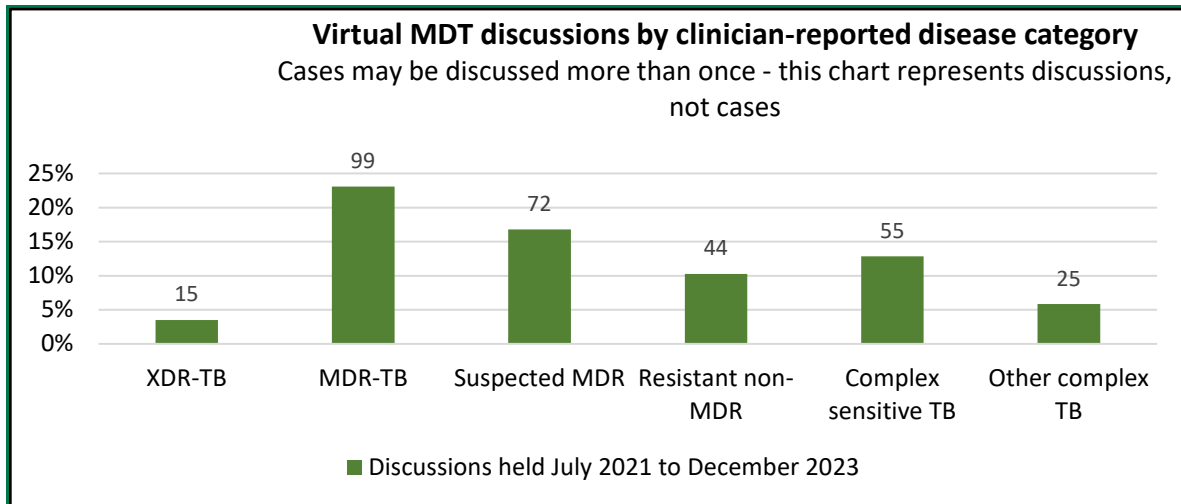
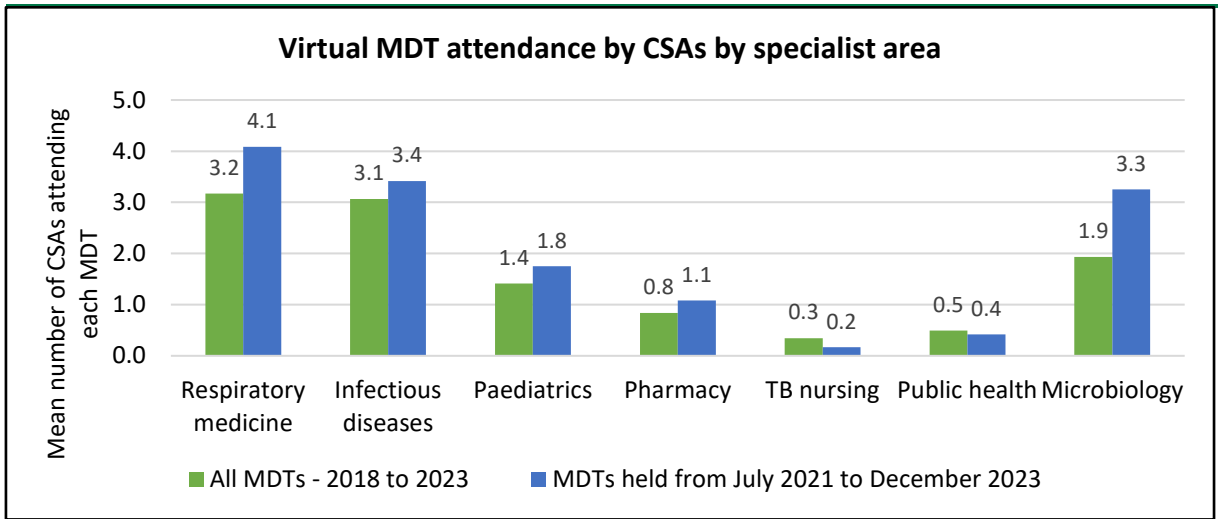


Figure 5: MDT discussion by clinician-reported disease category in period July 2021 to December 2023



**Figure 6: MDT attendance by CSAs by specialist area showing comparison between the reporting period and the totals since 2018**

## Overview: Service Activity in Numbers

This overview provides a summary of the activities of the Service for the reporting period of **July 2021 to December 2023**.



**629** clinicians are registered on the Clinical Advice Service  
from a total of **162** hospitals across all four  
nations of the UK, and the Isle of Man

A total of **229** clinicians were new registrations during this reporting period



# 51

Expert Clinical Service  
Advisers

- + Respiratory medicine
- + Pharmacy
- + Paediatrics
- + Infectious diseases
- + TB nursing
- + Public health
- + Microbiology

# 346

Cases discussed by our panel of expert advisers

**11** XDR-TB

**73** MDR-TB

**45** Suspected MDR-TB

**37** Resistant non-MDR-TB



Other/Unknown **99**

Other complex TB **25**

Complex sensitive TB **46**



# 2,397

Individual messages from expert Clinical Service Advisers to clinicians who have posted cases. These messages are separate to the MDT discussions, and initial responses are often received within hours.

Discussion is a key element in identifying the best approach to treatment and monitoring for each individual case.



Of all cases brought to the BTS MDR-TB Clinical Advice Service have been discussed at our monthly virtual MDTs. The remaining 14% were provided with advice without requiring MDT discussion.

**30**

Virtual MDTs were held, with a mean of 15 cases discussed per meeting. Cases may be discussed at MDT as often as needed.

**90**

Hours of **MDT** discussion, with one MDT every month

**85**

Person-hours of **clinician MDT involvement**. This assumes 20 minutes per case, whereas many clinicians stay on the call for much longer (as a learning opportunity)



**1,260**

Person-hours of **adviser MDT involvement**. Our expert advisers gave their time, knowledge and experience voluntarily

**345**

Person-hours of **trainee / observer MDT involvement**

## PART 2 – Multi and Extensively Drug-Resistant Tuberculosis (MDR AND XDR-TB)

This section of the report deals with cases reviewed from **July 2021 to the end of December 2023**, initially categorised by the clinician as being either XDR-TB, MDR-TB or suspected MDR-TB.

**48** centres have contributed cases classified by the treating clinician as either XDR, MDR or suspected MDR-TB to the BTS MDR-TB Clinical Advice Service:

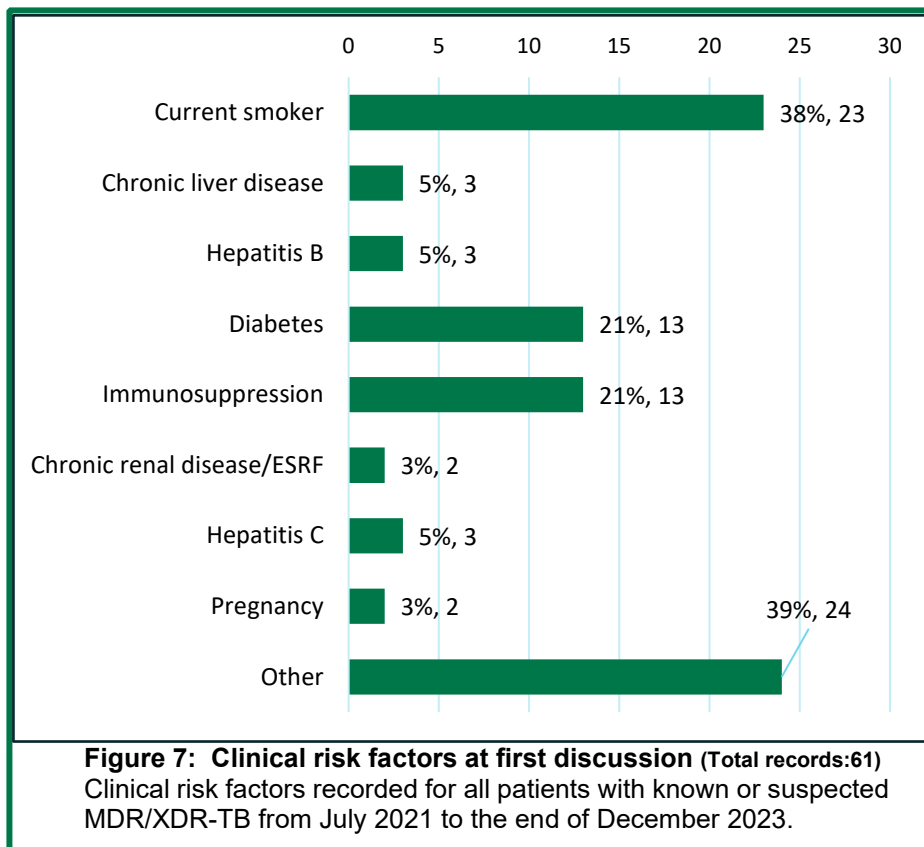


- 151** patient demographic records
- 151** also completed clinical/diagnosis records
- 24** follow up records were completed for cases new to the Service in this reporting period

### 2.1 THE MDR/XDR-TB PATIENT COHORT

Over half (60%) the patients were male, and the majority were of either White (30%), South Asian (33%) or Black African (20%) ethnicity.

Clinical Risk Factors:





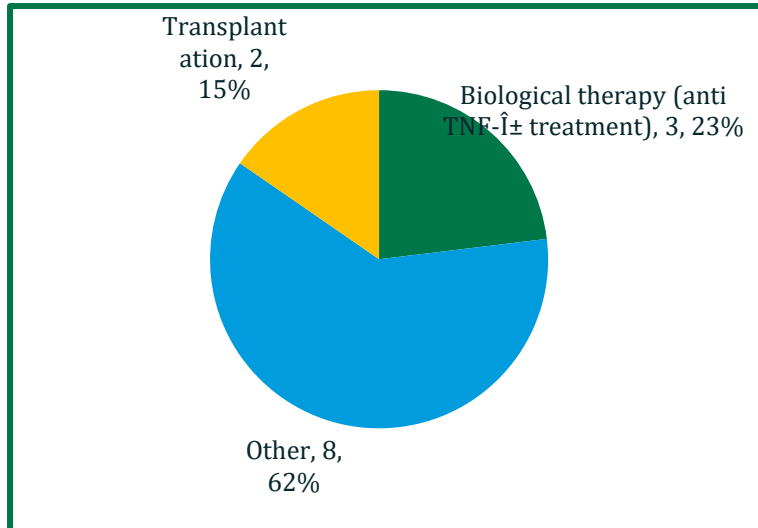
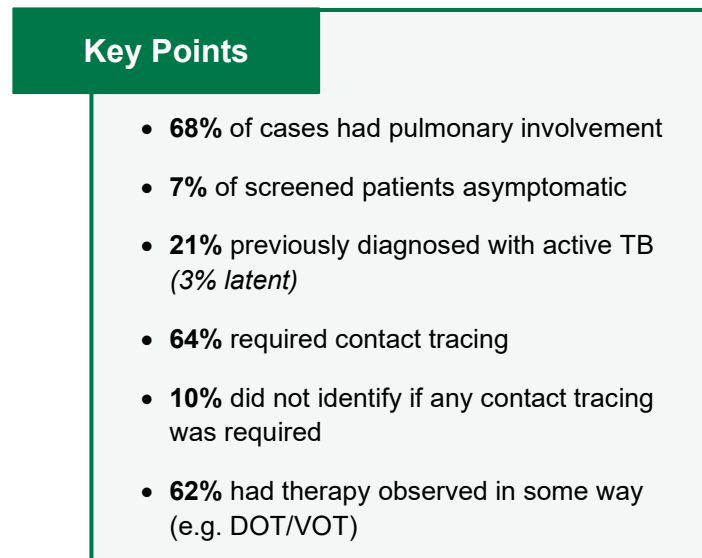


Figure 8: Reasons for immunosuppression recorded in period July 2021 to December 2023

## 2.2 CLINICAL/DIAGNOSTIC DATA



## 2.3 DRUG RESISTANCE

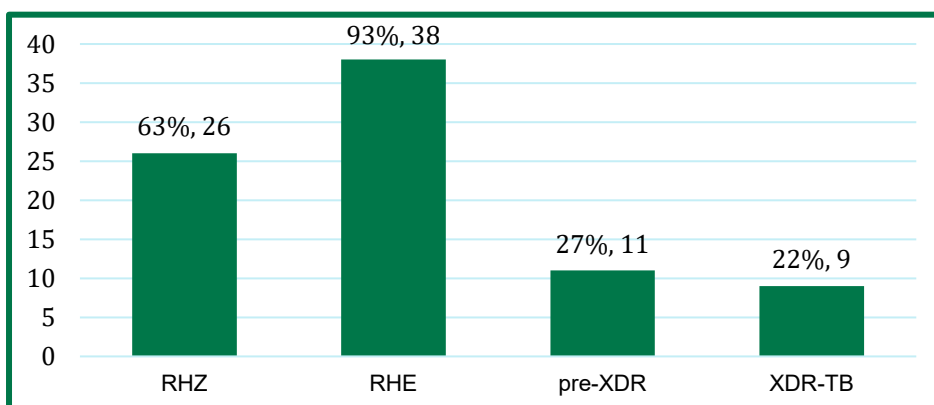


Figure 9: Clinician-reported resistance pattern; not drawn from whole genome sequencing (WGS) data

## PART 3 – Complex Sensitive TB and Drug Resistant Non-MDR TB

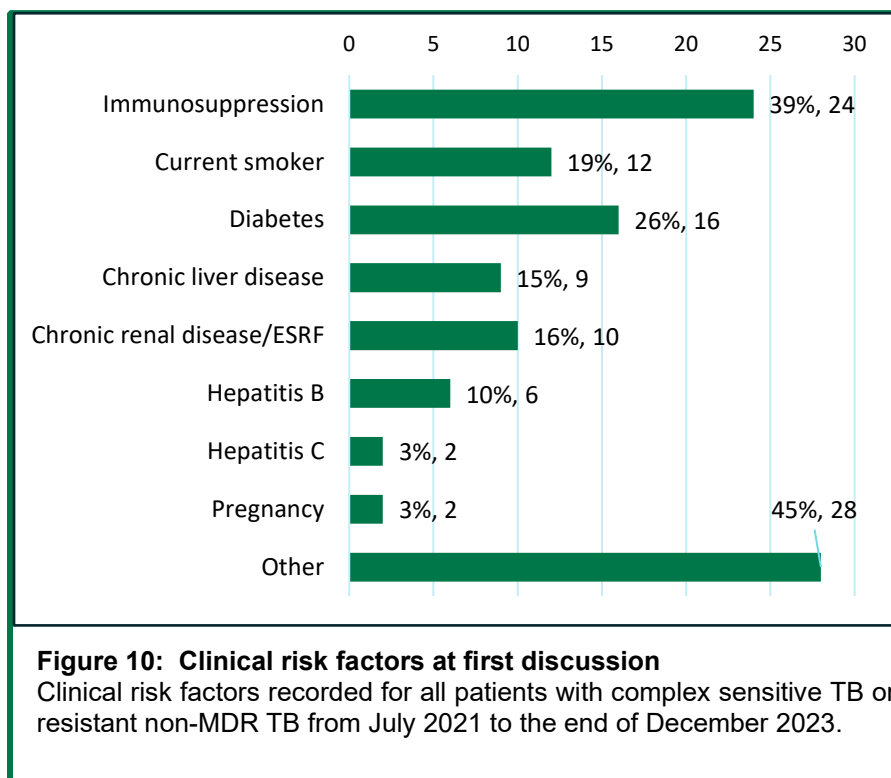
This section of the report deals with cases reviewed from **July 2021 to the end of December 2023**, initially categorised by the clinician as being either complex sensitive TB, drug resistant non-MDR TB or other complex TB. The cases included in this section were contributed by 53 different centres.



- 112** patient demographic records
- 112** complete clinical/diagnosis records
- 31** follow-up records representing 16 unique patients.

### 3.1 THE COMPLEX SENSITIVE/RESISTANT NON-MDR TB PATIENT COHORT

Patients were predominately female (63%), and the majority were of either South Asian (39%), White (32%), or Black African (14%) ethnicity.



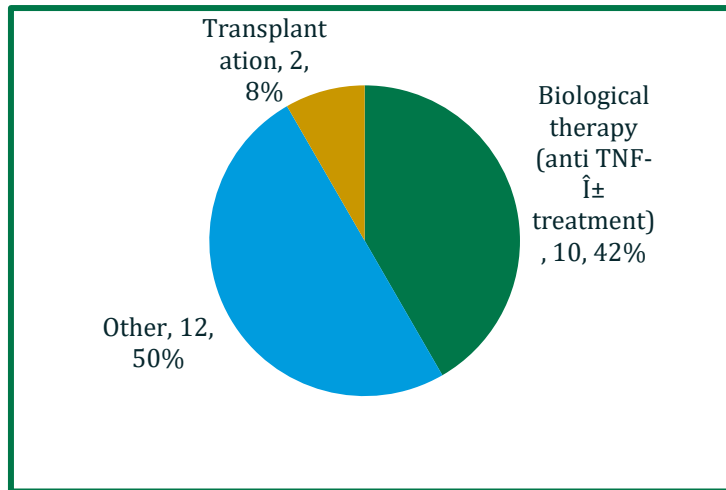


Figure 11: Reasons for Immunosuppression in the complex sensitive/resistant non-MDR TB

### 3.2 CLINICAL/DIAGNOSTIC DATA

#### Key Points

- **74%** of cases had pulmonary involvement
- **13%** of patients asymptomatic
- **4%** previously diagnosed with active TB
- **38%** required contact tracing
- **40%** had therapy observed in some way (e.g. DOT/VOT)

## PART 4 – Specialised Commissioned and Novel Drugs

The BTS MDR-TB Clinical Advice Service can be considered as providing the function of a regional/national MDT to consider support of Blueteq applications for the use of these drugs.

The information presented here relates to individual patient treatment history at first entry. Data on the panel supporting the prescription (or continuing use of) bedaquiline or delamanid is based on the outcome of virtual MDT case discussion meetings and – on a small number of occasions – support through consensus reached outside MDT discussion.

**These figures cover the period of July 2021 to the end of December 2023.**

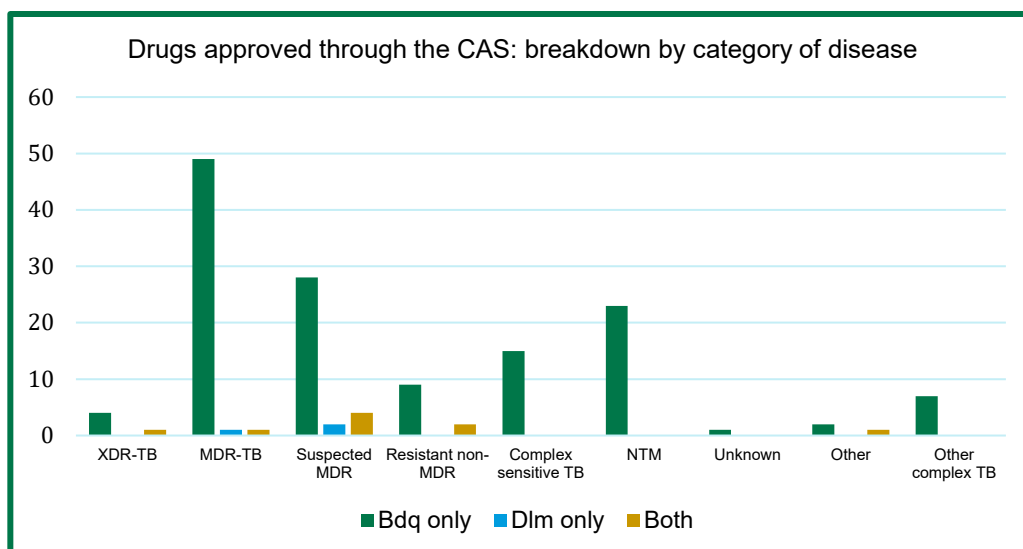
### Cases where advice requested

Total eligible cases	<b>331</b>			
Total requests made	<b>150</b>	45.3%	<i>of all cases</i>	
Total requests approved	<b>125</b>	83.3%	<i>of all requests</i>	
Approvals without requests	<b>25</b>	16.7%	<i>of all approvals</i>	

### Drugs requested by clinicians

Requested bedaquiline	142	94.7%
Both	2	1.3%
Requested delamanid	2	1.3%
Requested either bdq or dlm	4	2.7%
<b>Grand Total</b>	<b>150</b>	<b>100%</b>

### Drugs approved by category of disease



## Drugs approved through the CAS: breakdown by original clinician request

	Requested bedaquiline		Requested delamanid		Requested either bdq/dlm		No request made		Both requested (concomitant)		Overall total	
	Column Labels											
	Bdq		Dlm		Either		(blank)		Both		Total #	Total %
	#	%	#	%	#	%	#	%	#	%		
Service approved bdq only	113	75.3%	1	0.7%		0.0%	23	15.3%	1	0.67%	138	92.0%
Service approved dlm only	1	0.7%		0.0%		0.0%	2	1.3%		0.00%	3	2.0%
Approved both bdq and dlm	4	2.7%		0.0%	4	2.7%		0.0%	1	0.67%	9	6.0%
<b>Grand Total</b>	<b>118</b>	<b>78.7%</b>	<b>1</b>	<b>0.7%</b>	<b>4</b>	<b>2.7%</b>	<b>25</b>	<b>16.7%</b>	<b>2</b>	<b>1.33%</b>	<b>150</b>	<b>100%</b>

