British Thoracic Society National Audit
Quality in Endobronchial Ultrasound
National Protocol and Instructions
2026

Aims and Objectives

The aim of the BTS audit programme is to drive improvements in the quality of care and services provided for patients with respiratory conditions across the UK. This audit seeks to capture data on the delivery and performance of Endobronchial Ultrasound (EBUS) across all indications in acute hospitals within the UK.

The aim of this audit is to examine performance of a common respiratory diagnostic tool (EBUS) that has not yet had any systemic quality assessment in the UK on a major scale. This will be analysed at a hospital, regional cancer alliance and national level. This audit will collect procedural and outcome data from EBUS procedures for both cancer and non-cancer related diagnoses. Data will be collected on consecutive patients who underwent EBUS during the specified timeline below and performance metrics will be verified using subsequent pathological sampling results and/or a minimum of three months clinical-radiological follow-up.

Audit Period and Scope

Retrospective audit period: 01/09/2025 - 31/12/2025 (EBUS procedures performed in this timeframe)
Data entry period: 01/04/2026 – 31/07/2026 (ensures all procedures have a minimum 3-months FU)

*Please note that as a deviation from our previous audits, the audit period is **retrospective** to allow for three months follow up. We ask that sites enter in data for patients who received an EBUS procedure during the retrospective audit period, even though this differs from the data entry period.*

Any acute care Hospital in the United Kingdom that provides EBUS-TBNA procedures is eligible to participate. Each Hospital will register on the BTS audit platform and will also identify the cancer alliance in which they are located on the audit registration form (this will support the provision of Hospital-level and cancer alliance-level reports). Consecutive linear EBUS-TBNA procedures should be included (all indications, no exclusions). All EBUS-TBNA procedures that meet the inclusion criteria in the retrospective audit period should be included.

The audit should be led by a senior level clinician, such as a Consultant Physician or Nurse. The screening process/diagnosis review should be undertaken by a member of the direct clinical care team with experience and knowledge of EBUS procedures and outcomes.

The **EBUS National Audit Part 1** will provide data for each individual EBUS procedure and contains four sections.

Section 1: Patient demographics
Section 2: EBUS procedure data (all procedures)
Section 3: Staging EBUS outcomes (only applicable to staging EBUS procedures)
Section 4: Diagnostic EBUS outcomes (only applicable to diagnostic EBUS procedures)

The **EBUS National Audit Part 2** will provide data on an organisational level, with one set of questions for each site.

Definitions:

Indications for EBUS-TBNA

- **Staging EBUS in suspected / confirmed lung cancer.** Definition: the aim of the procedure is to accurately map the presence / absence of thoracic nodal metastases in patients with suspected/confirmed lung cancer and no distant metastases

- **Diagnostic EBUS - suspected Lung cancer** (e.g. advanced stage lung cancer, central primary tumour). Definition: the aim of the procedure is solely to achieve a pathological diagnosis

- **Diagnostic EBUS – Isolated mediastinal / hilar lymphadenopathy (IMHL*).*** Definition: Where the differential diagnosis includes sarcoidosis, lymphoma, TB, carcinoma, reactive lymphadenopathy and there is NO intra-thoracic or extra-thoracic primary tumour.

- **Diagnostic EBUS – Suspected metastases from an extra-thoracic cancer.** Definition: known extra-thoracic malignancy with suspicion of thoracic nodal metastases

Instructions for Case Identification
All EBUS TBNA procedures (regardless of indication) performed between **01/09/2025 - 31/12/2025** should be included in the audit. In order to correctly assess the sensitivity of EBUS, the results of subsequent pathological sampling (e.g. intra-operative lymph node staging during surgical resection) are required and / or a minimum of 3 months radiological follow-up data. All consecutive cases in the audit period should be entered. Please note that if low numbers of cases are entered, comparisons with the national data may be less reliable, and may result in an imprecise outlier status/ your site listed as a potential outlier.

Inclusion Criteria

- Consecutive EBUS-TBNA procedures between 01/09/2025 - 31/12/2025, regardless of indication

Exclusions

- Any procedure that does not meet the inclusion criteria

Accessing the BTS Audit Tools:
Data can be entered onto the online data collection tool via the BTS audit system (user registration required – log in details should not be shared): https://audits.brit-thoracic.org.uk/. Please note that the 2026 National Audit will be held on the legacy audit system. Each site will require a signed registration form from a chosen audit lead before audit access can be granted. All team members who enter in data will need to be listed on the registration form, and will be eligible for a certificate of participation if data is entered under their account in the audit system. Blank registration forms can be found alongside the protocol and other documents online on the BTS website and on the audit system.

The EBUS National Audit appears under the list of adult audit tools. To access the audit, click on the Period name "01 April 2026- 31 July 2026 National Audit" and then click "Add record" to access the data entry screens. You can save the record you are working on and return to it at any point. When you have completed data entry you will need to click "Commit" to submit your data to the database. At this point you can see the record but will not be able to edit the contents further.

Analysis and Reporting
Audit participants can generate local reports from the audit system which present that institution's data as a comparison to the national dataset, and reports comparing data from different audit periods. Click the 'Reports' link on the audit system home page, then select the type of report and the relevant audit period(s) from the links at the bottom of the reports page.

Data submitted for BTS national audits may be reviewed for outliers under the BTS outlier policy. More information can be found here: https://www.brit-thoracic.org.uk/quality-improvement/clinical-audit/audit-outlier-process/

Contacts

Any queries should be referred to audittools@brit-thoracic.org.uk

Appendix 1: Applicable Standards
Sources of audit standards:

- ✓ **2021 National GIRFT report for Lung Cancer (1)**
- ✓ **NICE 2019 guidelines NG12: Lung cancer Diagnosis & Management (2)**
- ✓ **National endobronchial ultrasound service specification (England) (3)**
- ✓ **World Association for Bronchology & Interventional Pulmonology – Quality indicators in performance of EBUS bronchoscopy 2023 (4)**

Audit standards

All EBUS procedures

- Proportion of procedures with documented indication (staging vs diagnostic) (>98%)
- Overall proportion of lymph nodes sampled that were classified as 'inadequate' (<10%)
- Incidence of procedures requiring premature termination due to tolerance (<5%)

Staging EBUS in suspected / confirmed lung cancer

- Procedure performed within 5 calendar days of referral (target >85%)
- PET-CT completed prior to staging EBUS (target >95%)
- Recording of sonographic appearances of lymph nodes within procedural report (target >95%)
- Evidence if Systematic approach - examination of all accessible lymph node stations N3, N2, N1 (ACCP group B & C >95%)
- Sensitivity of staging EBUS (stratified according to prevalence of nodal metastases – Table 1)
- Negative predictive value of staging EBUS (stratified according to prevalence of nodal metastases – Table 1)

Table 1

	Sensitivity		Negative predictive value	
N2/3 prevalence	ACCP meta-analysis	Minimum standard	ACCP meta-analysis	Minimum standard
>80%	96%	**>90%**	83%	**>80%**
60%–80%	91%	**>88%**	83%	**>80%**
40%–60%	87%	**>85%**	89%	**>85%**
20%–40%	87%	**>80%**	95%	**>90%**
<20%	78%	**>75%**	96%	**>92%**

Diagnostic EBUS in suspected / confirmed advanced stage lung cancer

- Procedure performed within 5 calendar days of referral (target >85%)
- Sensitivity of diagnostic EBUS for diagnosis of lung cancer (>90%)
- Adequacy of tissue for complete biomarker testing in NSCLC (>90% of eligible cases)
- Proportion of cases where a repeat procedure is needed due to non-diagnostic procedure or insufficient tissue (10%) **not where a second procedure is appropriately required for diagnosis e.g. CT guided lung biopsy after negative staging EBUS. Teams should only record a repeat procedure if it was needed because the first EBUS procedure failed to achieve its goal.*

Diagnostic EBUS (other)

- Sensitivity of diagnostic EBUS for diagnosis of sarcoidosis (>80%)
- Sensitivity of diagnostic EBUS for diagnosis of tuberculosis (>80%)
- Sensitivity of diagnostic EBUS for diagnosis of lymphoma (>65%)
- Sensitivity of diagnostic EBUS for diagnosis of extra-thoracic cancer (>85%)

EBUS type	Audit standards for Part 1 Questions	Source (Page 4)	Target
All EBUS procedures	Incidence of procedures requiring premature termination due to tolerance	3	≤5%
Staging EBUS	Procedure performed within 5 calendar days of referral	1	>85%
	PET-CT completed prior to staging EBUS	2	>95%
	Recording of sonographic appearances of lymph nodes within procedural report	3, 4	>95%
	Overall proportion of lymph nodes sampled that were classified as 'inadequate' (<10%)	4	<10%
	Evidence of Systematic approach - examination of all accessible lymph node stations N3, N2, N1 in ACCP group B & C	4	>95%
	Sensitivity of staging EBUS	3,4	>85%
	Negative predictive value of staging EBUS	3,4	>85%
	Adequacy of tissue for complete biomarker testing in NSCLC	3,4	>90%
	Proportion of cases where a repeat procedure is needed due to non-diagnostic procedure or insufficient tissue	3,4	<10%
Diagnostic EBUS – lung cancer	Procedure performed within 5 calendar days of referral	1	85%
	Sensitivity of diagnostic EBUS for diagnosis of lung cancer	3,4	>90%
	Adequacy of tissue for complete biomarker testing in NSCLC	3,4	>90%
	Proportion of cases where a repeat procedure is needed due to non-diagnostic procedure or insufficient tissue	3,4	<10%
Diagnostic EBUS - Other	Sensitivity of diagnostic EBUS for diagnosis of sarcoidosis	4	>80%
	Sensitivity of diagnostic EBUS for diagnosis of tuberculosis	4	>80%
	Sensitivity of diagnostic EBUS for diagnosis of lymphoma	4	>65%
	Sensitivity of diagnostic EBUS for diagnosis of extra-thoracic cancer	4	>85%