

Figure S1 Forrest plot for lung cancer diagnostic yield: MedCB vs. EBUS-TBNA.

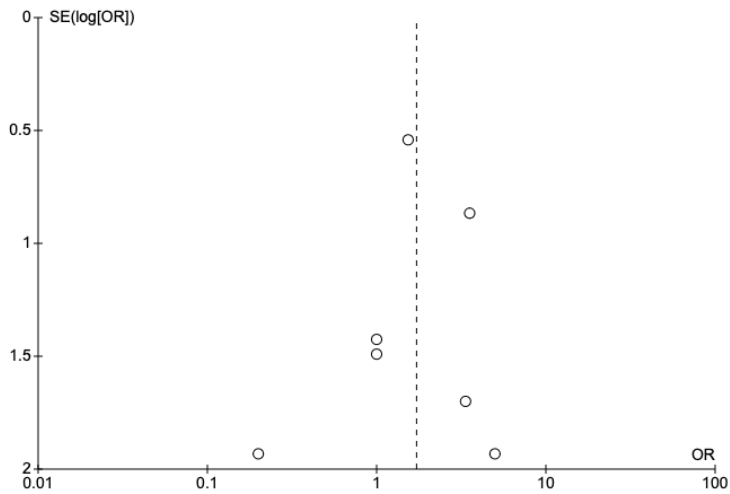


Figure S2 Funnel plot for lung cancer diagnostic yield: MedCB vs. EBUS-TBNA.

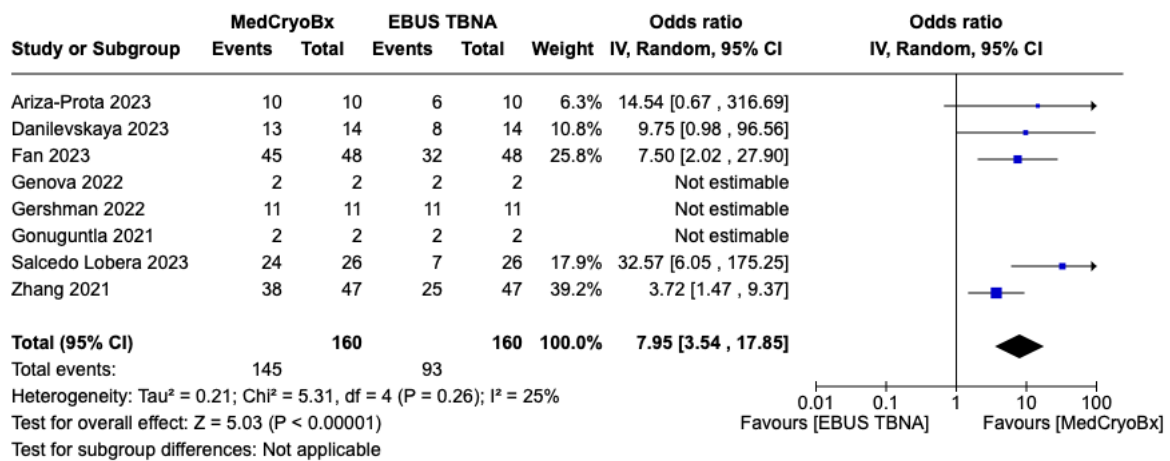


Figure S3 Forrest plot for benign conditions diagnostic yield: MedCB vs. EBUS-TBNA.

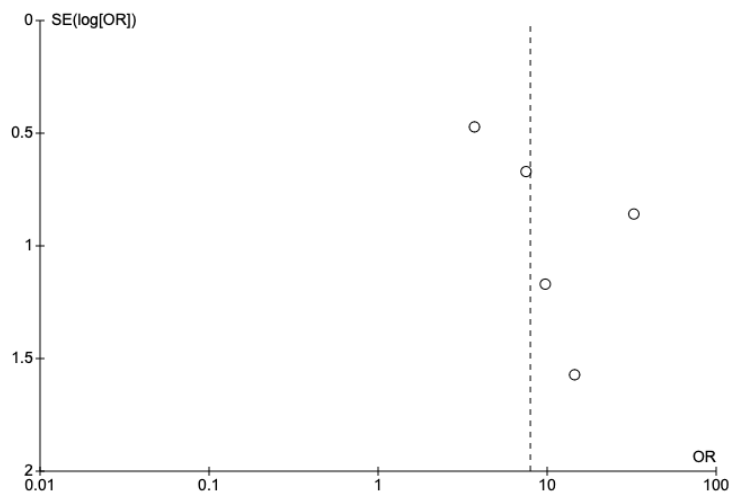


Figure S4 Funnel plot for benign conditions diagnostic yield: MedCB vs. EBUS-TBNA.

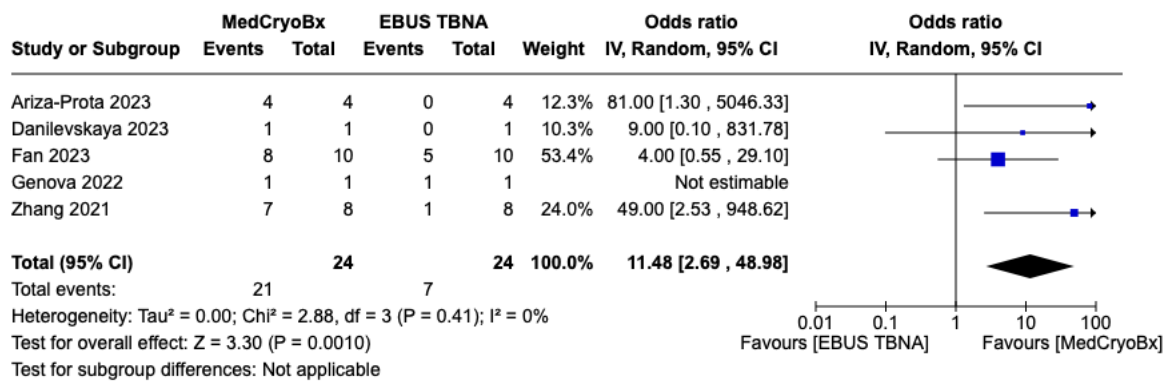


Figure S5 Forrest plot for lymphoma diagnostic yield: MedCB *vs.* EBUS-TBNA.

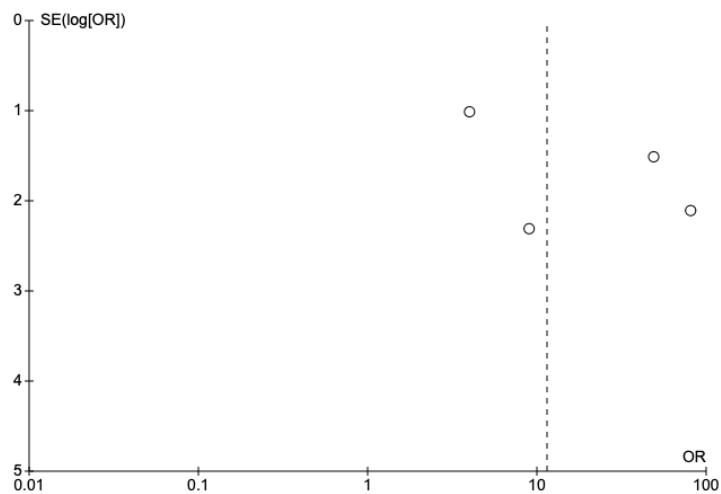


Figure S6 Funnel plot for lymphoma diagnostic yield: MedCB *vs.* EBUS-TBNA.

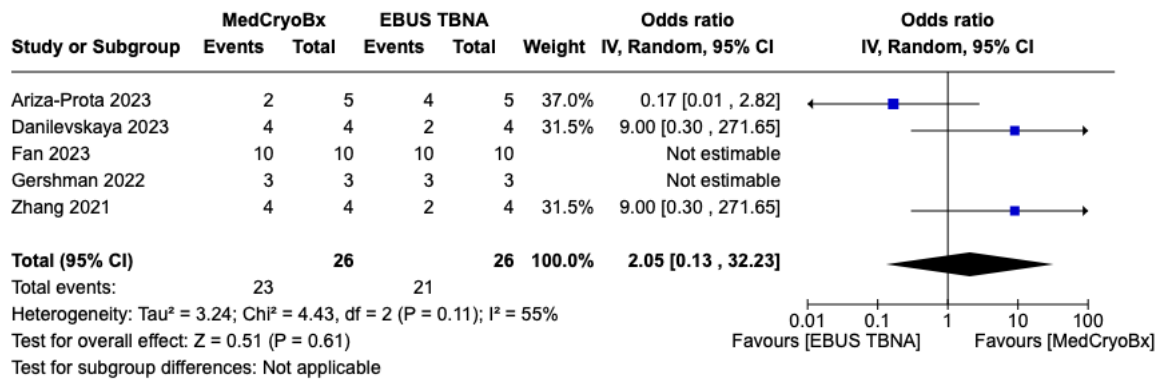


Figure S7 Forrest plot for other tumors and malignancy diagnostic yield: MedCB vs. EBUS-TBNA.

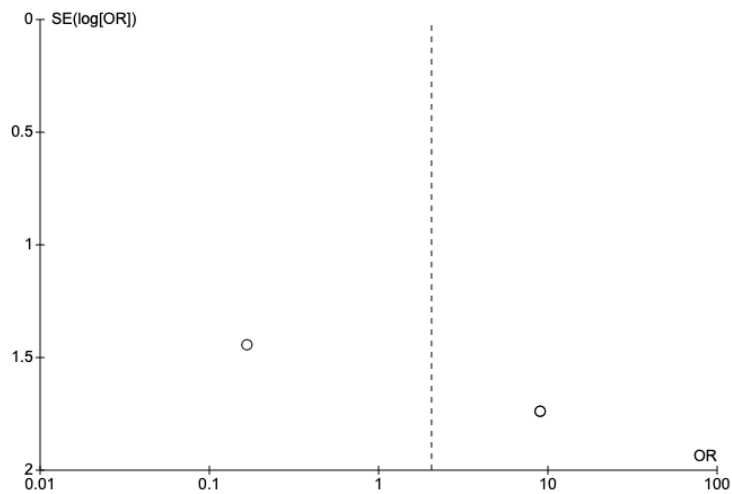


Figure S8 Funnel plot for other tumors and malignancy diagnostic yield: MedCB vs. EBUS-TBNA.

Table S1 Breakdown of diagnostic yield for different conditions when available in the selected studies

Study	EBUS-TBNA Dx %	MedCryoBx Dx %	ND EBUSTBNA%	ND MedCryoBx %	%Lung CA: EBUS-TBNA	%Lung CA: MedCryoBx	%Lym EBUS-TBNA	%Lym MedCryoBx	%Other tumor EBUS-TBNA	%Other tumor MedCryoBx	%Benign EBUS-TBNA	%Benign MedCryoBx	Tissue for cytogenetics
Zhang 2021 (7)	79.9	91.8	20	8	94	95.5	12.5	87.5	25	91.6	53	80.8	93%: MedCryoBx 74% : EBUS-TBNA
Fan 2023 (8)	82	91	17	6	98.4	98.4	50	80	83	83	68.8	96.7	97%: MedCryoBx 79%: EBUS-TBNA
Ariza-Prota 2023 (10)	82	96	18	4	78	92	0	100	80	40	60	100	100% : MedCryoBx
Maturu 2024 (6)	84	93	16	7	100	91.6	–	100	–	100	–	93	100%: MedCryoBx 36%: EBUS-TBNA
Gershman 2022 (9)	87.5	83	15	11	90	90	–	–	100	100	100	100	
Genova 2022 (5)	80	60	20	40	100	50	100	100	–	–	100	100	100%: MedCryoBx
Gonuguntla 2021 (4)	100	100	0	0	100	100	–	–	–	–	100	100	100%: MedCryoBx
Ueoka 2022 (15)	77.8	55	23	45	–	–	–	–	–	–	–	–	–
Salcedo Lobera 2023 (14)	64	90	36	10	–	–	100	100	–	–	27	92	–
Danilevskaya 2023 (16)	74	94	11	6	100	100	0	100	50	100	–	–	–

–, data not available. EBUS-TBNA, endobronchial ultrasound-transbronchial needle aspiration; Dx, diagnosis; edCryoBx, mediastinal cryobiopsy; ND, non-diagnostic sample; Lung CA, lung cancer; Lym, lymphoma.