

# CLINICAL REFERENCE

## Mini-BAL Sampling Catheters

The following is a summary list of clinical studies that explored the effectiveness, safety, or benefits of the minibronchoalveolar (mini-BAL) procedure. *Some studies explicitly reference the Ballard™ Mini-BAL Sampling Catheter\**

ARTICLE	AUTHOR(S)	PUBLICATION	LINK
<b>Effectiveness (Compared To Bronchoscope Bal)</b>			
Comparing the Accuracy of Mini-BAL to Bronchoscopic BAL in the Diagnosis of Pneumonia Among Ventilated Patients: A Systematic Literature Review	Tepper J., et al.	Journal of Intensive Care Medicine, 2023 Dec; 38(12): 1099-1107	<a href="#">Pubmed Link: PMID: 37545322 Abstract</a>
The Safety and Diagnostic Accuracy of Minibronchoalveolar Lavage in Patients with Suspected Ventilator-Associated Pneumonia	Kollef M., et al.	Annals of Internal Medicine. 1995 May 15; 122(10):743-8.	<a href="#">Pubmed Link: PMID: 7717596 Abstract</a>
Blinded Invasive Diagnostic Procedures in Ventilator-Associated Pneumonia	Campbell DG Jr., et al.	Chest. 2000 Apr; 117(4 Suppl 2) ; 207S-211S	<a href="#">Open Access Link Outline</a>
<b>Effectiveness (Compared To Endotracheal Aspirate)</b>			
Comparison of Semi-Quantitative Endotracheal Aspirates to Quantitative Non-Bronchoscopic Bronchoalveolar Lavage in Diagnosing Ventilator-Associated Pneumonia	Fujitani S., et al.	Respiratory Care. 2009 Nov; 54(11):1446-8	<a href="#">Pubmed Link: PMID: 19863828 Abstract</a>
<b>Effectiveness (Compared To Antibiotic Management)</b>			
Invasive and Noninvasive Strategies for Management of Suspected Ventilator-Associated Pneumonia. A Randomized Trial	Fagon, J.Y., et al.	Annals of Internal Medicine. 2000; 132(8):621-30	<a href="#">Pubmed Link: PMID: 10766680 Abstract</a>
The Influence of Mini-BAL Cultures on Patient Outcomes: Implications for the Antibiotic Management of Ventilator-Associated Pneumonia	Kollef M.H., et al.	Chest 1998; 113; 412-420	<a href="#">Pubmed Link: PMID: 9498961 Abstract</a>
<b>Safety</b>			
Blinded Invasive Diagnostic Procedures in Ventilator-Associated Pneumonia	Campbell D.G. Jr., et al.	Chest. 2000 Apr; 117(4 Suppl 2) ; 207S-211S	<a href="#">Open Access Link</a>
The Safety and Diagnostic Accuracy of Minibronchoalveolar Lavage in Patients with Suspected Ventilator-Associated Pneumonia	Kollef M., et al.	Annals of Internal Medicine. 1995 May 15; 122(10):743-8.	<a href="#">Pubmed Link: PMID: 7717596 Abstract</a>
<b>Economic Data</b>			
Decision Analysis of Antibiotic and Diagnostic Strategies in Ventilator-Associated Pneumonia	Ost D.E., et al.	American Journal of Respiratory Critical Care Medicine 2003; 168(9): 1060-7	<a href="#">Pubmed Link: PMID: 12842855 Abstract</a>
<b>Mini-BAL Studies</b>			
Comparing the Accuracy of Mini-BAL to Bronchoscopic BAL in the Diagnosis of Pneumonia Among Ventilated Patients: A Systematic Literature Review	Tepper J., et al.	Journal of Intensive Care Medicine, 2023 Dec; 38(12): 1099-1107	<a href="#">Pubmed Link: PMID: 37545322 Abstract</a>
The Safety and Diagnostic Accuracy of Minibronchoalveolar Lavage in Patients with Suspected Ventilator-Associated Pneumonia	Kollef M., et al.	Annals of Internal Medicine. 1995 May 15; 122(10):743-8.	<a href="#">Pubmed Link: PMID: 7717596 Abstract</a>
Comparison of Ballard Catheter Bronchoalveolar Lavage With Bronchoscopic Bronchoalveolar Lavage*	Levy H., et al.	Chest. 1994 Dec; 106(6):1753-6.	<a href="#">Pubmed Link: PMID: 7988195 Abstract</a>
The Role of Mini-Bronchoalveolar Lavage Fluid in the Diagnosis of Pulmonary Tuberculosis in Critically Ill Patients	Neves C., et al.	BMC Infectious Diseases. 2020 Mar 18; 20(1):229.	<a href="#">Open Access Link</a>



# Mini-BAL Sampling Catheters, Cont.

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Mini-BAL Studies, Cont.			
Comparison of Semi-Quantitative Endotracheal Aspirates to Quantitative Non-Bronchoscopic Bronchoalveolar Lavage in Diagnosing Ventilator-Associated Pneumonia	Fujitani S., et al.	Respiratory Care. 2009 Nov; 54(11):1446-8	<a href="#">Pubmed Link: PMID: 19863828 Abstract</a>
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Invasive and Noninvasive Strategies for Management of Suspected Ventilator-Associated Pneumonia. A Randomized Trial	Fagon JY., et al.	Annals of Internal Medicine. 2000; 132(8):621-30	<a href="#">Pubmed Link: PMID: 10766680 Abstract</a>
Sputum Induction Compared with Bronchoalveolar Lavage by Ballard Catheter to Diagnose Pneumocystis Carinii Pneumonia*	Bustamante, et al.	Chest. 1994 Mar; 105 (3): 816-22.	<a href="#">Pubmed Link: PMID: 8131546 Outline</a>
Analysis of Charges Associated with Diagnosis of Nosocomial Pneumonia	Croce M.A.	Journal of Trauma 1994; 37:721-727	<a href="#">Pubmed Link: PMID: 7966468 Abstract</a>
Impact of BAL on the Diagnosis and Treatment of Nosocomial Pneumonia in ICU Patients	Ferrer R., et al	Monaldi Arch Chest Dis. 2001 Dec; 56 (6):521-6.	<a href="#">Pubmed Link: PMID: 11980284 Abstract</a>
Optimizing Antibiotic Treatment for Ventilator-Associated Pneumonia	Micek S., et al.	Pharmacotherapy 2006; 26(2): 204-213	<a href="#">Pubmed Link: PMID: 16466325 Abstract</a>
An Emergency Department-Based Randomized Trial of Nonbronchoscopic Bronchoalveolar Lavage for Early Pathogen Identification in Severe Community-Acquired Pneumonia	Rodriguez R.M., et al.	Annals of Emergency Medicine. 2001 Oct; 38(4):357-63.	<a href="#">Pubmed Link: PMID: 11574790 Abstract</a>