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Arabic Summary	

#### List of Abbreviations

**AA** : Aerosolized antibiotics

**BAL** : Bronchoalveolar lavage

**B-BAL**: Bronchoscopic BAL

**BBS** : Blind bronchial samples

**BEAS** : Bronchial epithelial cells

**BEC** : Bronchial/ tracheal epithelial

**CF** : Cystic Fibrosis

**cfu** : Colony forming units

**CPIS** : Clinical pulmonary infection score

**CT** : Computed tomography

**E -coli** : Escherichia coli

**EA** : Endotracheal aspirate

**EDTA** : Ethylene diamine tetra acetic acid

**ELF** : Extracellular lining fluid

**ESBL** : Extended spectrum beta-lactamase

**ETT** : Endotracheal tubes

**FasL** : Fas/Fas ligand

FiO2 : Fraction of Inspired Oxygen

**HAP** : Hospital acquired pneumonia

**ICU** : Intensive care unit

IL-12 : Interlukine-12

#### 🕏 List of Abbreviations

**LRTIs** : Lower respiratory tract infections

**MDR** : Multidrug resistant

**MICs** : Minimum Inhibitory Concentrations

**Mini-BAL**: Blind Broncho-Alveolar Lavage

**MRSA** : Methicillin- resistant Staphylococcus aureus

**MV** : Mechanical ventilation

**NB-BAL**: Non-bronchoscopic BAL

**NF** : Nuclear factor

PaO2 : Partial pressure of oxygen in arterial blood

**PEEP** : Positive end-expiratory pressure

**pMDI** : Pressurized meter dose inhaler

**PMNL** : Polymorphoneuclear leukocytes

**PSB** : Protected specimen brush

**PTC** : Protected telescopic catheter

**Q** : Quantitative

**QS** : Quorum sensing

**RICU**: Respiratory intensive care unit

**SAEC** : Small airway epithelial cells

**SIMV** : Synchronous Intermittent Mandatory

**SQ** : Semi-quantitative

**TGF**: Transforming Growth Factor

**TLR** : Toll-like-receptors

#### Elist of Abbreviations

**TNF** : Tumour necrosis factor

**URTIs** : Upper respiratory tract infections

**US FDA** : United States food and drug association

**VAP** : Ventilator-associated pneumonia

**VARI** : Ventilator- associated respiratory infection

**VAT** : Ventilator-associated tracheobronchitis

Ventilation

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# Introduction

### Aim of the Work

### **Review of Literature**

## **Subjects and Methods**

## Results

## **Discussion**