antlia®

Pulmonary diagnostic device

- Antlia® is a Forced Oscillation Technique (FOT) based system for clinical evaluation of pulmonary diseases related to central and peripheral airway under tidal breathing conditions.
- Antlia's design is PATENTED. Antlia® is a non-invasive device and can be accessd from Laptop/Desktop/Tablet.
- Antlia® uses sinusoidal excitations or sum of sinusoidal waves in several frequencies (5 Hz to 20 Hz)
- Parameters calculated at different frequencies give measures of different regions in the lungs (lower frequencies = alveoli and higher frequencies = larger airways)
- This method characterizes the respiratory impedance and its two components, resistance (Rrs) and reactance (Xrs).

What Makes Antlia® Unique

Lung Tests…by ANTLIA®. Now breathe easy !!

- Easy to setup, install and calibrate. Light weight equipment that is easy to move around
- Uses Clinically Proven Forced Oscillation Technique (FOT). Designed as per ERS Guidelines
- Tidal breathing hence requires no complex manoeuvre or forced breathing.
- Ideal for all kinds of patients (especially for pediatrics, geriatrics, post surgical cases' uncooperative patients,...etc.)
- Completes the test in about 36 seconds.
- **First device which uses data from Indian population for interpretation.**
- Provides unique information about lung mechanics and assess small airway obstructions
- Detect early signs of COPD and consequences of smoking

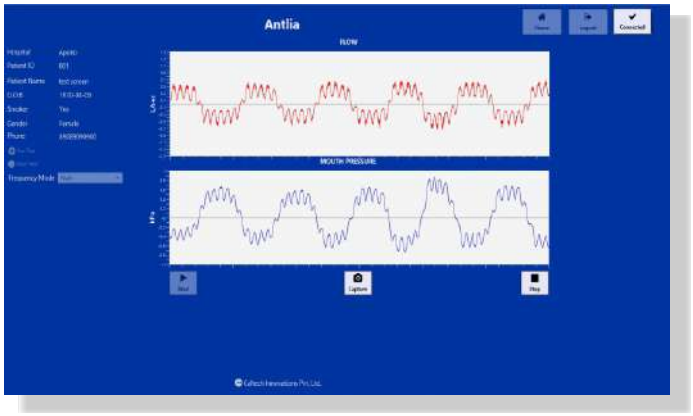
Antlia® is the best choice of diagnosis in:

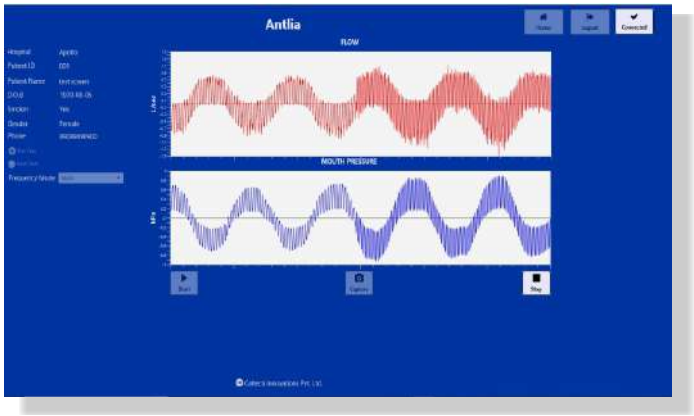
- Chronic Lung Disease (CLD)
- Occupational Lung Disorders
- Intrapulmonary Restriction
- Extrapulmonary Restriction
- Bronchodilator Responses
- Bronchoconstrictor Responses

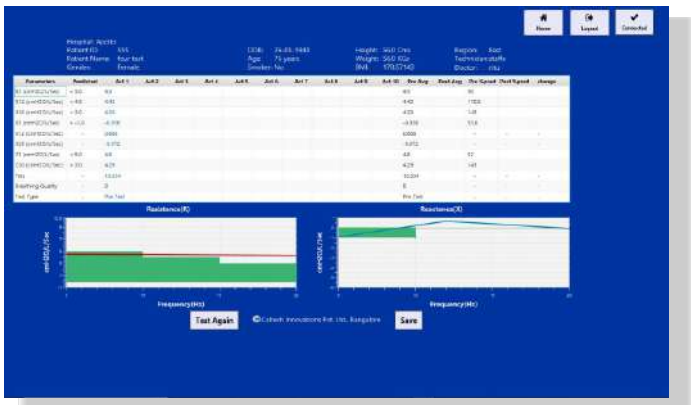
Technical Specification:

Flow Measurement	Pneumotach
Mouth Pressure range	+/-2 kpa
Pressure Transducer	Piezo - Resistive
Testing Signal Mode	Mono Frequency (6,10,14,20Hz) and Multi Frequency (6-12-20)
Accuracy	+/-10%
Calibration	Factory calibration +auto-zeroing of the sensors before each test + calibration check with a test object (reference impedance)
Major Parameters	Impedance (Zrs), Resistance (Rrs), Reactance(Xrs), Resonance Frequency (Fres)
Connectivity	USB Port
Device Type	Tabletop, operated through Window Desktop or Laptop
ARM	Metal
Power Supply	230 volts AC
Power Consumption	30 Watts
Dimensions	Height 287mm, Width 170mm, Length 329mm
Weight	2.6 kg

Design is as per IEC 60601-1,1-2 and ERS guidelines.







Rrs5: Measures smaller-airway obstruction at peripheral region

Rrs12: Measures middle-airway obstruction between central and peripheral region

R20: Measures larger-airway obstruction at central region

X5: Measures the lungs elasticity

Resonance Freq (Hz): High frequency for smaller airway diseases

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