PulmoLife Spirometer

A COPD screening device reporting FEV_1 & 'Lung Age'

Chronic Obstructive Pulmonary Disease (COPD) is the fourth leading cause of death worldwide according to the World Health Organization and it is estimated that it will become the third leading cause of mortality by 2020[1]. COPD is often undiagnosed in its early stages, especially in smokers, who are most at risk; and as a result, not receiving treatment.

Since early detection and treatment of COPD can positively influence the disease course, it is important to screen those patients at risk. The PulmoLife is the ideal tool to use as a quick check of lung function to highlight signs of disease as early as possible.

Simple and easy to use, the PulmoLife offers a practical solution for COPD testing in adult smokers. A quick test using the PulmoLife measures and shows the patients' FEV_1 and FEV_1% predicted results[2] on its high visibility display. FEV_1 is strongly recommended as the measurement of choice in COPD screening and the percentage of the result against predicted values can be used to help determine the level of severity of disease[3].

The PulmoLife uses these results to calculate and display an optional 'Lung Age' estimation[4]. This is an equivalent 'Lung Age' based upon the FEV_1% predicted results and can be used to show smokers the physical damage caused by smoking and encouraging smoking cessation. Smokers are at the greatest risk for developing COPD and decline in lung function in susceptible smokers has been shown to be twice of non-smokers[5].

Features

- Measures and displays FEV_1 and FEV_1% predicted
- 'Lung Age' estimation
- Quick and easy to use
- Large graphical display
- Easy to clean turbine
- Step-by-step screening instructions
- Robust storage pouch
- 2-year parts and labor warranty

Suitable for

- FEV_1 testing programs
- Identification of early signs of COPD in smokers over 35
- Encouraging susceptible smokers to quit

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Specifications

• Transducer:	Digital Volume Transducer
• Resolution:	0.01 Liters
• Accuracy:	+/- 3% to ATS/ERS Standardization of Spirometry 2005
• Volume Range:	0 - 8 Liters/Second (As per ATS/ERS recommendations)
• Flow Range:	0 - 14 Liters/Second (As per ATS/ERS recommendations)
• Predicted Values:	ECCS, NHANES III and Asian (Chinese)
• Display:	Custom Liquid Crystal Display (LCD)
• Power Supply:	3V Lithium Ion Coin Cell Battery
• Dimensions:	5.15” x 2.32” x 1.50”
• Weight:	Unit Only: 3.39 Ounces Packed: 9.17 ounces
• Operating Temperature:	32 to 104^0 Fahrenheit
• Operating Humidity:	30% to 90% Relative Humidity
• Storage Temperature:	-4 to 158^0 Fahrenheit
• Storage Humidity:	10% to 90% Relative Humidity

Bibliography

1) Murray CJL, Lopez AD. The global burden of disease: a comprehensive assessment of mortiality and disability from diseases, injuries and risk factors in 1990 and projected to 2020. Harvard University Press: Camabridge MA 1996.

2) Stavern K, Aaser E, Sandvik L, Bjornholt JV, Erikssen G, Thaulow E, Erikssen J. Lung function, smoking and mortality in a 26 year follow-up of healthy middle-aged males. Eur Respir J 2005; 25: 618-625

3) NICE COPD Guidelines 2004, Thorax 2004: 59 (suppl 1):1-232

4) Morris JF, Temple W. Spirometric ‘Lung Age’ estimation for motivating smoking cessation. Preventative Medicine, 1995; 14 655-662

5) Fletcher C, Peto R. BMJ 1977; 1: 1645-1648

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