

WatchPAT[™]

True Sleep Time™ decreases the risk of misdiagnosis in up to 20% of patients*

◆ Understanding the Importance of True Sleep Time

Most HST devices as well as laboratory polysomnography (PSG) calculate AHI/RDI based on total recording time, which has shown to lead to a misdiagnosis and misclassification in up to 20% of patients tested. WatchPAT, an innovative Home Sleep Test (HST), calculates AHI based on the patient's True Sleep Time, providing the physician with the most accurate and reliable diagnosis of the patient's AHI and RDI which are critical in managing the entire sleep apnea disease spectrum.

The WatchPAT also detects all sleep stages including wake, light sleep, deep sleep and REM. Coupled with undiluted respiratory events, the WatchPAT enables a more sensitive and accurate sleep disorder diagnosis.

Such highly sensitive and accurate diagnosis is especially important for patients with REM related sleep apnea, for patients who wake up numerous times during the night and for patients suffering from insomnia

| Sleep | Summary |
|-------|----------------|
|-------|----------------|

Start Study Time: 9:43:01PM
End Study Time: 6:04:59AM
Total Study Time: 8 hrs, 21 min

Sleep Time 6 hrs, 7 min
% REM of Sleep Time: 21.4 hrs

◆ WatchPAT - the simplicity of pulse oximetry, the accuracy of PSG

WatchPAT is an FDA cleared portable sleep diagnostic system to diagnose sleep related breathing disorders. It is a small wrist-mounted device which allows testing to be done in the comfort of the patient's own home. The WatchPAT's unique mode of action is based on the proprietary PAT® (Peripheral Arterial Tone) signal which measures the arterial volume changes in the fingertip, and is a reflection of sympathetic nervous system

WatchPAT consistently demonstrates a high degree of correlation as compared with PSG.

SIMPLE

ACCURATE

FAST

RELIABLE







activation.



WatchPAT[™]

Complete Sleep Architecture with the WatchPAT

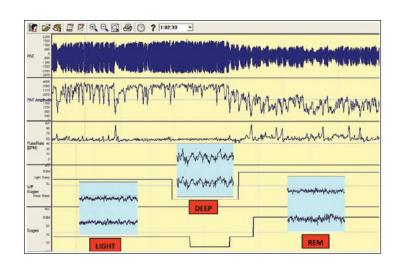
The WatchPAT software provides a clinically validated algorithm that provides the clinician both True Sleep Time and the Complete Sleep Architecture via the fingertip sensor.

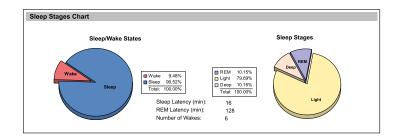
WatchPAT is FDA cleared to measure sleep stages: light, deep and REM sleep. Each stage was clinically validated, both independently and then in combination.

First the advanced actigraphy differentiates wake from sleep; then a combination of the PAT signal amplitude and variability coupled with heart rate variability differentiates REM sleep from non-REM sleep and ultimately light from deep sleep.

The Complete Sleep architecture provides information on sleep quality including sleep efficiency, sleep latency and REM latency. The Complete Sleep architecture also provides further specificity in the diagnosis of REM sleep related apnea with a separate REM and non-REM AHI.

The WatchPAT, with its True Sleep Time together with the Complete Sleep Architecture, provides the clinican an accurate diagnosis that is simple and reliable.





* Sources:

- Rodin et al. Comparison of AHI using recording time versus sleep time Schutte. J Sleep Abs supl 2014, p. A373
- Hedner J. et al. A Novel Adaptive Wrist Actigraphy Algorithm for Sleep-Wake Assessment in Sleep Apnea Patients. SLEEP, Vol. 27, No. 8, 2004:1560-1566
- Hersocivi S. et al. Detecting REM sleep from the finger: an automatic REM sleep algorithm based on peripheral arterial tone (PAT) and Actigraphy. Physiol Meas. 2007 Feb;28(2):129-40. Epub 2006 Dec 12.
- Bresler M. et al. Differentiating between light and deep sleep stages using an ambulatory device based on peripheral arterial tonometry. Physiol Meas. 2008 May;29(5):571-84. Epub 2008 May 7.
- Hedner J. et al. Sleep Staging Based on Automimcal Signals: A Multi-Center Validation Study. JCSM. Journal of Sleep Medicine, Vol. 7, No. 3, 2011: 301 306

©2015. All rights reserved. WatchPAT, Itamar Medical, the Itamar Medical logo are trademarks of Itamar Medical Ltd. and may be registered in certain jurisdictions



