

## **Xhale Issued Japanese Patent for Monitoring Drug Compliance**

*Xhale, Inc. announced today the issuance of Japanese patent 4773019, disclosing a method for monitoring drug compliance by detecting markers, such as odors, upon breath exhalation after medication is taken.*

Gainesville, FL July 1, 2011

Xhale, Inc. announced today the issuance of Japanese Patent 4773019, disclosing methods and apparatuses for monitoring drug compliance by detecting markers, such as odors, upon exhalation by a patient after medication has been taken. These markers result either directly from the medication or from an additive combined with the medication. It utilizes electronic sensor technology to non-invasively monitor compliance, and a reporting system to then track and send any necessary alerts. The system which Xhale is developing to commercialize this technology is branded SMART™ (Self Monitoring and Reporting Therapeutics).

There is a great need for a method to improve drug compliance which provides simple monitoring of medication dosing which is non-invasive, intuitive, and sanitary. Non-compliance of patients to drug regimens prescribed by their physicians results in excessive healthcare costs estimated to be around \$100 billion per year through lost work days, increased cost of medical care, higher compliance rates, as well as drug wastage. Non-compliance refers to the failure to take the prescribed dosage at the prescribed time which results in under medication or overmedication. Non-compliance of patients with communicable diseases costs the public health authorities millions of dollars annually and increases the likelihood of drug-resistance, with potential for widespread dissemination of drug-resistant pathogens resulting in epidemics.

This method determines whether a patient has taken a medication, by providing a patient a medication comprising a combination of a least one active therapeutic agent and an odorous compound or olfactory marker, which is then detectable in gaseous exhaled breath. The patient then blows into an electronic SMART™ device which analyzes the patient's exhaled breath for detection, or absence, of the odorous compound or olfactory marker to determine compliance. Presence of the markers indicates the patient has taken the medication at the prescribed time and in the prescribed dosage. The system is also expected to be an important tool for use in pharmaceutical clinical trials as part of drug development.

Xhale is a medical technology innovator, developing products that transform healthcare and save lives. The company is a world leader in the use of sensors that analyze vapor and exhaled breath and is focused on novel patient-centric monitoring solutions. Its two current product lines under development include SMART™, the world's only definitive medication adherence monitoring system, and Assurance™, a replacement for conventional finger-based pulse oximetry which will monitor multiple patient parameters from a single-point-of-contact sensor, more comfortably and conveniently than finger-based pulse oximetry with fewer false alarms.

For more information, please visit [www.xhale.com](http://www.xhale.com) or contact the company at 352.371.8488.

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