



Inmedix meets with NICE and NOCRI, establishes subsidiary, Inmedix UK, Ltd.

With its ANS Neuroscan diagnostic™, Inmedix seeks to reduce cost and improve treatment outcomes for patients with rheumatoid arthritis (RA) in the UK based on a broader understanding of the autonomic nervous system (ANS).

Inmedix, the leader in heart rate variability (HRV) application as an informative diagnostic tool in autoimmune disease, today announced the establishment of a subsidiary, Inmedix UK, Ltd.

In coordination with the National Institute for Health Research (NIHR) Office for Clinical Research Infrastructure (NOCRI) and with input from the National Institute for Health Care Excellence (NICE), Inmedix seeks to evaluate its ANS Neuroscan within a single payer system to more fully evaluate its health economic impact.

Daniel Austen will direct Inmedix UK Ltd. logistics in cooperation with rheumatology Professors Ernest Choy, and Peter Taylor. Choy serves as Head of Rheumatology and Translational Research at the Institute of Infection and Immunity and Director of the Cardiff Regional Experimental Arthritis Treatment and Evaluation (CREATE) Centre at Cardiff University School of Medicine. Taylor is Professor of Musculoskeletal Sciences at the University of Oxford and Director of Clinical Sciences at the Botnar Research Centre within the Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences and chairs the NOCRI Translational Research Partnership.

“The UK is an ideal place for medical research and development,” said Austen. “We have a cohesive, single payer system and our independent health and social care guidance body, NICE, has the important role through its medtech evaluation program of providing clinical excellence for our patients at the best possible price.”

The ANS Neuroscan measures autonomic nervous system (ANS) status, which has been shown to influence many human immune functions at work in RA and in other autoimmune diseases. Through electrocardiogram (ECG) tracing, the ANS Neuroscan uses proprietary heart rate variability (HRV) technology to assess the patient’s ANS profile. Inmedix shared with NICE and NOCRI its published proof-of-concept study (n=33) of observed accuracy – with 90% sensitivity and 95.7% specificity – for the ANS Neuroscan to predict therapeutic biologic response for RA.^{1,2} At year one, 0% of patients with a baseline poor ANS profile achieved disease control using either etanercept (Enbrel®, Amgen) or adalimumab (Humira®, AbbVie). For patients with a baseline beneficial ANS profile, 65% achieved disease control as defined by an ACR70 response, a standard endpoint for measuring efficacy in RA.

“We’re pleased to work with NIHR, NOCRI, and NICE as we address the goal of improving outcomes for patients with RA while reducing unsustainable costs,” said Andrew J. Holman, MD, CEO & Co-founder of Inmedix. “Conducting research in the UK single payer system will allow Inmedix to not only to seek greater rates of autoimmune disease remission, but to also assess the cost impact of reducing the need to so often escalate to biologic therapies.”

According to Express Scripts, even though only 2 percent of the U.S. population uses biologic drugs, biologics account for 40 percent of prescription drug spending.³ RA affects nearly two million Americans, including children, at a tangible societal cost of \$19.3 billion per year (2005 dollars).⁴ In the U.S., specialty

pharmaceutical costs exceeded \$87 billion in 2014, with rheumatologists responsible for 25%, mostly for biologic treatment of RA. The UK market is approximately one sixth the size of the U.S. market. Reducing the need to escalate to biologic care by enhancing non-biologic outcomes through ANS optimization strategies could potentially reduce specialty pharmacy costs for autoimmune diseases by 30-40%.

About Inmedix, LLC

Seattle-based biotech Inmedix is committed to engaging in world class research to discover innovative solutions for pressing healthcare needs related to the autonomic nervous system (ANS). Inmedix's ANS Neuroscan is the leading heart rate variability (HRV) application as an informative diagnostic tool in autoimmune disease, beginning with patients with rheumatoid arthritis (RA). The company's science and technology hopes to raise therapeutic outcomes so that patients will no longer need to cycle through failure of one therapeutic intervention after another. For more information, visit <http://www.inmedix.com>.

References

1. Holman AJ, Ng E. Heart rate variability predicts anti-tumor necrosis factor therapy response for inflammatory arthritis. *Autonomic Neurosci Basic Clinical* 2008 Dec 5;143(1-2):58-67.
2. Holman AJ, Ng E. How substantive is Heart Rate Variability as a Predictor of Anti-TNF Treatment Outcome for Inflammatory Arthritis? *Arthritis Rheumatol* 2015;67(suppl 10).
3. Birnbaum H, Pike C, Kaufman R et al. Societal cost of rheumatoid arthritis patients in the US. *Curr Med Res Opin* 2010 Jan;26(1):77-90.
4. <http://health.usnews.com/health-news/health-wellness/articles/2015/02/06/why-are-biologic-drugs-so-costly>



Contact Information

Rae Marie Gleason

Inmedix

<http://www.inmedix.com>

(714) 423-4863