

Immunogram Analyzer: A New Tool for Physicians

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The decision to treat patients with Hepatitis C using the standard regimen, a combination of pegylated interferon alfa shots and ribavirin supplements, is a difficult one. The side effects of treatment are known to be highly stressful: trouble sleeping, nausea and vomiting, fever, body aches and extreme fatigue, irritability and depression, concentration and memory problems.

Worse yet, many patients (50% to 60%) will not respond to treatment.¹ After enduring weeks of expensive and debilitating treatment, their symptoms remain.

Wouldn't you want a way to determine quickly which patients are responding positively to treatment, and which patients are not likely to improve?

The Immunogram™ Analyzer (now in clinical trials) has been developed as an instrument to identify non-responders for interferon treatment. With a simple blood test, you will have the information you need to make an informed recommendation for treatment.

What Is the Immunogram Analyzer?

The Immunogram™ Analyzer outputs two numbers from patient blood samples: ROX™ and BOX™.

ROX (reservoir oxygen capacity) is the measurement of the patient's innate immune viability and how the patient will respond *immediately* to a given treatment or drug.

BOX measures the patient's adaptive immune system strength, or ability of blood cells to build oxygen capacity. By monitoring BOX levels, you can track your patient's response to treatment over a longer period of time. BOX also gives the dose at which the immune switch is triggered and can be of use in determining the proper dosage of medication.

The test typically works by adding a 0.05-0.5 ml sample of patient blood to a well. ROX and BOX numbers are output by a reader calibrated at zero and 100%. Both up and down fluctuations are readable and of potential value.

Is the Immunogram Analyzer of Use Only with Hepatitis C?

At the present time, clinical trials are under way with patients with Hepatitis C and a control group of healthy patients (University of Medicine & Dentistry of New Jersey IRB Protocol No. 0120090320).

The purpose of the clinical trial is to identify patients who have low ROX and low BOX levels and examine their progress during the course of treatment with interferon and ribavirin supplements.

It is anticipated that measurement of ROX and BOX levels will have implications for the treatment of other chronic diseases, including diabetes and certain cancers.

How Was the Immunogram Analyzer Developed?

The Immunogram™ Analyzer was developed by Samir Sofer, PhD, PE.

Dr. Sofer discovered molecular oxygen peaks (MOPs) emanating from blood during research he conducted with his group on bovine blood², when he was Research Chair Professor of Biotechnology at New Jersey Institute of Technology (NJIT). Dr. Sofer then went to work at Solmedx, where he invented the Immunogram™ Analyzer with private funding.

The Immunogram™ Analyzer was developed during efforts to answer the following questions: How does stressing mammalian blood turn on a cardiovascular and an immunological switch at the same time? What is the mechanism of the switch, and how can this new tool be helpful to physicians, drug screeners, biomarker developers, and other researchers?

How Can the Immunogram Analyzer Be Used Now by Physicians?

The Immunogram™ Analyzer is available for use by the physician. Please fill out the contact us form at www.solmedx.com or email info@solmedx.com.

¹ Lee WM HALT-C study – 2002-2007, University of Texas Southwestern Medical School, available on the web.

² McKenna C & Sofer S (1999). The initial oxygraphic response of bovine blood as the basis for a rapid assay for drug toxicity, *Coparative Haematology International*, 9(2)