



## **New Test in Celiac Disease Provides Powerful Tool for Diagnosis and Immune Monitoring**

CAMBRIDGE, Mass.—Jan. 6, 2014—ImmusanT, a company focused on restoring tolerance to gluten and overcoming the need for gluten-free diet in patients with celiac disease, today announced that an article appearing in the February 2014 issue of the journal, *Clinical & Experimental Immunology*, features research findings demonstrating that a simple blood test may eventually be used for diagnosing celiac disease and monitoring new therapies. ImmusanT's chief scientific officer, Bob Anderson, M.D., Ph.D., along with collaborators in Australia, led the study.

The new blood test provides an approach that could lead to more rapid and accurate diagnosis of celiac disease, a condition that can currently only be definitively diagnosed with a small bowel biopsy. The new test could help address an emerging medical problem of inconclusive or self-diagnosed celiac disease in people following a gluten-free diet who may not have the disease.

"This novel diagnostic method for celiac disease required study participants to include gluten in their diets for a mere three days, a stark contrast to the weeks or months of gluten consumption required for a diagnosis using the current standard, bowel biopsy," commented Dr. Anderson.

All study participants, including control patients who did not have celiac disease, ate gluten within three days of taking the blood test. Using the new test, the researchers detected the T cells responsible for celiac disease in 85 percent of the study participants previously known to have the disease. The test was negative in all of the patients on a gluten-free diet who thought gluten was the cause of their digestive symptoms but did not have celiac disease.

"The results from the blood test are highly encouraging and warrant further research and development. Additionally, this is an important step toward a tool that could monitor changes in the small population of circulating T cells responsible for celiac disease when using treatments intended to restore tolerance to gluten, such as Nexvax2, the compound currently being developed by ImmusanT," Anderson continued.

"There is significant need for highly specific, noninvasive and easy-to-use diagnostic tools for celiac disease," said Leslie Williams, president and chief executive officer of ImmusanT.

"The findings from this study are extremely promising and support our ongoing work on a Nexvax2 blood test as a companion diagnostic and monitoring tool. Tests of this quality and simplicity are not available for other immune-mediated diseases, like Type-1 diabetes or multiple sclerosis, for which tolerance-inducing treatments are being considered," Williams continued. ImmusanT is currently developing Nexvax2<sup>®</sup>, a therapeutic vaccine designed to restore immune tolerance to gluten and allow patients to resume an unrestricted diet.

Visit the [Clinical & Experimental Immunology web site](#) to view the entire article.

### **About Celiac Disease**

Celiac disease is a T cell-mediated autoimmune-like disease triggered by the ingestion of gluten from wheat, rye, barley and sometimes oats in genetically susceptible individuals. A gluten-free diet is the only current medical treatment for this disease. The community prevalence of celiac disease is 0.7 percent in the U.S., but 83 percent of cases go unrecognized. When a person with celiac disease consumes gluten the individual's immune system responds by triggering T cells to fight the offending proteins, damaging the small intestine and inhibiting the absorption of important nutrients into the body. With no available

drug therapy, the only option for the approximately one percent of the global population that has celiac disease is to eliminate gluten from the diet. Compliance is often challenging, and nearly half the people on the strict elimination diet still have residual damage to their small intestine.

Undiagnosed, celiac disease is a major contributor to poor educational performance and failure to thrive in children. Untreated disease in adults is associated with increased risk of fractures and osteoporosis, problems during pregnancy and birth, short stature, dental enamel hypoplasia, dermatitis, recurrent stomatitis and cancer.

**About ImmusanT Inc.**

ImmusanT is a privately-held biotechnology company focused on restoring tolerance to gluten in celiac disease by harnessing new discoveries in immunology that aim to improve diagnosis and treatment and return patients to a normal diet, good health and improved quality of life. The company is developing [Nexvax2<sup>®</sup>](#), a therapeutic vaccine for celiac disease, and a companion diagnostic and monitoring tool to improve celiac disease management. ImmusanT's targeted immunotherapy discovery platform can be applied to a variety of epitope-specific autoimmune diseases. Founded in 2010, ImmusanT is backed by Vatera Healthcare Partners. More information may be found at [www.ImmusanT.com](http://www.ImmusanT.com), or follow [ImmusanT](#) on Twitter.

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