WATS3D SHOWN TO BE OVER 4X MORE EFFECTIVE IN DETECTING HIGH-GRADE DYSPLASIA AND ESOPHAGEAL ADENOCARCINOMA

New results published in Gastrointestinal Endoscopy

SUFFERN, NY – CDx Diagnostics, developer of the WATS3D biopsy, or Wide Area Transepithelial Sampling with 3D Tissue Analysis for the detection and surveillance of Barrett's esophagus today announced the publication of new, pivotal, multicenter, crossover data in the latest issue of Gastrointestinal Endoscopy. The study found that WATS3D increased the detection of High-Grade Dysplasia and Esophageal Adenocarcinoma (HGD/EAC) by more than 400% compared to the standard Seattle protocol random forceps biopsy, even when those random biopsies are carefully performed in academic centers by some of the world's most experienced endoscopists.

"At the current time, endoscopists rely solely on taking small random forceps biopsies at 1-2 cm intervals, leaving more than 96% of the endoscopically suspect area completely untested. The publication of this study underscores the severe limitations of our current random biopsy protocol as well as the value of taking a few extra minutes to add the WATS3D procedure as a standard of care," said lead author Prashanth R. Vennalaganti, MD, of Kansas City VA Medical Center and University of Kansas School of Medicine, Kansas City, Missouri.

The multi-center, prospective, randomized, tandem study was conducted in 16 major academic US GI centers. In the study, WATS3D detected 29 cases of HGD/EAC while the Seattle random forceps biopsy detected only seven such cases among 160 high-risk patients undergoing Barrett's esophagus surveillance.

"These results are quite compelling," said Robert D. Odze, MD, Director of the GI Pathology Division at the Brigham and Women's Hospital and Professor of Pathology at the Harvard Medical School who was not a participant in the study. He continued, "WATS3D not only addresses the sampling error inherent in relying on random forceps biopsies, its three-dimensional computer assisted analysis of the tissue sample provides the GI pathologist with diagnostic information that is not typically available using standard tissue based histopathology. We look forward to implementing this advance in gastroenterology and GI pathology to enhance routine care for our own practitioners."

"I can think of very few high impact studies in the field of Barrett's esophagus that should change how gastroenterologists, both community-based and academic, care for their patients, and this study is one of them," said Michael S. Smith, MD, MBA, incoming Chief of Gastroenterology and Hepatology at Mount Sinai West and Mount Sinai St. Luke's Hospitals in New York, who participated in the study. "These robust data demonstrate we have a tool that markedly improves our ability to detect dysplasia and cancer within Barrett's well beyond the error-prone Seattle protocol."

"Participation in this multicenter study, and further experience using WATS3D in my large Barrett's practice, has resulted in its incorporation into my routine clinical care," said Dr. Charles Lightdale, MD of the Columbia University Medical Center, New York. He continued, "Routine clinical use of WATS3D continues to demonstrate increased diagnostic yield in my patients, including in post-ablation surveillance. I see no reason why every academic and community gastroenterologist should not be using this rapidly performed, easily implemented procedure today to improve the diagnosis of Barrett's esophagus and dysplasia, so patients can be directed to appropriate endoscopic surveillance or therapy to prevent esophageal cancer."

"The current standard of care forces gastroenterologists to rely on chance, hoping that one of their small random forceps biopsies will happen to land on a highly focal area of precancer that may exist in their patient's esophagus," said Mark Rutenberg, Founder and CEO of CDx Diagnostics, the developer of the WATS3D diagnostic system. "Now that we can more easily treat esophageal precancer though endoscopic ablation, the remaining obstacle to preventing the most rapidly growing cancer in the US is to more reliably identify those GERD and Barrett's patients with these still harmless but precancerous changes so that we can treat them in time to prevent their progression to adenocarcinoma. These results clearly demonstrate that WATS3D can very effectively help to fill that critical gap in current routine GI care."

About WATS3D

CDx Diagnostics' WATS3D biopsy addresses the major sampling error inherent in current random forceps biopsy testing of the esophagus. In just a few minutes, endoscopists can easily obtain a wide area, full thickness transepithelial tissue sample for computer assisted 3D laboratory analysis. In large multicenter clinical trials, WATS3D has been found to significantly increase the detection rate of both Barrett's esophagus and esophageal dysplasia. The high sensitivity and interobserver agreement of WATS3D is due to the larger tissue area sampled, and the proprietary 3-Dimensionial computer imaging system that is based on an algorithm developed as part of the U.S. Strategic Defense Initiative missile defense program.

To learn more about WATS3D, visit:
wats3d.com

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About CDx Diagnostics

CDx Diagnostics' mission is to provide clinicians with easily implemented, cost effective tools to preempt cancer through enhanced detection of precancerous change. This is accomplished by a proprietary diagnostic platform that synthesizes computer imaging, artificial intelligence, molecular biology and three-dimensional cytopathology to detect precancerous change earlier and more reliably than prior methods. CDx tests for precancerous change require only a few minutes of practice time, are highly cost effective, widely reimbursed, and address a recognized critical gap in the current diagnostic standard of care that results in thousands of otherwise unnecessary cancer deaths each year. Routine clinical use of CDx testing in the oral cavity and esophagus has prevented thousands of cancers, and application of the CDx diagnostic platform to prevent cancers of the throat, bile duct, liver, pancreas, and stomach, is currently in progress.

SYNERGY PHARMACEUTICALS ANNOUNCES ACCEPTANCE OF SUPPLEMENTAL NEW DRUG APPLICATION (SNDA) FOR TRULANCE™ (PLECANATIDE) FOR THE TREATMENT OF ADULTS WITH IRRITABLE BOWEL SYNDROME WITH CONSTIPATION (IBS-C)

NEW YORK – (BUSINESS WIRE) – Synergy Pharmaceuticals Inc. (NASDAQ:SGYP) announced that the U.S. Food and Drug Administration (FDA) has accepted for filing the company's supplemental New Drug Application (sNDA) for TRULANCE™ (plecanatide) for the treatment of adults with irritable bowel syndrome with constipation (IBS-C). The Prescription Drug User Fee Act (PDUFA) date is January 24, 2018.

TRULANCE is a once-daily tablet approved by the FDA for the treatment of adults with chronic idiopathic constipation (CIC) and is currently being evaluated for the treatment of adults with IBS-C. The recommended dosage of TRULANCE for CIC is 3 mg taken orally, once daily, with or without food at any time of the day.

"This acceptance by the FDA is an important step forward for Synergy, building on the recent FDA approval and launch of TRULANCE for adults with CIC, and signaling the next step in our efforts to bring TRULANCE to the many millions of people living with IBS-C," said Gary S. Jacob, Ph.D., Chairman and CEO, Synergy Pharmaceuticals Inc. "This milestone is a testament to our entire team's passion to the continued research and development of TRULANCE, which, if approved, represents an additional, much needed new treatment option for this complex disorder."

The application is based on data from two randomized, 12-week, double-blind, placebo-controlled Phase 3 studies evaluating the efficacy and safety of TRULANCE for the treatment of adults with IBS-C. Across the two trials, more than 2,100 patients received a once-daily tablet of TRULANCE (3 mg or 6 mg doses) or placebo.

In these studies, TRULANCE 3 mg and 6 mg doses met the primary endpoint showing statistical significance in the percentage of patients who were Overall Responders compared to placebo during the 12-week treatment period (Study 1: 30.2% in 3 mg and 29.5% in 6 mg dose groups compared to 17.8% in placebo; $p<0.001$ for 3 mg and $p<0.001$ for 6 mg; Study 2: 21.5% in 3 mg and 24.0% in 6 mg dose groups compared to 14.2% in placebo; $p=0.009$ for 3 mg and $p<0.001$ for 6 mg).

An Overall Responder, as defined by the U.S. Food and Drug Administration (FDA), is a patient who fulfills both ?30% reduction in worst abdominal pain and an increase of ?1 complete spontaneous bowel movement (CSBM) over baseline, in the same week, for at least 50% of the 12 treatment weeks. This is the current primary endpoint required for FDA approval in IBS-C.

In both studies, the most common adverse event was diarrhea (Study 1 = 3.2% at 3 mg and 3.7% at 6 mg compared to 1.3% at placebo; Study 2 = 5.4% at 3 mg and 4.3% at 6 mg compared to 0.6% at placebo).

Indications and Usage

TRULANCE is a guanylate cyclase-C (GC-C) agonist indicated in adults for the treatment of chronic idiopathic constipation (CIC).

IMPORTANT SAFETY INFORMATION
WARNING: RISK OF SERIOUS DEHYDRATION IN PEDIATRIC PATIENTS

Trulance™ is contraindicated in patients less than 6 years of age; in nonclinical studies in young juvenile mice administration of a single oral dose of plecanatide caused deaths due to dehydration. Use of Trulance should be avoided in patients 6 years to less than 18 years of age. The safety and efficacy of Trulance have not been established in pediatric patients less than 18 years of age.

Contraindications

- Trulance is contraindicated in patients less than 6 years of age due to the risk of serious dehydration.
- Trulance is contraindicated in patients with known or suspected mechanical gastrointestinal obstruction.

Warnings and Precautions

Risk of Serious Dehydration in Pediatric Patients

- Trulance is contraindicated in patients less than 6 years of age. The safety and effectiveness of Trulance in patients less than 18 years of age have not been established. In young juvenile mice (human age equivalent of approximately 1 month to less than 2 years), plecanatide increased fluid secretion as a consequence of stimulation of guanylate cyclase-C (GC-C), resulting in mortality in some mice within the first 24 hours, apparently due to dehydration. Due to increased intestinal expression of GC-C, patients less than 6 years of age may be more likely than older patients to develop severe diarrhea and its potentially serious consequences.
- Use of Trulance should be avoided in patients 6 years to less than 18 years of age. Although there were no deaths in older juvenile mice, given the deaths in young mice and the lack of clinical safety and efficacy data in pediatric patients, use of Trulance should be avoided in patients 6 years to less than 18 years of age.

Diarrhea

- Diarrhea was the most common adverse reaction in the two placebo-controlled clinical trials. Severe diarrhea was reported in 0.6% of patients.
- If severe diarrhea occurs, the health care provider should suspend dosing and rehydrate the patient.

Adverse Reactions

- In the two combined CIC clinical trials, the most common adverse reaction in Trulance-treated patients (incidence ?% and greater than in the placebo group) was diarrhea (5% vs 1% placebo).

About Irritable Bowel Syndrome with Constipation (IBS-C)

Irritable bowel syndrome (IBS) is a chronic gastrointestinal disorder characterized by recurrent abdominal pain and associated with two or more of the following: related to defecation, associated with a change in the frequency of stool, or associated with a change in the form (appearance) of the stool. IBS can be subtyped by the predominant stool form: constipation (IBS-C), diarrhea (IBS-D) or mixed (IBS-M). Those within the IBS-C subtype experience hard or lumpy stools more than 25 percent of the time they defecate, and loose or watery stools less than 25 percent of the time. It is estimated that the prevalence of IBS-C in the U.S. adult population is approximately 4 to 5 percent, although this number can vary as patients may fluctuate between the three subtypes of IBS.

About TRULANCE™

TRULANCE™ (plecanatide) is a once-daily tablet approved for adults with CIC and is being evaluated for IBS-C. With the exception of a single amino acid substitution for greater binding affinity, TRULANCE is structurally identical to uroguanylin, a naturally occurring and endogenous human GI peptide. Uroguanylin activates GC-C receptors in a pH-sensitive manner primarily in the small intestine, stimulating fluid secretion and maintaining stool consistency necessary for regular bowel function.

About Synergy Pharmaceuticals

Synergy is a biopharmaceutical company focused on the development and commercialization of novel GI therapies. The company has pioneered discovery, research and development efforts on analogs of uroguanylin, a naturally occurring and endogenous human GI peptide, for the treatment of GI diseases and disorders. Synergy's proprietary GI platform includes one commercial product TRULANCE and a second lead product candidate, dolcanatide.

For more information, please visit:
synergypharma.com

Forward-Looking Statement

This press release and any statements made for and during any presentation or meeting contain forward-looking statements related to Synergy Pharmaceuticals Inc. under the safe harbor provisions of Section 21E of the Private Securities Litigation Reform Act of 1995 and are subject to risks and uncertainties that could cause actual results to differ materially from those projected. These statements may be identified by the use of forward-looking words such as "anticipate," "planned," "believe," "forecast," "estimated," "expected," and "intend," among others. There are a number of factors that could cause actual events to differ materially from those indicated by such forward-looking statements. These factors include, but are not limited to, the development, launch, introduction and commercial potential of TRULANCE; growth and opportunity, including peak sales and the potential demand for TRULANCE, as well as its potential impact on applicable markets; market size; substantial competition; our ability to continue as a going concern; our need for additional financing; uncertainties of patent protection and litigation; uncertainties of government or third party payer reimbursement; dependence upon

third parties; our financial performance and results, including the risk that we are unable to manage our operating expenses or cash use for operations, or are unable to commercialize our products, within the guided ranges or otherwise as expected; and risks related to failure to obtain FDA clearances or approvals and noncompliance with FDA regulations. As with any pharmaceutical under development, there are significant risks in the development, regulatory approval and commercialization of new products. There are no guarantees that future clinical trials discussed in this press release will be completed or successful or that any product will receive regulatory approval for any indication or prove to be commercially successful. Investors should read the risk factors set forth in Synergy's most recent periodic reports filed with the Securities and Exchange Commission, including Synergy's Form 10-K for the year ended December 31, 2016. While the list of factors presented here is considered representative, no such list should be considered to be a complete statement of all potential risks and uncertainties. Unlisted factors may present significant additional obstacles to the realization of forward-looking statements. Forward-looking statements included herein are made as of the date hereof, and Synergy does not undertake any obligation to update publicly such statements to reflect subsequent events or circumstances except as required by law. PP-TRU-US-0365.

CROHN'S & COLITIS FOUNDATION AND AMERICAN GASTROENTEROLOGICAL ASSOCIATION ANNOUNCE CONFERENCE PARTNERSHIP

Inaugural Crohn's & Colitis Congress for healthcare professionals and researchers to take place in Las Vegas in January 2018

NEW YORK, NY – The Crohn's & Colitis Foundation and the American Gastroenterological Association (AGA) announced that they are partnering to co-sponsor the first-ever "Crohn's & Colitis Congress," which will take place in Las Vegas in January 2018.

The Crohn's & Colitis Congress will be the premier conference for inflammatory bowel diseases (IBD) healthcare professionals and researchers. It will bring state-of-the-art comprehensive care together with the latest research to advance prevention, treatment, and cures for IBD patients.

"We are thrilled to be partnering with AGA, the nation's premier gastroenterological professional organization, on this new conference," said Michael Osso, President & CEO of the Foundation. "By working together, we will bridge the patient and professional perspectives, and create a multidisciplinary, clinically-focused, and forward-thinking experience for all attendees."

The new conference will focus on a comprehensive, patient-centered approach to IBD care, with sessions addressing the current realities and challenges in the disease space. The most advanced, cutting-edge research will be presented to assist the IBD community in providing the best quality of care to the 1.6 million Americans living with these diseases.

"We are proud to be part of the Crohn's & Colitis Foundation's work to cure Crohn's disease and ulcerative colitis," said Tom Serena, executive vice president of AGA. "The Crohn's & Colitis Congress will be 2018's must-attend meeting for scientists and clinicians who want to accelerate advances in IBD patient care."

To plan the conference agenda, staff from the Foundation and AGA will work with an organizing committee comprised of leading healthcare professionals representing the key disciplines involved in the comprehensive care of IBD as well as research.

About the Crohn's & Colitis Foundation

The Crohn's & Colitis Foundation is the largest non-profit, voluntary, health organization dedicated to finding cures for inflammatory bowel diseases (IBD). The Foundation's mission is to cure Crohn's disease and ulcerative colitis, and to improve the quality of life of children and adults affected by these diseases. The Foundation works to fulfill its mission by funding research; providing educational resources for patients and their families, medical professionals, and the public; and furnishing supportive services for those afflicted with IBD.

For more information visit:
crohnscolitisfoundation.org, call 888-694-8872, or email info@crohnscolitisfoundation.org

About the AGA

The American Gastroenterological Association is the trusted voice of the GI community. Founded in 1897, the AGA has grown to more than 16,000 members from around the globe who are involved in all aspects of the science, practice and advancement of gastroenterology. The AGA Institute administers the practice, research and educational programs of the organization.

www.gastro.org.