LARGE MULTI-CENTER STUDY DEMONSTRATES SIGNIFICANT INCREASE IN DETECTION OF ESOPHAGEAL PRE-CANCER WITH USE OF WATS3D BIOPSY

Adding WATS3D Improved the Detection of Barrett’s Esophagus by 153% and Dysplasia by 242% in Community-Based Settings

HONOLULU, HI – CDx Diagnostics announced new data from a prospective multi-center study of more than 12,800 patients demonstrating a significant increase in detection of esophageal pre-cancer, including Barrett’s esophagus and dysplasia, with the use of WATS3D biopsy, a three dimensional computer-assisted biopsy system, in community-based settings. The results were announced during a podium presentation at the American Gastroenterology (ACG) 2015 Annual Scientific Meeting, which took place in Honolulu, Hawaii, from October 16 - 21, 2015.

The study, “Transepithelial Brush Biopsies With Computer-Assisted 3-Dimensional Analysis Markedly Improve Detection of Barrett’s Esophagus and Dysplasia: Interim Analysis From a Prospective Multi-Center Community-Based Study,” found that the adjunctive use of WATS3D uncovered an additional 2,570 non-dysplastic Barrett’s esophagus and 213 cases with dysplasia that were undetected with four-quadrant forceps biopsies alone. The augmented yield of adding WATS3D biopsy to the standard biopsy approach was 153% for Barrett’s esophagus and 242% for dysplasia.

“The findings from this broad study further validate and confirm the benefits of adopting the WATS3D biopsy within the clinical setting,” said Michael S. Smith, MD, MBA, Medical Director of the Esophageal Program and Associate Professor of Medicine at the Lewis Katz School of Medicine at Temple University, and senior author of the study. “By adding WATS3D, the sampling was able to identify areas of concern that would otherwise go undetected, ultimately helping us to improve the care of patients with Barrett’s esophagus and even save lives.”

With more than 12,800 patients, this study enrolled cases with forceps and WATS3D biopsy data results from June 2013 to July 2015 and is the largest WATS3D sample to date. From the analysis, the most common endoscopic indications detected were reflux and Barrett’s esophagus.

“This study underscores the importance and value of using WATS3D biopsy to identify esophageal pre-cancer often missed by standard sampling methods,” said Mark Rutenberg, Chairman and CEO of CDx Diagnostics. “These results strengthen our growing understanding of the benefits associated with WATS3D and we look forward to continuing to deliver innovative technology and clinical insights to the endoscopy community.”

The WATS3D biopsy samples a large tissue area and its computer analysis integrates over 100, one-micron thick optical slices to form a single three dimensional image in which potential abnormality is highlighted to the pathologist.

About CDx Diagnostics and the WATS3D Biopsy

CDx Diagnostics’ mission is to provide doctors with the most powerful diagnostic technology to help prevent cancer before it can start.

CDx Diagnostics’ WATS3D biopsy addresses the sampling error inherent in random forceps biopsy testing of the esophagus. In just a few minutes, gastroenterologists can easily obtain a wide area, full-thickness transepithelial tissue sample for computer-assisted 3D laboratory analysis. In clinical trials, adjunctive use of CDx Diagnostics’ WATS3D biopsy significantly increased the detection rate of both Barrett’s esophagus and esophageal dysplasia.1, 2 The high sensitivity of WATS3D is due to the large tissue area sampled, and the proprietary 3-Dimensional 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

References


IRONWOOD AND ALLERGAN INITIATE PHASE IIB CLINICAL TRIAL OF LINACLOTIDE COLONIC RELEASE IN ADULTS WITH IBS WITH CONSTIPATION

CAMBRIDGE, MA & DUBLIN – Ironwood Pharmaceuticals, Inc. (NASDAQ: IRWD) and Allergan plc (NYSE: AGN) announced the initiation of a Phase IIB clinical trial evaluating two orally-administered colonic release formulations of linacotide in adult patients with irritable bowel syndrome with constipation (IBS-C). The two formulations are being evaluated together in this trial to support potential advancement (continued on page 60)
of two distinct product opportunities into late stage development, one for patients with IBS-C who suffer from both abdominal pain and constipation symptoms, and the other for patients suffering from other gastrointestinal (GI) disorders with lower abdominal pain as a predominant symptom. Data from the Phase IIb clinical trial in IBS-C are expected in the second half of 2016.

Linaclotide is the first and only FDA-approved guanylate cyclase C (GC C) agonist; it is approved as a 145 mcg capsule to be taken once per day for the treatment of adults with chronic idiopathic constipation (CIC) and as a 290 mcg capsule to be taken once per day for the treatment of adults with IBS-C.

Linaclotide binds to the GC-C receptor in the intestine and is thought to work in two ways, based on non-clinical studies: by decreasing the activity of pain-sensing nerves and by increasing fluid secretion into the intestine. The investigational linaclotide colonic release formulations are designed to provide targeted delivery of linaclotide to the distal small intestine and colon, and the companies believe this may further decrease the activity of key pain-sensing nerves in the colon with a smaller increase in fluid secretion.

“Abdominal pain is a key symptom of many gastrointestinal diseases, including IBS-C. Millions of patients are impacted by abdominal pain, and they have few prescription options,” said David Nicholson, Ph.D., executive vice president of brand research and development at Allergan. “Our goal in this trial is to evaluate the potential of our two linaclotide colonic release formulations to provide enhanced abdominal pain relief to patients suffering from IBS-C as well as to evaluate the differences between the two formulations and inform a path forward for developing a drug that can reduce gastrointestinal pain in other disorders, such as other types of IBS, ulcerative colitis and diverticulitis.”

“With colonic release, we are seeking to peel apart the two components of the linaclotide mechanism of action, which we believe may lead to two product opportunities potentially addressing multiple unmet gastrointestinal needs,” said Mark Currie, Ph.D., chief scientific officer and president of research and development at Ironwood. “The colonic release program is one of many efforts by Allergan and Ironwood to tap into linaclotide’s rich and pioneering pharmacology as we work together to address the broad spectrum of GI patients’ symptoms.”

The randomized, double-blind, placebo-controlled, multi-site Phase IIb clinical trial is expected to enroll up to 520 adult patients with IBS-C. Patients will be randomized to one of eight groups: one group receives placebo, one group receives 290 mcg linaclotide (approved formulation), three groups receive various doses of CR1 (colonic release formulation 1 at 30 mcg, 100 mcg or 300 mcg), and three groups receive various doses of CR2 (colonic release formulation 2 at 30 mcg, 100 mcg or 300 mcg). The 290 mcg approved formulation is included as a positive control for this study. All doses will be administered orally, once daily for 12 weeks. The trial is designed to assess the safety and efficacy of each linaclotide colonic release dose and formulation, including its effect on abdominal pain relief and complete spontaneous bowel movement (CSBM) frequency, as well as on other abdominal and bowel symptoms commonly experienced by IBS-C patients. The trial also aims to evaluate how the two colonic release formulations compare to each other and to the approved 290 mcg formulation of linaclotide, with the goal of identifying appropriate doses and formulations for Phase III clinical trials.

**About Irritable Bowel Syndrome with Constipation**

Irritable bowel syndrome with constipation (IBS-C) is a functional gastrointestinal disorder in which individuals experience hallmark symptoms of abdominal pain and infrequent bowel movements (less than three times per week). While estimates vary, as many as 13 million adults in the U.S. may suffer from IBS-C. Results derived from responses to a web based survey commissioned by Forest Pharmaceuticals and Ironwood Pharmaceuticals suggest that only about half of adult IBS-C sufferers are medically diagnosed. There are few available prescription treatment options for this condition.

Please see full Prescribing Information including Boxed Warning:

frx.com/pi/linzess_pi.pdf

Connect with us at:

ironwoodpharma.com

For more information, visit Allergan’s website:

allergan.com

practicalgastro.com