October 19, 2015

Ironwood Highlights Refractory GERD and Constipation Research at the American College of Gastroenterology 2015 Annual Scientific Meeting

- Oral Presentation of IW-3718 rGERD Data, As Well As Post-Hoc Analysis of Linaclotide Sustained Response in CIC and Patient Insights on Constipation -

CAMBRIDGE, Mass.--(BUSINESS WIRE)-- Ironwood Pharmaceuticals, Inc. (NASDAQ: IRWD) today announced a series of oral and poster presentations at the American College of Gastroenterology 2015 Scientific Meeting in Honolulu, HI, October 16 to 21, 2015. The oral presentations include data from a Phase IIa study of IW-3718 indicating that this investigational drug improved heartburn and certain other symptoms associated with refractory gastroesophageal reflux disease (GERD). A second oral presentation suggests that certain patients suffering from chronic constipation may be at a higher risk of developing serious GI complications.

The poster presentations include a post-hoc analysis reviewing the sustainability of the response of linaclotide in patients with chronic idiopathic constipation (CIC), as well as post-hoc analyses regarding patient attitudes about treatment with linaclotide and treatment with other therapies.

The titles and scheduled times of the presentations are as follows:

Results of Phase IIa Study in Patients with Refractory GERD (Oral Presentation):

IW-3718, a Novel Gastric-Retentive Bile Acid Sequestrant, Improved Symptoms of Refractory GERD in a Double-Blind, Placebo-Controlled Phase 2a Study (paper #58) to be presented during Plenary Session 1: Esophagus / Endoscopy on Wednesday, Oct. 21, 2015, 1:30 p.m. to 1:40 pm (Eastern Time), by Michael Vaezi, M.D., Ph.D., M.S., Clinical Director, Division of Gastroenterology, and Director of the Center for Swallowing and Esophageal Disorders at Vanderbilt University Medical Center.

Serious GI Complications Associated with Chronic Constipation (Oral Presentation):

Association of Chronic Constipation with Gastrointestinal Complications in Younger Patients (paper #40) to be presented during the Colon/Functional Bowel Disorder Plenary Session on Tuesday, Oct. 20, 2015, 6:30 p.m. to 6:40 p.m. (Eastern Time), by Lauren B. Gerson, M.D., Board-Certified Gastroenterologist, Division of Gastroenterology, California Pacific Medical Center. This presentation received ACG's designation as "Most Newsworthy."

Patient Insights into Chronic Idiopathic Constipation Treatments (Poster Presentations):

Patients' Use of and Experience with Medications for Management of Symptoms of Chronic Constipation (poster P1724), to be presented on Tuesday, Oct. 20, 2015, 3:30 p.m. to 9:30 p.m. (Eastern Time), by William Spalding, Director, Health Economics & Outcomes Research at Ironwood Pharmaceuticals, Inc. This poster received ACG's designation as "Most Newsworthy."

Patient Attitudes Regarding Treatment Satisfaction and Bowel Movement Confidence and Predictability: A Post-Hoc Comparison of Study Treatment and Prior Medication Use Based on a Phase 3b Trial of Linaclotide in CIC (poster P314), which was presented on Sunday, Oct. 18, 2015, by Douglas Taylor, Director, Health Economics & Outcomes Research at Ironwood Pharmaceuticals, Inc.

Treatment Satisfaction Among Patients With Constipation-Related Bowel and Abdominal Symptoms: Results From the CONTOR Study (poster P542), which was presented on Sunday, Oct. 18, 2015, by Douglas Taylor, Director, Health Economics & Outcomes Research at Ironwood Pharmaceuticals, Inc.

Characteristics Associated With Probiotic Use Among Patients Experiencing Constipation-Related Symptoms: Results From the CONTOR Study (poster P548), which was presented on Sunday, Oct. 18, 2015, by Brennan Spiegel, M.D., M.S.H.S., Cedars-Sinai Health System, Los Angeles, CA.

Sustained Response of Linaclotide in Chronic Idiopathic Constipation Patients (Poster Presentation):

Sustainability of Linaclotide Response in Chronic Idiopathic Constipation Patients: a Post-hoc Pooled Analysis of Two Phase 3 Trials (poster P1012), to be presented on Monday, Oct. 19, 2015, 4:00 p.m. to 9:30 p.m. (Eastern Time), by Bernard Lavins, Senior Director, Clinical Research at Ironwood Pharmaceuticals, Inc.

About Linaclotide

Linaclotide is a guanylate cyclase‑C (GC‑C) agonist that is thought to work in two ways based on nonclinical studies. Linaclotide binds to the GC-C receptor locally, within the intestinal epithelium. Activation of GC-C results in increased intestinal fluid secretion and accelerated transit and a decrease in the activity of pain-sensing nerves in the intestine. The clinical relevance of the effect on pain fibers, which is based on nonclinical studies, has not been established. Linaclotide is marketed by Ironwood and Actavis in the United States as LINZESS® and is indicated for the treatment of adults with irritable bowel syndrome with constipation (IBS-C) or chronic idiopathic constipation (CIC). Linaclotide is marketed by Almirall, S.A. for the treatment of adults with moderate to severe IBS-C in Europe under the brand name CONSTELLA®. Ironwood also has partnered with Astellas Pharma Inc. for development and commercialization of linaclotide in Japan and with AstraZeneca for development and commercialization in China.

LINZESS and CONSTELLA are trademarks owned by Ironwood Pharmaceuticals, Inc. Any other trademarks referred to in this press release are the property of their respective owners. All rights reserved.

LINZESS Important Safety Information

WARNING: PEDIATRIC RISK

LINZESS is contraindicated in pediatric patients under 6 years of age. In nonclinical studies, administration of a single, clinically relevant adult oral dose of linaclotide caused deaths due to dehydration in young juvenile mice. Use of LINZESS should be avoided in pediatric patients 6 through 17 years of age. The safety and efficacy of LINZESS has not been established in pediatric patients under 18 years of age.

Contraindications

- LINZESS is contraindicated in pediatric patients under 6 years of age.
- LINZESS is contraindicated in patients with known or suspected mechanical gastrointestinal obstruction.

Warnings and Precautions

Pediatric Risk

- LINZESS is contraindicated in children under 6 years of age. The safety and effectiveness of LINZESS in pediatric patients under 18 years of age have not been established. In neonatal mice, increased fluid secretion as a consequence of GC-C agonism resulted in mortality within the first 24 hours due to dehydration. Due to increased intestinal expression of GC-C, children under 6 years of age may be more likely than older children and adults to develop significant diarrhea and its potentially serious consequences.
- Use of LINZESS should be avoided in pediatric patients 6 through 17 years of age. Although there were no deaths in older juvenile mice, given the deaths in young juvenile mice and the lack of clinical safety and efficacy data in pediatric patients, use of LINZESS should be avoided in pediatric patients 6 through 17 years of age.

Diarrhea

- Diarrhea was the most common adverse reaction of LINZESS-treated patients in the pooled IBS-C and CIC double-blind placebo-controlled trials. Severe diarrhea was reported in 2% of LINZESS-treated patients. The incidence of diarrhea was similar in the IBS-C and CIC populations.
- Patients should be instructed to stop LINZESS if severe diarrhea occurs and to contact their healthcare provider. The healthcare provider should consider dose suspension and rehydration.

Adverse Reactions

- In IBS-C clinical trials, the most common adverse reactions in LINZESS-treated patients (incidence ≥2% and greater than placebo) were diarrhea (20% vs 3% placebo), abdominal pain (7% vs 5%), flatulence (4% vs 2%), headache (4% vs 3%), viral gastroenteritis (3% vs 1%) and abdominal distension (2% vs 1%).
- In CIC clinical trials, the most common adverse reactions in LINZESS-treated patients (incidence ≥2% and greater than

placebo) were diarrhea (16% vs 5% placebo), abdominal pain (7% vs 6%), flatulence (6% vs 5%), upper respiratory tract infection (5% vs 4%), sinusitis (3% vs 2%) and abdominal distension (3% vs 2%).

Please see full Prescribing Information including Boxed Warning: http://www.frx.com/pi/linzess_pi.pdf.

About IBS-C and CIC

While estimates vary, as many as 13 million adults in the U.S. may suffer from IBS-C, and as many as 35 million may suffer from CIC. Results derived from responses to a web based survey commissioned by Forest Pharmaceuticals, now a member of Allergan plc, and Ironwood Pharmaceuticals suggest that only about half of adult IBS-C sufferers are medically diagnosed, and only about 12 percent of adult CIC sufferers are medically diagnosed. Hallmark symptoms associated with IBS-C include abdominal pain and constipation. Symptoms associated with CIC may include constipation, hard or lumpy stools, infrequent stools, and incomplete evacuation (not completely emptying the bowels). There are few available prescription treatment options for these conditions.

About IW-3718

IW-3718 is a novel, gastric retentive formulation of a bile acid sequestrant, developed by Ironwood using the proprietary Acuform® drug delivery technology licensed from Depomed, Inc. IW-3718 is designed to deliver the bile acid sequestrant to the desired sites of action - specifically the stomach and duodenum (upper small intestine) - over an extended period of time. Data from non-clinical studies support the extended release profile of IW-3718.

About Refractory Gastroesophageal Reflux Disease (GERD)

An estimated 8 million Americans suffer from refractory gastroesophageal reflux disease (GERD), experiencing continued symptoms such as heartburn and regurgitation despite receiving the current standard of care treatment with a proton pump inhibitor (PPI) to suppress stomach acid production. There are a limited number of FDA-approved treatment options for these patients. Research suggests reflux of bile from the intestine into the stomach and esophagus may play a role in the ongoing symptoms of refractory GERD patients.

About Ironwood Pharmaceuticals

Ironwood Pharmaceuticals (NASDAQ: IRWD) is focused on creating medicines that make a difference for patients, building value to earn the continued support of our fellow shareholders, and empowering our team to passionately pursue excellence. We discovered, developed and are commercializing linaclotide, which is approved in the United States and a number of other countries. Our pipeline priorities include exploring further opportunities for linaclotide, as well as leveraging our therapeutic expertise in gastrointestinal disorders and our pharmacologic expertise in guanylate cyclases to address patient needs across the upper and lower gastrointestinal tract. Ironwood was founded in 1998 and is headquartered in Cambridge, Mass. Connect with us at www.ironwoodpharma.com or on Twitter at www.twitter.com/ironwoodpharma; information that may be important to investors will be routinely posted in both these locations.

All data are embargoed until October 19, 2015 at 8 a.m. (Eastern Time) per ACG policy.

View source version on businesswire.com: http://www.businesswire.com/news/home/20151019005274/en/

Ironwood Pharmaceuticals, Inc.
Media Relations
Trista Morrison, 617-374-5095
tmorrison@ironwoodpharma.com
or
Investor Relations
Meredith Kaya, 617-374-5082
mkaya@ironwoodpharma.com

Source: Ironwood Pharmaceuticals, Inc.

News Provided by Acquire Media