February 15, 2018

Ironwood Pharmaceuticals Provides Fourth Quarter and Full Year 2017 Investor Update

- Generated 2017 revenue of $298 million, driven primarily by LINZESS® (linaclotide) U.S. net sales of $701 million and expansion of LINZESS commercial margin to 61% -

- On track to advance key pipeline candidates in 2018, including Phase III trials for IW-3718 and LINZESS and Phase II trials for praliciguat (IW-1973) and IW-1701 -

- Expect to generate positive cash flow in 4Q 2018 through continued top-line growth and financial discipline -

CAMBRIDGE, Mass.--(BUSINESS WIRE)-- Ironwood Pharmaceuticals, Inc. (NASDAQ: IRWD), a commercial biotechnology company, today provided an update on its fourth quarter and full year 2017 results and recent business activities.

"Continued execution in 2017 advanced our vision of building a biotech company that is grounded in innovation and creating and commercializing medicines that make a difference in patients' lives," said Peter Hecht, chief executive officer of Ironwood. "LINZESS continued to strengthen its branded prescription market leading position, ex-U.S. linaclotide contribution from our partner Astellas in Japan increased significantly, DUZALLO® was approved and launched, and we advanced six exciting mid- and late-stage clinical trials. In 2018, we expect strong top-line growth through our commercial efforts, the advancement of key mid- to late-stage clinical trials targeting areas of significant unmet need such as uncontrolled GERD, diabetic nephropathy, heart failure with preserved ejection fraction and sickle cell disease, and we expect to generate positive cash flow in the fourth quarter."

Fourth Quarter and Full Year 2017 and Recent Highlights

Irritable Bowel Syndrome with Constipation (IBS-C) / Chronic Idiopathic Constipation (CIC)

- *LINZESS.* U.S. net sales, as reported by Ironwood's U.S. collaboration partner Allergan plc, were $194.8 million in the fourth quarter of 2017, a 12% increase compared to the fourth quarter of 2016, and $701.2 million for the full year 2017, a 12% increase compared to the full year 2016. Ironwood and Allergan share equally in brand collaboration profits.
  - LINZESS commercial margin was 71% in the fourth quarter of 2017 compared to 61% in the fourth quarter 2016. For the full year 2017, commercial margin was 61% compared to 58% in 2016.
  - Net profit for the LINZESS U.S. brand collaboration, including commercial and research and development (R&D) expenses, was $126.5 million in the fourth quarter of 2017, a 41% increase compared to the fourth quarter of 2016. For the full year 2017, net profit was $371.8 million, a 29% increase compared to the full year 2016.
  - Total LINZESS prescription volume in the fourth quarter of 2017 included approximately 31 million LINZESS capsules, an 18% increase in capsules compared to the fourth quarter of 2016, per IQVIA. For the full year 2017, total prescription volume included approximately 113 million LINZESS capsules, an 18% increase compared to the full year 2016, per IQVIA.
  - More than 806,000 total LINZESS prescriptions were filled in the fourth quarter of 2017, a nearly 12% increase compared to the fourth quarter of 2016, per IQVIA. For the full year 2017, approximately 3 million total LINZESS prescriptions were filled, a nearly 14% increase compared to the full year 2016, per IQVIA.
  - Since the launch of LINZESS in December 2012, greater than 2 million unique patients have filled approximately 10 million prescriptions, per IQVIA.
- In January 2018, Ironwood and Allergan reached an agreement with wholly-owned subsidiaries of Sun Pharmaceutical Industries Ltd. (Sun Pharma, including its subsidiaries and/or associated companies), resolving patent litigation brought in response to Sun Pharma's abbreviated new drug application (ANDA) seeking approval to market a generic version of LINZESS prior to the expiration of the companies' patents. Pursuant to the terms of the settlement, Ironwood and Allergan will grant the wholly-owned subsidiaries of Sun Pharma a license to market a generic version of LINZESS in the U.S. beginning on February 1, 2031 (subject to U.S. FDA approval), unless certain limited circumstances, customary to settlement agreements of this nature, occur. As a result of the settlement, all Hatch-

Waxman litigation between the companies and Sun Pharma regarding LINZESS patents has been dismissed.

- *Additional Abdominal Symptom Claims.* Abdominal bloating and discomfort are two highly bothersome symptoms associated with IBS-C. Ironwood and Allergan expect to advance a single Phase III trial with LINZESS in 2018 intended to obtain additional abdominal symptom claims, including bloating and discomfort.
- *Linaclotide Delayed Release.* An estimated 20 to 25 million patients suffer from IBS-mixed and IBS with diarrhea in the U.S. Ironwood and Allergan plan to advance a linaclotide delayed release formulation as a visceral, non-opioid, pain-relieving agent for patients suffering from all subtypes of IBS. The companies are in active discussions with the U.S. FDA to advance this program into a Phase IIb trial.

Uncontrolled Gout

- *DUZALLO (lesinurad and allopurinol)* and *ZURAMPIC® (lesinurad).* Combined U.S. net sales were $1.6 million in the fourth quarter of 2017 and $3.1 million for the full year 2017, including a cumulative adjustment of approximately $0.9 million due to the transition to the sell-in revenue recognition model.
  - In October 2017, Ironwood began commercializing DUZALLO in the U.S. as the first FDA-approved fixed-dose combination treatment that addresses two causes of hyperuricemia in gout, over-production and under-excretion of serum uric acid, in a single pill.
  - Nearly 3,000 total DUZALLO and ZURAMPIC prescriptions were filled in the fourth quarter of 2017, and more than 6,000 total prescriptions were filled in the full year 2017, per IQVIA.
- *Lesinurad Franchise Strategy.* In January 2018, Ironwood commenced an initiative to evaluate the optimal mix of investments for its lesinurad franchise, including DUZALLO and ZURAMPIC. As part of this effort, Ironwood is investing to systemically explore a more comprehensive marketing mix in select test markets (with paired controls), while continuing to build market presence across the country. The data received in 2018 from these test markets are expected to inform future investments into the lesinurad franchise. As a result, Ironwood is re-allocating its franchise resources and commenced a reduction in its field-based workforce, primarily consisting of field-based sales representatives that promote DUZALLO or ZURAMPIC in the first position, by approximately 60 employees. Ironwood's field-based sales representatives that promote LINZESS in the first position and headquarters-based employees are excluded from the workforce reduction.

Uncontrolled Gastroesophageal Reflux Disease (GERD)

- *IW-3718*. There are an estimated 10 million Americans who suffer regularly from symptoms of GERD, such as heartburn and regurgitation, despite receiving treatment with the current standard of care, proton pump inhibitors. Ironwood is actively working to advance IW-3718, its gastric retentive formulation of a bile acid sequestrant for the potential treatment of uncontrolled GERD, into Phase III trials. Ironwood continues to expect the trials to begin in the second half of 2018, pending end of Phase II meetings with the U.S. FDA.

Diabetic Nephropathy and Heart Failure with Preserved Ejection Fraction (HFpEF)

- *Praliciguat (IW-1973).* Ironwood is advancing praliciguat, its lead soluble guanylate cyclase (sGC) stimulator, in Phase II trials for the potential treatment of diabetic nephropathy and of HFpEF. Both diseases affect millions of patients around the world, including an estimated eight million Americans suffering from diabetic nephropathy and an estimated three million Americans suffering from HFpEF. Diabetic nephropathy is the leading cause of end-stage renal disease. There are few treatment options available to delay the steady decline of renal function leading to dialysis or kidney transplant. HFpEF is a highly symptomatic condition with high rates of morbidity and mortality, with no approved treatments available.
  - *Diabetic nephropathy.* Ironwood is enrolling approximately 150 patients into a randomized, double-blind, placebo-controlled, dose-ranging Phase II trial designed to evaluate the safety and efficacy of praliciguat in patients with diabetic nephropathy.
  - *HFpEF.* Ironwood is enrolling approximately 325 patients into a randomized, double-blind, placebo-controlled, dose-ranging Phase II trial designed to evaluate the safety and efficacy of praliciguat in patients with HFpEF.
  - In December 2017, Ironwood announced top-line results from two Phase IIa studies designed to study the safety and pharmacokinetics of praliciguat in patients with type 2 diabetes and hypertension. Consistent with pre-clinical observations, data from both studies indicated that treatment with praliciguat led to blood pressure reductions, improvements in metabolic parameters (including reductions in fasting plasma glucose, triglyceride and cholesterol levels), and improvements in markers of endothelial health in patients who were taking a stable medical regimen to manage their disease. These studies confirmed a pharmacokinetic profile of praliciguat that supports evaluation of once-daily dosing and suggest broad distribution to tissues, offering the potential for extra-vascular pharmacology. Praliciguat was generally well-tolerated in both studies.

Sickle Cell Disease and Achalasia

- *IW-1701.* Ironwood is advancing IW-1701, its second clinical sGC stimulator, in Phase II development for the potential treatment of sickle cell disease and of achalasia. Sickle cell disease is a debilitating genetic disorder that affects approximately 100,000 Americans and causes red blood cells to become sickle-shaped, reducing normal red blood cell number. Achalasia is a rare disease with a prevalence rate of 10/100,000 Americans in which the lower esophagus does not relax normally, causing dysphagia (swallowing problems), regurgitation, and chest pain.
  - Sickle Cell Disease. Ironwood is enrolling approximately 80 patients into a multicenter, randomized, double-blind, placebo-controlled, dose-ranging Phase II trial of IW-1701 in patients with sickle cell disease. The Phase II trial is designed to evaluate the safety, tolerability, pharmacokinetics and pharmacodynamics of IW-1701 in these patients.
  - *Achalasia.* Ironwood continues to enroll patients into a randomized, double-blind, placebo-controlled, single-dose Phase IIa study of IW-1701 in patients with achalasia. This study is designed to evaluate the safety, tolerability, pharmacokinetics and pharmacodynamics of IW-1701 in these patients. Data from this study are expected in 2018.

Global Collaborations and Partnerships

- Ironwood's partner Astellas is commercializing LINZESS for adults with IBS-C in Japan. In September 2017, Astellas submitted a Supplemental New Drug Application with the Pharmaceuticals and Medical Devices Agency in Japan for approval to market linaclotide for the additional indication of chronic constipation.
- Ironwood continues to expect the China Food and Drug Administration to complete its review of the marketing application for linaclotide in China for adult IBS-C patients in the first half of 2018. Ironwood is partnered with AstraZeneca for the development and commercialization of linaclotide in China.

Corporate and Financials

- **Total Revenues**
  - Total revenues were $94.2 million in the fourth quarter of 2017 compared to $87.4 million in the fourth quarter of 2016. Included in total revenues was $76.6 million associated with Ironwood's share of the net profits from the sales of LINZESS in the U.S., $14.2 million in sales of linaclotide API to Astellas, $1.6 million in ZURAMPIC and DUZALLO product revenue, and $1.8 million in linaclotide royalties, co-promotion and other revenue.
  - For the full year 2017, total revenues were $298.3 million compared to $273.9 million in 2016. Included in total revenues was $258.0 million associated with Ironwood's share of the net profits from the sales of LINZESS in the U.S., $29.7 million in sales of linaclotide API to Astellas, $3.1 million in ZURAMPIC and DUZALLO product revenue, and $7.5 million in linaclotide royalties, co-promotion and other revenue.
  - For the fourth quarter and full year 2016, revenue included $19.1 million and $39.0 million of milestone related revenue from Astellas, respectively. These were primarily related to the final development milestones for the approval of LINZESS for the treatment of adults with IBS-C in Japan.
- **Operating Expenses**
  - Operating expenses were $71.4 million in the fourth quarter of 2017 as compared to $93.8 million in the fourth quarter of 2016. Operating expenses in the fourth quarter of 2017 included $9.1 million in cost of revenues, $40.1 million in R&D expenses, $58.0 million in selling, general and administrative (SG&A) expenses, $3.5 million in acquired intangible assets amortization expenses, and a $39.2 million gain on fair value remeasurement of contingent consideration.
  - Operating expenses were $375.7 million for the full year 2017, compared to $325.8 million for the full year 2016. Operating expenses for the full year 2017 included $19.1 million in cost of revenue, $0.3 million in write-down of inventory to net realizable value and loss on non-cancelable purchase commitments, $148.2 million in R&D expenses, $233.1 million in SG&A expenses, $6.2 million in acquired intangible asset amortization expenses and a $31.3 million gain on fair value remeasurement of contingent consideration.
  - The gain in fair value remeasurement of contingent consideration during the fourth quarter and full year 2017 was primarily due to a revised lesinurad U.S. net sales forecast with a slower sales ramp. Contingent consideration at December 31, 2017 relates to future royalty and milestone payments based on the estimated future sales of DUZALLO and ZURAMPIC.
- **Other Expense**
  - **Interest Expense.** Net interest expense was $8.6 million in the fourth quarter of 2017 and $34.3 million for the full year 2017, primarily in connection with the $150 million debt refinancing funded in January 2017 and the approximately $336 million convertible debt financing funded in June 2015. Interest expense recorded in the fourth quarter of 2017 includes $5.0 million in cash expense and $4.2 million in non-cash expense. Interest

expense recorded for the full year 2017 includes $20.3 million in cash expense and $16.1 million in non-cash expense.

- **Loss on Derivatives.** Ironwood records a gain/loss on derivatives related to the change in fair value of the convertible note hedges and note hedge warrants issued in connection with the convertible debt financing funded in June 2015. A loss on derivatives of $2.1 million and $3.3 million was recorded in the fourth quarter and the full year 2017, respectively.
- **Loss on Extinguishment of Debt.** A $2.0 million write-off related to the payoff of the Linaclotide PhaRMA 11% Notes was recognized during the year ended December 31, 2017.

- **Net Income (loss)**
  - GAAP net income was $12.1 million, or $0.08 per share, in the fourth quarter of 2017, compared to a net loss of $13.5 million, or $(0.09) per share, in the fourth quarter of 2016. For the full year 2017, GAAP net loss was $116.9 million, or $(0.78) per share, as compared to $81.7 million, or $0.56 per share, in 2016.
  - Non-GAAP net loss was $21.6 million, or $(0.14) per share, in the fourth quarter of 2017, compared to $17.7 million, or $(0.12) per share, in the fourth quarter of 2016. For the full year 2017, Non-GAAP net loss was $138.7 million, or $(0.93) per share, as compared to $79.0 million, or $(0.55) per share, in 2016. Non-GAAP net loss excludes the impact of mark-to-market adjustments on the derivatives related to Ironwood's convertible debt, as well as the amortization of acquired intangible assets and the fair value remeasurement of contingent consideration related to Ironwood's U.S. lesinurad license. See Non-GAAP Financial Measures below.
- **Cash Position**
  - Ironwood ended 2017 with approximately $221 million of cash, cash equivalents and available-for-sale securities. Ironwood used approximately $9 million of cash for operations during the fourth quarter of 2017 and approximately $100 million during the full year 2017, as compared to approximately $19 million during the fourth quarter of 2016 and approximately $25 million during the full year 2016.
- **Performance against 2017 Financial Guidance**
  - Total 2017 R&D expenses were $148.2 million.
    - 2017 R&D expenses were guided to be in the low- to middle-end of the $145 million to $160 million range.
  - Total 2017 SG&A expenses were $233.1 million.
    - 2017 SG&A expenses were guided to be in the low- to middle-end of the $235 million to $250 million range.
  - Combined Ironwood and Allergan total 2017 LINZESS marketing and sales expenses were $254.2 million.
    - Ironwood and Allergan total 2017 marketing and sales expenses for LINZESS were guided to be in the middle of the $250 million to $280 million range.
  - Ironwood used $99.6 million in cash for operations for the full year 2017.
    - Ironwood guided to use less than $110 million in cash for operations in 2017.
  - 2017 net interest expense was $34.3 million.
    - 2017 net interest expense was guided to be approximately $40 million.
- **2018 Financial Guidance**
  - In 2018, Ironwood expects:
    - to generate positive cash flow in the fourth quarter;
    - to use less than $75 million in cash for operations;
    - R&D expenses to be in the range of $160 million to $180 million;
    - SG&A expenses to be in the range of $230 million to $250 million;
    - the combined Ironwood and Allergan total marketing and sales expenses for LINZESS to be in the range of $230 to $260 million; and
    - net interest expense to be less than $40 million.

Non-GAAP Financial Measures

The company presents non-GAAP net loss and non-GAAP net loss per share to exclude the impact of net gains and losses on the derivatives related to our convertible notes that are required to be marked-to-market, as well as the amortization of acquired intangible assets and the fair value remeasurement of contingent consideration associated with Ironwood's U.S.

license agreement with AstraZeneca for the exclusive rights to all products containing lesinurad. The derivative gains and losses may be highly variable, difficult to predict and of a size that could have a substantial impact on the company's reported results of operations in any given period. The acquired intangible assets are valued as of the date of acquisition and are amortized over their estimated economic useful life, and management believes excluding the amortization of acquired intangible assets provides more consistency with the treatment of internally developed intangible assets for which research and development costs were previously expensed. The contingent consideration balance is remeasured each reporting period, and the resulting change in fair value impacts the company's reported results of operations. The changes in the fair value remeasurement of contingent consideration do not correlate to the company's actual cash payment obligations in the relevant period. Management believes this non-GAAP information is useful for investors, taken in conjunction with Ironwood's GAAP financial statements, because it provides greater transparency and period-over-period comparability with respect to Ironwood's operating performance. These measures are also used by management to assess the performance of the business. Investors should consider these non-GAAP measures only as a supplement to, not as a substitute for or as superior to, measures of financial performance prepared in accordance with GAAP. In addition, these non-GAAP financial measures are unlikely to be comparable with non-GAAP information provided by other companies. For a reconciliation of these non-GAAP financial measures to the most comparable GAAP measures, please refer to the table at the end of this press release.

Conference Call Information

Ironwood will host a conference call and webcast at 8:30 a.m. Eastern Time on Thursday, February 15, 2018 to discuss its fourth quarter and full year 2017 results and recent business activities. Individuals interested in participating in the call should dial (877) 643-7155 (U.S. and Canada) or (914) 495-8554 (international) using conference ID number 8489758. To access the webcast, please visit the Investors section of Ironwood's website at www.ironwoodpharma.com at least 15 minutes prior to the start of the call to ensure adequate time for any software downloads that may be required. The call will be available for replay via telephone starting at approximately 11:30 a.m. Eastern Time, on February 15, 2018 running through 11:59 p.m. Eastern Time on February 22, 2018. To listen to the replay, dial (855) 859-2056 (U.S. and Canada) or (404) 537-3406 (international) using conference ID number 8489758. The archived webcast will be available on Ironwood's website for 14 days beginning approximately one hour after the call has completed.

About Ironwood Pharmaceuticals

Ironwood Pharmaceuticals (NASDAQ: IRWD) is a commercial biotechnology company focused on creating medicines that make a difference for patients, building value for our fellow shareholders, and empowering our passionate team. We are commercializing two innovative primary care products: linaclotide, the U.S. branded prescription market leader for adults with irritable bowel syndrome with constipation (IBS-C) or chronic idiopathic constipation (CIC), and lesinurad, which is approved to be taken with a xanthine oxidase inhibitor (XOI), or as a fixed-dose combination with allopurinol, for the treatment of hyperuricemia associated with gout. We are also advancing a pipeline of innovative product candidates in areas of significant unmet need, including uncontrolled gastroesophageal reflux disease, diabetic nephropathy, heart failure with preserved ejection fraction, achalasia and sickle cell disease. Ironwood was founded in 1998 and is headquartered in Cambridge, Mass. For more information, please visit www.ironwoodpharma.com or www.twitter.com/ironwoodpharma; information that may be important to investors will be routinely posted in both these locations.

About LINZESS (linaclotide)

LINZESS® is the #1 prescribed brand for the treatment of adult patients with irritable bowel syndrome with constipation (IBS-C) and chronic idiopathic constipation (CIC), based on IQVIA data. Since its FDA approval in August of 2012 and subsequent launch in December 2012, greater than 2 million unique patients have filled approximately 10 million prescriptions for LINZESS, according to IQVIA.

LINZESS is a once-daily capsule that helps relieve the abdominal pain and constipation associated with IBS-C, as well as the constipation, infrequent stools, hard stools, straining, and incomplete evacuation associated with CIC. The recommended dose is 290 mcg for IBS-C patients and 145 mcg for CIC patients, with a 72 mcg dose approved for use in CIC depending on individual patient presentation or tolerability. LINZESS should be taken at least 30 minutes before the first meal of the day.

LINZESS is contraindicated in pediatric patients less than 6 years of age. The safety and effectiveness of LINZESS in pediatric patients less than 18 years of age have not been established. In neonatal mice, linaclotide increased fluid secretion as a consequence of GC-C agonism resulting in mortality within the first 24 hours due to dehydration. Due to increased intestinal expression of GC-C, patients less than 6 years of age may be more likely than patients 6 years of age and older to develop severe diarrhea and its potentially serious consequences. In adults with IBS-C or CIC treated with LINZESS, the most commonly reported adverse event was diarrhea.

LINZESS is not a laxative; it is the first medicine approved by the FDA in a class called guanylate cyclase-C (GC-C) agonists. LINZESS contains a peptide called linaclotide that activates the GC-C receptor in the intestine. Activation of GC-C

is thought to result 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.

In the United States, Ironwood and Allergan plc co-develop and co-commercialize LINZESS for the treatment of adults with IBS-C or CIC. In Europe, Allergan markets linaclotide under the brand name CONSTELLA® for the treatment of adults with moderate to severe IBS-C. In Japan, Ironwood's partner Astellas markets linaclotide under the brand name LINZESS for the treatment of adults with IBS-C. Ironwood also has partnered with AstraZeneca for development and commercialization of linaclotide in China, and with Allergan for development and commercialization of linaclotide in all other territories worldwide.

About ZURAMPIC (lesinurad) 200mg tablets

ZURAMPIC (lesinurad) works in combination with xanthine oxidase inhibitors (XOIs) to treat hyperuricemia associated with uncontrolled gout. ZURAMPIC is not recommended for the treatment of asymptomatic hyperuricemia and should not be used as monotherapy. XOIs reduce the production of uric acid; ZURAMPIC increases the excretion of uric acid. Together, the combination of ZURAMPIC and an XOI provides a dual mechanism of action that both decreases production and increases excretion of uric acid, thereby lowering serum uric acid (sUA) levels in patients who have not achieved target serum uric acid levels with XOI treatment alone. ZURAMPIC selectively inhibits the function of transporter proteins uric acid transporter 1 (URAT1) and organic anion transporter 4 (OAT4), involved in uric acid reabsorption in the kidney. The safety and efficacy of ZURAMPIC was established in three Phase III clinical trials that evaluated a once-daily dose of ZURAMPIC in combination with the XOI allopurinol or febuxostat compared to XOI alone. The boxed warning for ZURAMPIC states that acute renal failure has occurred with ZURAMPIC and was more common when ZURAMPIC was given alone and reinforces that ZURAMPIC should be used in combination with an XOI.

About DUZALLO (lesinurad and allopurinol)

DUZALLO (lesinurad and allopurinol) is a once-daily oral therapy that contains lesinurad 200 mg plus allopurinol 300 mg; it is also available in a lesinurad 200 mg plus allopurinol 200 mg dosage. DUZALLO is approved by the FDA as a once-daily oral treatment for hyperuricemia associated with gout in patients who have not achieved target serum uric acid (sUA) levels with a medically appropriate daily dose of allopurinol alone. DUZALLO is not recommended for the treatment of asymptomatic hyperuricemia. Allopurinol is an XOI whose action differs from that of uricosuric agents such as lesinurad. Allopurinol reduces the production of uric acid (UA); lesinurad increases renal excretion of UA by selectively inhibiting the action of URAT1, the UA transporter responsible for the majority of renal UA reabsorption. The dual-mechanism combination of DUZALLO can address both inefficient excretion and overproduction of UA, thereby lowering sUA levels. DUZALLO should be taken in the morning with food and water, and patients should be advised to stay well hydrated when taking DUZALLO (about 2 liters of liquid a day).

LINZESS Important Safety Information

INDICATIONS AND USAGE

LINZESS (linaclotide) is indicated in adults for the treatment of both irritable bowel syndrome with constipation (IBS-C) and chronic idiopathic constipation (CIC).

IMPORTANT SAFETY INFORMATION

WARNING: RISK OF SERIOUS DEHYDRATION IN PEDIATRIC PATIENTS
LINZESS is contraindicated in patients less than 6 years of age. In nonclinical studies in neonatal mice, administration of a single, clinically relevant adult oral dose of linaclotide caused deaths due to dehydration. Use of LINZESS should be avoided in patients 6 years to less than 18 years of age. The safety and effectiveness of LINZESS have not been established in patients less than 18 years of age.

Contraindications

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

Warnings and Precautions
Pediatric Risk

- LINZESS is contraindicated in patients less than 6 years of age. The safety and effectiveness of LINZESS in patients less than 18 years of age have not been established. In neonatal mice, linaclotide increased fluid secretion as a consequence of GC-C agonism resulting in mortality within the first 24 hours due to dehydration. Due to increased

intestinal expression of GC-C, patients less than 6 years of age may be more likely than patients 6 years of age and older to develop severe diarrhea and its potentially serious consequences.

- Use of LINZESS should be avoided in pediatric patients 6 years to less than 18 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 years to less than 18 years of age.

Diarrhea

- Diarrhea was the most common adverse reaction in LINZESS-treated patients in the pooled IBS-C and CIC double-blind placebo-controlled trials. The incidence of diarrhea was similar in the IBS-C and CIC populations. Severe diarrhea was reported in 2% of 145 mcg and 290 mcg LINZESS-treated patients, and in < 1% of 72 mcg LINZESS-treated CIC patients. If severe diarrhea occurs, dosing should be suspended and the patient rehydrated.

Common Adverse Reactions (incidence ≥2% and greater than placebo)

- In IBS-C clinical trials: 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 trials of a 145 mcg dose: 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%). In a CIC trial of a 72 mcg dose: diarrhea (19% vs 7% placebo) and abdominal distension (2% vs < 1%).

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

ZURAMPIC Important Safety Information and Limitations of Use

WARNING: RISK OF ACUTE RENAL FAILURE MORE COMMON WHEN USED WITHOUT A XANTHINE OXIDASE INHIBITOR (XOI)

- **Acute renal failure has occurred with ZURAMPIC and was more common when ZURAMPIC was given alone**
- **ZURAMPIC should be used in combination with an XOI**

Contraindications:

- Severe renal impairment (eCLcr less than 30 mL/min), end-stage renal disease, kidney transplant recipients, or patients on dialysis
- Tumor lysis syndrome or Lesch-Nyhan syndrome

Warnings and Precautions:

- **Renal events:** Adverse reactions related to renal function have occurred after initiating ZURAMPIC. A higher incidence was observed at the 400-mg dose, with the highest incidence occurring with monotherapy use. Monitor renal function at initiation and during therapy with ZURAMPIC, particularly in patients with eCLcr below 60 mL/min or with serum creatinine elevations 1.5 to 2 times the pre-treatment value, and evaluate for signs and symptoms of acute uric acid nephropathy. Interrupt treatment with ZURAMPIC if serum creatinine is elevated to greater than 2 times the pre-treatment value or if there are symptoms that may indicate acute uric acid nephropathy. ZURAMPIC should not be restarted without another explanation for the serum creatinine abnormalities. ZURAMPIC should not be initiated in patients with an eCLcr less than 45 mL/min.
- **Cardiovascular events:** In clinical trials, major adverse cardiovascular events (defined as cardiovascular deaths, non-fatal myocardial infarctions, or non-fatal strokes) were observed with ZURAMPIC. A causal relationship has not been established.

Adverse Reactions:

- Most common adverse reactions with ZURAMPIC (in combination with an XOI and more frequently than on an XOI alone) were headache, influenza, blood creatinine increased, and gastroesophageal reflux disease

Indication and Limitations of Use for ZURAMPIC

ZURAMPIC is a URAT1 inhibitor indicated in combination with an XOI for the treatment of hyperuricemia associated with gout in patients who have not achieved target serum uric acid levels with an XOI alone.

- ZURAMPIC is not recommended for the treatment of asymptomatic hyperuricemia
- ZURAMPIC should not be used as monotherapy

Please see full Prescribing Information**,** including Boxed Warning, at:
http://irwdpi.com/zurampic/ZURAMPIC_PI_and_Medguide_2017.pdf#page=1

DUZALLO Important Safety Information

WARNING: RISK OF ACUTE RENAL FAILURE

- **Acute renal failure has occurred with lesinurad, one of the components of DUZALLO**

Contraindications:

- Severe renal impairment (estimated creatinine clearance [eCLcr] < 30 mL/min), end-stage renal disease, kidney transplant recipients, or patients on dialysis
- Tumor lysis syndrome or Lesch-Nyhan syndrome
- Known hypersensitivity to allopurinol, including previous occurrence of skin rash

Warnings and Precautions:

- **Renal events:** Adverse reactions related to renal function, including acute renal failure, can occur after initiating DUZALLO. Renal function should be evaluated prior to initiation of DUZALLO and periodically thereafter, as clinically indicated. More frequent renal function monitoring is recommended in patients with eCLcr < 60 mL/min or with serum creatinine elevations 1.5 to 2 times the value when lesinurad treatment was initiated. DUZALLO should not be initiated in patients with an eCLcr < 45 mL/min. Interrupt treatment with DUZALLO if serum creatinine is elevated to > 2 times the pretreatment value or if there are symptoms that may indicate acute uric acid nephropathy, including flank pain, nausea, or vomiting. DUZALLO should not be restarted without another explanation for the serum creatinine abnormalities
- **Skin rash and hypersensitivity:** Skin rash is a frequently reported adverse event in patients taking allopurinol. In some instances, a skin rash may be followed by more severe hypersensitivity reactions associated with exfoliation, fever, lymphadenopathy, arthralgia, and/or eosinophilia including Stevens-Johnson syndrome and toxic epidermal necrolysis. Associated vasculitis and tissue response may be manifested in various ways including hepatitis, renal impairment, seizures, and on rare occasions, death. Hypersensitivity reactions to allopurinol may be increased in patients with decreased renal function who are receiving thiazide diuretics and DUZALLO concurrently. DUZALLO should be discontinued immediately at the first appearance of skin rash or other signs that may indicate an allergic reaction, and additional medical care should be provided as needed
- **Hepatotoxicity:** A few cases of reversible clinical hepatotoxicity have been reported in patients taking allopurinol and, in some patients, asymptomatic rises in serum alkaline phosphatase or serum transaminase have been observed. If anorexia, weight loss, or pruritus develops in patients taking DUZALLO, evaluation of liver function should be performed. In patients with preexisting liver disease, periodic liver function tests are recommended
- **Cardiovascular events:** In clinical trials, major adverse cardiovascular events (defined as cardiovascular deaths, nonfatal myocardial infarctions, and nonfatal strokes) were observed with DUZALLO. A causal relationship has not been established
- **Bone marrow depression:** Bone marrow depression has been reported in patients receiving allopurinol, most of whom received concomitant drugs with the potential for causing this reaction. This has occurred as early as 6 weeks to as long as 6 years after the initiation of allopurinol therapy. Rarely, a patient may develop varying degrees of bone marrow depression, affecting one or more cell lines, while receiving allopurinol alone. Patients taking allopurinol and mercaptopurine or azathioprine require a reduction in dose to approximately one-third to one-fourth of the usual dose of mercaptopurine or azathioprine
- **Increase in prothrombin time:** It has been reported that allopurinol prolongs the half-life of dicumarol, a coumarin anticoagulant. The prothrombin time should be reassessed periodically in patients receiving coumarin anticoagulants

(dicumarol, warfarin) concomitantly with DUZALLO

- **Drowsiness:** Occasional occurrence of drowsiness was reported in patients taking allopurinol. Patients should be alerted to the need for caution when engaging in activities where alertness is mandatory

Adverse Reactions:

- The most common adverse reactions in controlled studies (occurring in 2% or more of patients on lesinurad in combination with allopurinol and at least 1% greater than observed in patients on allopurinol alone) were headache, influenza, blood creatinine increased, and gastroesophageal reflux disease
- The most common adverse reactions identified during post-approval use of allopurinol are skin rash, nausea, and diarrhea

Indication and Limitations of Use:

DUZALLO, a combination of lesinurad, a URAT1 inhibitor, and allopurinol, a xanthine oxidase inhibitor, is indicated for the treatment of hyperuricemia associated with gout in patients who have not achieved target serum uric acid levels with a medically appropriate daily dose of allopurinol alone.

- DUZALLO is not recommended for the treatment of asymptomatic hyperuricemia

Please see full Prescribing Information, including Boxed, at
https://www.irwdpi.com/duzallo/DuzalloPIandMedguide2017.pdf#page=1

This press release contains forward-looking statements. Investors are cautioned not to place undue reliance on these forward-looking statements, including statements about the development, launch, commercial availability and commercial potential of linaclotide, lesinurad, our product candidates and the other products that we promote and the drivers, timing, impact and results thereof; market size, prevalence, growth and opportunity, including peak sales (and drivers thereof) and the growth in and potential demand for linaclotide, lesinurad and our product candidates, as well as their potential impact on applicable markets; the potential indications for, and benefits of, linaclotide, lesinurad and our product candidates; the anticipated timing of preclinical, clinical and regulatory developments and the design, timing and results of clinical and preclinical studies; the potential for, and timing of, regulatory submissions and approvals for linaclotide, lesinurad and our product candidates; partnering strategy and discussions; business strategy and investments (and evaluations thereof), structure and operations; the cause, size, timing and impact of Ironwood's reduction in workforce and related activities; expected periods of patent exclusivity, durability and life of the respective patent portfolios for linaclotide, lesinurad and our product candidates; the strength of the intellectual property protection for linaclotide, lesinurad and our product candidates and our intentions and efforts to protect such intellectual property; and our financial performance and results, and guidance and expectations related thereto (including the drivers and timing thereof), including expectations related to a rapidly growing top-line, the exercise of capital discipline, maximizing long-term per-share cash flows for shareholders, Ironwood revenue CAGR, commercial margin, net price increase, positive cash flow and positive cash flow from operations, LINZESS U.S. net sales, ex-U.S. revenue (including API revenue), allocation of capital, R&D, SG&A and marketing and sales expenses, net interest expense and cash used for operations. Each forward-looking statement is subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied in such statement. Applicable risks and uncertainties include those related to the effectiveness of development and commercialization efforts by us and our partners; preclinical and clinical development, manufacturing and formulation development; the risk that findings from our completed nonclinical and clinical studies may not be replicated in later studies; efficacy, safety and tolerability of linaclotide, lesinurad and our product candidates; decisions by regulatory and judicial authorities; the risk that we are unable to successfully commercialize lesinurad or realize the anticipated benefits of the lesinurad transaction; the risk that we may never get sufficient patent protection for linaclotide, lesinurad and our product candidates or that we are not able to successfully protect such patents; the outcomes in legal proceedings to protect or enforce the patents relating to our products and product candidates, including ANDA litigation; developments in the intellectual property landscape; challenges from and rights of competitors or potential competitors; the risk that our planned investments do not have the anticipated effect on our company revenues, linaclotide, lesinurad or our product candidates; 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 the risks listed under the heading "Risk Factors" and elsewhere in Ironwood's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017, and in our subsequent SEC filings. These forward-looking statements (except as otherwise noted) speak only as of the date of this press release, and Ironwood undertakes no obligation to update these forward-looking statements. Further, Ironwood considers the net profit for the U.S. LINZESS brand collaboration with Allergan in assessing the product's performance and calculates it based on

inputs from both Ironwood and Allergan. This figure should not be considered a substitute for Ironwood's GAAP financial results. An explanation of our calculation of this figure is provided in the U.S. LINZESS Brand Collaboration table and related footnotes accompanying this press release.

Condensed Consolidated Balance Sheets
(In thousands)
(unaudited)

	December 31, 2017	December 31, 2016
Assets		
Cash, cash equivalents and available-for-sale securities	$ 221,416	$ 305,216
Accounts receivable, net	82,157	64,854
Inventory	735	1,081
Prepaid expenses and other current assets	7,288	9,030
Total current assets	311,596	380,181
Property and equipment, net	17,274	20,512
Convertible note hedges	108,188	132,521
Intangible assets, net	159,905	166,119
Goodwill	785	785
Other assets	7,926	9,703
Total assets	$ 605,674	$ 709,821
Liabilities and Stockholders' Equity		
Accounts payable, accrued expenses and other current liabilities	$ 61,508	$ 62,941
Current portion of capital lease obligations	4,077	6,227
Current portion of deferred rent	195	7,719
Current portion of contingent consideration	247	14,244
Total current liabilities	66,027	91,131
Capital lease obligations	-	82
Deferred rent, net of current portion	5,449	557
Other liabilities	5,060	8,190
Contingent consideration, net of current portion	31,011	63,416
Note hedge warrants	92,188	113,237
Convertible notes	249,193	234,243
Long-term debt	146,898	132,249
Total stockholders' equity	9,848	66,716
Total liabilities and stockholders' equity	$ 605,674	$ 709,821

Condensed Consolidated Statements of Operations
(In thousands, except per share amounts)
(unaudited)

	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2017	2016	2017	2016
Total revenues	$ 94,208	$ 87,459	$ 298,276	$273,957
Cost and expenses:				
Cost of revenues, excluding amortization of acquired intangible assets	9,126	2,242	19,406	2,242
Research and development	40,117	38,442	148,228	139,492
Selling, general and administrative	57,953	55,208	233,123	173,281
Amortization of acquired intangible assets	3,476	(3,297)	6,214	981
(Gain) loss on fair value remeasurement of contingent consideration	(39,229)	1,164	(31,310)	9,831
Total cost and expenses	71,443	93,759	375,661	325,827
Income (Loss) from operations	22,765	(6,300)	(77,385)	(51,870)

Other (expense) income:				
Interest expense, net	(8,587)	(9,308)	(34,259)	(37,984)
(Loss) gain on derivatives	(2,093)	2,103	(3,284)	8,146
Loss on extinguishment of debt	-	-	(2,009)	-
Other expense, net	(10,680)	(7,205)	(39,552)	(29,838)
GAAP net income (loss)	12,085	(13,505)	(116,937)	(81,708)
GAAP net income (loss) per share—basic and diluted	$ 0.08	$ (0.09)	$ (0.78)	$ (0.56)

	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2017	2016	2017	2016
Non-GAAP net loss	$ (21,575)	$ (17,741)	$ (138,749)	$ (79,042)
Non-GAAP net loss per share (basic and diluted)	$ (0.14)	$ (0.12)	$ (0.93)	$ (0.55)
Weighted average number of common shares used in net loss per share — basic and diluted	149,877	146,274	148,993	144,928

Reconciliation of GAAP Results to Non-GAAP Financial Measures
(In thousands, except per share amounts)
(unaudited)

A reconciliation between net loss on a GAAP basis and on a non-GAAP basis is as follows:

	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2017	2016	2017	2016
GAAP net income (loss)	$ 12,085	$ (13,505)	$ (116,937)	$ (81,708)
Adjustments:				
Mark-to-market adjustments on the derivatives related to convertible notes, net	2,093	(2,103)	3,284	(8,146)
Amortization of intangible assets	3,476	(3,297)	6,214	981
(Gain) loss fair value remeasurement of contingent consideration	(39,229)	1,164	(31,310)	9,831
Non-GAAP net loss	$ (21,575)	$ (17,741)	$ (138,749)	$ (79,042)

A reconciliation between diluted net loss per share on a GAAP basis and on a non-GAAP basis is as follows:

	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2017	2016	2017	2016
GAAP net income (loss) per share - Basic and Diluted	$ 0.08	$ (0.09)	$ (0.78)	$ (0.56)
Adjustments to GAAP net loss per share (as detailed above)	(0.22)	(0.03)	(0.15)	0.02
Non-GAAP net loss per share - basic and diluted[1] Numbers may not add due to rounding	$ (0.14)	$ (0.12)	$ (0.93)	$ (0.55)

U.S. LINZESS Brand Collaboration[1]
Revenue/Expense Calculation
(In thousands)
(unaudited)

	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2017	2016	2017	2016
LINZESS U.S. net sales	$194,790	$173,575	$701,170	$625,555

Commercial costs and expenses[2]	56,023	67,397	271,197	265,238
Commercial profit on sales of LINZESS	$138,767	$106,178	$429,973	$360,317
Commercial Margin[3]	*71%*	*61%*	*61%*	*58%*
Ironwood's share of net profit	$ 69,384	$ 53,089	$214,987	$180,159
Ironwood's selling, general and administrative expenses[4]	7,190	9,674	41,251	35,197
Profit share adjustment[5]	-	-	1,677	2,370
Ironwood's collaborative arrangement revenue	$ 76,574	$ 62,763	$257,915	$217,726

[1] Ironwood collaborates with Allergan on the development and commercialization of linaclotide in North America. Under the terms of the collaboration agreement, Ironwood receives 50% of the net profits and bears 50% of the net losses from the commercial sale of LINZESS in the U.S. The purpose of this table is to present calculations of Ironwood's share of net profit (loss) generated from the sales of LINZESS in the U.S. and Ironwood's collaboration revenue/expense; however, the table does not present the research and development expenses related to LINZESS in the U.S. that are shared equally between the parties under the collaboration agreement. For the three months ended December 31, 2017, net profit for the U.S. LINZESS brand collaboration with Allergan was $126.5 million, calculated by subtracting $56.0 million in commercial costs and expenses and $12.3 million in research and development expenses, from LINZESS U.S. net sales of $194.8 million. For the full year 2017, net profit for the U.S. LINZESS brand collaboration with Allergan was $371.8 million, calculated by subtracting $271.2 million in commercial costs and expenses and $58.2 million in research and development expenses, from LINZESS U.S. net sales of $701.2 million.

[2] Includes cost of goods sold incurred by Allergan as well as selling, general and administrative expenses incurred by Allergan and Ironwood that are attributable to the cost-sharing arrangement between the parties.

[3] Commercial margin is defined as commercial profit on sales of LINZESS as a percent of total LINZESS U.S. net sales.

[4] Includes Ironwood's selling, general and administrative expenses attributable to the cost-sharing arrangement with Allergan.

[5] Ironwood or Allergan may recognize additional revenue or incur additional expenses resulting in an adjustment to the company's share of the net profits as stipulated by the collaboration agreement.

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Source: Ironwood Pharmaceuticals, Inc.