



A COMMERCIAL BIOTECHNOLOGY COMPANY

Ironwood 4Q and Full Year 2018 Investor Update

February 13, 2019

Introduction

Meredith Kaya



Safe Harbor Statement

This presentation contains forward-looking statements. Investors are cautioned not to place undue reliance on these forward-looking statements, including statements about the proposed separation of our operations into two independent, publicly traded companies, including the status, completion, timing and tax-free nature of the separation; the business and operations of Ironwood and Cycleron and any benefits or costs of the separation; the status of Cycleron's proposed financing and the duration of the cash runway that will be provided by the financing; the leadership and boards of each of Ironwood and Cycleron following the separation and the strength and value thereof; the cause, size, timing and impact of Ironwood's reduction in workforce and related activities; expectations and timing regarding Ironwood's ability to achieve profitability; the development, launch, commercial availability and commercial potential of our products, product candidates and the other products that we promote and the drivers, timing, impact and results thereof; market size, commercial potential, prevalence, and the growth in, and potential demand for, our products and product candidates, as well as their potential impact on applicable markets; the potential indications for, and benefits of, our products and product candidates; the anticipated timing of preclinical, clinical and regulatory developments and the design, timing, size and results of clinical and preclinical studies; and our financial performance and results, and guidance and expectations related thereto (including the drivers and timing thereof), including expectations related to revenue, net interest expense, separation expenses and restructuring expenses. 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 possibility that we may not complete the separation of our business on the terms or timeline currently contemplated, if at all, achieve the expected benefits of the separation, and that the separation could harm our business, results of operations and financial condition; the risk that the transaction might not be tax-free; the risk that we may be unable to make, on a timely or cost-effective basis, the changes necessary to operate as independent companies; Cycleron's lack of independent operating history and the risk that its accounting and other management systems may not be prepared to meet the financial reporting and other requirements of operating as an independent public company; the risk that a separation may adversely impact our ability to attract or retain key personnel; risks related to the difficulty of predicting the financial impact or timing of our reduction in workforce; 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 our products and product candidates; decisions by regulatory and judicial authorities; the risk that we may never get sufficient patent protection for our products and 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, our products or 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, 2018, and in our subsequent SEC filings, including those related to the separation. 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 on slide 20 of this presentation.

Today's Agenda



Roles effective upon completion of planned separation

VP, IR & Communications

Chief Executive Officer

Chief Executive Officer

Chief Executive Officer

Chief Financial Officer

President
Chief Medical Officer

Chief Financial Officer
Chief Medical Officer
President

Introduction

Meredith Kaya

2018 Overview & Separation Update

Peter Hecht

New Ironwood

Mark Mallon

Cyclerion

Peter Hecht

4Q/FY18 Financials + 2019 Guidance

Gina Consylman

Q&A

(additional participants)

Tom McCourt

Mike Shetzline

Bill Huyett

Chris Wright

Mark Currie



2018 Overview + Separation Update

Peter Hecht



Strong Performance in 2018 Continuing into 2019



Strong revenue growth & continued global expansion

- Grew revenue by 16% yoy
- Drove U.S. LINZESS net sales of \$761M¹ and \$70M in API sales
- Received approval of LINZESS CIC indication in Japan & approval of LINZESS in China



Continued pipeline momentum:

- Advanced several pipeline candidates with multiple readouts expected 2019
- Initiated Phase III programs (linaclotide, IW-3718)
- Progressed three Phase II trials (praliciguat & olinciguat)



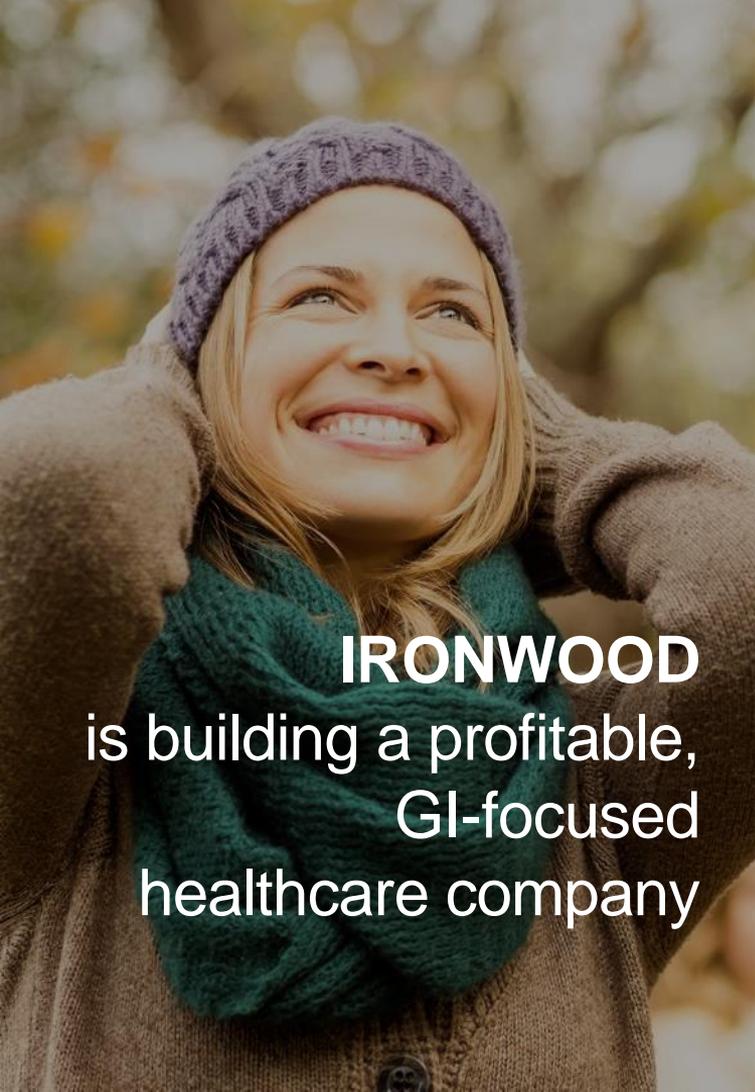
Expect to separate 1H 2019

- Filed first public Form 10 Registration Statement
- Announced executive teams, incl. CEOs, and boards of directors
- Progressing Cycleron tax-free sponsored spin-off

New Ironwood

Mark Mallon





IRONWOOD
is building a profitable,
GI-focused
healthcare company

WE AIM TO:

▶ **Grow LINZESS®** (linaclotide) and
accelerate U.S. GI development portfolio

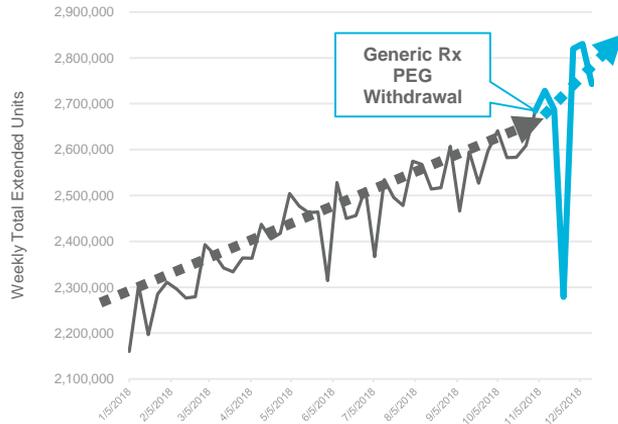
▶ **Capitalize on our GI expertise** to
bring innovative therapies to patients

▶ **Deliver profits** beginning in 2019¹
(following planned separation)

1. Profitability on a non-GAAP basis from continuing operations

Capitalizing on our expertise in GI to bring innovative therapies to patients

Accelerate LINZESS growth and profitability¹



Advance late-stage development programs

Linaclotide abdominal symptom claims (bloating, discomfort, pain)

- Phase IIIb data expected mid-2019
- If positive, expect to begin promotion ASAP

IW-3718 for persistent GERD

- Pivotal Phase III trials ongoing
- Phase III data expected 2H 2020

MD-7246 for abdominal pain in IBS

- Phase II trial initiation expected 2Q 2019
- Initially evaluating in IBS-D to assess profile in new patient population

Invest in growth & value creation

Ironwood is seeking to:

- Drive **revenue growth** and expanding **operating margins**
- Generate **profitability²** and **cash generation** beginning in 2019 (following planned separation)
- **Strengthen balance sheet** and **lower cost of capital**

Cyclerion

Peter Hecht



Cyclerion creating breakthrough treatments for patients with serious & orphan diseases by harnessing the power of sGC

- 5** Differentiated programs
- 4** Clinical studies ongoing
- 3** Phase 2 readouts expected
- 2** New tissue-tailored development candidates*
- 1** Great company launch



4 clinical data readouts in 2019 on differentiated compounds

Product*	Discovery	IND Enabling	Phase 1	Phase 2	Phase 3	Status and Anticipated Next Milestones
Vascular sGC Stimulator						
 Olinciguat						<ul style="list-style-type: none"> - Top line data expected in 2H2019 - Granted Orphan Drug Designation by the US FDA - Worldwide rights
Systemic sGC Stimulator						
 Praliguat				 		<ul style="list-style-type: none"> - DN: Top line data expected in 2H2019 - HFpEF: Top line data expected in 2H2019 - Pursue out-licensing after completion of Phase 2 studies - Granted Fast Track Designation for HFpEF by the US FDA - Worldwide rights
Central Nervous System sGC Stimulator						
 IW-6463				 Serious + Orphan CNS Diseases		<ul style="list-style-type: none"> - Phase 1 initiated in 1Q 2019 - Top line data expected in 2H2019 - Worldwide rights
Liver-Targeted sGC Stimulator						
 Liver				 Serious + Orphan liver diseases		<ul style="list-style-type: none"> - Development candidate nomination expected in 1H2019
Lung-Targeted sGC Stimulator						
 Lung				 Serious + Orphan pulmonary diseases		<ul style="list-style-type: none"> - Development candidate nomination expected in 1H2019

* Status of programs as of February 13, 2019. Represents ongoing phase of development and does not correspond to the completion of a particular phase.

4Q and Full Year 2018 Financials + 2019 Financial Guidance

Gina Consylman



4Q and Full Year 2018 Financial Results

4Q 2018:

- **\$130.7M in Ironwood revenue:**
 - \$81.6M in Ironwood's share of net profits from LINZESS U.S. net sales, \$45.9M in linaclotide API sales
- **\$124.7M in total operating expenses**
 - including \$44.3M in R&D and \$58.2M in SG&A
- **\$15.5M in GAAP net loss (\$0.10/share)**
- **\$2.8M in non-GAAP net loss (\$0.02/share)***

Full year 2018:

- **\$346.6M in Ironwood revenue:**
 - \$264.2M in Ironwood's share of net profits from LINZESS U.S. net sales, \$70.4M in linaclotide API sales
- **\$585.5M in total operating expenses**
 - including \$166.5M in R&D and \$241.3M in SG&A
 - higher yoy primarily due to impairment of intangible assets, increased SG&A expenses due to separation expenses, and restructuring expenses
- **\$282.4M in GAAP net loss (\$1.85/share)**
- **\$144.8M in non-GAAP net loss (\$0.95/share)***

Strong 2018 financial performance; met all financial guidance

	2018 Guidance	2018 Reported
✓ SG&A Expenses	\$230 - \$250 million	\$241.3 million
✓ R&D Expenses	\$160 – \$180 million	\$166.5 million
✓ Total LINZESS Marketing & Sales Expenses (IRWD + AGN)	\$230 - \$260 million	\$236.7 million
✓ Net Interest Expense	<\$40 million	\$34.7 million
✓ Total Restructuring Expenses (incl. 2018 workforce reductions)	~\$16 million	\$15.9 million

2019 financial guidance

Ironwood expects

Total revenue	\$370 – 390 million
Net interest expense	~\$35 million
Separation expenses*	\$30 – 40 million
Restructuring expenses	\$3 – 4 million

Ironwood expects to provide guidance on 2019 non-GAAP profitability from continuing operations at an investor update following the completion of the separation.



Ironwood®

A COMMERCIAL BIOTECHNOLOGY COMPANY

4Q and Full Year 2018 Financial Summary

Condensed Consolidated Statement of Operations (unaudited)

Three Months Ended
December 31, 2018

Year Ended
December 31, 2018

(000s, except per share amounts)

	Three Months Ended December 31, 2018	Year Ended December 31, 2018
Revenue	\$ 130,692	\$ 346,639
Cost and expenses:		
Cost of revenue	21,463	32,751
Write- down of inventory to net realizable value and loss on non- cancellable purchase commitments	-	247
Research and development	44,272	166,503
Selling, general and administrative	58,179	241,291
Amortization of acquired intangible asset	-	8,111
Gain on fair value remeasurement of contingent consideration	-	(31,045)
Restructuring expenses	783	15,879
Impairment of intangible assets	-	151,794
Total cost and expenses	124,697	585,531
Income (loss) from operations	5,995	(238,892)
Other expense, net	(21,488)	(43,476)
GAAP net loss	\$ (15,493)	\$ (282,368)
GAAP net loss per share – basic and diluted	\$ (0.10)	\$ (1.85)
Non-GAAP net loss	\$ (2,754)	\$ (144,765)
Non-GAAP net loss per share	\$ (0.02)	\$ (0.95)



Refer to the Reconciliation of GAAP Results to Non-GAAP Financial Measures appearing on page 19 of this presentation.

4Q and Full Year 2018 Financial Summary

Reconciliation of GAAP Results to Non-GAAP Financial Measures

	Three Months Ended December 31, 2018	Year Ended December 31, 2018
	(000s, except per share amounts)	
GAAP net loss	\$ (15,493)	\$ (282,368)
Adjustments:		
Mark-to-market adjustments on the derivatives related to convertible notes, net	12,739	8,743
Amortization of acquired intangible asset	-	8,111
Fair value remeasurement of contingent consideration	-	(31,045)
Impairment of intangible assets	-	151,794
Non-GAAP net loss	\$ (2,754)	\$ (144,765)
GAAP net loss per share (basic and diluted)	\$ (0.10)	\$ (1.85)
Adjustments to GAAP net loss (detailed above)	0.08	0.90
Non-GAAP net loss per share (basic and diluted)	\$ (0.02)	\$ (0.95)

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, the amortization of acquired intangible assets, the impairment of intangible assets, and the fair value remeasurement of contingent consideration. 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 the company's non-GAAP financial measures to the most comparable GAAP measures, please refer to the table above. Additional information regarding the non-GAAP financial measures is included in the company's press release dated February 13, 2019.

4Q and Full Year 2018 Financial Summary

LINZESS U.S. Brand Collaboration

Ironwood Revenue/Expense Calculation

Commercial Pool¹

	Three Months Ended December 31, 2018 (000s)	Year Ended December 31, 2018 (000s)		
		2018 excluding net sales adjustment	Net Sales Adjustment ²	2018
LINZESS U.S. net product sales	\$ 205,239	\$ 761,214	\$ (59,832)	\$ 701,382
Commercial costs and expenses	59,353	257,767	-	257,767
Commercial profit on sales of LINZESS	\$ 145,886	\$ 503,447	\$ (59,832)	\$ 443,615
<i>Commercial Margin</i>	71%	66%		63%
Ironwood's share of net profit	72,943			221,808
Ironwood's selling & marketing	8,879			42,435
Net sales adjustment ³	(254)			
Ironwood's collaboration revenue	\$ 81,568			\$ 264,243

Ironwood & Allergan Combined U.S. LINZESS P&L

	Three Months Ended December 31, 2018	Year Ended December 31, 2018
	(000s)	(000s)
LINZESS U.S. net product sales (excluding net sales adjustment)	\$ 205,239	\$ 761,214
Commercial costs and expenses	59,353	257,767
R&D expenses	16,887	58,599
Net profit on sales of LINZESS	\$ 128,999	\$ 444,848

R&D Pool⁴

LINZESS R&D expenses	\$ 16,887	\$ 58,599
Ironwood's 50% Share	8,443	29,299

1. The purpose of the Commercial Pool table is to present the calculation of Ironwood's share of net profits or losses generated from sales of LINZESS in the U.S. and Ironwood's collaboration revenue or expense; 2. During the twelve months ended December 31, 2018, Allergan reported to Ironwood an approximately \$59.8 million negative adjustment to LINZESS net sales. Such adjustment relates to the cumulative difference between certain previously estimated LINZESS gross-to-net sales reserves and allowances made by Allergan during the years ended December 31, 2015, 2016 and 2017, and actual subsequent payments made. This adjustment is primarily associated with estimated governmental and contractual rebates, as reported by Allergan. Upon receiving the information from Allergan, Ironwood recorded a \$29.9 million reduction to collaborative arrangement revenue and accounts receivable in its 2018 financial statements related to its share of the adjustment. 3. During the three months ended December 31, 2018, Allergan reported to Ironwood a true-up of approximately \$0.2 million related to the previously reported adjustment for the cumulative difference between certain previously estimated LINZESS gross-to-net sales reserves and allowances made by Allergan during the years ended December 31, 2015, 2016 and 2017, and actual subsequent payments made. 4. The R&D Pool table presents the research and development expenses related to LINZESS in the U.S. that are shared equally between Ironwood and Allergan under the collaboration agreement.