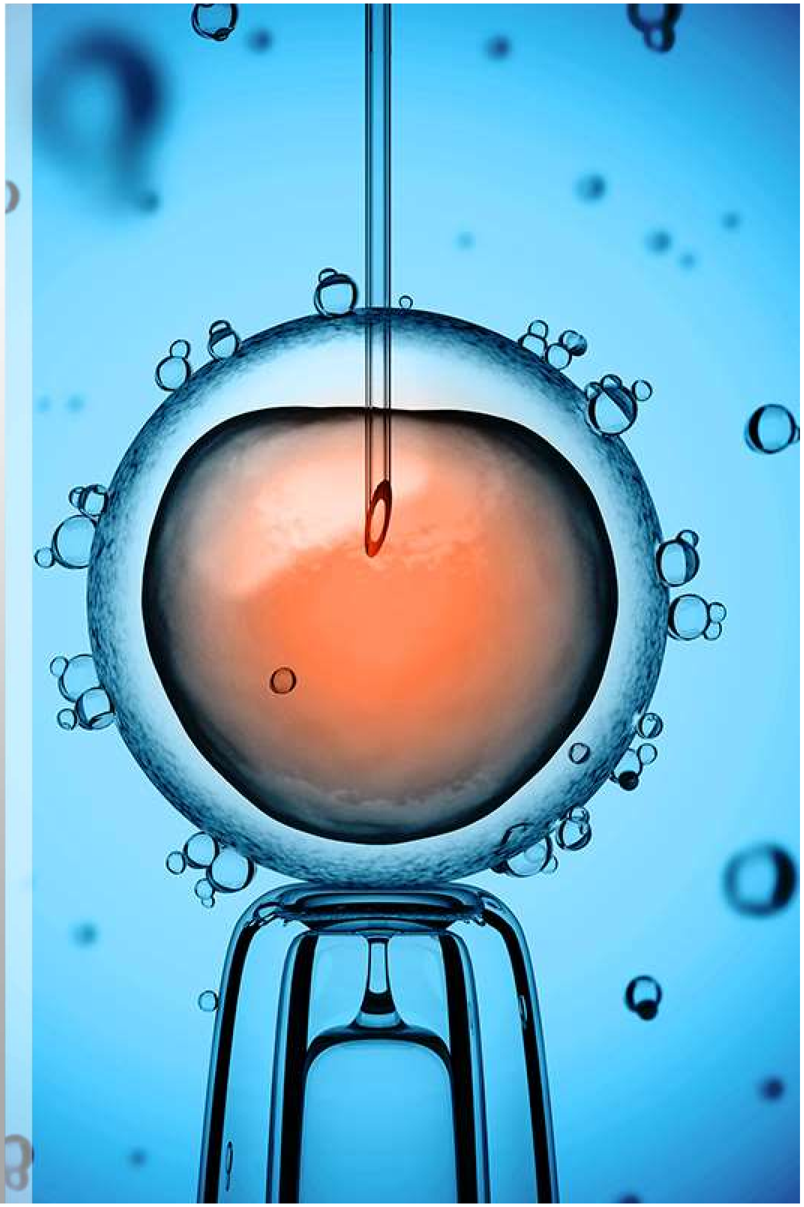
Investor Presentation

Jim Green, President and CEO

Sept 2019



Forward-Looking Statements and Non-GAAP Financial Information

Harvard Bioscience

Forward-Looking Statements

This information in this presentation or in oral statements of the management of the Company may include forward-looking statements within the meaning of the federal securities laws, including the Private Securities Litigation Reform Act of 1995. You can identify these statements by our use of such words as "will," "guidance," "objectives," "optimistic," "potential," "future," "expects," "plans," "estimates," "continue," "drive," "strategy," "potential," "potentially," "growth," "long-term," "projects," "projected," "intends," "believes," "goals," "sees," "seek," "develop" "possible" "new," "emerging," "opportunity," "pursue" and similar expressions that do not relate to historical matters. Forward-looking statements in this presentation or that may be made during our presentation may include, but are not limited to, statements or inferences about the Company's or management's beliefs or expectations, the Company's anticipated future revenues and earnings, the strength of the Company's market position and business model, industry outlook; the Company's business strategy, the positioning of the Company for growth, the market demand and opportunity for the Company's current products, or products it is developing or intends to develop, and the Company's plans, objectives and intentions that are not historical facts. These statements involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Investors should note that many factors, as more fully described under the caption “Risk Factors” in our Form 10-K, including our Form 10-K for the year ended December 31, 2018, Form 10-Q and Form 8-K filings with the Securities and Exchange Commission and as otherwise enumerated herein or therein may cause the Company's actual results to differ materially from those in the forward-looking statements. The forward-looking statements in this presentation are qualified by these risk factors. The Company's results may also be affected by factors of which the Company is not currently aware. The Company may not update these forward-looking statements, even though its situation may change in the future, unless it has obligations under the federal securities laws to update and disclose material developments related to previously disclosed information.

Management’s Use of Non-GAAP Financial Information

In this presentation, we have included non-GAAP financial information including adjusted revenue, adjusted gross profit, adjusted operating income, adjusted net income, adjusted EBITDA and adjusted earnings per diluted share. We believe that this non-GAAP financial information provides investors with an enhanced understanding of the underlying operations of the business. For the periods presented, these non-GAAP financial measures of revenue and income have excluded certain revenue and expenses and income primarily resulting from purchase accounting or events that we do not believe are related to the underlying operations of the business such as currency translation, amortization of intangibles related to acquisitions, costs related to acquisition, disposition and integration initiatives, impairment charges, gains or losses from divestitures, forensic investigation and remediation costs, severance and restructuring expenses, and stock-based compensation expense. They also exclude the tax impact of the reconciling items. This non-GAAP financial information approximates information used by our management to internally evaluate the operating results of the Company. Any non-GAAP measures included herein are accompanied by a reconciliation to the nearest corresponding GAAP measure within this presentation.

The non-GAAP financial information provided in this presentation and should be considered in addition to, not as a substitute for, the financial information provided and presented in accordance with GAAP, and may be different than other companies’ non-GAAP financial information.

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Company Overview

Harvard Bioscience At a Glance

▪ Founded	1901 as Harvard Apparatus
▪ Headquarters	Holliston, Massachusetts, just west of Boston
▪ Employees	560
▪ Revenue	$122M (FY18)
▪ Adj. Operating Margin	12% (FY18)
▪ Listed	NASDAQ: HBIO
▪ Shares Outstanding	38M
▪ Primary Locations	Boston, Minneapolis, Stuttgart DE, Cambridge UK
▪ Product Segments	- Cellular & Molecular Technologies (PCMI + Ephys) - Pre-Clinical Systems (Data Sciences International)

** Financials are Adjusted or Non-GAAP measurements, refer to reconciliation in the appendix*

What We Do

Discovery through Preclinical

In vitro research and target selection

Cellular & Molecular Technologies*

- Cellular and Molecular Biology
- CRISPR: Gene Splicing, etc.
- Electrophysiology & Electro-Chem
- Behavioral Research

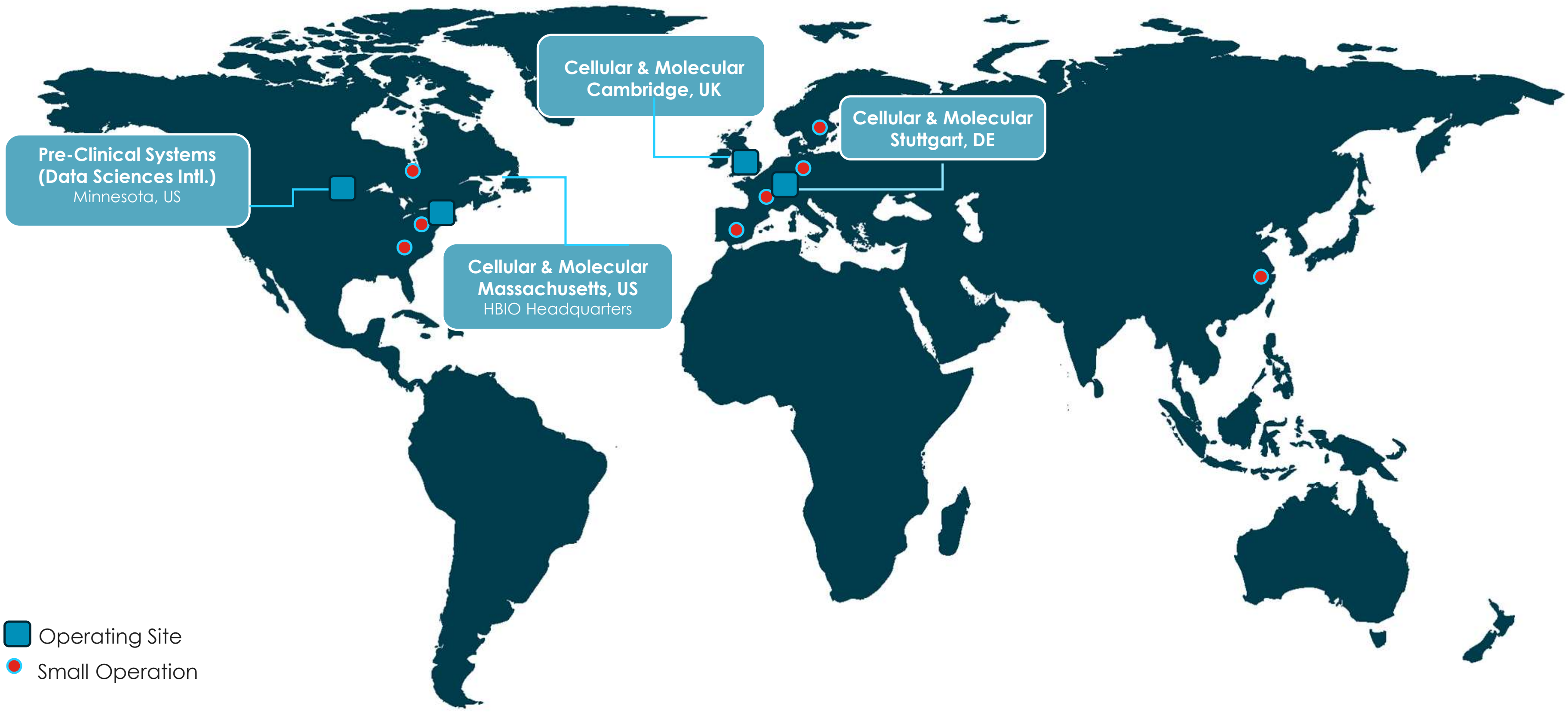
In vivo preclinical required for all drugs

Pre-Clinical Systems (DSI)

- Physiological Monitoring & Telemetry
- Data Acquisition & Analysis
- Behavioral Research
- Scientific Services

** Combination of what was formerly referred to as PCMI and Ephys*

Global Footprint



Solutions to Advance Life Science

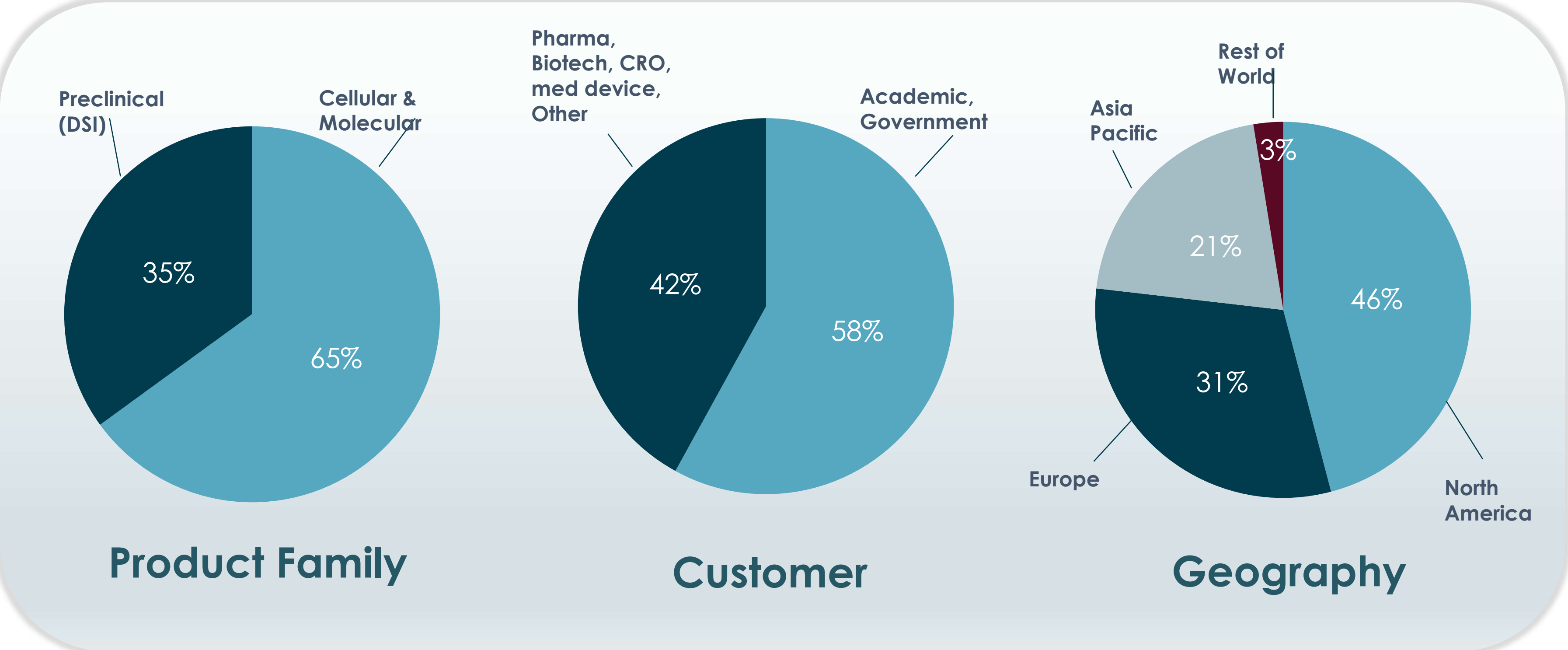
Investment Highlights

Investment Highlights

- Known life science leader enabling research and drug discovery
- Strong brands with blue chip customer base
- Extensive installed base with recurring customers
- Attractive end markets with significant upside potential
- Building a profitable platform

Large Diversified Blue-Chip Customer Base

A global platform with a balanced portfolio



* *Full Year 2018 Revenue*

Significant Long-Term Revenue Potential

Portfolio Management & Optimization	Sales	Innovation
▪ New products ▪ Double down on winners ▪ Price optimization ▪ Trim the tail	▪ Combine Cellular and Molecular Sales Force ▪ Tune quotas ▪ Optimize territories ▪ Channel expansion	▪ Drive strategic innovation ▪ Expanding the number of monitored parameters enables new applications - glucose, oncology, etc. ▪ Product innovation - refresh key mature products

Harvard Bioscience, Inc.

Solutions to Advance Life Science

Financial Summary

Financial Summary

	2017	2018	2019 Guidance
Revenue[(1)]	$102M	$122M	$119 – 122M
Gross Margin	47%	56%	~56%
Adj. Operating Margin	7%	12%	~12%
Adj. EPS	$0.12	$0.20	$0.19 – 0.21

- 2018 acquisition of high margin pre-clinical technologies business (DSI) and sale of low margin distribution business (Denville) complete change in our margin
- 2019: Consolidate, stabilize & reorganize for sustainable revenue/margin/earnings expansion

[(1)]Revenue from Denville distribution business of $24M, $0.9M in 2017 and 2018, respectively. DSI Revenue of $43M in 2018, none in 2017.

** Financials are Adjusted or Non-GAAP measurements, refer to reconciliation in the appendix*

Solutions to Advance Life Science

Unlocking New Value Strategies and Action Timeline

Opportunities

- Significant consolidation and integration
  - Brand rationalization
  - Combining sales and support organizations to maximize coverage and services
  - Facility and entity rationalization

- Product portfolio and pricing optimization

- Inventory management opportunities

2019 Action Plan (rest of year)

- Stabilize the business, complete leadership team
- Improve margins through consolidations, reduced COGS & operating expenses
- Optimize manufacturing & supply chain
- Reenergize and refocus sales operations
- Rationalize product portfolio and pricing, trim the tail

Action Plan – Margin Profile Evolution

Harvard Bioscience

FY19 - immediate	FY20 (H2)	FY21 - Go Forward
▪ Initiate action plan ▪ Achieve our financial goals ▪ Complete the team	▪ Improved financials ▪ Strong platform in place ▪ Minor revenue dis-synergies from consolidations	▪ Profitable organic growth ▪ Return to inorganic ▪ Lean operations & inventory management to drive cash flow

	Existing 2019 Guidance	Targets	Targets
Revenue	$119M-$122M	Modest growth	6-8% organic
Gross Margin	~56%	58%	60%
Operating Margin	~12%	17%	20%

** Financials are Adjusted or Non-GAAP measurements, refer to reconciliation in the appendix*

Disciplined Capital Allocation

2019 and 2020 Priorities

- Refinance and restructure our debt
- Paying down debt
- Exit 2020 with leverage ratio < 3x

2021 Priorities

- Opportunistic acquisitions

Summary

Creating Superior Long-Term Value by…

- Capitalizing on the strong global Harvard Bioscience Franchise
- Simplifying and rationalizing our business model to expand margins
- Reigniting organic growth
- Disciplined and thoughtful capital allocation

Thank You

Harvard Bioscience, Inc.

Solutions to Advance Life Science

Thank You

Appendix and Reconciliations of Non-GAAP Measures

Senior Management

Jim Green, Chairman, President and CEO

- Appointed President and CEO in July 2019; Chairman since 2017; Director since 2015
- Most recently:
  - President of Spacelabs Healthcare, where he significantly expanded both gross margins and operating margins while returning to organic revenue growth.
  - President & CEO of Analogic Corp (NASDAQ: ALOG), successfully navigated the great recession then grew core revenues over 50% and dramatically improved gross margins, operating margins and earnings per share

Michael Rossi, CFO

- Appointed CFO in July 2019
- Most recently:
  - CFO of Laborie Medical Technologies
  - CFO of Medical Specialties Distributors

Non-GAAP Adjusted Revenue

(unaudited, in thousands)

	Year Ended December 31,	
	2018	2017
GAAP revenue	$ 120,774	$ 77,407
Adjustments:		
Denville revenue reported within discontinued operations	893	24,475
Deferred revenue valuation adjustments on acquisition	284	-
Non-GAAP adjusted revenue	$ 121,951	$ 101,882

Non-GAAP Adjusted Gross Profit

(unaudited, in thousands)

	Year Ended December 31,	
	2018	2017
GAAP gross profit	$ 63,181	$ 39,170
Adjustments:		
Denville Non-GAAP adjusted gross profit	360	8,432
Deferred revenue valuation charges on acquisition	284	-
Inventory valuation step-up charges on acquisition	3,816	-
Depreciation of fixed asset step-up on acquisition	200	-
Severance and restructuring charges	82	92
Stock-based compensation expense	65	60
Non-GAAP adjusted gross profit	$ 67,988	$ 47,754
GAAP gross profit percentage	52.3%	50.6%
Non-GAAP adjusted gross profit percentage	55.7%	46.9%

Non-GAAP Adjusted Operating Income and Non-GAAP Adjusted EBITDA

(unaudited, in thousands)

	Year Ended December 31,	
	2018	2017
GAAP operating income (loss)	$ 984	$ (635)
Adjustments:		
Amortization of intangible assets	5,384	1,553
Denville Non-GAAP adjusted operating income	17	1,607
Deferred revenue valuation charges on acquisition	284	-
Inventory valuation step-up charges on acquisition	3,816	-
Depreciation of fixed asset step-up on acquisition	619	-
Forensic investigation and remediation costs	-	386
Loss on sale of AHN	-	95
Severance and restructuring charges	772	426
Stock-based compensation expense	2,894	3,382
Non-GAAP adjusted operating income	14,770	6,814
Depreciation expense	2,423	1,317
Less depreciation expense adjusted above	(619)	-
Non-GAAP adjusted EBITDA	$ 16,574	$ 8,131

Non-GAAP Adjusted Net Income

(unaudited, in thousands)

	Year Ended December 31, 2018	2017
GAAP net income (loss)	$ (2,922)	$ (865)
Adjustments:		
Amortization of intangible assets	5,384	1,553
Denville Non-GAAP adjustments included in discontinued operations (A)	(920)	1,072
Deferred revenue valuation charges on acquisition	284	-
Inventory valuation step-up charges on acquisition	3,816	-
Depreciation of fixed asset step-up on acquisition	619	-
Forensic investigation and remediation costs	-	386
Loss on sale of AHN	-	95
Severance and restructuring charges	772	426
Acquisition, disposition and integration costs	3,294	694
Stock-based compensation expense	2,894	3,382
Income taxes (B)	(5,861)	(2,519)
Non-GAAP adjusted net income	$ 7,360	$ 4,224

(A) For the year ended December 31, 2018, the non-GAAP adjustments reported in discontinued operations related to the sale of Denville included a $1,251 gain on sale, $47 in amortization of intangible assets, $132 in disposition costs, and $150 in stock-based compensation expense. For the year ended December 31, 2017, the non-GAAP adjustments reported in discontinued operations related to the sale of Denville included $889 in amortization of intangible assets, $65 in severance and restructuring charges, and $118 in stock-based compensation expense.

(B) Income taxes includes the tax effect of adjusting for the reconciling items using the calculated effective tax rate, including the post-2017 impact of tax reform, in the jurisdictions in which the reconciling items arise.

Non-GAAP Adjusted Diluted Earnings Per Common Share

(unaudited)

	Year Ended December 31, 2018	Year Ended December 31, 2017
GAAP diluted earnings (loss) per common share	$ (0.08)	$ (0.02)
Adjustments:		
Amortization of intangible assets	0.15	0.04
Denville Non-GAAP adjustments included in discontinued operations	(0.03)	0.03
Deferred revenue valuation charges on acquisition	0.01	-
Inventory valuation step-up charges on acquisition	0.10	-
Depreciation of fixed asset step-up on acquisition	0.02	-
Forensic investigation and remediation costs	-	0.01
Severance and restructuring charges	0.02	0.01
Acquisition, disposition and integration costs	0.10	0.02
Stock-based compensation expense	0.08	0.10
Income taxes (A)	(0.17)	(0.07)
Non-GAAP adjusted diluted earnings per common share	$ 0.20	$ 0.12

(A) Income taxes includes the tax effect of adjusting for the reconciling items using the calculated effective tax rate for the consolidated entity and any changes to valuation allowances.

Guidance for 2019 Non-GAAP Adjusted Diluted Earnings Per Common Share

(unaudited)

GAAP diluted earnings per common share (A)	$ 0.00 - 0.02
Adjustments:	
Amortization of intangible assets	0.15
Depreciation of fixed asset step-up on acquisition	0.01
Severance and restructuring charges	0.01
Stock-based compensation expense	0.07
Income taxes (B)	(0.05)
Non-GAAP adjusted diluted earnings per common share (A)	$ 0.19 - 0.21

(A) This guidance excludes, among other things, the impact of future acquisitions, acquisition costs, restructuring charges, or other one-time charges.

(B) Income taxes includes the tax effect of adjusting for the reconciling items using the calculated effective tax rate, including the post-2017 impact of tax reform, in the jurisdictions in which the reconciling items arise and any changes to valuation allowances.