



## COMPANY UPDATE / ESTIMATE CHANGE

### Key Metrics

NEOG - NASDAQ (as of 09/28/17)	\$77.10
Price Target	N/A
52-Week Range	\$50.53 - \$77.39
Shares Outstanding (mm)	38.6
Market Cap. (\$mm)	\$2,945
1-Mo. Average Daily Volume	128,780
Institutional Ownership	89%
Debt / Total Capital	0.0%
ROE (TTM)	9.8%
Book Value / Share	\$12.21
Price / Book Value	6.3x
Indicated Dividend / Yield	\$0.00 0.0%
TTM Operating Margin	18.0%

### Operating (non-GAAP) EPS FYE 5/31

	Prior	Curr.	Prior	Curr.
2017A	2018E	2018E	2019E	2019E
1Q	\$0.25	\$0.29A	\$0.34	\$0.33
2Q	\$0.29	\$0.34	\$0.35	\$0.39
3Q	\$0.24	\$0.28	\$0.29	\$0.33
4Q	\$0.33	\$0.38	\$0.38	\$0.43
Year	\$1.11	\$1.30	\$1.32	\$1.49
P/E	69.2x	58.5x		51.8x

Figures may not add up due to rounding

### Revenue (\$mm)

	Prior	Curr.	Prior	Curr.
2017A	2018E	2018E	2019E	2019E
1Q	\$83.6	\$95.3A	\$104.6	\$104.4
2Q	\$90.7	\$102.3	\$103.9	\$114.6
3Q	\$88.4	\$97.8	\$99.1	\$109.9
4Q	\$98.8	\$109.5	\$107.3	\$118.9
Year	\$361.6	\$404.0	\$405.5	\$447.8

**Company Description** – Based in Lansing, Michigan, Neogen develops, manufactures, and markets food and animal safety diagnostics and equipment. Neogen currently operates in two reportable segments: Food Safety and Animal Safety. Food Safety products include diagnostic test kits and complementary products sold to food producers and processors. Animal Safety products include pharmaceuticals, rodenticides, insecticides, disinfectants, veterinary instruments, and genomics services.

### Medical Devices

Analyst: Kurt Kemper, CFA  
502-588-8446 / [kkemper@hilliard.com](mailto:kkemper@hilliard.com)  
Institutional Sales Desk: George Moorin  
502-588-9141 / [GMoorin@hilliard.com](mailto:GMoorin@hilliard.com)  
J.J.B. Hilliard, W.L. Lyons, LLC  
September 29, 2017

## Neogen Corporation

NEOG – NASDAQ – Neutral – 3

### 1Q18 Revenue Strength Offset by Higher Expenses

- **1Q18 Results:** Neogen reported revenues of \$95.3 million, growth of 13.9% from the same period a year ago. This exceeded of our estimate of \$94.4 million and the Street consensus estimate of \$94.8 million. Operating EPS increased 17.2% to \$0.29 compared to our estimate of \$0.30 and the Street consensus of \$0.31. GAAP EPS of \$0.31 were boosted by Other Income.
- **Positive Highlights:** Veterinary Instruments & Disposables grew 8.9% versus our expectations of mid-single digit growth. The GeneSeek business (animal genomics) also outperformed our expectations with impressive 29% worldwide growth.
- **Negative Highlights:** Sales & Marketing expenses were about 4% higher than we estimated. Additionally, the gross margin registered at 48.2% versus our estimate of 49.2% and the Street consensus of 49.1%. These items led the operating margin to be 17.2%, significantly below our estimate of 18.7% and the Street consensus of 19.0%.
- **Outlook and Estimates:** The long-term story remains positive in our view, as regulatory changes, consumer trends, and international opportunities continue to provide additional support to this well-managed company. We increased our FY18 revenue estimate to \$405.5 million from \$404.0 million and increased our FY18 EPS estimate to \$1.32 from \$1.30, although much of that change is from a decreased tax rate. We increased our FY19 revenue estimate to \$447.8 million from \$445.1 million and increased our FY18 EPS estimate to \$1.49 from \$1.46, also aided by changed tax assumptions.
- **Valuation:** NEOG closed yesterday at 66.7X trailing operating EPS and 56.8X our next twelve months operating EPS estimate. While these multiples are above historical norms, we don't view expectations are unreasonable or misguided. Thus, we feel the shares are appropriately valued and encourage investors to wait for a better entry point.

**Note Important Disclosures on pages 7 and 8**  
**Note Analyst Certification on page 7**

Revenue Growth	1Q18 Y/Y	Segment Quick Review
Life Sciences	7.6%	Continued benefit from truck driver drug testing legislation in Brazil
Veterinary Instruments & Disposables	8.9%	Needles, syringes, and marking products performed well
Animal Care & Other	11.4%	Category was roughly flat when excluding ThyroKare buyback
Rodenticides, Disinfectants, & Insecticides (Biosecurity)	-0.5%	Rodenticides up 3%, disinfectants down due to lost distribution agreement, and insecticides up 11%
DNA Testing Service	29.0%	Substantial growth in the dairy market supported by strong growth in other markets as well
<b>Total Animal Safety</b>	<b>9.1%</b>	<b>Purely organic growth</b>
Natural Toxins, Allergens, & Drug Residues	8.9%	Aflatoxin outbreak led to a 9% increase in kit sales; allergen tests were up 17%
Bacteria & General Sanitation	6.3%	AccuPoint sales up 14%
Dehydrated Culture Media & Other	10.9%	Minimal commentary provided
Rodenticides, Disinfectants, & Insecticides (Biosecurity)	370.9%	Growth from acquisitions; also growing from a relatively small base
DNA Testing Service	30.2%	Strong growth aided by acquisitions
<b>Total Food Safety</b>	<b>19.4%</b>	<b>Organic growth of 9%</b>

**Neogen Revenue Growth 13.9%**

*Source: Company Reports*

Investors should note the Biosecurity and DNA Testing Service sections included in Food Safety simply represent the international results of those product portfolios. Neogen has historically included all Animal Safety international business under Dehydrated Culture Media & Other, and recently provided investors with this additional data.

#### ADDITIONAL COMMENTARY

##### *Earnings Conference Call Notes*

- International growth remained strong at 19% year-over-year and finally had a reprieve from currency headwinds. Neogen's Scotland-based operations reported a 13% increase as strength in the dehydrated culture media business (Lab M) offset tough comps in mycotoxin kit sales. Neogen's Brazilian revenues grew 39%, partially due to the acquisition of a genomics business there. The Mexican subsidiary actually declined slightly as a result of some disruption in the cleaners and disinfectants business.

Chinese revenues increased 12% and Indian revenues grew 25% from a small base. Management noted the number of countries that their products were sold into reached 127, or 13 more than last year.

- Neogen continues to add to its international operations, particularly in genomics. On September 1, the company announced the acquisition of the University of Queensland Animal Genetics Laboratory (AGL), the leading animal genomics lab in Australia. AGL supplies genetic testing to all 27 of Australia's major beef cattle associations and offers services to the country's large sheep markets, as well as goats, alpacas, and other species. Annual revenues for the lab are approximately \$3.1 million (USD). AGL will be renamed GeneSeek Australasia. This follows a new genomics facility built in Scotland and the acquisition of another (Rogama) in Brazil over the past couple of years. We believe these moves will help revenue growth by increasing Neogen's visibility and presence with local customers and help margins by increasing pricing power and/or decreasing shipping costs.
- Veterinary Instruments & Disposables delivered a strong quarter due to sales of needles, syringes, and marking products. Commentary on the call was light regarding this sub-segment, but management noted strong growth in durable syringes. Management is excited about the potential for market share gains with their Automated delivery device, which can be used to deliver injectable, pour-on, intranasal, or oral medications.
- Animal Care & Other growth was aided by easy comps as the company had to buy back ThyroKare in 1Q17. Management stated expectations for FDA approval of ThyroKare in FY19.
- GeneSeek revenue increased 29.3% on a worldwide basis, with international growth slightly outpacing domestic growth. This business line was the main source of outperformance versus our estimates. Domestic volume growth over the past 12 months has increased 42% and the company expects to process over three million samples in their Nebraska facility, compared to 1.25 million in FY15. Domestic growth was substantially aided by a 211% increase in revenues from commercial dairy customers, and growth was strong in other categories, even companion animals.
- Rodenticides sales increased 3% as strength in the retail agricultural market offset weakness in contract manufacturing. The company launched two new rodenticide baits, CyKill and DeciMax, during the quarter. The company's cleaners and disinfectants were down 9% due the loss of a distribution agreement with Lanxess as a result of an acquisition; this acquisition should more than offset the distribution problem over the long-term. The company's insecticides increased 11% due to high demand from some large customers.
- Allergen test kits grew 17% with management citing increasing concerns and regulatory focus on food allergens. The company recently added sesame to bring their Veratox line of diagnostics to 19 different allergens. Mycotoxin kits sales increased 9% with a 23% increase in aflatoxin kit sales as a result of surpluses still needing to be tested and an outbreak in corn crops in Brazil. An innovative new offering that eliminates a biohazard from tests has received very positive feedback from customers. Drug residue kits were flat for the quarter as the dairy market continues to be soft.
- The Bacteria & General Sanitation category had a solid quarter as AccuPoint system sales grew 14%. Management is very excited about the recently launched Listeria Right Now system, which is the fastest on market. The kit can detect low levels of any species in about one hour with similar accuracy as the 24 hour-plus culture process. Management hinted they may be able to use that technology for other pathogens.
- Neogen continues to parlay the GeneSeek technology into the Food Safety business, launching a new NeoSeek service to identify all bacteria in a sample. Management noted they are working with some meat processors to try to extend the shelf life of fresh product. With NeoSeek and other new services such as Recall Support and NeoNet, we think Neogen is further differentiating itself from competitors and set for market share gains in the food processing customer segment.
- Management spent some time talking about the impact of hurricanes on their business. In summary, there could be some mild negative impacts, but our general takeaway was that investors should not be concerned.

### ***Other Income Statement Notes***

- The gross margin, which has stabilized after a rough FY16, decreased slightly to 48.2% in 1Q18 compared to 48.4% in 1Q17. This fell short of our estimate of 49.2% and the Street consensus of 49.1%. Acquisitions (Quat-Chem and Rogama) with lower gross margins impacted the quarter.
- Operating expenses were higher than our estimate on a dollar basis and as a percent of sales. Sales & Marketing expenses were the primary driver of the variance, coming in about \$0.7 million higher than our estimate. The 15% increase in this line item was primarily driven by a higher headcount from recent acquisitions. Research & Development and General & Administrative expenses were roughly equal to our estimate. The operating margin of 17.2% was much lower than our estimate of 18.7% and the Street consensus of 19.0% primarily due mostly to the gross margin miss.
- Other Income was \$0.8 million. This contributed \$0.02 to EPS.
- The effective tax rate of 30.7% for the quarter was lower than our 34.3% estimate as a result of a \$396K benefit from an accounting change regarding the exercise of stock options. Management suggested this could impact EPS by anywhere from \$0.01 to \$0.03 per quarter.
- Operating (non-GAAP) net income was \$11.4 million versus our estimate of \$11.6 million. With 38.68 million diluted shares outstanding, operating EPS came in at \$0.29 versus our estimate of \$0.30 and the Street consensus estimate of \$0.31. GAAP EPS were \$0.31.

### ***Balance Sheet and Cash Flow Review***

- Neogen generated \$19.2 million in cash from operations in the quarter, a ~5% decline year-over-year. The company invested about \$4.5 million in property and equipment.
- Neogen has no long-term debt, cash and securities of \$160 million, and a comfortable current ratio of 8.1X. Total liabilities/equity is a conservative 12.3%.

### ***One Other Item***

Former President and COO Richard Calk resigned from the company to pursue alternative opportunities. His responsibilities are now being assumed by new CEO John Adent.

## **ESTIMATES UPDATE**

The biggest drivers of our FY18 revenue estimate changes are the addition of AGL and the delay of the ThyroKare launch into FY19 (we originally modeled 3Q18). We also re-modeled the Dehydrated Culture Media & Other category to incorporate new details provided by the company. Looking to FY19, noteworthy changes came from Biosecurity, DNA Testing Service, and Bacteria & General Sanitation. We feel confident the company can quickly recover lost revenues in the cleaners and disinfectants business as customers inside the farm gate further appreciate their role in maintaining animal health in the face of antibiotic legislation. We increased our growth rate for DNA Testing as we no longer expect any slowdown in the market yet; our previous model incorporated only a modest slowdown. Finally, we think the new Listeria Right Now test will allow the company to take market share more rapidly and bodes well for continued above-market growth if the company can leverage the technology for other pathogens. Our FY18 revenue forecast has been increased to \$405.5 million (12.2% growth) from \$404.0 million. Our FY19 revenue forecast has been increased to \$447.8 million (10.4% growth) from \$445.1 million.

We decreased our gross margin estimate slightly for FY18 to 48.0% from 48.4%, mostly incorporating this quarter but tweaking other quarters down slightly. From an operating expense standpoint, we have revised our outlook for Sales & Marketing to more or less grind lower as a percent of sales versus previous

expectations of more rapid leverage from this line item. The increased estimate for S&M is only slightly offset by marginally lower estimates for General & Administrative and Research & Development.

The increased revenue estimates are more than offset by the lowered gross margin outlook and higher S&M forecast. However, the tax rate change actually causes us to increase our operating (non-GAAP) EPS estimates for both FY18 and FY19. We now forecast \$1.32 EPS in FY18 (\$1.30 previously) and \$1.49 in FY19 (\$1.46 previously).

## VALUATION & SUITABILITY

Our next 12 month operating EPS estimate reflects impressive 17.3% growth. NEOG closed yesterday at 66.7X trailing operating EPS and 56.8X our next twelve months operating EPS estimate. While these multiples are modestly above historical norms, we don't view expectations are unreasonable or misguided. Thus, we feel the shares are appropriately valued and encourage investors to wait for a better entry point.

Neogen is well diversified for a mid-cap company in terms of products and customer base but does experience some event-driven revenues, which can be unreliable. Additionally, relatively low trading volumes and a high multiple are factors in our suitability rating of 3.

## RISKS & CONSIDERATIONS

- **Integration of acquisitions** – Neogen has been very acquisitive throughout its history, and we anticipate that trend to continue. Failure to successfully integrate acquisitions could lead to financial results below expectations.
- **Failure of new products** – Neogen also internally develops new products and product lines. Failure to successfully develop and sell new products could harm profitability.
- **Proprietary protection** – Neogen has many products that are not under patent protection, and they rely on trade secrets to protect proprietary methods and formulas. Financial harm could arise should Neogen fail to protect trade secrets.
- **Dependence on agricultural industry** – Neogen derives a significant amount of revenue from customers in or associated with the agricultural industry, which is subject to many factors beyond their control, such as weather.
- **Event-driven revenue** – Neogen is a frequent beneficiary of food safety problems, such as foodborne pathogen outbreaks, allergen contamination, etc. Failure of these events to occur could lead to lower than anticipated revenue growth.
- **Legal** – Product lawsuits are common in the health care sector. An unfavorable court decision could hamper the ability to market a product, whether a current patent under Neogen is successfully challenged or Neogen is determined to have infringed upon the patent of a competitor.
- **Regulatory** – Neogen has some products that are subject to regulatory approval. Additionally, the food safety industry is anticipating new regulations, which could have uncertain effects on industry participants.

NEOGEN CORPORATION				NEOG: NEUTRAL					
<i>In millions</i>	2015 A	2016 A	2017 A	1Q18 A	2Q18 E	3Q18 E	4Q18 E	2018 E	2019 E
<i>Fiscal Period End</i>	5/31/2015	5/31/2016	5/31/2017	8/31/2017	11/30/2017	2/28/2018	5/31/2018	5/31/2018	5/31/2019
Animal Safety Revenue	151.6	175.4	190.3	48.5	52.2	48.4	55.0	204.1	223.9
Food Safety Revenue	131.5	145.8	171.1	46.7	51.7	48.8	50.5	197.7	212.3
Other			4.0	-	-	1.9	1.9	3.8	11.6
<b>Total Revenue</b>	<b>283.1</b>	<b>321.3</b>	<b>361.6</b>	<b>95.3</b>	<b>103.9</b>	<b>99.1</b>	<b>107.3</b>	<b>405.5</b>	<b>447.8</b>
<i>Gross Margin %</i>	49.3%	47.6%	47.6%	48.2%	48.7%	46.8%	48.3%	48.0%	48.5%
<b>Gross Profit</b>	<b>139.7</b>	<b>153.1</b>	<b>172.0</b>	<b>45.9</b>	<b>50.6</b>	<b>46.4</b>	<b>51.8</b>	<b>194.6</b>	<b>217.1</b>
Sales and marketing	51.8	57.6	62.4	17.0	18.0	17.1	18.4	70.5	77.3
General and administrative	25.2	29.2	34.2	9.3	9.3	9.3	9.4	37.4	41.3
Research and development	9.6	9.9	10.4	3.1	3.3	3.1	2.7	12.1	13.8
Total Operating Expenses	86.6	96.7	107.0	29.4	30.6	29.5	30.4	119.9	132.5
<b>Operating Income</b>	<b>53.1</b>	<b>56.4</b>	<b>64.9</b>	<b>16.4</b>	<b>20.0</b>	<b>16.9</b>	<b>21.4</b>	<b>74.7</b>	<b>84.6</b>
<i>Operating Margin %</i>	18.8%	17.6%	18.0%	17.2%	19.3%	17.1%	19.9%	18.4%	18.9%
Royalty Income	0.2	0.2	0.2	-	-	-	0.2	0.2	0.2
Non-operating items	(1.2)	(1.1)	1.6	0.8	0.3	0.3	0.3	0.8	0.3
<b>Non-GAAP Pretax Income</b>	<b>53.3</b>	<b>56.6</b>	<b>65.1</b>	<b>16.4</b>	<b>20.0</b>	<b>16.9</b>	<b>21.6</b>	<b>74.9</b>	<b>84.8</b>
<i>Effective Tax Rate</i>	35.6%	34.2%	34.0%	30.7%	32.0%	33.0%	31.0%	31.7%	31.7%
<b>*Non-GAAP Net Income</b>	<b>34.3</b>	<b>37.2</b>	<b>42.8</b>	<b>11.4</b>	<b>13.6</b>	<b>11.3</b>	<b>14.9</b>	<b>51.1</b>	<b>58.1</b>
<b>GAAP Net Income</b>	<b>33.5</b>	<b>36.6</b>	<b>43.8</b>	<b>11.9</b>	<b>13.8</b>	<b>11.5</b>	<b>15.1</b>	<b>52.3</b>	<b>59.0</b>
Diluted Shares Outstanding	37.5	37.9	38.4	38.7	38.8	38.8	38.9	38.8	39.0
<b>Non-GAAP Diluted EPS</b>	<b>\$ 0.92</b>	<b>\$ 0.98</b>	<b>\$ 1.11</b>	<b>\$ 0.29</b>	<b>\$ 0.35</b>	<b>\$ 0.29</b>	<b>\$ 0.38</b>	<b>\$ 1.32</b>	<b>\$ 1.49</b>
<b>GAAP EPS</b>	<b>\$ 0.90</b>	<b>\$ 0.97</b>	<b>\$ 1.14</b>	<b>\$ 0.31</b>	<b>\$ 0.36</b>	<b>\$ 0.30</b>	<b>\$ 0.39</b>	<b>\$ 1.35</b>	<b>\$ 1.51</b>

*\*GAAP and Non-GAAP Net Income are calculated after allocations to non-controlling interests, which are not shown in this table*

*Source: Company Reports and Hilliard Lyons estimates*

*Additional information is available upon request*

**Analyst Certification**

I, Kurt A. Kemper, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject company(ies) and its (their) securities. I also certify that I have not been, am not, and will not be receiving direct or indirect compensation in exchange for expressing the specific recommendation(s) in this report.

**Important Disclosures**

Hilliard Lyons' analysts receive bonus compensation based on Hilliard Lyons' profitability. They do not receive direct payments from investment banking activity.

**Definitions of Ratings:**

**Buy** - We believe the stock has significant total return potential in the coming 12 months.

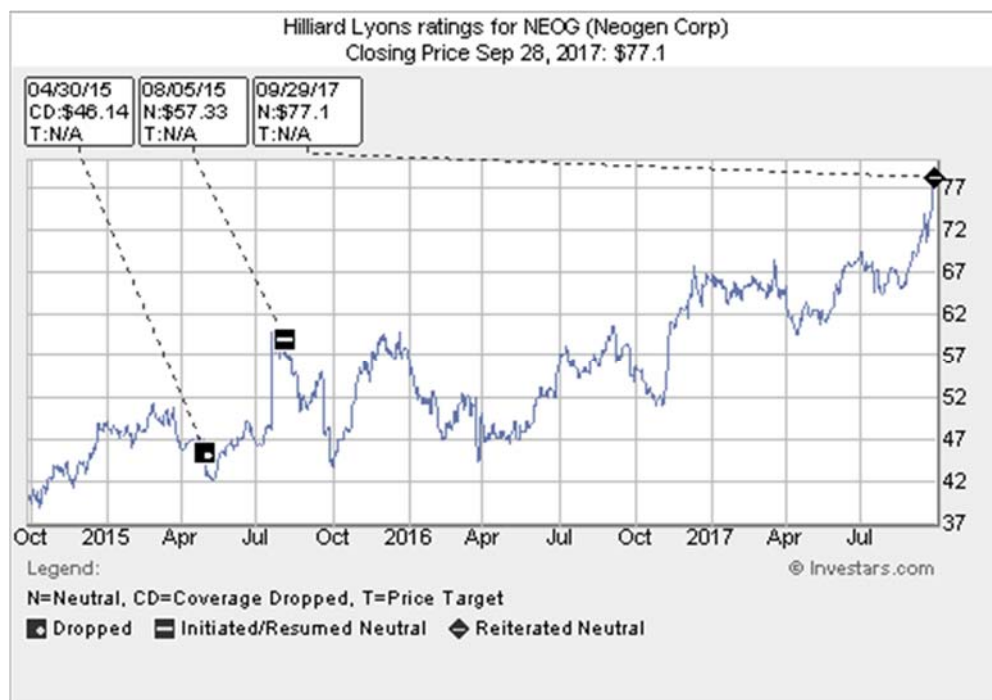
**Long-term Buy** - We believe the stock is an above average holding in its sector, and expect solid returns to be realized over a longer time frame than our Buy rated issues, typically 2-3 years.

**Neutral** - We believe the stock is an average holding in its sector, is currently fully valued, and may be used as a source of funds if better opportunities arise.

**Underperform** - We believe the stock is vulnerable to a price set back in the next 12 months.

**Definitions of Suitabilities:**

1. A large cap, core holding with a solid history.
2. A historically secure company which could be cyclical, has a shorter history than a "1" or is subject to event driven setbacks.
3. An above average risk/reward ratio could be due to small size, lack of product diversity, sporadic earnings or high leverage.
4. Speculative, due to small size, inconsistent profitability, erratic revenue, volatility, low trading volume or a narrow customer or product base.



	Hilliard Lyons Recommended Issues		Investment Banking Provided in Past 12 Mo.	
	# of Stocks Covered	% of Stocks Covered	Banking	No Banking
<b>Rating</b>				
<b>Buy</b>	40	32%	10%	90%
<b>Hold/Neutral</b>	77	62%	8%	92%
<b>Sell</b>	8	6%	0%	100%

As of 6 September 2017

### Other Disclosures

Opinions expressed are subject to change without notice and do not take into account the particular investment objectives, financial situation or needs of individual investors. Employees of J.J.B. Hilliard, W.L. Lyons, LLC or its affiliates may, at times, release written or oral commentary, technical analysis or trading strategies that differ from the opinions expressed here.

J.J.B. Hilliard, W.L. Lyons, LLC is a multi-disciplined financial services firm that regularly seeks investment banking assignments and compensation from issuers for services including, but not limited to, acting as an underwriter in an offering or financial advisor in a merger or acquisition, or serving as placement agent in private transactions.

The information herein has been obtained from sources we believe to be reliable but is not guaranteed and does not purport to be a complete statement of all material factors. This is for informational purposes and is not a solicitation of orders to purchase or sell securities. Reproduction is forbidden unless authorized. All rights reserved.