COMPANY UPDATE / ESTIMATE CHANGE

Medical Devices
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Key Metrics

NEOG - NASDAQ (as of 01/03/18)		$59.08
Price Target		N/A
52-Week Range		$44.63 - $64.42
Shares Outstanding (mm)		52.0
Market Cap. ($mm)		$2,259
1-Mo. Average Daily Volume		174,151
Institutional Ownership		89%
Debt / Total Capital		0.0%
ROE (TTM)		9.7%
Book Value / Share		$10.02
Price / Book Value		5.9x
Indicated Dividend / Yield	$0.00	0.0%
TTM Operating Margin		17.6%

Operating (non-GAAP) EPS FYE 5/31

	2017A	Prior 2018E	Curr. 2018E	Prior 2019E	Curr. 2019E
1Q	$0.19		$0.22A	$0.25	$0.29
2Q	$0.22		$0.24A	$0.29	$0.32
3Q	$0.18	$0.22	$0.23	$0.25	$0.28
4Q	$0.24	$0.29	$0.32	$0.32	$0.37
Year	$0.84	$0.99	$1.08	$1.11	$1.26
P/E	70.3x		54.5x		46.8x

Previous estimates adjusted for stock split

Revenue ($mm)

	2017A	Prior 2018E	Curr. 2018E	Prior 2019E	Curr. 2019E
1Q	$83.7		$95.3A	$104.4	$105.9
2Q	$90.9		$101.8A	$114.6	$112.6
3Q	$88.4	$99.1	$97.6	$109.9	$108.6
4Q	$98.8	$107.3	$109.4	$118.9	$121.3
Year	$361.8	$405.5	$404.0	$447.8	$448.4

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.*

Neogen Corporation

NEOG – NASDAQ – Neutral – 3

A Noisy 2Q18 Marked by Higher Expenses

- **2Q18 Results:** Neogen reported revenues of $101.8 million, marking the first time Neogen crossed the $100 million mark in a single quarter. This fell short of our estimate of $103.9 million and the Street consensus estimate of $102.3 million. Operating EPS increased 8% to $0.24 compared to our estimate and the Street consensus of $0.26. GAAP EPS of $0.33 were boosted by Other Income and an unusually low tax rate. All EPS references in this report are after adjusting from the four-for-three stock split that just occurred.
- **Positive Highlights:** Veterinary Instruments & Disposables grew 21% versus our expectations of mid-single digit growth. The biosecurity portfolio also exceeded our expectations due to international growth outpacing our estimates.
- **Negative Highlights:** Natural Toxins, Allergens, & Drug Residues were down slightly. General & Administrative expenses were about 12% higher than we estimated and the primary cause of a lower-than-expected operating margin.
- **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 decreased our FY18 revenue estimate to $404.0 million from $405.5 million but increased our FY18 EPS estimate to $1.08 from $0.99, although much of that change is from a lowered tax rate. We increased our FY19 revenue estimate to $448.4 million from $447.8 million and raised our FY19 EPS estimate to $1.26 from $1.11, also aided by changed tax assumptions.
- **Valuation:** NEOG closed yesterday at 66.4X trailing operating EPS and 50.9X our next twelve months operating EPS estimate. While these multiples are above historical norms, we don't view expectations as unreasonable or misguided. Thus, we reiterate our Neutral rating 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	2Q18 Y/Y	Segment Quick Review
Life Sciences	-10.5%	Tough comps from truck driver drug testing legislation implementation in Brazil last fiscal year
Veterinary Instruments & Disposables	21.1%	Detectable needles continue to perform well, up 17%
Animal Care & Other	5.7%	Injectable products for vitamin or mineral deficiencies in cattle increased 38%
Rodenticides, Disinfectants, & Insecticides (Biosecurity)	-5.0%	Lost OEM contract caused ~$1.8 million decline, up ~4% otherwise
DNA Testing Service	12.1%	Strong market growth continues to bolster the industry leader in this service
Total Animal Safety	**4.3%**	**Purely organic growth**
Natural Toxins, Allergens, & Drug Residues	-0.2%	Clean crop hurt toxin kit sales; drug residue tests were up 18%; allergens up 9%
Bacteria & General Sanitation	10.6%	Sanitation sales up 23% and *Listeria* tests up 43%; foodborne total up 14%
Dehydrated Culture Media & Other	15.5%	Strong growth continues fiscal year-to-date
Rodenticides, Disinfectants, & Insecticides (Biosecurity)	482.3%	Growth from acquisitions; also growing from a relatively small base
DNA Testing Service	44.1%	Strong growth aided by acquisitions
Total Food Safety	**21.0%**	**Organic growth of 5.4% in constant currency**

Neogen Revenue Growth **12.0%**

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 approximately 24% year-over-year and actually received a boost from currency exchange rates. Neogen's Scotland-based operations reported a 15% increase as it appears the dehydrated culture media business (Lab M) and genomics business (GeneSeek) are having a strong year. Neogen's Brazilian revenues grew 22% in constant currency, partially due to the acquisition of a genomics business there. The Mexican subsidiary produced impressive 36% growth after being down last quarter. Chinese revenues increased 23% and Indian revenues grew 48% from a small base. India still seems to be a source of frustration for management, but they are focused on what should be a lucrative opportunity in the long-term.

- Neogen continues to add to its international operations, particularly in genomics. On September 1, 2017, 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 has been 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.
- GeneSeek revenue increased 18.6% on a worldwide basis, with international growth aided by the AGL acquisition. Neogen continues to roll out new offerings for customers, pairing up with Angus Genetics this quarter to launch Angus GS to target breeders of this type of cattle. Neogen also combined several genetic tests into one simplified solution with their Igenity brand.
- Animal Care & Other growth was solid in its first quarter not skewed by the impact of the ThyroKare removal from market. Injectable supplements posted impressive 38% growth. We see clear sales synergies between this product line and the recently launched Automed delivery device (included in Veterinary Instruments & Disposables from our understanding), which can be used to deliver injectable, pour-on, intranasal, or oral medications.
- Rodenticide sales increased 14%. Neogen continues to expand its rodenticide portfolio with a new tracking powder that both kills mice and provides visual evidence of activity. The Prozap Tracking Powder kills rodents by providing a lethal dose of zinc phosphide as the rodents groom themselves to remove the powder. The company's cleaners and disinfectants are still struggling due to the loss of a distribution agreement with Lanxess as a result of an acquisition in December 2016; this acquisition should more than offset the distribution problem over the long-term.
- Allergen test kits grew 9% as the category continues to benefit from strong demand and Neogen innovation. Drug residue kits were up 18% after being quiet for several quarters. Management announced the coming introduction of BetaStar Advanced, which will be combined with the Raptor Integrated Analysis Platform. Raptor is capable of analyzing three different samples independently and simultaneously, a significant competitive advantage, in our view. BetaStar Advanced should enable the drug residue lineup to continue growing, in our opinion; management sounded very bullish on the opportunity. Natural toxin kits sales struggled due to a clean crop in North America.
- The Bacteria & General Sanitation category had a strong quarter as management continues to point to the AccuPoint system as a source of growth; total sanitation products increased 23%. Neogen upgraded their AccuClean system with improved rapid protein tests this quarter. Additionally, tests for foodborne pathogens increased 14%, led by 43% growth in *Listeria* testing. It is likely that the recently launched *Listeria* Right Now system is a key factor. The kit can detect low levels of any species in about one hour – the fastest on market – with similar accuracy as the 24 hour-plus culture process. Management previously hinted they may be able to use that technology for other pathogens.

Other Income Statement Notes

- The gross margin, which has stabilized after a rough FY16, increased slightly to 48.4% in 2Q18 compared to 48.2% in 2Q17. This fell short of our estimate of 48.7% but exceeded the Street consensus of 48.3%. Improvements at GeneSeek and product mix contributed to the modest increase.
- Operating expenses were higher than our estimate on a dollar basis and as a percent of sales. Sales & Marketing expenses were a bit lower on a dollar basis than our estimate and a bit higher as a percent of sales. Research & Development expenses were lower than our estimate. General & Administrative

expenses were much higher than we anticipated. While some of it was attributed to the timing of acquisition expense recognition, management noted increased investments in IT was a significant driver of the increase and they expect that to continue. The operating margin of 17.7% was much lower than our estimate of 19.3% and the Street consensus of 19.0% primarily due to the General & Administrative expense increase.

- Other Income was $1.1 million. This contributed $0.02 to EPS.
- The effective tax rate of 10.0% for the quarter was substantially lower than our 32.0% estimate as a result of a $3.4 million benefit from an accounting change regarding the exercise of stock options. There was also an $800K adjustment that further lowered taxes. Management was hesitant to give guidance on the impact of tax reform.
- Operating (non-GAAP) net income was $12.6 million versus our estimate of $13.6 million. We used an effective tax rate of 30% to attempt to remove the noise from tax rate volatility, although that is likely to change going forward. With 52.0 million diluted shares outstanding after the stock split, operating EPS came in at $0.24 versus our estimate and the Street consensus of $0.26. GAAP EPS were $0.33. As a reminder, we exclude Other Income from our operating EPS estimate.

Balance Sheet and Cash Flow Review

- Neogen generated $19.2 million in cash from operations year-to-date, a ~7% decline compared to the same time frame a year ago. The company has invested about $10 million in property and equipment year-to-date.
- Neogen has no long-term debt, cash and securities of $176 million, and a comfortable current ratio of 9.0X. Total liabilities/equity is a conservative 11.6%.

Management Changes

Neogen recently announced that Ed Bradley, Vice President of Neogen's Food Safety division, will retire after 17 years leading that business and 23 years with Neogen. This is unfortunate timing for Neogen, as new CEO John Adent comes from the animal health business and likely is still coming up to speed on the food safety landscape. However, we confirmed with the company that Mr. Bradley will stay on in a consulting role until a replacement is found and well-trained with no specific deadline for him stepping away. Neogen has had a tough year in terms of executive departures. Co-founder and CEO Jim Herbert stepped down but will remain as Executive Chairman, Dr. Daniel Kephart left his role as the Chief Scientific Officer after less than a year, and Chief Operating Officer Rick Calk left to pursue other opportunities. Attrition is natural, and with Mr. Herbert still at the helm, we trust the right people will be put in the right places, and operations and transitions will be handled well. Nevertheless, the replacement of these roles is something investors should watch closely.

With Mr. Adent now gaining traction in his role as CEO, it was interesting to hear him discuss his observations thus far at Neogen. The most striking comment was his surprise regarding the size of the product portfolio. He proceeded to discuss the company's focus with the massive amount of opportunity that lays ahead of Neogen and then later in the call both he and Mr. Herbert discussed rationalizing the portfolio. We immediately thought about the Bill Ackman-Zoetis interaction and Zoetis' subsequent steps to reduce portfolio size and focus on margins. We caution, however, Neogen is a much younger company – yes, younger despite being 35 years old – with far greater revenue growth potential, in our view. Some product trimming is likely needed with the numerous tuck-in acquisitions, but a substantial portfolio rationalization could harm the very long-term revenue growth path, in our opinion. We therefore would warn investors against expectations for substantial margin gains as a result of significant portfolio streamlining and encourage investors to focus on top-line growth for Neogen with reasonable expectations for cost control.

ESTIMATES UPDATE

From a top line perspective, most of our estimate changes in Animal Safety were simply a reflection of this quarter with some minor tweaks sprinkled throughout. Within Food Safety, we did increase our growth expectations due to new product development (BetaStar and *Listeria* Right Now), although this was partially offset by lower expectations for natural toxin kits. Our FY18 revenue forecast has been decreased to $404.0 million (11.7% growth) from $405.5 million. Our FY19 revenue forecast has been increased to $448.4 million (11.0% growth) from $447.8 million.

We decreased our gross margin estimate slightly for FY18 to 47.9% from 48.0%, mostly incorporating this quarter but tweaking other quarters down slightly due to lower expectations for the high-margin natural toxin kits. Our FY19 gross margin estimate has been decreased to 48.4% from 48.5% previously. From an operating expense standpoint, we have revised our outlook for General & Administrative expenses given the soft guidance for continued IT investment. We don't expect G&A expense growth to reverse in FY19 as IT investments level off, but we do estimate the expense growth to slow. Changes to our Selling & Marketing and Research & Development expense estimates were essentially a wash.

The biggest change to our EPS estimates comes as a result of tax reform. As we stated, management was reserved in attempting to provide guidance. We have modeled according to expectations for domestic versus international profit breakdown, while adjusting domestic expectations for various modifications such as state and local tax and domestic production incentives as well as making an attempt to incorporate the recent changes for the accounting treatment change of stock option exercise. We used a three year average of the international effective tax rate for that portion. We caution the tax rate is likely to be volatile as companies have roughly a year to adjust estimates, and management noted the timing of the tax reform reflection is uncertain; we have simply assumed the impact to be immediate in calendar 2018 for Neogen (partial for their fiscal Q3). We encourage investors to focus on pretax operating income and cash flow for the next four quarters due to the expected tax rate volatility.

With the changes above, we have lowered our FY18 pretax operating income by just over 4% and decreased our FY19 pretax operating income by just over 1%. However, the tax rate change causes us to increase our operating (non-GAAP) EPS estimates for both FY18 and FY19. We now forecast $1.08 EPS in FY18 ($0.99 previously) and $1.26 in FY19 ($1.11 previously).

VALUATION & SUITABILITY

Our next 12 month operating pretax income estimate reflects impressive 14.0% growth. NEOG closed yesterday at 66.4X trailing operating EPS and 50.9X our next twelve months operating EPS estimate. While these multiples are modestly above historical norms, we don't view expectations as unreasonable or misguided. Thus, we reiterate our Neutral rating and encourage investors to wait for a better entry point.

Suitability

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**

In millions / *Fiscal Period End*	2015 A 5/31/2015	2016 A 5/31/2016	2017 A 5/31/2017	1Q18 A 8/31/2017	2Q18 A 11/30/2017	3Q18 E 2/28/2018	4Q18 E 5/31/2018	2018 E 5/31/2018	2019 E 5/31/2019
Animal Safety Revenue	151.6	175.4	190.3	48.5	52.3	48.2	55.3	204.3	224.2
Food Safety Revenue	131.5	145.8	164.2	46.7	49.6	48.1	52.2	196.6	213.2
Other				-	-	1.3	1.9	3.1	10.9
Total Revenue	**283.1**	**321.3**	**361.8**	**95.3**	**101.8**	**97.6**	**109.4**	**404.0**	**448.4**
Gross Margin %	*49.3%*	*47.6%*	*47.6%*	*48.2%*	*48.4%*	*46.8%*	*48.2%*	*47.9%*	*48.4%*
Gross Profit	**139.7**	**153.1**	**172.2**	**45.9**	**49.3**	**45.7**	**52.7**	**193.5**	**216.9**
Sales and marketing	51.8	57.6	62.4	17.0	17.8	16.9	18.7	70.4	77.4
General and administrative	25.2	29.2	34.2	9.3	10.5	10.0	10.1	39.9	42.3
Research and development	9.6	9.9	10.4	3.1	3.0	3.0	2.7	11.8	13.8
Total Operating Expenses	86.6	96.7	107.0	29.4	31.3	29.9	31.5	122.1	133.5
Operating Income	**53.1**	**56.4**	**65.2**	**16.4**	**18.0**	**15.8**	**21.2**	**71.4**	**83.4**
Operating Margin %	*18.8%*	*17.6%*	*18.0%*	*17.2%*	*17.7%*	*16.2%*	*19.4%*	*17.7%*	*18.6%*
Royalty Income	0.2	0.2	0.2	-	0.1	-	0.2	0.3	0.2
Non-operating items	(1.2)	(1.1)	1.6	0.8	1.0	0.5	0.5	0.8	1.0
Non-GAAP Pretax Income	**53.3**	**56.6**	**65.3**	**16.4**	**18.1**	**15.8**	**21.4**	**71.7**	**83.6**
Effective Tax Rate	*35.6%*	*34.2%*	*33.9%*	*30.7%*	*10.0%*	*25.0%*	*21.0%*	*21.3%*	*21.2%*
Non-GAAP Net Income*	**34.3**	**37.2**	**43.0**	**11.4**	**12.6**	**11.8**	**16.9**	**56.3**	**66.0**
GAAP Net Income	**33.5**	**36.6**	**44.0**	**11.9**	**17.1**	**12.2**	**17.3**	**58.5**	**67.3**
Diluted Shares Outstanding**	50.0	50.5	51.2	51.6	52.0	52.0	52.1	51.9	52.3
Non-GAAP Diluted EPS	**$ 0.69**	**$ 0.74**	**$ 0.84**	**$ 0.22**	**$ 0.24**	**$ 0.23**	**$ 0.32**	**$ 1.08**	**$ 1.26**
GAAP EPS	**$ 0.67**	**$ 0.72**	**$ 0.86**	**$ 0.23**	**$ 0.33**	**$ 0.23**	**$ 0.33**	**$ 1.13**	**$ 1.29**

**GAAP and Non-GAAP Net Income are calculated after allocations to non-controlling interests, which are not shown in this table*
***Adjusted for 4:3 stock split effective December 29, 2017*
Source: Company Reports and Hilliard Lyons estimates

Additional information is available upon request

Prices of other stocks mentioned: Zoetis (ZTS - $72.10, Buy - $81 PT)

Analyst Certification

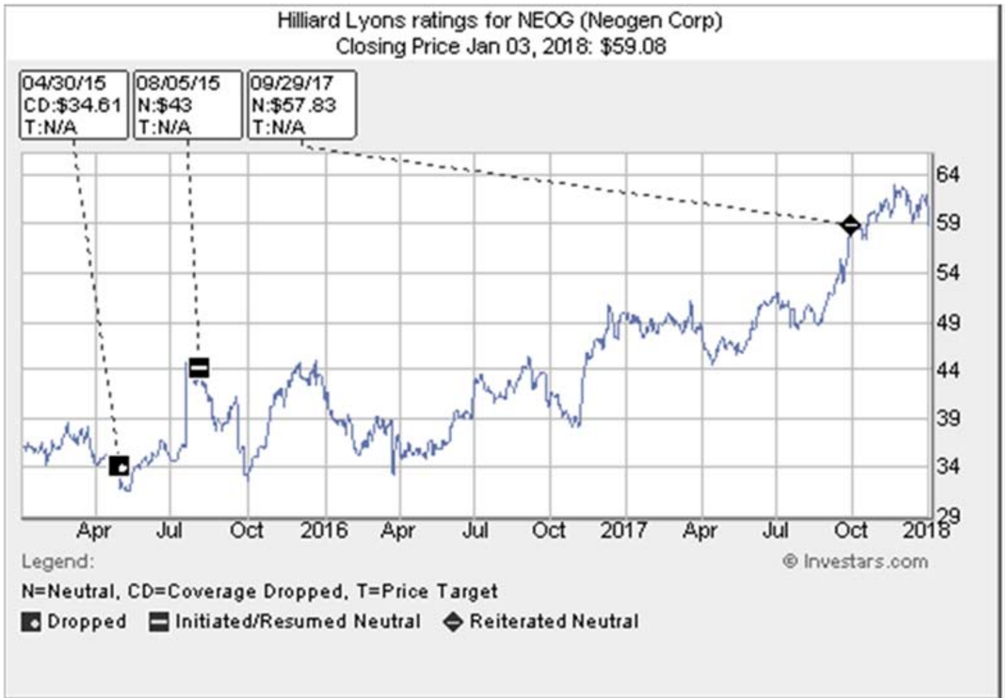
I, Kurt A. Kemper, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject company(ies) and its (their) securities. I also certify that I have not been, am not, and will not be receiving direct or indirect compensation in exchange for expressing 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.	
Rating	**# of Stocks Covered**	**% of Stocks Covered**	**Banking**	**No Banking**
Buy	31	28%	13%	87%
Hold/Neutral	74	66%	9%	91%
Sell	7	6%	0%	100%

As of 6 December 2017

Other Disclosures

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