Zacks Small-Cap Research

December 6, 2016
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Applied DNA Sciences (APDN-NASDAQ)

APDN: Zacks Company Report

APDN: Balance sheet remains strong; we remain optimistic about the company for its long term growth potential

Current Price (12/05/16)	$2.20
Valuation	**$7.50**

OUTLOOK

We are optimistic about the Company's unique technology and two principle anti-counterfeiting and product authentication solutions: SigNature DNA and fiberTyping, which can be used in numerous industries. With an ever booming anti-counterfeiting business worldwide, along with its unique technology and broad range of product offering, the Company is well positioned to grow in the coming years.

The entry into diagnostic market should accelerate revenue growth in the coming years.

Our fair value stands at $7.50 per share.

SUMMARY DATA

52-Week High	**$3.93**
52-Week Low	**$2.20**
One-Year Return (%)	**-29.49**
Beta	**0.36**
Average Daily Volume (sh)	**46,497**
Shares Outstanding (mil)	**26**
Market Capitalization ($mil)	**$53**
Short Interest Ratio (days)	**N/A**
Institutional Ownership (%)	**N/A**
Insider Ownership (%)	**N/A**
Annual Cash Dividend	**$0.00**
Dividend Yield (%)	**0.00**
5-Yr. Historical Growth Rates	
Sales (%)	**N/A**
Earnings Per Share (%)	**N/A**
Dividend (%)	**N/A**
P/E using TTM EPS	**N/A**
P/E using 2011 Estimate	**N/A**
P/E using 2012 Estimate	**N/A**
Zacks Rank	**N/A**

Risk Level	**High,**
Type of Stock	**N/A**
Industry	**Protection-Sfty**
Zacks Rank in Industry	**N/A**

ZACKS ESTIMATES

Revenue
(In millions of $)

	Q1 (Dec)	Q2 (Mar)	Q3 (Jun)	Q4 (Sep)	Year (Sep)
2015	1.24 A	1.52 A	2.27 A	3.98 A	9.01 A
2016	1.32 A	0.57 A	0.65 A	1.64 A	4.19 A
2017					12.50 E
2018					20.00 E

Earnings per Share
(EPS is operating earnings before non-recurring items)

	Q1 (Dec)	Q2 (Mar)	Q3 (Jun)	Q4 (Sep)	Year (Sep)
2015	-$0.25 A	-$0.11 A	-$0.08 A	-$0.02 A	-$0.42 A
2016	-$0.13 A	-$0.14 A	-$0.14 A	-$0.10 A	-$0.51 A
2017					-$0.30 E
2018					-$0.19 E

Zacks Projected EPS Growth Rate - Next 4 Years % **N/A**

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WHAT'S NEW

Update on Fiscal Fourth Quarter Financials

On December 6, Applied DNA Sciences (APDN) announced financial results for the fiscal fourth quarter ended September 30, 2016.

Total revenue for the fiscal fourth quarter of 2016 was $1.64 million, compared to $3.98 million for the same period of 2015, a decrease of 59%. But this revenue was an increase of 151% from the $0.65 million reported in the third fiscal quarter ended June 30, 2016.

During the conference call, management indicated that the year-over-year decrease in revenue resulted primarily from decreased sales to the textile industry for the securing of global cotton supply chains and reduced revenues from two non-recurring government commercialization contract awards that were completed in the fourth quarter of fiscal 2016. The increase in revenues for the fourth quarter of fiscal 2016 as compared to the prior fiscal quarter was primarily a result of shipments of DNA concentrate to mark cotton.

SG&A expenses for fiscal fourth quarter of 2016 were $2.6 million, compared to $3.7 million for the same period of 2015.

R&D expenses for fiscal fourth quarter of 2016 were $0.8 million, compared to $0.7 million for the same quarter of 2015.

Total operating expenses for the current quarter were $3.6 million, compared with $4.2 million in the prior fiscal year's quarter, a decrease of approximately $0.6 million or 14%. The decrease in year-over-year total operating expenses was primarily attributable to a decrease in SG&A expense of approximately $0.5 million and a decrease in research and development expense of approximately $0.2 million.

Net loss for the quarter ended September 30, 2016 was $2.4 million, or $0.10 per share, compared with a net loss of $0.5 million, or $0.02 per share, for the quarter ended September 30, 2015 and a net loss of $3.4 million, or $0.14 per share, for the quarter ended June 30, 2016.

	Three Month Period Ended September 30,		Variance	
	2016	2015	$	%
Revenues				
Product revenues	$ 1,381,168	$ 3,018,690	(1,637,522)	-54%
Service revenues	$ 254,927	$ 961,575	(706,648)	-73%
Total revenues	1,636,095	3,980,265	(2,344,170)	-59%
Cost of revenues	441,971	255,254	186,717	73%
Operating expenses:				
Selling, general and administrative	2,623,151	3,086,448	(463,297)	-15%
Research and development	832,227	989,981	(157,754)	-16%
Depreciation and amortization	148,528	136,496	12,032	9%
Total operating expenses	3,603,906	4,212,925	(609,019)	-14%
LOSS FROM OPERATIONS	(2,409,782)	(487,914)	1,921,868	394%
Other income (expense)	(5,294)	(8,120)	(2,826)	-35%
NET LOSS	**$ (2,415,076)**	**$ (496,034)**	**1,919,042**	**387%**

Excluding non-cash expenses, Adjusted EBITDA for the quarter ended September 30, 2016 was negative $1.7 million compared to a positive Adjusted EBITDA of $573 thousand for the same quarter last year and a negative Adjusted EBITDA of $2.6 million in the prior fiscal quarter.

Calculation and Reconciliation of Quarterly Consolidated Adjusted EBITDA:

	Three Month Period Ended September 30,			Three Month Period Ended June 30,	
	2016	2015	% Δ	2016	% Δ
Net Loss	$ -	$ -		$ (3,367,011)	
Interest expense (income), net	9,567	(3,340)		(2,660)	
Depreciation and amortization	-	-		168,641	
Stock based compensation expense	(1,522,304)	562,933		525,186	
Bad debt expense	(106,247)	13,246		83,934	
Total non-cash items	(1,618,984)	572,839		775,101	
Consolidated Adjusted EBITDA (loss)	**$ (1,618,984)**	**$ 572,839**	**-383%**	**$ (2,591,910)**	**-38%**

Balance Sheet Remains Strong

In early November, APDN closed a private placement pursuant to a securities purchase agreement with a single healthcare dedicated institutional investor to purchase $5 million of common stock and warrants at a combined price of $2.20 per share of common stock and warrant. In the private placement, Applied DNA sold 2,272,727 shares of its common stock and warrants to purchase 2,272,727 shares of its common stock. The warrants have the same terms as the Company's existing publicly traded warrants (NASDAQ: APDNW) with an exercise price of $3.50 per share and an expiration date of November 20, 2019.

The aggregate gross proceeds to the Company from the private placement were $5 million before deducting the placement agent's fee and other offering expenses.

The company intends to use the aggregate net proceeds from the private placement for general corporate purposes, including working capital, capital expenditures, business development and research and development.

We welcome this new financing, which not only boosts the company's balance sheet, but more importantly validates the company's technology and commercial efforts. With the boosted balance sheet, APDN is well positioned to accelerate revenue growth in fiscal 2017 and beyond.

As of September 30, 2016, **cash and cash equivalents** totaled $4.5 million. With proceeds from the above financing, cash in hand can fund the operations in the next 12 months.

Business Continues to Grow

Although financial performance for the current quarter was a little disappointed, APDN has made great progress in operations and business development.

On **November 22**, the Company announced a technology partnership with ITL Group to utilize its SigNature DNA forensic marking system to support global apparel and footwear brands and retailers in their ongoing battle against product counterfeiters.

On **November 17**, the Company announced a reseller agreement with Action-Pak, a contract packaging services provider for military and commercial supply chains identified in trials during the Rapid Innovation

Fund Contract from the Office of the Secretary of Defense that will enable it to further penetrate military and commercial markets with its DNA-based products.

On **November 15**, the Company announced a one-year firm fixed price Indefinite Delivery Purchase Order from the U.S. Defense Logistics Agency (DLA) for the marking of FSC 5962 microcircuits. This new order continues the marking of FSC 5962 first awarded to Applied DNA by DLA in December 2014, and is now implemented via a low-throughput, high variability marking system developed under a Rapid Innovation Fund contract with the Office of the Secretary of Defense.

On **November 10,** Applied DNA reported that it anticipated total market usage of cotton tagged in the 2016 ginning season to be approximately 150 million pounds, of which the Company shipped orders for its SigNature T DNA concentrate to tag 93 million pounds.

On **October 14,** the Company announced the appointment of Robert B. Catell, former Chairman and Chief Executive Officer of KeySpan Corporation, past Chairman of the Board of Directors of the United States Energy Association and Chairman of the American Gas Association, to its Board of Directors. As an accomplished global energy industry leader, Mr. Catell is assisting with Applied DNA's penetration of the market for critical infrastructure protection.

On **October 11**, the Company announced the launch of its new DNA Transfer System at cotton gins in Arkansas, California and Texas. The system is designed to handle greater volumes of SigNature T tagging than the prior generation System and is equipped with real-time monitoring, security and data capture to ensure efficient and consistent DNA tagging of cotton fibers during ginning.

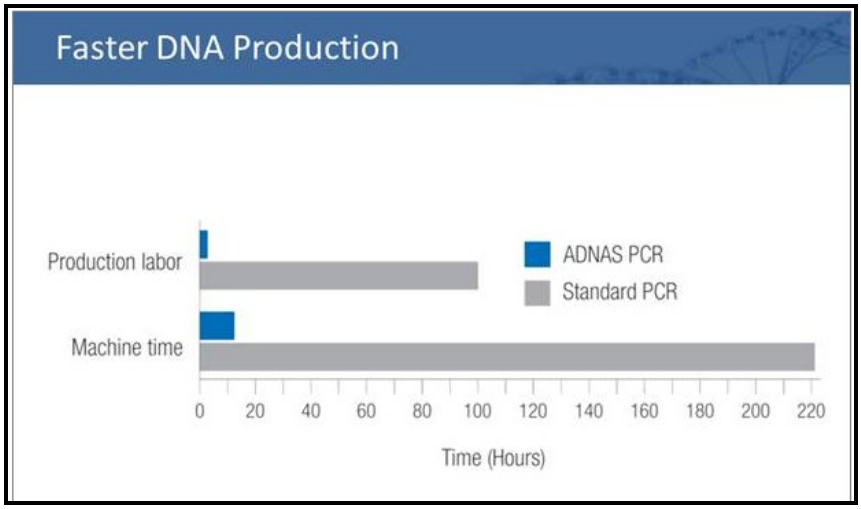
On **September 14**, Applied DNA introduced its SigNature® DNA Molecular Taggant to pharmaceutical supply chain experts, regulators and leaders from the pharmaceutical industry. Molecular taggants can be deployed on pharmaceutical inks used on tablets and capsules or on the coating on tablets that ensures a mark of authenticity for regulatory inspectors and patients alike. Applied DNA's SigNature DNA Molecular Taggants satisfy the principles established by FDA Guidelines for inclusion in pharmaceuticals.

APDN Enters Diagnostics Market

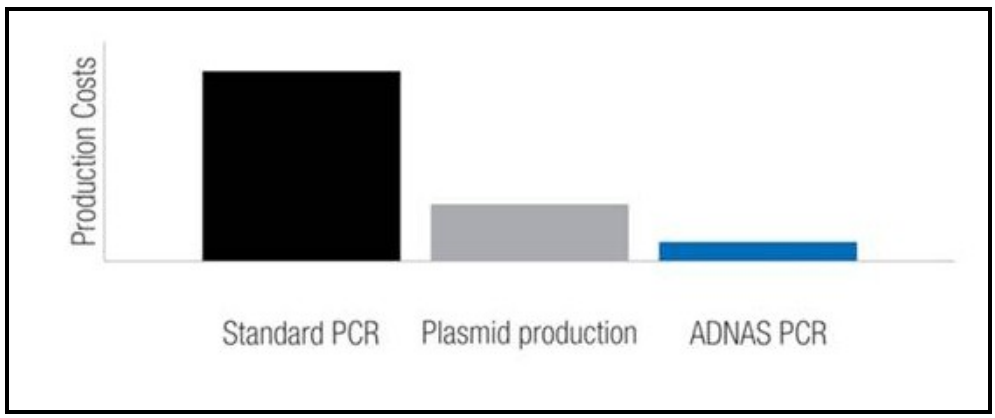
In early November 2015, APDN announced that it has shipped its first orders of DNA used as a **diagnostic reagent** to reagent suppliers and two international diagnostics customers. The total value of these shipments, which were made in its fiscal 2015 fourth quarter and the current fiscal first quarter, is over $400,000.

This marks the official entry into the lucrative **diagnostic market** by the company.

In September 2015, APDN announced the acquisition of private **Vandalia Research**, Inc., whose core technology and intellectual property portfolio allows for the large-scale production of specific DNA sequences using polymerase chain reaction (PCR). As part of the acquisition, Applied DNA assumed Vandalia’s backlog of orders. Vandalia’s PCR technology has the advantage of faster DNA production, including lower production labor and reduced machine time.



Therefore, the cost for producing DNA using APDN's technology is much lower than standard PCR method on the market.



The acquisition provides APDN with established supply relationships across key companies in the biotechnology, pharmaceutical and diagnostic markets where Vandalia DNA is already used as a business-critical therapeutic, diagnostic and reagent and provides the company the opportunity to cross-sell its DNA-based supply chain security solutions.

As APDN continues to provide contract production of DNA to clients in these markets, the company plans to also introduce them to its DNA-based security solutions to protect their products against theft of their IP and the invasion of counterfeits into their supply chains.

DNA-based diagnostic reagents may be used in the early detection of cancer, or the diagnosis of genetic, metabolic or infectious diseases. DNA-based therapeutics may be used in gene therapies, DNA vaccines, and other therapies that are generally in the early stage of development. By providing the production of DNA for diagnostics and therapeutics, APDN expects to gain access to pharmaceutic customers who will likely have supply chain concerns, and need to protect themselves against the potential of counterfeit infiltration and comply with FDA efforts to eliminate counterfeits.

In order to accelerate the revenue growth in the pharmaceutical sector, the company recently appointed **Bob Miglani** as Chief of Business Development. Mr. Miglani will be responsible for building the Company's business within the FDA-regulated markets, including pharmaceuticals, foods, personal care and medical devices. He will also lead the team responsible for creating and driving commercial strategies within these large and important sectors.

Mr. Miglani brings 23 years of deep industry experience from Pfizer Inc., where he served in a series of roles of increasing responsibility. Mr. Miglani has a proven track record of developing innovative partnerships with medical and healthcare organizations in the United States, Europe, India and other parts of the world.

Valuation

We maintain our fair valuation for APDN shares at $7.50 per share.

Although we are disappointed with the fiscal fourth quarter financials, we are still optimistic about the company's long term prospect. We still believe revenue growth will accelerate in fiscal 2017 due to the growth in business development especially in the pharmaceutical industry.

We are especially pleased to see that APDN has entered into the lucrative molecular diagnostic market. This is a huge market with high growth potential in the next decade for the company.

We remain optimistic about APDN's prospect. The company's fundamentals remain strong. The Company's technology is unique and has competitive advantages over its peers. According to our long term financial model, the Company's revenue will grow at a compound annual growth rate (CAGR) of 81% in the next 4 fiscal years from 2016 to 2020. APDN will become profitable in fiscal 2020 with an EPS of $0.13 based on total revenue of $45 million.

Our fair value is $7.5 per share, which values the company at $195 million based on 26 million outstanding shares, which corresponds to a forward P/E of 58 based on 2020 EPS of $0.13. We believe this valuation is still conservative considering APDN is a high growth company.

As long as the Company can execute on its growth strategy correctly, we believe value should be generated for shareholders.

PROJECTED INCOME STATEMENT

	2015 (Sep)					2016 (Sep)					2017E (Sep)	2018E (Sep)	2019E (Sep)	2020E (Sep)
$ in million except per share data	Q1	Q2	Q3	Q4	FYA	Q1	Q2	Q3	Q4	FYE	FYE	FYE	FYE	FYE
Product revenue	**$1.24**	**$1.52**	**$2.27**	**$3.98**	**$9.01**	**$1.32**	**$0.57**	**$0.65**	**$1.38**	**$3.93**	**$11.00**	**$17.00**	**$24.50**	**$35.00**
YOY Growth	*107.9%*	*138.4%*	*169.6%*	*516.6%*	*231.0%*	*6.6%*	*-62.3%*	*-71.2%*	*-65.3%*	*-56.4%*	*179.8%*	*54.5%*	*44.1%*	*42.9%*
Service Revenue									**$0.25**	**$0.25**	**$1.50**	**$3.00**	**$5.50**	**$10.00**
YOY Growth									-	-	-	*100.0%*	*83.3%*	*81.8%*
Total Revenue									**$1.64**	**$4.19**	**$12.50**	**$20.00**	**$30.00**	**$45.00**
YOY Growth									*-58.9%*	*-53.5%*	*198.6%*	*60.0%*	*50.0%*	*50.0%*
CoGS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.44	0.56	1.58	2.44	3.51	5.01
Gross Income	**1.24**	**1.52**	**2.27**	**3.98**	**9.01**	**1.32**	**0.57**	**0.53**	**1.19**	**3.62**	**9.42**	**14.56**	**20.99**	**29.99**
Gross Margin	*100.0%*	*100.0%*	*100.0%*	*100.0%*	*100.0%*	*100.0%*	*100.0%*	*81.4%*	*86.5%*	*92.2%*	*85.7%*	*85.7%*	*85.7%*	*85.7%*
SG&A	$4.7	$2.9	$3.5	$3.7	$14.7	$3.6	$3.1	$2.7	$2.6	$12.0	$15.0	$17.0	$20.0	$22.0
% SG&A	*376.2%*	*191.0%*	*154.7%*	*91.9%*	*163.6%*	*268.4%*	*544.3%*	*414.7%*	*189.9%*	*305.4%*	*136.4%*	*100.0%*	*81.6%*	*62.9%*
R&D	$0.28	$0.37	$0.31	$0.67	$1.64	$0.47	$0.73	$1.08	$0.83	$3.11	$2.20	$2.80	$3.00	$3.50
% R&D	*22.4%*	*24.6%*	*13.7%*	*16.9%*	*18.2%*	*35.6%*	*127.2%*	*165.1%*	*60.3%*	*79.1%*	*20.0%*	*16.5%*	*12.2%*	*10.0%*
Other	$0.1	$0.1	$0.1	$0.1	$0.5	$0.2	$0.2	$0.2	$0.1	$0.7	$0.3	$0.3	$0.3	$0.3
% Other	*8.8%*	*8.1%*	*5.4%*	*3.4%*	*5.4%*	*16.5%*	*29.8%*	*25.8%*	*10.8%*	*18.0%*	*2.7%*	*1.8%*	*1.2%*	*0.9%*
Operating Income	**($3.8)**	**($1.9)**	**($1.7)**	**($0.5)**	**($7.9)**	**($2.9)**	**($3.4)**	**($3.4)**	**($2.4)**	**($12.2)**	**($8.1)**	**($5.5)**	**($2.3)**	**$4.2**
Operating Margin	*-307.4%*	*-123.7%*	*-73.7%*	*-12.3%*	*-87.2%*	*-220.6%*	*-601.3%*	*-524.2%*	*-174.5%*	*-310.3%*	*-73.4%*	*-32.6%*	*-9.4%*	*12.0%*
Other Net	($4.0)	($0.0)	$0.0	($0.0)	($4.0)	($0.0)	($0.0)	$0.1	($0.0)	$0.0	$0.0	$0.0	$0.0	$0.0
Pre-Tax Income	**($7.8)**	**($1.9)**	**($1.7)**	**($0.5)**	**($11.9)**	**($2.9)**	**($3.5)**	**($3.4)**	**($2.4)**	**($12.2)**	**($8.1)**	**($5.5)**	**($2.3)**	**$4.2**
Income taxes(benefit)	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Tax Rate	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Reported Net Income	**($7.8)**	**($1.9)**	**($1.7)**	**($0.5)**	**($11.9)**	**($2.9)**	**($3.5)**	**($3.4)**	**($2.4)**	**($12.2)**	**($8.1)**	**($5.5)**	**($2.3)**	**$4.2**
YOY Growth	-	-	-	-	-	-	-	-	-	-	-	-	*-58.27%*	*-281.21%*
Net Margin	-	-	-	-	-	-	-	-	-	-	-	*-32.6%*	*-9.4%*	*12.0%*
Shares Out	*15.5*	*17.4*	*21.4*	*21.5*	*18.9*	*22.5*	*24.1*	*24.1*	*24.1*	*23.7*	*27.0*	*29.0*	*30.0*	*32.0*
Reported EPS	**($0.51)**	**($0.11)**	**($0.08)**	**($0.02)**	**($0.63)**	**($0.13)**	**($0.14)**	**($0.14)**	**($0.10)**	**($0.51)**	**($0.30)**	**($0.19)**	**($0.08)**	**$0.13**
YOY Growth	-	-	-	-	-	-	-	-	-	-	*-41.8%*	*-36.2%*	*-59.7%*	*-269.9%*
One-time charge	*$4.01*	*$0.00*	*$0.00*	*$0.00*	*$4.01*	*$0.00*	*$0.00*	*$0.00*	*$0.00*	*$0.00*	*$0.00*	*$0.00*	*$0.00*	*$0.00*
Non GAAP Net Income	**($3.8)**	**($1.9)**	**($1.7)**	**($0.5)**	**($7.9)**	**($2.9)**	**($3.5)**	**($3.4)**	**($2.4)**	**($12.2)**	**($8.1)**	**($5.5)**	**($2.3)**	**$4.2**
Non GAAP EPS	**($0.25)**	**($0.11)**	**($0.08)**	**($0.02)**	**($0.42)**	**($0.13)**	**($0.14)**	**($0.14)**	**($0.10)**	**($0.51)**	**($0.30)**	**($0.19)**	**($0.08)**	**$0.13**

Source: Company filing and Zacks Investment Research estimates

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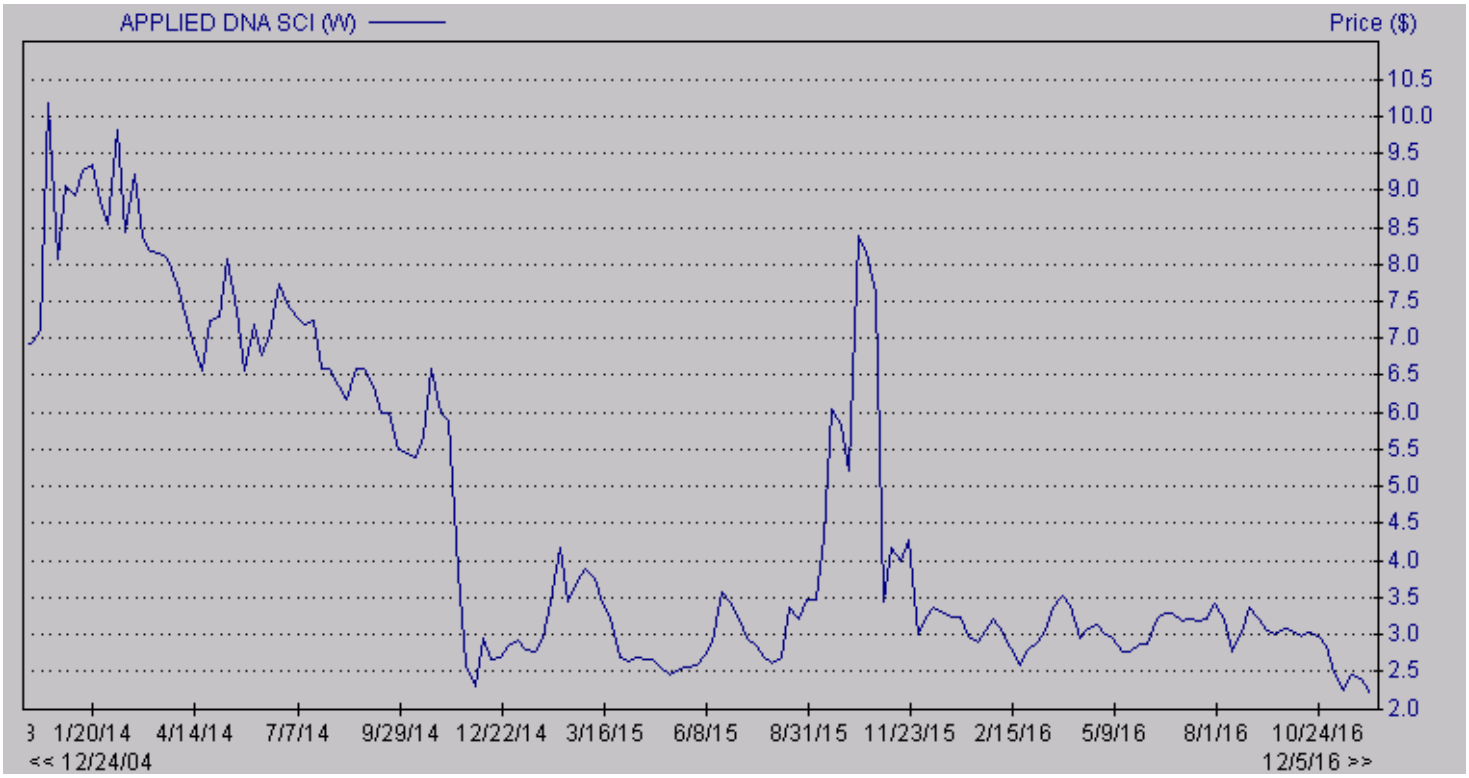
HISTORICAL STOCK PRICE



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