Zacks Small-Cap Research

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Applied DNA Sciences (APDN-NASDAQ)

APDN: Second quarter revenue decline disappointing, but remain optimistic for long term growth

Current Price (05/11/16)	$3.15
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.

We remain bullish on APDN shares.

SUMMARY DATA

52-Week High	**$8.82**
52-Week Low	**$2.42**
One-Year Return (%)	**28.03**
Beta	**0.89**
Average Daily Volume (sh)	**63,589**
Shares Outstanding (mil)	**24**
Market Capitalization ($mil)	**$76**
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	1.50 E	3.00 E	6.40 E
2017					17.50 E
2018					25.00 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	-$0.11 E	-$0.06 E	-$0.45 E
2017					-$0.06 E
2018					$0.10 E

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

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WHAT'S NEW

Update on Fiscal Second Quarter Financials

On May 12, 2016, APDN announced financial results for the fiscal second quarter ended March 31, 2016.

Revenues for the second quarter of fiscal 2016 were $0.6 million, compared with $1.5 million for the second quarter of fiscal 2015, a decrease of 62%. Second quarter revenue decreased 57% from the $1.3 million reported in the first fiscal quarter ended December 31, 2015.

According to the new release and management discussion during the conference call, the year-over-year decrease in revenue is primarily attributable to the scheduled lower revenue from two government contract awards and a decrease in revenue from suppliers of the Defense Logistics Agency (DLA) due to the consolidation of APDN's contracts with multiple individual suppliers of the DLA to one contract directly with DLA, as well as a decrease in revenue from another Federal Agency.

The sequential decrease in revenues resulted primarily from lower revenue from the two government contract awards, a decrease in revenue in DNA manufacturing for the diagnostic market as well as decrease in revenue for textiles related to DNA transfer units that were installed during the prior fiscal quarter.

SG&A expenses for 2Q16 were $3.1 million, compared to $2.9 million for 2Q15.

R&D expenses for 2Q16 were $0.73 million, compared to $0.37 million for 2Q15.

Total operating expenses for the second quarter of fiscal 2016 were $4.0 million, compared with $3.4 million for 2Q15, an increase of approximately 18%. The increase was primarily attributable to an increase in SG&A expense, R&D expense and depreciation and amortization expenses.

Net loss for the quarter ended March 31, 2016 was $3.5 million ($0.14 per share), compared with a net loss of $1.9 million ($0.11 per share) for the quarter ended March 31, 2015

Comparative Consolidated Statement of Operations

	Three Month Period Ended March 31,		Variance		Six Month Period Ended March 31,		Variance	
	2016	2015	$	%	2016	2015	$	%
Revenues	$ 573,322	$ 1,518,761	(945,439)	-62%	$ 1,897,436	$ 2,760,563	(863,127)	-31%
Operating expenses:								
Selling, general and administrative	3,120,469	2,901,207	219,262	8%	6,674,831	7,569,950	(895,119)	-12%
Research and development	729,079	373,380	355,699	95%	1,201,013	651,652	549,361	84%
Depreciation and amortization	170,981	123,079	47,902	39%	389,327	232,805	156,522	67%
Total operating expenses	4,020,529	3,397,666	622,863	18%	8,265,171	8,454,407	(189,236)	-2%
LOSS FROM OPERATIONS	(3,447,207)	(1,878,905)	1,568,302	83%	(6,367,735)	(5,693,844)	673,891	12%
Other income (expense)	(20,416)	(6,677)	13,739	206%	(26,158)	(4,020,376)	(3,994,218)	-99%
NET LOSS	$ (3,467,623)	$ (1,885,582)	1,582,041	84%	$ (6,393,893)	$ (9,714,220)	(3,320,327)	-34%

Excluding non-cash expenses, adjusted EBITDA for the quarter ended March 31, 2016 was negative $2.8 million compared to a negative adjusted EBITDA of $1.2 million for the same quarter last year and a negative adjusted EBITDA of $2.2 million in the prior fiscal quarter reflecting lower revenue.

Calculation and Reconciliation of Consolidated Adjusted EBITDA

	Three Month Period Ended March 31,			Three Month Period Ended December 31,	
	2016	2015	% Δ	2015	% Δ
Net Loss	$ (3,467,623)	$ (1,885,582)		$ (2,926,270)	
Interest expense (income), net	(4,062)	(16)		(2,845)	
Depreciation and amortization	170,981	123,079		218,346	
Stock based compensation expense	499,668	539,996		455,110	
Loss on conversion of promissory notes	-	-		-	
Bad debt expense	10,000	-		10,000	
Total non-cash items	676,587	663,059		680,611	
Consolidated Adjusted EBITDA (loss)	**$ (2,791,036)**	**$ (1,222,523)**	**128%**	**$ (2,245,659)**	**24%**

	Six Month Period Ended March 31,		
	2016	2015	% Δ
Net Loss	$ (6,393,893)	$ (9,714,220)	
Interest expense (income), net	(6,907)	31,859	
Depreciation and amortization	389,327	232,805	
(Gain) loss on change in fair value of warrant liability	-	2,994,540	
Stock based compensation expense	954,781	2,538,519	
Loss on conversion of promissory notes	-	980,842	
Bad debt expense	22,313	2,779	
Total non-cash items	1,359,514	6,781,344	
Consolidated Adjusted EBITDA (loss)	**$ (5,034,379)**	**$ (2,932,876)**	**72%**

Cash and cash equivalents as of March 31, 2016 totaled $9.8 million as compared to $12.4 million at December 31, 2015. The decrease in cash balances was due primarily to the use of cash to fund operations.

Net cash used in operating activities in the fiscal second quarter of 2016 was $2.5 million. This compares with $1.6 million for the corresponding prior-year period.

Our Takeaways

A deep revenue decline for the 2Q16 was a surprise to us. But when we think about it second time, it seems not that surprising.

APDN is still in the early stage of commercializing its anti-counterfeiting and anti-theft technology and sales ramp may take longer time than we expected to accelerate. We have noticed that interest in APDN's unique product portfolio has been increasing in recent years, but how that translates into sales is still a challenge and depends on the customer's own branding strategy. In this regard, we think quarterly revenue will continue to fluctuate in the near future.

We also noticed that the deep decline in second quarter revenue was mainly due to reduced revenue from government agencies. In this regard, revenue will be compensated from a newly signed contract with a government agency worth $2.5 million.
The new contract vehicle is a blanket purchase agreement (BPA) with a period of performance of April 1, 2016 through March 31, 2021. The contract allows for the sale of both standard products and the development of new products over the five-year term. The BPA is an efficient contract vehicle because

once established, repeat purchases are easy for both sides. The contract vehicle also allows Applied DNA Sciences the ability to develop new products and solutions for the contracting agency at an accelerated deployment pace compared with traditional contract development paths.

APDN ended the quarter with a **strong balance sheet.** As of March 31, 2016, cash and cash equivalents totaled $9.8 million. Cash burn rate is approximately $0.8 million/month. Therefore, even without new funds, current cash balance can last into 2018.

In late November, APDN closed a registered direct offering of 2,500,000 shares of common stock at a price of $3.49 per share and its concurrent private placement of warrants to purchase 1,250,000 shares of common stock at a price of $.01 per warrant to certain institutional investors. The warrants have a per share exercise price of $4.30, are exercisable beginning six months from the date hereof and will expire five years from the date on which they become exercisable.

The aggregate gross proceeds to the company from the registered direct offering and concurrent private placement were $8.75 million before deducting the placement agent's fee and other estimated offering expenses.

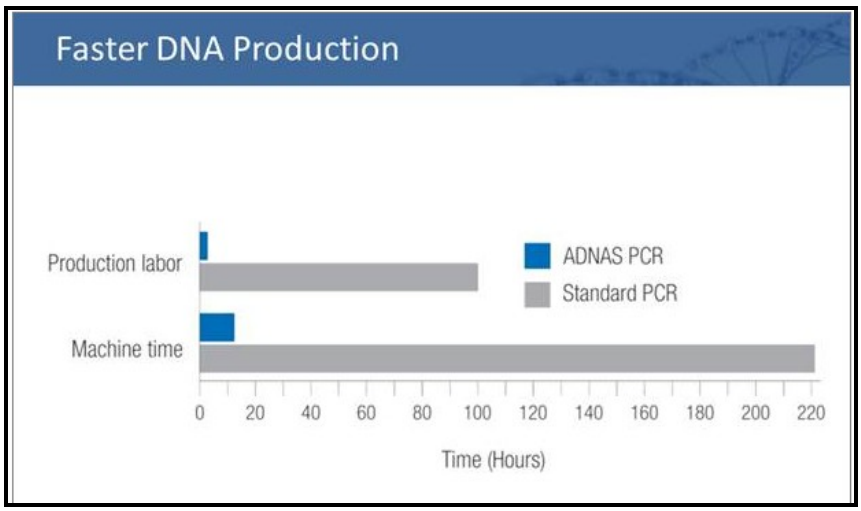
We welcome this new financing, which not only boosts the company's balance sheet, but more importantly validates the company's technology and commercial efforts. With the boosted balance sheet, APDN is well positioned to accelerate revenue growth in fiscal 2016 and beyond.

APDN Enters Diagnostics Market

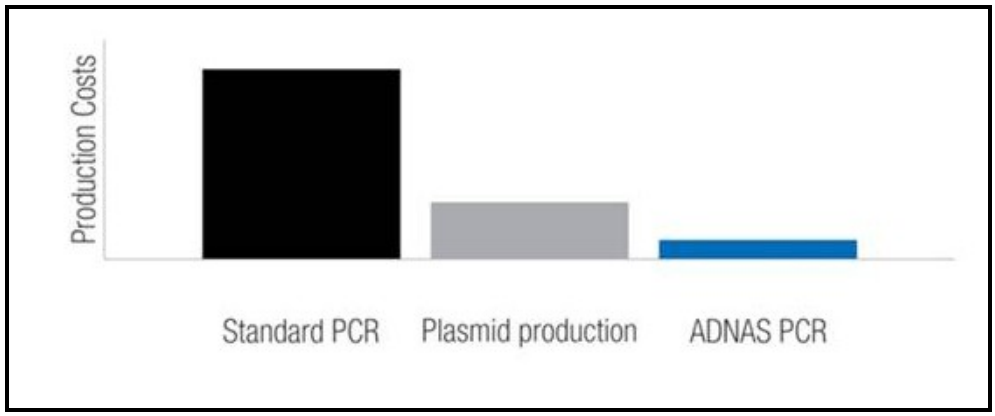
In early November 2015, APDN announced that it has shipped its first orders of DNA used as a **diagnostic reagent** to reagent suppliers and two international diagnostics customers. The total value of these shipments, which were made in its fiscal 2015 fourth quarter and the current fiscal first quarter,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

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

In September, 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

Our fair value for APDN shares remains at $7.50 per share.

Although we are disappointed with the second quarter financials, we are still optimistic about the company's long term prospect. We lowered our revenue estimate for the rest of 2016, but keep our estimates for fiscal 2017 and beyond based on our assumptions that revenue growth will accelerate 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 38% in the next 4 fiscal years from 2016 to 2020. APDN will become profitable in fiscal 2018 with net income of $2.9 million or EPS of $0.10 per share. EPS will grow to $0.60 per share in fiscal 2020 based on total revenue of $45 million.

APDN is a high growth company. In terms of valuation, we apply a P/E of 30x to our estimated EPS of $0.60 in fiscal 2020, discounted at 25% for 4 years. This way, we get our price target of $7.50 per share. This values the company at about $180 million in market cap based on 24 million outstanding shares, which is conservative in our view. As long as the Company can execute on its growth strategy correctly, we believe value should be generated for shareholders.

PROJECTED INCOME STATEMENT

	2015E (Sep)					2016E (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
Total Revenues	**$1.24**	**$1.52**	**$2.27**	**$3.98**	**$9.01**	**$1.32**	**$0.57**	**$1.50**	**$3.00**	**$6.40**	**$17.50**	**$25.00**	**$35.00**	**$45.00**
YOY Growth	*107.9%*	*138.4%*	*169.6%*	*516.6%*	*231.0%*	*6.6%*	*-62.3%*	*-33.9%*	*-24.6%*	*-29.0%*	*173.5%*	*42.9%*	*40.0%*	*28.6%*
CoGS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross Income	**1.24**	**1.52**	**2.27**	**3.98**	**9.01**	**1.32**	**0.57**	**1.50**	**3.00**	**6.40**	**17.50**	**25.00**	**35.00**	**45.00**
Gross Margin	*100.0%*	*100.0%*	*100.0%*	*100.0%*	*100.0%*	*100.0%*	*100.0%*	*100.0%*	*100.0%*	*100.0%*	*100.0%*	*100.0%*	*100.0%*	*100.0%*
SG&A	$4.7	$2.9	$3.5	$3.7	$14.7	$3.6	$3.1	$3.7	$4.0	$14.4	$16.5	$19.0	$20.0	$22.0
% SG&A	*376.2%*	*191.0%*	*154.7%*	*91.9%*	*163.6%*	*268.4%*	*544.3%*	*246.7%*	*133.3%*	*224.7%*	*94.3%*	*76.0%*	*57.1%*	*48.9%*
R&D	$0.28	$0.37	$0.31	$0.67	$1.64	$0.47	$0.73	$0.50	$0.55	$2.25	$2.20	$2.80	$3.00	$3.50
% R&D	*22.4%*	*24.6%*	*13.7%*	*16.9%*	*18.2%*	*35.6%*	*127.2%*	*33.3%*	*18.3%*	*35.2%*	*12.6%*	*11.2%*	*8.6%*	*7.8%*
Other	$0.1	$0.1	$0.1	$0.1	$0.5	$0.2	$0.2	$0.1	$0.1	$0.6	$0.3	$0.3	$0.3	$0.3
% Other	*8.8%*	*8.1%*	*5.4%*	*3.4%*	*5.4%*	*16.5%*	*29.8%*	*6.7%*	*3.3%*	*9.2%*	*1.7%*	*1.2%*	*0.9%*	*0.7%*
Operating Income	**($3.8)**	**($1.9)**	**($1.7)**	**($0.5)**	**($7.9)**	**($2.9)**	**($3.4)**	**($2.8)**	**($1.7)**	**($10.8)**	**($1.5)**	**$2.9**	**$11.7**	**$19.2**
Operating Margin	*-307.4%*	*-123.7%*	*-73.7%*	*-12.3%*	*-87.2%*	*-220.6%*	*-601.3%*	*-186.7%*	*-55.0%*	*-169.1%*	*-8.6%*	*11.6%*	*33.4%*	*42.7%*
Other Net	($4.0)	($0.0)	$0.0	($0.0)	($4.0)	($0.0)	($0.0)	$0.0	$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)**	**($2.8)**	**($1.7)**	**($10.8)**	**($1.5)**	**$2.9**	**$11.7**	**$19.2**
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)**	**($2.8)**	**($1.7)**	**($10.8)**	**($1.5)**	**$2.9**	**$11.7**	**$19.2**
YOY Growth	-	-	-	-	-	-	-	-	-	-	-	-	*303.45%*	*64.10%*
Net Margin	-	-	-	-	-	-	-	-	-	-	-	*11.6%*	*33.4%*	*42.7%*
Shares Out	*15.5*	*17.4*	*21.4*	*21.5*	*18.9*	*22.5*	*24.1*	*25.0*	*25.5*	*24.3*	*27.0*	*29.0*	*30.0*	*32.0*
Reported EPS	**($0.51)**	**($0.11)**	**($0.08)**	**($0.02)**	**($0.63)**	**($0.13)**	**($0.14)**	**($0.11)**	**($0.06)**	**($0.45)**	**($0.06)**	**$0.10**	**$0.39**	**$0.60**
YOY Growth	-	-	-	-	-	-	-	-	-	-	*-87.6%*	*-280.0%*	*290.0%*	*53.8%*
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)**	**($2.8)**	**($1.7)**	**($10.8)**	**($1.5)**	**$2.9**	**$11.7**	**$19.2**
Non GAAP EPS	**($0.25)**	**($0.11)**	**($0.08)**	**($0.02)**	**($0.42)**	**($0.13)**	**($0.14)**	**($0.11)**	**($0.06)**	**($0.45)**	**($0.06)**	**$0.10**	**$0.39**	**$0.60**

Source: Company filing and Zacks Investment Research estimates

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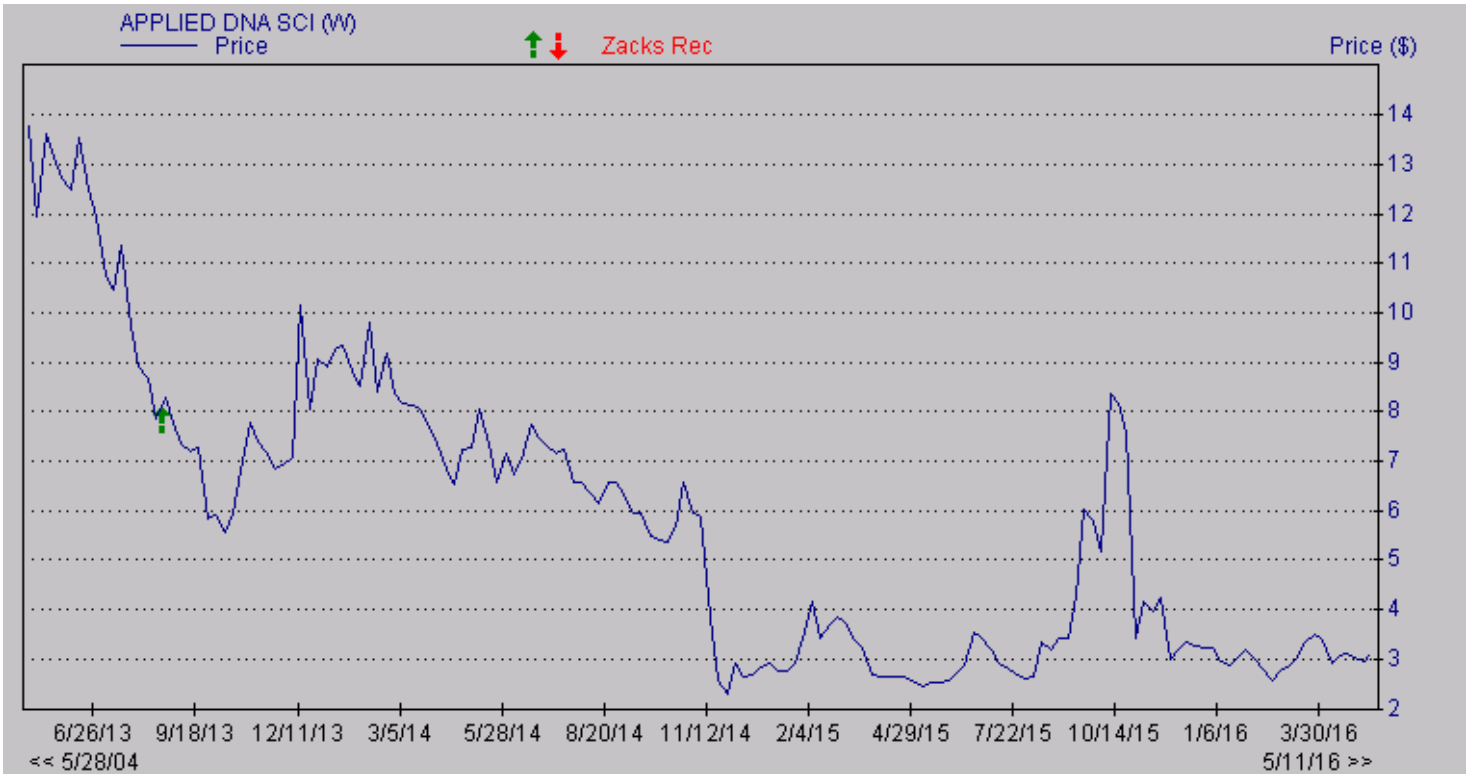

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