Zacks Small-Cap Research

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Applied DNA Sciences (APDN-NASDAQ)

APDN: Zacks Company Report

APDN: We remain optimistic about the company for its long term growth potential

Current Price (08/12/16)	$2.78
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	**$8.82**
52-Week Low	**$2.58**
One-Year Return (%)	**-17.26**
Beta	**0.98**
Average Daily Volume (sh)	**70,746**
Shares Outstanding (mil)	**24**
Market Capitalization ($mil)	**$67**
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	0.53 A	3.00 E	5.43 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	-$0.14 A	-$0.06 E	-$0.47 E
2017					-$0.07 E
2018					$0.08 E

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

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WHAT'S NEW

Update on Fiscal Third Quarter Financials

On August 11, Applied DNA Sciences announced results for the fiscal third quarter ended June 30, 2016.

Revenue for the fiscal third quarter of 2016 was $0.65 million, compared to $2.27 million for the same quarter of last year, a decrease of 71%. However, his year's third quarter revenue increased 14% from the $0.57 million reported in the second fiscal quarter ended March 31, 2016.

Comparative Consolidated Statement of Operations

	Three Month Period Ended June 30,		Variance		Nine Month Period Ended June 30,		Variance	
	2016	2015	$	%	2016	2015	$	%
Revenues	$ 652,896	$ 2,267,671	(1,614,775)	-71%	$ 2,550,332	$ 5,028,234	(2,477,902)	-49%
Cost of revenues	121,260	129,016	(7,756)	-6%	304,611	129,015	175,596	136%
Operating expenses:								
Selling, general and administrative	2,707,420	3,222,691	(515,271)	-16%	8,616,246	10,323,809	(1,707,563)	-17%
Research and development	1,077,916	466,841	611,075	131%	2,861,583	1,587,326	1,274,257	80%
Depreciation and amortization	168,641	121,339	47,302	39%	557,968	354,144	203,824	58%
Total operating expenses	3,953,977	3,810,871	143,106	4%	12,035,797	12,265,279	(229,482)	-2%
LOSS FROM OPERATIONS	(3,422,341)	(1,672,216)	1,750,125	105%	(9,790,076)	(7,366,060)	2,424,016	33%
Other income (expense)	55,330	1,334	(53,996)	4048%	29,173	(4,019,042)	(4,048,215)	-101%
NET LOSS	$ (3,367,011)	$ (1,670,882)	1,696,129	102%	$ (9,760,903)	$ (11,385,102)	(1,624,199)	-14%

During the conference call, management indicated that the year-over-year decrease in revenue was primarily attributable to the **scheduled lower revenue** from two government contract awards and a decrease in revenue related to sales to the textile industry for protecting cotton supply chains offset by an increase in consumer asset marking and fiberTyping revenues. The sequential increase in revenue resulted primarily from an increase in sales in consumer asset marking during the current fiscal quarter.

SG&A expenses for fiscal 3Q16 were $2.7 million, compared to $3.5 million for fiscal 3Q15.

R&D expenses for fiscal 3Q16 were $1.1 million, compared to $0.3 million for fiscal 3Q15.

Total operating expenses for the third quarter of fiscal 2016 were $4.0 million, compared with $3.8 million in the prior year's quarter. The increase in year-over-year total operating expenses was primarily attributable to an increase in R&D expense and offset by a decrease in SG&A expense. Total operating expense for the fiscal third quarter of 2016 remained flat as compared to the fiscal second quarter of 2016.

Net loss for the fiscal third quarter of 2016 was $3.4 million ($0.14 per share), compared with a net loss of $1.7 million ($0.08 per share) for the quarter ended June 30, 2015.

Adjusted EBITDA for the quarter ended June 30, 2016 was negative $2.6 million compared to a negative Adjusted EBITDA of $0.5 million for the same quarter last year and a negative Adjusted EBITDA of $2.8 million in the prior fiscal quarter.

Calculation and Reconciliation of Consolidated Adjusted EBITDA

	Three Month Period Ended June 30,			Three Month Period Ended March 31,	
	2016	2015	% Δ	2016	% Δ
Net Loss	$ (3,367,011)	$ (1,670,882)		$ (3,467,623)	
Interest expense (income), net	(2,660)	(5,052)		(4,082)	
Depreciation and amortization	168,641	121,339		170,981	
Stock based compensation expense	525,186	1,057,097		499,668	
Loss on conversion of promissory notes	-	-		-	
Bad debt expense	83,934	18,971		10,000	
Total non-cash items	775,101	1,192,355		676,587	
Consolidated Adjusted EBITDA (loss)	**$ (2,591,910)**	**$ (478,527)**	**442%**	**$ (2,791,036)**	**-7%**

APDN ended the fiscal third quarter with a relatively strong balance sheet. **Cash and cash equivalents** as of June 30, 2016 totaled $7.1 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, 2015, 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.

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

Business Continues to Grow

On **May 16**, Applied DNA announced the expansion of its DNA marking of prestige cars through its Swedish distributor, Safesolution. A two–year contract for protecting a minimum of 2,000 vehicles per month was entered into, making these vehicles a harder target for thieves.

On **May 25**, Applied DNA named CGPR as their public relations agency of record for their textile and apparel business. CGPR will provide strategic counsel to continue to drive awareness of its exciting textile and apparel DNA marking, validation and authentication platform. Major brands and supply chain partners are using the platform to ensure integrity of products and associated claims. The PR plan will complement the demand creation plan in place and support the launch of new technologies, solutions and products.

On **June 7**, Applied DNA partnered with Palmetto Synthetics and Techmer PM launching its SigNature T DNA system in synthetic fibers and expanding its presence in the athletic apparel industry and automotive textile category. SigNature T DNA now tags natural and synthetic fibers at industrial scale and maintains a secure chain of custody as the product moves from source to fiber to product to consumer.

On **July 6**, Applied DNA signed an agreement with R&R Partnership Enterprises to protect against document fraud, theft and counterfeiting. R&R intends to market its ProveWrite document authentication system to protect evidentiary processes, and sensitive government documents.

On **July 12**, Applied DNA announced that it had shipped SigNature T DNA in the third quarter, guaranteeing purity to mark 10 million pounds of Acala cotton. Additionally, Applied DNA will ship two new DNA transfer units in the fourth quarter of 2016 that will support gin expansion into new regions and cotton varieties.

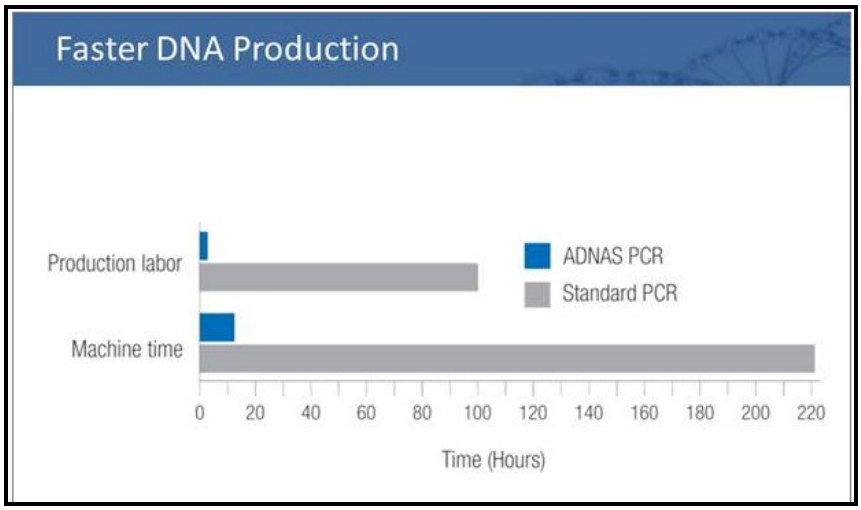
On **August 9**, 2016, Applied DNA and BLC Leather Technology Centre announced that they had entered into a Memorandum of Understanding for the marking of animal pelts to ensure security of the supply chain.

APDN Enters Diagnostics Market

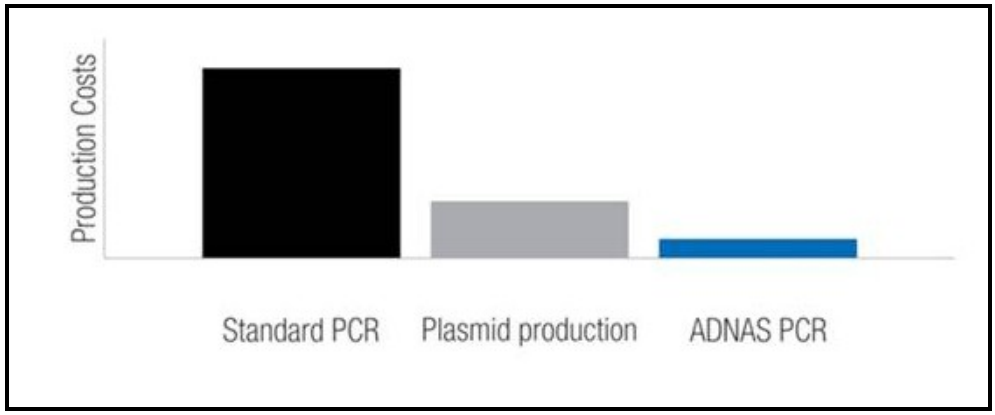
In early November 2015, APDN announced that it has shipped its first orders of DNA used as a **diagnostic reagent** to reagent suppliers and two international diagnostics customers. The total value of these shipments, which were made in its fiscal 2015 fourth quarter and the current fiscal first quarter,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

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

Although we are disappointed with the second and third 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 $2.4 million or EPS of $0.08 per share. EPS will grow to $0.57 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 3.5 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**	**$0.65**	**$3.00**	**$5.55**	**$17.50**	**$25.00**	**$35.00**	**$45.00**
YOY Growth	*107.3%*	*138.4%*	*169.6%*	*516.6%*	*231.0%*	*6.6%*	*-62.3%*	*-71.2%*	*-24.6%*	*-38.4%*	*215.3%*	*42.9%*	*40.0%*	*28.6%*
CoGS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.12	0.38	0.55	0.76	0.98
Gross Income	**1.24**	**1.52**	**2.27**	**3.98**	**9.01**	**1.32**	**0.57**	**0.53**	**3.00**	**5.43**	**17.12**	**24.45**	**34.24**	**44.02**
Gross Margin	*100.0%*	*100.0%*	*100.0%*	*100.0%*	*100.0%*	*100.0%*	*100.0%*	*81.4%*	*100.0%*	*97.8%*	*97.8%*	*97.8%*	*97.8%*	*97.8%*
SG&A	$4.7	$2.9	$3.5	$3.7	$14.7	$3.6	$3.1	$2.7	$4.0	$13.4	$16.5	$19.0	$20.0	$22.0
% SG&A	*376.2%*	*191.0%*	*154.7%*	*91.9%*	*163.6%*	*268.4%*	*544.3%*	*414.7%*	*133.3%*	*241.1%*	*94.3%*	*76.0%*	*57.1%*	*48.9%*
R&D	$0.28	$0.37	$0.31	$0.67	$1.64	$0.47	$0.73	$1.08	$0.55	$2.83	$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%*	*18.3%*	*51.0%*	*12.6%*	*11.2%*	*8.6%*	*7.8%*
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%*	*3.3%*	*11.9%*	*1.7%*	*1.2%*	*0.9%*	*0.7%*
Operating Income	**($3.8)**	**($1.9)**	**($1.7)**	**($0.5)**	**($7.9)**	**($2.9)**	**($3.4)**	**($3.4)**	**($1.7)**	**($11.4)**	**($1.9)**	**$2.4**	**$10.9**	**$18.2**
Operating Margin	*-307.4%*	*-123.7%*	*-73.7%*	*-12.3%*	*-87.2%*	*-220.6%*	*-601.3%*	*-524.2%*	*-55.0%*	*-206.1%*	*-10.8%*	*9.4%*	*31.2%*	*40.5%*
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)**	**($1.7)**	**($11.4)**	**($1.9)**	**$2.4**	**$10.9**	**$18.2**
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)**	**($1.7)**	**($11.4)**	**($1.9)**	**$2.4**	**$10.9**	**$18.2**
YOY Growth	-	-	-	-	-	-	-	-	-	-	-	-	*364.58%*	*66.58%*
Net Margin	-	-	-	-	-	-	-	-	-	-	-	*9.4%*	*31.2%*	*40.5%*
Shares Out	*15.5*	*17.4*	*21.4*	*21.5*	*18.9*	*22.5*	*24.1*	*24.1*	*25.5*	*24.0*	*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)**	**($0.06)**	**($0.47)**	**($0.07)**	**$0.08**	**$0.36**	**$0.57**
YOY Growth	-	-	-	-	-	-	-	-	-	-	*-85.3%*	*-216.4%*	*349.1%*	*56.2%*
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)**	**($1.7)**	**($11.4)**	**($1.9)**	**$2.4**	**$10.9**	**$18.2**
Non GAAP EPS	**($0.25)**	**($0.11)**	**($0.08)**	**($0.02)**	**($0.42)**	**($0.13)**	**($0.14)**	**($0.14)**	**($0.06)**	**($0.47)**	**($0.07)**	**$0.08**	**$0.36**	**$0.57**

Source: Company filing and Zacks Investment Research estimates

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HISTORICAL STOCK PRICE



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