Zacks Small-Cap Research

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Pure Bioscience, Inc. (PURE-OTC)

PURE: Zacks Company Report

PURE: The launch of PURE Control for Produce will accelerate strong revenue growth in calendar 1H17 and beyond

Current Price (09/14/16)	$1.01
Valuation	**$3.00**

OUTLOOK

PURE develops and markets SDC-based antimicrobial products that provide non-toxic solutions to food safety challenges. SDC is a novel, patented platform technology with superior efficacy and low toxicity and can be used in diverse markets. Current focus is on food safety industry.

With the launch of PURE Control in 1Q16, we expect growth will accelerate in calendar 2H16 and beyond. We continue to be bullish on PURE shares.

SUMMARY DATA

52-Week High	**$1.50**
52-Week Low	**$0.62**
One-Year Return (%)	**28.83**
Beta	**-0.66**
Average Daily Volume (sh)	**29,795**
Shares Outstanding (mil)	**62**
Market Capitalization ($mil)	**$65**
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 (%)	**36.6**
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	**Small-Growth**
Industry	**Med Products**
Zacks Rank in Industry	**N/A**

ZACKS ESTIMATES

Revenue
(in millions of $)

	Q1 (Oct)	Q2 (Jan)	Q3 (Apr)	Q4 (Jul)	Year (Jul)
2015	0.12 A	0.27 A	0.11 A	0.23 A	0.73 A
2016	0.19 A	0.18 A	0.40 A	0.80 E	1.57 E
2017					7.50 E
2018					20.00 E

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

	Q1 (Oct)	Q2 (Jan)	Q3 (Apr)	Q4 (Jul)	Year (Jul)
2015	-$0.05 A	-$0.04 A	-$0.05 A	-$0.05 A	-$0.19 A
2016	-$0.04 A	-$0.04 A	-$0.02 A	-$0.03 E	-$0.13 E
2017					-$0.08 E
2018					$0.01 E

Zacks Projected EPS Growth Rate - Next 5 Years % **N/A**

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WHAT'S NEW

Update on PURE Control Launch

In parallel to its PURE Hard Surface business, PURE is launching its second business segment **PURE Control**-which utilizes the company's lead compound SDC as direct **food contact processing aid**.

Currently, PURE is targeting three key fields for PURE Control.

Produce (FDA)

PURE **introduced PURE Control®** at IPPE (International Production & Processing Expo) **in late Jan 2016**. IPPE is the world's largest annual poultry, meat and feed industry event attended by more than 30,000 industry leaders and their suppliers seeking to learn about the latest technological developments in the industry.

PURE will target PURE Control as a food safety solution for a broad range of processed vegetables and fruits that are most frequently associated with pathogen contamination. In its regulatory filing, PURE demonstrated materially significant reductions in Salmonella, Listeria and E. coli in processed fresh produce, as compared with current processing chemicals.

Produce is the leading source of foodborne illness in the US. Given the immediate market need and the proven superior efficacy of SDC, we believe PURE Control can quickly achieve meaningful market penetration among fruit and vegetable processors.

Poultry (FDA/USDA)

In June, 2015, PURE resubmitted a Food Contact Notification (FCN) to the US **FDA** for Silver Dihydrogen Citrate (SDC) as an online reprocessing antimicrobial for raw poultry processing aid.

In September, 2015, PURE received an Acknowledgement Letter from the US FDA stating that its FCN for SDC as a raw poultry processing aid is complete and setting an effective date of **December 18, 2015**.

The next step in the regulatory approval process is to obtain USDA approval **(Poultry USDA)**. Accordingly, after its receipt of the Acknowledgement Letter from the FDA, PURE immediately submitted its FCN to the Food Safety and Inspection Service of the USDA to commence the USDA review and approval process. As part of the USDA process, PURE is preparing to conduct in-plant process validation and optimization trials with the authorization of the USDA.

On July 11, 2016, PURE announced the receipt of a "No Objection Letter" from the USDA's Food Safety and Inspection Service (FSIS) granting approval for SDC-based PURE Control to be used as a ***spray or dip*** applied to poultry carcasses, parts and organs in pre-OLR (on-line reprocessing) and post chill processing of fresh poultry.

The commercialization of PURE Control for these newly approved applications is underway and the Company is already in discussions with several major poultry processors to begin in-plant validation and optimization testing which takes about few months.

Right now, PURE Control is being used by one of the leading fresh produce processors to complete pilot plant validation and optimization trials. This processor is testing the use of PURE Control as a new processing step for added protection. The pathogen reduction results from these trials exceeded the processor's goals. After completion of pilot plant testing and process validation, the next step for the processor will be to move into an operating facility for online trials, expected in calendar Q4.

At this time, three additional prominent processors of fresh and/or frozen produce have begun their own PURE Control use trials. PURE continues to leverage its existing foothold with a number of major produce and fruit processors who are using its SDC-based PURE® Hard Surface disinfectant for environmental sanitation.

The approval for these new uses allows immediate access to multiple poultry processing application points outside of OLR and enables PURE to begin sales to poultry processors.

PURE continues its on-going plant trials to optimize the application of PURE Control in OLR to gain USDA approval for use in that stage of poultry processing and anticipates completion in the **fourth calendar quarter this year**.

Meats (FDA/USDA)

PURE continues its product development efforts for the application of SDC as processing aid/intervention for beef and pork. Pending positive test results, PURE expects to file the FCN for processing raw beef and pork in calendar **2H2017**.

Go-To-Market Strategies and Programs Underway

With a goal of being positioned to commercialize and execute immediately upon obtaining regulatory approvals, PURE is proactively engaged in both “push” and “pull” sales and marketing initiatives with processors, retailers and distributors to prime demand for PURE Control®. Among these are some of the very largest vegetable and fruit processors, grocery and restaurant chains.

A number of leading processors, in both poultry and produce, are already using PURE® Hard Surface disinfectant on plant equipment, and therefore are familiar with the benefits of PURE’s superior SDC technology. For this reason, PURE anticipates that it may be able to achieve **accelerated market adoption** with a relatively short sales cycle. Additional market dynamics expected to drive adoption include:

- PURE Control’s superior efficacy and dramatically lower toxicity vs. processing aids currently in use, and
- The urgent pressure of increasing regulatory requirements.

Huge Market Opportunity for SDC as a Food Contact Processing Aid

Food contamination, especially by Salmonella, is a global health issue. Salmonella is responsible for an estimated 1.2 million food borne illnesses each year. In testing, the USDA has found that at least 25% of chicken parts in the food supply chain were contaminated with Salmonella.

In order to address the issue, the USDA has initiated a Salmonella Action Plan, which is the top Department priority, aiming to significantly reduce the number of Salmonella-related food borne illnesses in the US. This USDA initiative drives increased scrutiny to poultry inspection and processing practices.

Processing aids or interventions commonly used in the US food industry today are highly toxic chemistries. In addition, pathogens can become increasingly resistant and render current interventions less efficacious. As a result, poultry processors need new, highly effective antimicrobial interventions that can provide a heightened level of control over Salmonella that current interventions are not achieving. The demonstrated ability of SDC to reduce Salmonella to levels below the detection limit (when applied during the on-line reprocessing of raw poultry products) has the potential to play an important role in the solution.

Produce is also a leading source of foodborne illness in the US. The Centers for Disease Control and Prevention (CDC) estimates that produce was responsible for 46% of foodborne illnesses and 23% of foodborne illness-related deaths in the US between 1998 and 2008. Leafy greens were identified as the primary source of foodborne illness.

We believe that SDC is a significant improvement over current processing chemicals and provides important advantages because SDC does not induce bacterial resistance and is:

- More effective in reducing or eliminating pathogens
- Easier to handle and dilute
- Non-corrosive to processing equipment
- Non-toxic - does not create noxious fumes

Now approved as food contact processing aid, SDC has the opportunity to target the $1+ billion-dollar market and command a big chunk of the market share based on its superior efficacy and safety.

The raw poultry market opportunity is estimated to be in excess of $350 million and the processed produce opportunity is estimated to exceed $300 million. PURE's long term goal to capture a significant share, at least 10%, of those markets, which means peak annual sales of at least $65 million alone for the two markets.

Update on Fiscal Third Quarter 2016 Financials

Total revenue for fiscal 3Q16 ended April 30 was $0.40 million, as compared to $0.11 million for the same period of 2015, an increase of 269.7%.

But revenue from PURE's core business, food safety, continued to gain traction, increasing 372% in the third fiscal quarter of 2016 as compared with the prior year.

R&D expenses for fiscal 3Q16 was $0.21 million, compared to $0.17 million for the same period of last year.

SG&A expenses for fiscal 3Q16 were $1.39 million, compared to $1.21 million for the same period of 2015.

Total operating costs and expenses, excluding cost of goods sold and share-based compensation, for the third fiscal quarter of 2016 and 2015, were $1.6 million and $1.4 million, respectively.

The third fiscal quarter 2016 net income was $30,000 compared with a net loss of ($2.1) million for third fiscal quarter 2015.

The adjusted net loss, excluding derivative income and share-based compensation, for third fiscal quarter 2016 and third fiscal quarter 2015 was ($1.7) and ($1.3) million, respectively.

We are pleased to see a 270% quarterly sales increase year over year and 53% sales increase for the nine-month period.

Gross margin also improved from 40% in fiscal 3Q15 to 71% in 3Q16.

Balance Sheet Remains Strong

As of April 30, 2016, PURE had a cash balance of $5.4 million with no long term debt.

In May 2016, PURE raised $1.27 million from the exercise by all of the holders of the 2,820,670 warrants expiring May 23, 2016.

In October, 2015, PURE closed a $6 million private placement with strategic lead investor Franchise Brands LLC. This is Franchise Brands' second investment in PURE.

In November 2015, PURE completed the second and final closing of a follow-on private placement financing with its existing investors, raising $2 million to support its operations.

These financings greatly boosted the company's balance sheet. More importantly, the transactions further validate the company's SDC technology.

The combined financing will support the Company's operations and business plan through calendar Q1 2017.

The initial customers for SDC will be big players in the food processing market including Tyson, Pilgrim's Pride, Perdue, Foster Farms, Wayne Farms, Koch Foods, Taylor Farms, Ready Pac, Dole, Fresh Express, and F and S Produce.

Given the immediate market need and the proven superior efficacy of SDC against Salmonella, we believe that SDC can achieve significant market penetration now that it has received FDA and USDA approvals.

We Continue to be Bullish on PURE Shares

We continue to be optimistic about the prospect of PURE's SDC technology and reiterate our fair valuation at $3.00 per share.

We are impressed with the recent progress the company has achieved and the positive developments within the company. We think the company's valuation is very attractive at this time.

PURE is a technology-based bioscience company that provides solutions to numerous global health challenges. PURE's proprietary high efficacy/low toxicity **SDC-based antimicrobials** represent innovative advances in diverse markets and lead today's global trend toward industry and consumer use of **"green" products**. Patented SDC is an electrolytically generated source of stabilized ionic silver, which formulates well with other compounds. As a platform technology, SDC is distinguished from competitors in the marketplace because of its **superior efficacy**, **reduced toxicity** and the **inability of bacteria to form a resistance** to it.

PURE's SDC is the first new disinfectant registered with EPA in over 30 years. SDC's competitive advantages in efficacy and safety make it outstanding among its competitors and represent a **paradigm shift** in the disinfectant/sanitizer market place.

Another key feature of SDC is that SDC-based products have broad applicability in diverse markets. The Company's current focus is to expand distribution of currently approved **disinfectant/sanitizer** products to consumers in the **food safety industry**. We believe the launch of PURE Control will greatly accelerate revenue growth in calendar 2017 and beyond.

In terms of valuation, we think PURE shares are undervalued at current market price. Currently, the Company trades around $1.00 per share with a market cap of $62 million based on 62 million shares outstanding. We think this is a deep discount based on the company's fundamentals. According to our model, revenue will grow at 125% CAGR in the next fiscal 4 years. PURE will become profitable in fiscal 2018 with an EPS of 0.01 based on total revenue of $20.0 million. EPS will grow to $0.21 per share in fiscal 2020 based on total revenue of $42.5 million. With this in mind, we think PURE shares should be traded at a P/E ratio of 35 x. Applying this P/E multiple with our estimated EPS of $0.21 per share in fiscal 2020, discounted at 25% for 4 years, we come up with a fair valuation at $3.00 per share. This values PURE at $186 million in market cap, which we think is still conservative.

But keep in mind the risks. We noticed that the company's lead product PURE Hard Surface has been in the market for a few years, but sales so far have not been impressive. This could happen to the company's second product PURE Control. Sales of PURE Control may take longer time to gain traction

since PURE is still in its early stage of commercialization of its SDC technology. SDC technology is quite new to most customers in the disinfectant market, and the costs for SDC are also higher than those for most existing technologies. Therefore, rollout of the PURE Control may take longer time.

PROJECTED INCOME STATEMENT

	2014A (Jul)	2015A (Jul)					2016 (Jul)					2017 (Jul)	2018 (Jul)	2019 (Jul)	2020 (Jul)
$ in million except per share data	FYA	Q1A	Q2A	Q3A	Q4A	FYA	Q1	Q2	Q3	Q4	FYE	FYE	FYE	FYE	FYE
Total Revenues	**$0.55**	**$0.12**	**$0.27**	**$0.11**	**$0.23**	**$0.73**	**$0.19**	**$0.18**	**$0.40**	**$0.80**	**$1.57**	**$7.50**	**$20.00**	**$30.00**	**$42.50**
YOY Growth	*-32.9%*	*1.7%*	*565.9%*	*-58.2%*	*72.9%*	*32.5%*	*59.0%*	*-35.5%*	*269.7%*	*247.8%*	*114.7%*	*379.2%*	*166.7%*	*50.0%*	*41.7%*
CoGS	0.34	0.05	0.11	0.07	0.06	0.29	0.05	0.05	0.12	0.24	0.46	1.50	4.00	6.00	8.50
Gross Income	**$0.21**	**$0.07**	**$0.16**	**$0.04**	**$0.17**	**$0.44**	**$0.13**	**$0.13**	**$0.29**	**$0.56**	**$1.11**	**$6.00**	**$16.00**	**$24.00**	**$34.00**
Gross Margin	*37.5%*	*61.5%*	*59.3%*	*40.4%*	*72.2%*	*60.9%*	*71.0%*	*72.7%*	*71.2%*	*70.0%*	*70.7%*	*80.0%*	*80.0%*	*80.0%*	*80.0%*
R&D	$1.03	$0.18	$0.22	$0.17	$0.23	$0.79	$0.24	$0.24	$0.21	$0.26	$0.94	$1.20	$1.30	$1.45	$1.50
% R&D	*187.6%*	*150.4%*	*78.8%*	*156.9%*	*99.1%*	*108.4%*	*126.9%*	*135.2%*	*50.9%*	*32.5%*	*60.0%*	*16.0%*	*6.5%*	*4.8%*	*3.5%*
SG&A	$5.06	$1.19	$1.20	$1.21	$1.31	$4.91	$1.09	$1.39	$1.39	$1.60	$5.46	$7.50	$11.00	$12.50	$13.50
% SG&A	*919.3%*	*1018.8%*	*439.9%*	*1107.3%*	*570.4%*	*673.8%*	*583.9%*	*787.5%*	*343.7%*	*200.0%*	*348.7%*	*100.0%*	*55.0%*	*41.7%*	*31.8%*
Other	$6.02	$0.63	$0.48	$0.77	$0.50	$2.38	$0.67	$0.76	$0.19	$0.50	$2.12	$2.50	$3.00	$3.50	$4.00
% Other	*1094.5%*	*541.9%*	*176.6%*	*702.8%*	*217.4%*	*326.7%*	*361.3%*	*433.5%*	*46.2%*	*62.5%*	*135.5%*	*33.3%*	*15.0%*	*11.7%*	*9.4%*
Operating Income	**($11.9)**	**($1.9)**	**($1.7)**	**($2.1)**	**($1.9)**	**($7.6)**	**($1.9)**	**($2.3)**	**($1.5)**	**($1.8)**	**($7.4)**	**($5.2)**	**$0.7**	**$6.6**	**$15.0**
Operating Margin	-	-	-	-	-	-	-	-	-	-	*-473.5%*	*-69.3%*	*3.5%*	*21.8%*	*35.3%*
Other Net	$0.9	($0.0)	$0.0	$0.0	$0.0	$0.0	($1.0)	($8.6)	$1.5	$0.0	($8.1)	$0.0	$0.0	$0.0	$0.0
Pre-Tax Income	**($11.1)**	**($1.9)**	**($1.7)**	**($2.1)**	**($1.9)**	**($7.6)**	**($2.8)**	**($10.9)**	**$0.0**	**($1.8)**	**($15.5)**	**($5.2)**	**$0.7**	**$6.6**	**$15.0**
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	$0.0
Tax Rate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reported Net Income	**($11.1)**	**($1.9)**	**($1.7)**	**($2.1)**	**($1.9)**	**($7.6)**	**($2.8)**	**($10.9)**	**$0.0**	**($1.8)**	**($15.5)**	**($5.2)**	**$0.7**	**$6.6**	**$15.0**
YOY Growth	-	-	-	-	-	-	-	-	-	-	-	*-66.4%*	*-113.5%*	*835.7%*	*129.0%*
Net Margin	-	-	-	-	-	-	-	-	-	-	-	-	*3.5%*	*21.8%*	*35.3%*
Shares Out	*25.6*	*37.0*	*39.9*	*40.8*	*41.3*	*39.7*	*43.0*	*58.7*	*71.3*	*62.0*	*58.8*	*65.0*	*68.0*	*70.0*	*72.0*
Reported EPS	**($0.43)**	**($0.05)**	**($0.04)**	**($0.05)**	**($0.05)**	**($0.19)**	**($0.07)**	**($0.19)**	**$0.00**	**($0.03)**	**($0.26)**	**($0.08)**	**$0.01**	**$0.09**	**$0.21**
YOY Growth	-	-	-	-	-	-	-	-	-	-	-	-	*-112.9%*	*809.0%*	*122.6%*
One time charge	*$4.39*	*$0.00*	*$0.00*	*$0.00*	*$0.00*	*$0.00*	*$0.96*	*$8.64*	*($1.52)*	*$0.00*	*$8.08*	*$0.00*	*$0.00*	*$0.00*	*$0.00*
Non GAAP Net Income	**($6.7)**	**($1.9)**	**($1.7)**	**($2.1)**	**($1.9)**	**($7.6)**	**($1.9)**	**($2.3)**	**($1.5)**	**($1.8)**	**($7.4)**	**($5.2)**	**$0.7**	**$6.6**	**$15.0**
Non GAAP EPS	**($0.26)**	**($0.05)**	**($0.04)**	**($0.05)**	**($0.05)**	**($0.19)**	**($0.04)**	**($0.04)**	**($0.02)**	**($0.03)**	**($0.13)**	**($0.08)**	**$0.01**	**$0.09**	**$0.21**

Source: Company filing and Zacks estimates

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HISTORICAL STOCK PRICE



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Sell/Underperform: The analyst expects the company will underperform the broader U.S. Equity market over the next one to two quarters.

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