Zacks Small-Cap Research

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Pure Bioscience, Inc. (PURE-OTC)

PURE: Zacks Company Report

PURE: Revenue grew 154% in fiscal 2Q17; The launch of PURE Control will accelerate revenue growth in calendar 2017 and beyond

Current Price (03/02/17)	$0.90
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, we expect revenue growth will accelerate in calendar 2017 and beyond. We continue to be bullish on PURE shares.

SUMMARY DATA

52-Week High	**$1.25**
52-Week Low	**$0.85**
One-Year Return (%)	**-30.40**
Beta	**-1.49**
Average Daily Volume (sh)	**25,449**
Shares Outstanding (mil)	**63**
Market Capitalization ($mil)	**$54**
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	0.52 A	1.29 A
2017	0.53 A	0.45 A	1.00 E	2.00 E	3.98 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	-$0.01 A	-$0.11 A
2017	-$0.03 A	-$0.01 A	-$0.02 E	-$0.01 E	-$0.08 E
2018					$0.01 E

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

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WHAT'S NEW

Revenue Grew 154% in Fiscal Second Quarter of 2017

On March 2, PURE reported financial results for fiscal second quarter of 2017 ended January 31, 2017.

Total revenue for the fiscal second quarter ended January 31, 2017 increased 154% to $447,000, compared with revenues of $176,000 in the prior year fiscal second quarter ended 2016.

Core food safety revenues for the second quarter increased 149% as compared with food safety revenues in the fiscal second quarter ended 2016.

Gross margin was 70% during the second quarter of fiscal 2017 as compared with 73% during the same period in fiscal 2016.

R&D costs for fiscal second quarter 2017 were $0.21 million, compared to $0.24 million for the same period of last year.

SG&A costs for fiscal second quarter 2017 were $1.3 million, compared to $1.4 million for the fiscal second quarter of 2016.

Operating loss for the fiscal second quarter 2017 was $1.4 million, as compared with $2.3 million for fiscal second quarter in 2016.

Net loss per share was ($0.01) as compared with ($0.19) for the fiscal second quarter ended 2017 and 2016.

Balance Sheet Remains Strong

As of January 31, 2017, PURE had a cash balance of $3.9 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.

With the PURE Control first order in calendar 1Q17, we believe the company could **break even** in the next 12 to 18 months.

Current cash combined with cash flow generated from operations will support the Company's operations and business plan through end of calendar 2017 according to our financial model.

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.

PURE anticipates its first PURE Control order for produce in calendar **Q12017**.

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.

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.

As part of the USDA poultry review process, PURE is conducting in-plant processing validation and optimization trials with the authorization of the USDA for OLR (online reprocessing). Upon receipt of that USDA approval (expected in **2Q2017)**, orders for Poultry will follow in our belief.

On Feb 6, 2017, PURE announced the Company had received a Preliminary Notification (PNC) authorization letter from the FDA granting permission to conduct in-plant poultry processing trials at **higher concentrations** of the SDC-based PURE Control® antimicrobial to dramatically reduce Salmonella and Campylobacter.

PURE has submitted the PNC to the USDA seeking permission to promptly begin poultry plant trials using up to 200 PPM of PURE Control. The pending USDA poultry processing trials (estimated to begin by the end of calendar 1Q17 with results reported before the end of calendar 2Q17), will evaluate PURE Control applied as a spray to whole chicken carcasses during Online Reprocessing and Offline Reprocessing.

Once approved and commercialized, poultry processors will be able to use PURE Control in place of the highly toxic interventions currently being used.

Pending trial results that are satisfactory to the USDA, and the issuance of a "No Objection" letter, PURE anticipates the final steps to commercialization of PURE Control for poultry processing to include:

- Receipt of an Acknowledgement Letter from the FDA that its FCN (Food Contact Notification) for use of SDC as a raw poultry processing aid at higher concentrations is complete, setting an effective date in **May 2017** (the end of the FDA's statutory 120-day review period).
- With USDA and FDA approvals in hand, PURE can begin to immediately commercialize PURE Control for US poultry processing into this new +$350m annual market.
- It is anticipated that the plant trial processors will be among the first customers for PURE Control for poultry processing.

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.

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 $0.90 per share with a market cap of $55 million based on 63 million shares outstanding. We think this is a deep discount based on the company's fundamentals. According to our model, revenue will grow at 140% 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 25 x. Applying this P/E multiple with our estimated EPS of $0.21 per share in fiscal 2020, discounted at 20% for 3 years, we come up with a fair valuation at $3.00 per share. This values PURE at $195 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

	2016 (Jul)						2017 (Jul)					2018 (Jul)	2019 (Jul)	2020 (Jul)
$ in million except per share data	Q1A	Q1	Q2	Q3	Q4	FYA	Q1	Q2	Q3	Q4	FYE	FYE	FYE	FYE
Total Revenues	**$0.12**	**$0.19**	**$0.18**	**$0.40**	**$0.52**	**$1.29**	**$0.53**	**$0.45**	**$1.00**	**$2.00**	**$3.98**	**$20.00**	**$30.00**	**$42.50**
YOY Growth	*4.5%*	*59.0%*	*-35.5%*	*269.7%*	*127.8%*	*76.8%*	*185.5%*	*154.0%*	*148.1%*	*281.7%*	*208.6%*	*402.8%*	*50.0%*	*41.7%*
CoGS	0.04	0.05	0.05	0.12	0.22	0.44	0.26	0.13	0.40	0.80	1.60	4.00	6.00	8.50
Gross Income	**$0.08**	**$0.13**	**$0.13**	**$0.29**	**$0.30**	**$0.85**	**$0.27**	**$0.31**	**$0.60**	**$1.20**	**$2.38**	**$16.00**	**$24.00**	**$34.00**
Gross Margin	*68.7%*	*71.0%*	*72.7%*	*71.2%*	*57.4%*	*65.8%*	*50.5%*	*70.0%*	*60.0%*	*60.0%*	*59.9%*	*80.0%*	*80.0%*	*80.0%*
R&D	$0.23	$0.24	$0.24	$0.21	$0.25	$0.93	$0.25	$0.21	$0.28	$0.30	$1.04	$1.30	$1.45	$1.50
% R&D	*203.5%*	*126.9%*	*135.2%*	*50.9%*	*47.3%*	*71.9%*	*46.7%*	*47.9%*	*28.0%*	*15.0%*	*26.2%*	*6.5%*	*4.8%*	*3.5%*
SG&A	$0.99	$1.09	$1.39	$1.39	$1.22	$5.08	$1.34	$1.33	$1.50	$1.60	$5.77	$11.00	$12.50	$13.50
% SG&A	*863.5%*	*583.9%*	*787.5%*	*343.7%*	*232.6%*	*393.8%*	*251.8%*	*298.2%*	*150.0%*	*80.0%*	*145.0%*	*55.0%*	*41.7%*	*31.8%*
Other	$2.68	$0.67	$0.76	$0.19	$0.28	$1.90	$0.28	$0.17	$0.28	$0.28	$1.01	$3.00	$3.50	$4.00
% Other	*2333.9%*	*361.3%*	*433.5%*	*46.2%*	*53.6%*	*147.6%*	*52.4%*	*38.0%*	*28.0%*	*14.0%*	*25.3%*	*15.0%*	*11.7%*	*9.4%*
Operating Income	**($3.8)**	**($1.9)**	**($2.3)**	**($1.5)**	**($1.4)**	**($7.1)**	**($1.6)**	**($1.4)**	**($1.5)**	**($1.0)**	**($5.4)**	**$0.7**	**$6.6**	**$15.0**
Operating Margin	-	-	-	-	-	-	-	-	-	-	-	*3.5%*	*21.8%*	*35.3%*
Other Net	($0.0)	($1.0)	($8.6)	$1.5	$0.8	($7.3)	($0.1)	$0.5	$0.0	$0.0	$0.3	$0.0	$0.0	$0.0
Pre-Tax Income	**($3.8)**	**($2.8)**	**($10.9)**	**$0.0**	**($0.7)**	**($14.4)**	**($1.7)**	**($0.9)**	**($1.5)**	**($1.0)**	**($5.1)**	**$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
Tax Rate	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reported Net Income	**($3.8)**	**($2.8)**	**($10.9)**	**$0.0**	**($0.7)**	**($14.4)**	**($1.7)**	**($0.9)**	**($1.5)**	**($1.0)**	**($5.1)**	**$0.7**	**$6.6**	**$15.0**
YOY Growth	-	-	-	-	-	-	-	-	-	-	-	*-113.7%*	*835.7%*	*129.0%*
Net Margin	-	-	-	-	-	-	-	-	-	-	-	*3.5%*	*21.8%*	*35.3%*
Shares Out	*20.7*	*43.0*	*58.7*	*71.3*	*54.3*	*56.8*	*64.8*	*63.6*	*65.2*	*66.0*	*64.9*	*68.0*	*70.0*	*72.0*
Reported EPS	**($0.19)**	**($0.07)**	**($0.19)**	**$0.00**	**($0.01)**	**($0.25)**	**($0.03)**	**($0.01)**	**($0.02)**	**($0.01)**	**($0.08)**	**$0.01**	**$0.09**	**$0.21**
YOY Growth	-	-	-	-	-	-	-	-	-	-	-	*-113.1%*	*809.0%*	*122.6%*
One-time charge	*$2.68*	*$0.96*	*$8.64*	*($1.52)*	*$0.00*	*$8.08*	*$0.00*	*$0.00*	*$0.00*	*$0.00*	*$0.00*	*$0.00*	*$0.00*	*$0.00*
Non GAAP Net Income	**($1.2)**	**($1.9)**	**($2.3)**	**($1.5)**	**($0.7)**	**($6.3)**	**($1.7)**	**($0.9)**	**($1.5)**	**($1.0)**	**($5.1)**	**$0.7**	**$6.6**	**$15.0**
Non GAAP EPS	**($0.06)**	**($0.04)**	**($0.04)**	**($0.02)**	**($0.01)**	**($0.11)**	**($0.03)**	**($0.01)**	**($0.02)**	**($0.01)**	**($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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