



PURE BIOSCIENCE (NASDAQCM: PURE)

- **Richmont Sciences delivers a new, large deal in water treatment; PURE signs a 10-year \$144 million supply contract.**
- **Food contact surface sanitizer rollout commences, as testing of SDC in food processing makes good progress.**
- **Several product applications should generate business over the next five years.**
- **We reiterate our BUY recommendation and set a 12-month target price of \$5.25.**

PURE Bioscience (NasdaqCM: PURE) is in the midst of commercializing its proprietary antimicrobial agent silver dihydrogen citrate (SDC) for several applications while pursuing additional uses. This unique specialty chemical stabilizes the silver ion, which has been used for centuries to protect against disease.

The latest thrust is product commercialization stems from probably the oldest known use of silver as an antimicrobial agent. PURE's marketing agent, Richmont Sciences, helped secure a 10-year, \$144 million supply contract with a Middle East distributor, High Scope. The deal, which will bring SDC-based water treatment to nine countries, began with the shipment of \$355,000 of product recently. The initial supply will be used in Dubai to conduct a trial that should commence shortly. The goal is to optimize the amount of SDC needed to eradicate microbes in the water supply and assess the related healthcare benefit. In all, High Scope has agreed to buy \$9 million worth of SDC this year.

Commercialization of PURE's food-contact surface sanitizer has commenced with the backing of Richmont. This government-approved use should help greatly in stimulating interest in the IV-7 brand. It positions SDC as an

Share Price (1/7/11)	\$2.05
52-Week Price Low / High	\$1.22-\$3.74
Mkt. Capitalization (issued)	\$75.9 million
Shares Outstanding (issued)	37.0 million
12-month Target Price	\$5.25
Website	www.purebio.com



alternative to products using chemicals rated as more dangerous by the EPA. Meanwhile, the Company is working with food microbiologists to test SDC as a carcass wash to reduce the threat of bacterial contamination of poultry products.

PURE shares have traded largely in a range of \$2.00 - \$2.50 since mid-2010. We believe good top- and bottom-line results in the months ahead will stimulate interest. Accordingly, we are reiterating our BUY recommendation with a 12-month price target of \$5.25 a share.

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WATER TREATMENT GOES COMMERCIAL

Historical data supporting the use of SDC as an antimicrobial water treatment dates back to the Roman era. These early engineers placed silver bars into their aqueducts to protect against microbial contaminants. The effectiveness of this treatment was limited by the amount of silver ions released by the bars and by the short lifespan of the ions. (It is only the ionic form of silver that has antimicrobial activity.) PURE addresses these limitations through its proprietary chemistry, which is the only known means of stabilizing silver ions, and through the preparation of different concentrations of SDC. As a result, tests have established the concentration and exposure times required for SDC to eradicate a broad spectrum of microbes, including various bacteria, fungi, and viruses. Indeed this product has even shown good activity against biofilm, a very challenging microbe population to destroy. This is important because biofilm is commonly found in nature and in water storage and transportation equipment.

RICHMONT'S INTRODUCTION

Richmont Sciences used its contacts in the Middle East to introduce PURE to High Scope, a distributor that is a subsidiary of a corporation owned by the royal family of the United Arab Emirates. The result was a 10-year, \$144 million contract granting High Scope exclusive distribution rights in nine regional countries. The deal includes minimum annual purchase levels that range from \$9 million in the first year to \$21 million in the tenth year.

TESTING COMMENCES

The first shipment, valued at \$355,000 will be used to optimize the amount of SDC needed to effectively treat the water supply system in Dubai. The amount required varies with the conditions of the local water system and the nature of the microbial contaminants.

The test will be conducted in one school district where water is pumped to roof-top cisterns for subsequent distribution to the school, homes, and businesses. The cisterns are being fitted with automated dispensers that will deliver a predetermined amount of SDC at specified intervals. Besides monitoring microbes in the water, the test will assess the effect of the water treatment on the health of the residents of the school district. As an extra precaution against sickness related to food preparation, the households will receive PURE's food-contact surface sanitizer.

TEST RESULTS

The results should generate the data needed to gain government approval of the product in the region. Once that is received, sales of the water treatment and the food-contact surface sanitizer will commence across the nine-country region.

Our estimates are based on an assumption that the test is completed by the end of fiscal 2011 (on July 31st) and that the government approval is received in the first half of the next accounting cycle. That should permit sufficient time for High Scope to fulfill its minimum purchase obligation for the first year of the contract.

TARGETING THE FOOD PREPARATION MARKET

The Environmental Protection Agency opened a huge market for PURE's SDC disinfectant by approving it also as a food-contact surface sanitizer. This is the application that Richmont had desired before intensifying its promotional efforts. Sales in the first quarter of fiscal 2011 did not reflect the progress that has been made, because Richmont already had an adequate inventory of IV-7 Ultimate Germ Defense for Food Contact Surfaces™ to fill the initial orders.

RICHMONT'S MARKETING PLANS

We expect PURE's relationship with its marketing agent will begin to pay off in the closing months of this fiscal year. Richmont has set up the infrastructure necessary to support both a direct marketing effort and

a wholesale operation. A direct marketing strategy has been devised to use a school/organization-based approach to introduce IV-7 as a household disinfectant and food-contact surface sanitizer to families. Richmond has had considerable success with this type of marketing program with other products. Howie Mandel will provide celebrity support and 28 million children have been identified to participate. This will complement a cadre of marketers calling on commercial accounts (e.g., restaurants, cafeterias, and other food preparers).

A NEW APPLICATION UNDERGOES TESTING

PURE has been working with Dr. Robert Deibel, a noted microbiology expert on food contamination, on the use of SDC as a carcass wash for poultry, and it has engaged one of his protégés to direct the internal development of the project. Some testing has already been completed, and a large trial is planned for the near future to demonstrate the effectiveness of SDC. The company expects that data from this study will provide the evidence needed to gain EPA and subsequently FDA approval for the carcass wash.

The poultry market constitutes an enormous opportunity for PURE. The University of Georgia, where the large study will be conducted, maintains a facility with 9 million chickens. More important, the U.S. poultry industry recorded \$21.5 billion of sales in 2007, the latest year for which data is available.¹

SDC would offer food processors a new way to combat bacterial contamination, starting with one of the most susceptible food products. Today, the industry uses the noxious agent chlorine to preserve meat and protect consumers from food poisoning. SDC has several advantages, notably good activity against the prime contaminants (i.e. *Salmonella* and *Campylobacter*); no effect on food taste or color; and better safety and ease of use for workers.

FEEDING THE BOTTOM LINE

As shown on page 6, our estimates for fiscal 2011 do not distinguish between IV-7 sold as a household disinfectant and the food-contact surface sanitizer (both included in the “household” category). That said, we look for sales to strengthen in the closing six fiscal months and for the momentum to accelerate into fiscal 2013 as Richmond’s marketing program bears fruit. Another plus that fiscal year may well be approval of SDC as a carcass wash, which generates business for the “agriculture” category.

OTHER SOURCES OF BUSINESS

Pure is pursuing additional applications for SDC. Each is distinct, but all are based on the compound’s broad spectrum of antimicrobial activity and take advantage of its solid safety profile.

Personal Care Products: SDC has already been incorporated into a number of personal care products as a preservative, replacing triclosan, which was proven to be an environmental hazard. PURE has been relying on Ciba-Geigy as its distributor, but it terminated that agreement soon after BASF acquired Ciba. Negotiations to enlist a new partner will probably be completed in the months ahead, and that should pay off fairly quickly since SDC inventories held by manufacturers of personal care products will need to be replenished soon.

CruiseControl®: This disinfectant is designed to tackle the difficult task of protecting people living in close quarters from an easily spread viral infection. The culprit is norovirus, which causes seasonal outbreaks of severe gastroenteritis. This disease is the bane of the cruise line industry, causing some cruises to be halted prematurely, forcing ships to be taken out of service for extensive cleaning, and turning many vacationers to other sources of relaxation.

¹ U.S. Poultry & Egg Association website accessed January 9, 2011.

PURE's SDC-based disinfectant offers an attractive solution to the problem, in our view. The product rapidly destroys the virus and does so while posing no threat to the cleaning personnel or to passengers. This means that it can be used during cruises as part of normal maintenance. In addition, it leaves no obvious residue that must be removed like other cleaning agents used against the norovirus. However, it does offer 24-hour protection against the spread of a variety of microbes.

This product appears to have one more hurdle to clear before the industry is willing to purchase it. PURE has agreed to a test of CruiseControl applied via a fogger in a room 10 feet by 20 feet. Multiple samples will be taken for analysis by an independent lab. Based on SDC's broad spectrum of activity, we believe the results will be favorable and have included contributions from this product in our "household" category, starting in fiscal 2012.

Medical Applications: PURE has been collaborating with a small private company affiliated with the Cleveland Clinic to develop SDC-based products for medical uses. At least the first two products, a treatment for onychomycosis (toenail and fingernail fungal infections) and wound care product, should enter clinical trials by calendar 2012. Our projections to 2015 reflect the launch of a wound care product in 2014.

Oil & Gas Industry: Water isn't the only environment capable of sustaining bacteria, as some have adapted to life on a petroleum diet. These microbes interfere with the extraction of natural gas through a process called high-volume fracture drilling (also known as fracking) in which millions of gallons of water and drilling chemicals are pumped at high pressure thousands of feet underground to release natural gas trapped in shale. Among the chemicals used for hydraulic fracturing are hydrochloric acid, methanol, formaldehyde, and acetic acid.² Use of the drilling chemicals has become a controversial issue, especially in the northeastern United States, where groundwater pollution is the concern. The Governor of New York recently imposed a seven month moratorium on the use of fracking in horizontally drilled wells in the state, and the EPA has asked the leading supplier of fracking chemicals, Halliburton, to reveal the components of these products. It is known already, though, that one goal of the drilling chemicals is to inhibit the growth and buildup of bacteria in the wellbore and fluid. Since SDC's mechanism of action is not microbe specific, it constitutes a potential solution to the environmental concerns while enabling the oil and gas industry to protect its investments. But because testing of this application has not begun yet, we have not included it in our projections.

INVESTMENT CONSIDERATIONS

PURE Bioscience has a number of applications for generating significant sales of SDC and it is striving to commercialize its compound as effectively as possible for each. This hasn't been easy due to regulatory hurdles both in the United States and overseas. And unfortunately, that won't change as products for new uses are developed. Add to those issues, a difficult economic backdrop over the past two to three years and reticence by some potential customers to adopt a novel compound such as SDC to replace a familiar one, no matter how imperfect, and it is easy to understand why sales have not grown steadily since the first SDC-based disinfectant was launched. We believe the situation will gradually improve over the next few years as more products/applications gain traction in the marketplace.

² Levy, M. More gas drilling chemicals in Pa. disclosed. The Pike County Courier, November 18, 2010.

INVESTMENT CONCERNS AND RISKS

For a complete description of risks and uncertainties related to PURE Bioscience's business, see the "Risk Factors" section in PURE's SEC filings, which can be accessed directly from the SEC Edgar filings at www.sec.gov. Potential risks include:

- **Stock risk and market risk:** There is a limited trading market for the Company's common stock. There can be no assurance that an active and liquid trading market will develop or, if developed, that it will be sustained, which could limit one's ability to buy or sell the Company's common stock at a desired price. Investors should also consider technical risks common to many small-cap or micro-cap stock investments, such as small float, risk of dilution, dependence upon key personnel, and the strength of competitors that may be larger and better capitalized.
- **Competitive risk:** The specialty chemical markets are highly competitive, based on individual product characteristics, pricing, and marketing support. Other companies are actively engaged in the development/commercialization of environmentally friendly antimicrobial agents to directly or indirectly address the uses being pursued by PURE. These companies may have substantially greater research and development capabilities, as well as significantly greater marketing, financial, and human resources than PURE.
- **Products still in development phases:** Many end-products based on PURE's SDC have yet to be commercialized. Such products may appear to be promising, but may not reach commercialization for various reasons, including failure to achieve regulatory approvals, safety concerns, and/or the inability to be manufactured at a reasonable cost. And even if the products are commercialized, there can be no assurance that they will be accepted, which may prevent the Company from becoming profitable.
- **Funding requirements:** It is difficult to predict PURE's future capital requirements. The Company may need additional financing to continue funding the research and development of its products and to expand its business. There is no guarantee that it can secure the desired future capital or, if sufficient capital is secured, that current shareholders will not suffer significant dilution.
- **Regulatory risk:** There is no guarantee that PURE's products will be approved by the U.S. Environmental Protection Agency, the Food and Drug Administration (FDA) or international regulatory bodies for marketing in the U.S. or abroad.
- **Patent risk:** The field of specialty chemicals is very competitive, and although PURE has received and/or filed for numerous patents to secure its right to commercialize its technology, not all of these patents have been challenged, and therefore some may not protect the Company's rights adequately in the marketplace.
- **Business concentration risk:** Because of its distribution and licensing agreements, PURE is dependent upon its partners for end-product sales. The loss of one of these important customers might have a significant effect on PURE's financial performance.

FINANCIAL FORECASTS & VALUATION

REVENUE SOURCES[#] (FISCAL YEAR ENDS JULY 31ST)

All data are in thousands.

Revenue by Product Line		2011	2012	2013	2014	2015
Household	\$	1,968	\$ 3,794	\$ 5,655	\$ 7,554	\$ 9,490
Personal Care	\$	752	\$ 1,438	\$ 2,138	\$ 2,852	\$ 3,580
Water Treatment	\$	500	\$ 10,036	\$ 11,141	\$ 12,318	\$ 13,572
Agriculture	\$	-	\$ -	\$ 4,366	\$ 27,471	\$ 53,835
Medical	\$	-	\$ -	\$ -	\$ 3,029	\$ 7,628
Total	\$	3,220	\$ 15,268	\$ 23,300	\$ 53,224	\$ 88,105

Assumptions regarding Revenue Sources:

- Household product sales benefit in the second half of fiscal 2011 as the Richmond sales force gains traction among consumers and commercial users, including food preparers (e.g., restaurants, supermarkets, and cafeterias). In fiscal 2012, these trends continue, sales to cruise ships begin, and the sanitizer enters international markets.
- Sales of SDC for personal care products increase markedly in the second half of fiscal 2011, as inventory at manufacturers has been depleted. Subsequently, use of this antimicrobial agent in more personal care products accounts for much of the incremental SDC sales.
- Water treatment sales made in the recent October quarter, but not recognized for accounting purposes, are booked in the January quarter. In the second fiscal half, another small shipment is made. Fiscal 2012 starts well, as the High Scope fulfills its commitment to purchase \$9 million of SDC for water treatment in the first 12 months of its contract with PURE. Thereafter, sales increase at a moderate pace as the antimicrobial agent gains acceptance in the Middle East with the marketing support of High Scope.
- Agriculture sales commence in 2013, with SDC's approval for reducing the bacterial load on fresh poultry by meat processing plants.
- The first medical product utilizing SDC, a wound care product, enters the market in 2014.

INCOME STATEMENT[#] (FISCAL YEAR ENDS JULY 31ST)

All data are in thousands, except per-share numbers.

	2011	2012	2013	2014	2015
Total revenue	\$ 3,220	\$ 15,268	\$ 23,300	\$ 53,224	\$ 88,105
COGS	900	3,229	5,252	11,944	19,262
Gross profit	\$ 2,320	\$ 12,039	\$ 18,048	\$ 41,279	\$ 68,843
Operating expenses					
R&D	\$ 2,000	\$ 2,500	\$ 3,000	\$ 4,258	\$ 7,048
Selling & marketing	1,200	3,359	5,126	11,709	19,383
General & administrative	5,000	5,500	5,750	5,855	9,692
Total expense	8,200	11,359	13,876	21,822	36,123
Operating profit	\$ (5,880)	\$ 680	\$ 4,172	\$ 19,458	\$ 32,720
Total non-operating	-	-	-	-	-
Pretax profit	\$ (5,880)	\$ 680	\$ 4,172	\$ 19,458	\$ 32,720
Income tax	-	-	501	7,783	13,088
Net income	\$ (5,880)	\$ 680	\$ 3,672	\$ 11,675	\$ 19,632
Earnings (loss) per share	\$ (0.15)	\$ 0.02	\$ 0.08	\$ 0.25	\$ 0.42
Diluted shares outstanding	39000	45000	46000	46250	46500

Assumptions regarding the Income Statement:

- Gross margins vary with changes in the sales mix between ready-to-use product (e.g., household disinfectant and food-contact surface sanitizer) and SDC concentrate that is sold to such commercial users as manufacturers of personal products.
- Quarterly operating expenses this fiscal year change little from those booked in the first quarter. Thereafter, we project selling & marketing expenses total 22% of sales, starting in 2012; R&D costs amount to 8% of sales, beginning in 2014; and general & administrative costs equate to 11% of sales, starting in 2014.
- No provisions are made for non-operating costs.
- PURE books taxes for financial reporting purposes at a 12% rate in fiscal 2012 and at 40% thereafter. However, tax liabilities are offset, at least in part, by federal and state operating loss carryforwards totaling \$102 million through fiscal 2019.
- The number of shares outstanding increases in the near term as the Company raises funds via an equity offering. In future years, the number of fully diluted shares increases due to stock-based compensation.

BALANCE SHEET# (FISCAL YEAR ENDS JULY 31ST)

All data are in thousands, except per-share numbers.

ASSETS	10/31/2010	7/31/2010
Current Assets		
Cash & equivalents	3,680	2,193
Accounts Receivable	443	333
Inventory	874	752
Other	76	146
Total Current Assets	<u>\$ 5,073</u>	<u>\$ 3,424</u>
Property & equipment	\$ 625	\$ 697
Intangible assets	1,868	1,873
Total Assets	<u><u>\$ 7,566</u></u>	<u><u>\$ 5,994</u></u>
LIABILITIES		
Current Liabilities		
Accounts payable	\$ 450	\$ 329
Debt due	-	-
Deferred revenue	355	10
Other	313	244
Total Current Liabilities	<u>\$ 1,118</u>	<u>\$ 583</u>
Long-term debt	\$ -	\$ -
Other	14	16
Total Long-Term Liabilities	<u>\$ 14</u>	<u>\$ 16</u>
Shareholders Equity		
Common Stock, par value	\$ 44,474	\$ 41,679
Additional Paid-In Capital	6,431	6,041
Warrants	2,810	2,935
Accumulated Deficit	<u>(47,281)</u>	<u>(45,260)</u>
Total Shareholders Equity	<u>\$ 6,434</u>	<u>\$ 5,395</u>
Total liabilities & equity	<u><u>\$ 7,566</u></u>	<u><u>\$ 5,994</u></u>

DISCOUNTED CASH FLOW ANALYSIS# (FISCAL YEAR ENDS JULY 31ST)

All data are in thousands, except per-share numbers.

	2011	2012	2013	2014	2015
Revenue	\$ 3,220	\$ 15,268	\$ 23,300	\$ 53,224	\$ 88,105
Operating income	(5,880)	680	4,172	17,812	32,720
Net income	(5,880)	680	3,672	10,687	19,632
Depreciation/amortization	450	450	475	475	480
Stock-based compensation	1,200	1,250	1,300	1,350	1,400
Tax loss carryforwards	-	-	501	7,125	13,088
Capital expenditures	(20)	(300)	(500)	(500)	(750)
Asset purchases					
Other					
Total cash flow adjustments	1,630	1,400	1,776	8,450	14,218
Free cash flow	\$ (4,250)	\$ 2,080	\$ 5,447	\$ 19,137	\$ 33,850
Risk-adjusted free cash flow	\$ (4,250)	\$ 422	\$ 1,503	\$ 6,985	\$ 13,154

Discount Rate	Discounted Cash Flows (2010 - 2025)	PV of Terminal Value at a Perpetual growth rate of rFCF					
		Enterprise Value			Enterprise Value		
		2.0%	3.0%	4.0%	2.0%	3.0%	4.0%
7.5%	\$210,461.59	\$ 388,433	\$ 479,405	\$ 622,363	\$598,894	\$689,867	\$832,824
10.0%	\$164,161.04	\$ 189,158	\$ 218,300	\$ 257,156	\$353,319	\$382,461	\$421,317
12.5%	\$129,446.23	\$ 102,879	\$ 114,824	\$ 129,578	\$232,326	\$244,270	\$259,024
15.0%	\$103,114.44	\$ 59,758	\$ 65,372	\$ 72,008	\$162,872	\$168,487	\$175,122
17.5%	\$82,918.63	\$ 36,300	\$ 39,184	\$ 42,495	\$119,219	\$122,102	\$125,414

Discount Rate	Net Debt	Total Equity Value			Value per Diluted Share		
		2.0%	3.0%	4.0%	2.0%	3.0%	4.0%
7.5%	\$ (3,680)	\$602,574	\$693,547	\$836,504	\$ 12.89	\$ 14.84	\$ 17.89
10.0%	(3,680)	\$356,999	\$386,141	\$424,997	\$ 7.64	\$ 8.26	\$ 9.09
12.5%	(3,680)	\$236,006	\$247,950	\$262,704	\$ 5.05	\$ 5.30	\$ 5.62
15.0%	(3,680)	\$166,552	\$172,167	\$178,802	\$ 3.56	\$ 3.68	\$ 3.82
17.5%	(3,680)	\$122,899	\$125,782	\$129,094	\$ 2.63	\$ 2.69	\$ 2.76

Discount Rate	Terminal Value as % Enterprise Value			Implied EBITDA Multiple		
	2.0%	3.0%	4.0%	2.0%	3.0%	4.0%
7.5%	64.9%	69.5%	74.7%	11.23	13.86	17.99
10.0%	53.5%	57.1%	61.0%	7.72	8.91	10.50
12.5%	44.3%	47.0%	50.0%	5.88	6.57	7.41
15.0%	36.7%	38.8%	41.1%	4.75	5.20	5.72
17.5%	30.4%	32.1%	33.9%	3.98	4.30	4.66

Assumptions regarding the Discounted Cash Flow Analysis:

- We've assigned the following probabilities to commercial development of PURE's product lines as follows:
 - Personal care: 50%
 - Household: 80%
 - Agriculture: 50%
 - Water Treatment: 80%
 - Medical: 10%

These probabilities were selected based upon the development stages of the different products in the R&D pipeline and those that are already commercialized. They also reflect the relative importance of the products to the projected revenue for each product line (i.e., a product at an early stage of

development that is being prepared for a huge market would result in a low probability, even if products were already commercialized for limited markets).

- The DCF model projects cash flow through 2026, discounted back at multiple annual rates (7.5%, 10.0%, 12.5%, 15.0%, and 17.5%) to demonstrate the potential variability related to this assumption. It also includes three perpetual growth rates (2%, 3%, and 4%) to show the impact on the present value of the Company's terminal value. The rates used in calculating the per-share value for PURE Bioscience are a 12.5% annual discount rate and a perpetual growth rate of 3%. The number of fully-diluted shares estimated to be outstanding in 2015, 46.50 million, is used in the per-share calculation.
- The cash flows are risk adjusted, based on the proportional gross profit contribution by each end market on an annual basis and the probability of the products being commercialized and generating the projected sales. During periods in which losses are estimated, the probability is conservatively set at 100%.

DISCLOSURES

ANALYST(S) CERTIFICATION: The analyst(s) responsible for covering the securities in this report certify that the views expressed in this research report accurately reflect their personal views about PURE Bioscience (the “Company”) and its securities. The analyst(s) responsible for covering the securities in this report certify that no part of their compensation was, is, or will be directly or indirectly related to the specific recommendation or view contained in this research report.

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FORWARD-LOOKING STATEMENTS: This Report contains forward-looking statements, which involve risks and uncertainties. Actual results may differ significantly from such forward-looking statements. Factors that might cause such a difference include, but are not limited to, those discussed in the “Risk Factors” section in the SEC filings available in electronic format through SEC Edgar filings at www.SEC.gov on the Internet.

PRICE CHART – 2 Year



Source: BigCharts.com

12/03/2008 – Initiating Coverage: share price: \$2.79; rating: BUY; 12-month price target: \$8.00; **10/30/2009** – Update Report: share price: \$1.79; 12-month price target: \$8.00; **5/17/2010** – Update Report: share price: \$3.26; 12-month price target: \$8.00; **1/10/2011** – Update Report: share price: \$2.05; 12-month price target: \$5.25.

FORWARD-LOOKING STATEMENTS: This Report contains forward-looking statements, which involve risks and uncertainties. Actual results may differ significantly from such forward-looking statements. Factors that might cause such a difference include, but are not limited to, those discussed in the “Risk Factors” section in the SEC filings available in electronic format through SEC Edgar filings at www.SEC.gov on the Internet.

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