SIGNALIFE, INC.
Form SB-1/A
January 10, 2007

As filed with the Securities and Exchange Commission on January 10, 2006

Commission File No. 333 138853

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Post-Effective Amendment No. 1
to
Form SB-2

Registration Statement Under The Securities Act Of 1933

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Signalife, Inc.

(Name of small business issuer in its charter)

Delaware	**3845**	**87-0441351**
(State or other jurisdiction of incorporation or organization)	**(Primary Industrial Code)**	**(I.R.S. Employer Identification No.)**

Pamela Bunes
Chief Executive Officer

531 South Main Street, Suite 301
Greenville, South Carolina 29601
(864) 233-2300
(Address, including zip code, and telephone number, including area code, of registrant s principal executive offices)
(Name, address, including zip code, and telephone number, including area code, of agent for service of process)

Copies to

John M. Woodbury, Jr., Esq.
7251 Owensmouth Ave, Suite 7
Canoga Park, California 91303
(818) 883-1776

Approximate date of proposed sale to public: From time to time after the effective date of this registration statement.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box: x

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o _

If this Form is a post effective amendment filed pursuant to Rule 462(c) under the Securities Act of 1933, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering: o __

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act of 1933, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering: o __

If delivery of this prospectus is expected to be made pursuant to Rule 434, please check the following box: o

Calculation of Registration Fee

Title of Each Class of Securities to be Registered	Amount to be Registered(1)	Proposed Offering Price Per Share	Proposed Aggregate Offering Price	Amount of Registration Fee
Newly registered shares:				
Common stock	277,419	$1.58(4)	$ 438,322.02	$ 46.90
Common stock (2)	110,968	$2.23(4)	$ 247,458.64	$ 26.48
Common stock (3)	38,839	$2.23(4)	$ 86,610.97	$ 9.27
Common stock (2)	300,000	$2.50(4)	$ 750,000.00	$ 80.25
Subtotal	727,226		$ 1,522,391.63	$ 162.90
Previously registered shares:				
Common stock	5,655,800(5)	N/A (6)	N/A (6)	N/A (6)
Common stock (2)	2,400,000(5)	N/A (6)	N/A (6)	N/A (6)
Common stock (2)	550,000(7)	N/A (8)	N/A (8)	N/A (8)
Common stock (2)	1,101,646(9)	N/A (10)	N/A (10)	N/A (10)
Subtotal	9,707,446		N/A (6)	N/A (6)
Total	10,434,672		$ 1,522,391.63	$ 162.90

(1)

Pursuant to SEC Rule 416(a), also covers additional common shares that may be offered to prevent dilution as a result of stock splits, stock dividends or similar transactions relating to these securities.

(2)

Represents common stock reserved for issuance by the registrant with respect to the prospective exercise of common share purchase warrants at the election of the holder of those warrants.

(3)

Represents common stock reserved for issuance by the registrant with respect to the prospective exercise of placement agents unit purchase warrants (and the subsequent exercise or conversion of the underlying common share purchase warrants) at the election of the holder of those securities.

(4)

This filing fee was paid in connection with the filing of the original registration statement on November 21, 2006. Pursuant to SEC Rule 457(h)(1), the filing fee is computed based upon the exercise price for the underlying options or warrants.

(5)

These securities were previously registered on registration statement file no. 333 -126220 filed with the SEC on June 14, 2005 and declared effective by the SEC on July 22, 2005. Pursuant to Rule 429 of SEC Regulation C, this registration statement will act as a post-effective amendment with respect to that prior registration statement.

(6)

No fee due as shares were previously registered in connection with the filing of the registration statement described in note (5) and fees previously paid as part of that registration statement.

(7)

These securities were previously registered on registration statement file no. 333-122296 filed with the SEC on February 10, 2005 and declared effective by the SEC on February 14, 2005. Pursuant to Rule 429 of SEC Regulation C, this registration statement will act as a post-effective amendment with respect to that prior registration statement.

(8)

No fee due as shares were previously registered in connection with the filing of the registration statement described in note (7) and fees previously paid as part of that registration statement.

(9)

These securities were previously registered on registration statement file no. 333-111683) filed with the SEC on November 4, 2004 and declared effective by the SEC on November 10, 2004. Pursuant to Rule 429 of SEC Regulation C, this registration statement will act as a post-effective amendment with respect to that prior registration statement.

(10)

No fee due as shares were previously registered in connection with the filing of the registration statement described in note (9) and fees previously paid as part of that registration statement.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until this registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

PRELIMINARY PROSPECTUS SUBJECT TO COMPLETION, DATED JANUARY 4, 2006

Prospectus

10,434,672 Common Shares

This prospectus relates to the offer and sale by some of our shareholders during the period in which the registration statement containing this prospectus is effective of up to 10,434,672 common shares consisting of up to:

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5,933,219 currently issued and outstanding common shares; and

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4,501,453 common shares issuable by the company upon the prospective exercise of currently issued and outstanding securities purchase warrants (and the subsequent exercise or conversion of the underlying securities) at the election of the holder of those warrants.

This offering is not being underwritten. The common shares offered under this prospectus may be sold by the selling shareholders on the public market, in negotiated transactions with a broker-dealer or market maker as principal or agent, or in privately negotiated transactions not involving a broker or dealer. We will not receive any of the proceeds from those sales.

Our common shares trade on the American Stock Exchange under the trading symbol SGN .

Please read this prospectus carefully. It describes our company, finances, products and services. Federal and state securities laws require that we include in this prospectus all the important information that you will need to make an investment decision.

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An investment in the common shares offered for sale under this prospectus involves a high degree of risk. You should purchase our securities only if you can afford losing your entire investment.
See Risk Factors beginning on page 1 of this prospectus.

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Neither the United States Securities and Exchange Commission nor any state securities commission has approved or disapproved of the common shares offered for sale under this prospectus or the merits of that offering, or has determined that this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

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The date of this Prospectus is January 4, 2006

531 South Main Street, Suite 301, Greenville, South Carolina 29601

(864) 233-2300

The information in this prospectus is not complete and may be changed. We have filed a registration statement containing this prospectus with the Securities and Exchange Commission. The common stock offered for sale under this prospectus may not be offered for sale or sold until that registration statement is declared effective by the Securities and Exchange Commission. This prospectus is not an offer to sell the common shares and doesn t

solicit an offer to purchase the common shares in any jurisdiction where this offer or sale is not otherwise permitted

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PROSPECTUS SUMMARY

This summary highlights important information about our company and business. Because it is a summary, it may not contain all of the information that is important to you. To understand this offering fully, you should read this entire prospectus and the financial statements and related notes included in this prospectus carefully, and in particular that section of this prospectus captioned *Risk Factors*. Unless the context requires otherwise, *Signalife* , *we*, *us*, *our* a similar terms refer to Signalife, Inc.

On April 11, 2003, we effected a split in our common shares on a 3:1 forward basis through the mechanism of a stock dividend. Whenever we make any reference in this prospectus to the grant or issuance of common shares or options or warrants to purchase common shares, such reference shall, for comparison purposes, be made in reference to post-split numbers and, in the case of options and warrants, exercise prices, unless we state otherwise.

The Company And Business

Signalife is a medical device company focused on researching, developing medical devices which monitor and measure physiological signals in order to detect diseases that impact an individual s health. Physiological signals are small bioelectrical signals generated by the body.

Our initial product lines will be heart monitor systems used to collect physiological data for electrocardiogram or ECG tests for the purpose of detecting and identifying cardiovascular disease. The core component of our products is our battery-operated, digital 12-lead Model 100 Module, a compact device approximately 4 x 3.5 x 1.5 inches in size and 5.5 oz. in weight, that allows a patient s heart to be continuously monitored over a period of 24 to 48 hours in a variety of settings both non-ambulatory (stationary) and ambulatory (moving) such as hospitals, surgeries, clinics, doctors offices, exercise and sports medicine clinics and laboratories. The Model 100 Module contains both our proprietary patented amplification technology which acquires, processes and amplifies ECG signals, as well as Bluetooth technology which allows the acquired signals to be wirelessly transmitted to a personal computer for interpretation and storage by the physician. Our Model 100 Module operates using a proprietary and patented amplification technology which provides the capability to enlarge and process the physiological signals to discriminate them from ambient or background electromagnetic noise and to facilitate the examination of the signal data for diagnostic purposes.

We have recently commenced commercial marketing of our first heart monitoring system using our Model 100 Module the Fidelity 100 Monitor System, and recorded our first revenues from product sales in October 2006. This system is an integrated system in which our Model 100 Module collects, processes and amplifies ECG signals from that patient through a set of twelve electrode lead sets provided with the system, and then wirelessly transmits that signal to a nearby personal computer provided with the system. The signals are then displayed on a computer monitor and can be printed on a printer provided with the system for analysis by the cardiologist. We received our first sales revenues from this product in the fourth quarter of fiscal 2006.

We principally intend to sell the Fidelity 100 Monitor System as an integrated system containing all of the components the Model 100 Module, electrode lead sets, and a personal computer with monitor and printer, which could either be in a desk top or laptop configuration. The Model 100 Module and our proprietary ECG printing software may also be sold separate from the other components to physicians who prefer to use their own personal computers systems. As a result of these variables, the Fidelity 100 Monitor System will be offered in many different configurations.

The Fidelity 100 Monitor System will be principally used for clinical (resting) and in-patient ambulatory applications. For example, ECG data may be instantaneously acquired, processed, amplified and transmitted to the personal computer for analysis in stationary settings, such as while conducting ECG tests in resting or in-patient ambulatory settings or during surgeries.

Our Fidelity 100 Monitor System will be marketed in the United States by Rubbermaid Inc. (*Rubbermaid*), a subsidiary of Newell Rubbermaid Inc., pursuant to the terms of a Sales and Marketing Services Agreement entered into on March 26, 2006. The initial term of the agreement is for one year, and may be renewed by Rubbermaid on an annual basis for up to nine additional years, subject to satisfaction of modest performance benchmarks and other conditions. Under this agreement, Rubbermaid will, at its cost, put together a national sales force to market the Fidelity 100 Monitor System, and will also advertise and otherwise vigorously promote these products in medical literature, at trade shows, and through other mechanisms as set forth in the agreement. This marketing arrangement may be extended to international sales or other parties upon the mutual consent of both parties. In compensation for these services, Rubbermaid will receive 35% of net product sales, as defined in the agreement. Signalife will, in turn, handle all product manufacturing, fulfillment and product servicing functions.

We are also completing development of an ambulatory Holter device (the *Signalife Holter Monitor*), which also operates using our Model 100 Module as its core component, and which will also be marketed in the United States by Rubbermaid. This device acquires, processes, amplifies and stores ECG data relating to arrhythmia and other transient heart disease over a period of 24 to 48 hours while the patient carries out his or her daily activities away from the physicians office or hospital. The signal data can be either stored on a storage chip contained in the device and downloaded by the physician at a later date when the patient returns to the physician s office, or transmitted to a patient monitoring center that will forward the data or otherwise make it available to the physician over the Internet. Although we have developed a production version of the Signalife Holter Monitor, we are still conducting physician preference testing studies on selected features of that device, and anticipate that we will make some minor modifications to that design before we commence marketing the product. We anticipate that we will complete final product modification activities and introduce the final Signalife Holter Monitor to market by the end of the first quarter of fiscal 2007. In the interim, physicians could use the Model 100 Module contained in the Fidelity 100 Monitor System in out-patient ambulatory settings should they choose to do so, although it would not have all of the features we would otherwise suggest for out-patient applications.

We are also developing several other products for the heart monitoring market, including an intracardiac monitor, a non-prescription over-the-counter cardiac monitor, and a prescription event recorder.

We are also actively pursuing other marketing alternatives through our internal sales staff. For example, we have recently entered into a letter of intent with Gold s Gym International, Inc. to conduct a pilot program in which patrons of the gym at selected facilities will be tested using Signalife s Fidelity 100 Monitor System in order to detect and identify cardiovascular disease that could be triggered or exacerbated by exercise programs. As part of the program, a set of test protocols and procedures will be developed to address cardiac risks inherent to exercise. If the program is successful, the parties will explore the expansion of the program to most of Gold s gyms as well as other national fitness facilities.

Concurrent with the Gold s gym project, we are also participating in the Athletes For Life program which will focus on developing protocols to test professional and amateur athletes for cardiovascular disease and abnormalities as part of their regular training regime, and will also promote testing for impoverished communities where early detection of cardiovascular disease simply does not exist. A large number of high-profile athletes have indicated their desire both in participating in this program given the high incidence of cardiovascular abnormalities associated with athletes involved in professional sports and track and field; and also sponsoring the community outreach portion of the program given their desire to promote community fitness and cardiovascular testing in the general community.

As of January 4, 2007, we had issued and outstanding or accrued for issuance a total of: (1) 42,676,277 shares of common stock; (2) 97,909 shares of series A convertible preferred stock, plus an additional 33,322 unissued series A

preferred shares accrued for issuance as dividends through September 30, 2006; and (3) stock purchase options and warrants entitling the holders to purchase up to 10,493,167 and 179,292 shares of common stock and series A convertible preferred stock, respectively, at weighted average exercise prices of $2.35 and $3.60 per share, respectively. We sometimes refer to our common stock and our series A

convertible preferred stock in this prospectus as our *common shares* and *series A preferred shares*, respectively.

Our corporate offices are located at 531 South Main Street, Suite 301, Greenville, South Carolina 29601. Our telephone number is (864) 233-2300.

The Offering

This prospectus relates to the offer and sale by some of our shareholders during the period in which the registration statement containing this prospectus is effective of up to 10,434,672 common shares consisting of up to:

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5,933,219 currently issued and outstanding common shares; and

.

4,501,453 common shares issuable by the company upon the prospective exercise of currently issued and outstanding securities purchase warrants (and the subsequent exercise or conversion of the underlying securities) at the election of the holder of those warrants.

The outstanding common shares offered under this prospectus may be sold by the selling shareholders on the public market, in negotiated transactions with a broker-dealer or market maker as principal or agent, or in privately negotiated transactions not involving a broker or dealer. Information regarding the selling shareholders, the common shares they are offering to sell under this prospectus, and the times and manner in which they may offer and sell those shares is provided in the sections of this prospectus captioned *Selling Shareholders*, *Registration Rights* and *Plan of Distribution*. We will not receive any of the proceeds from those sales. Should the selling shareholders in their discretion exercise any of the common share purchase warrants underlying the common shares offered under this prospectus, we would, however, receive the exercise price for those warrants. The registration of common shares pursuant to this prospectus does not necessarily mean that any of those shares will ultimately be offered or sold by the selling shareholders, or that any of the common share purchase warrants underlying the common shares offered under this prospectus will be exercised.

The common shares offered for sale under this prospectus include a total of 277,419 previously unregistered common shares held by Nite Capital, LP, Otago Partners, LLC, and Landmark Charity Foundation, and 110,968 common shares issuable to those investors upon exercise of common stock purchase warrants granted to those investors. The aforesaid securities were issued to those investors as part of a private placement of our securities to six accredited investors that closed on October 31, 2006 pursuant to which we raised gross proceeds of $2,930,000. The common shares offered for sale under this prospectus also include 38,839 common shares issuable to Maxim Group, LLC, upon the exercise of unit purchase warrants (and the subsequent exercise or conversion of the underlying common share purchase warrants) granted to it as placement agent for the above private placement. For more complete information as to the aforesaid private placement, see those sections of this prospectus captioned *Management s Discussion And Analysis Of Financial Condition And Results of Operations Liquidity And Capital Resources* and *Registration Rights*. The common shares offered for sale under this prospectus also include 300,000 common shares issuable to Maxim Group, LLC, upon exercise of stock purchase warrants granted to it for acting as Signalife s investment advisor pursuant to an agreement dated June 14, 2006.

Also included in this prospectus are a total of 8,055,800 previously-registered common shares consisting of (1) 1,562,500 common shares originally sold to an accredited investor, Trellus Partners, LP, pursuant to a private placement to that investor on March 31, 2005, (2) 1,500,000 additional common shares issuable upon the exercise of common share purchase warrants sold to Trellus Partners, LP as part of that private placement; (3) 937,500 common shares originally sold to four affiliated accredited investors, Lagunitas Partners LP, Gruber & McBaine International, Jon D. and Linda W. Gruber, and J. Patterson McBaine, pursuant to a private placement to those investors on April 8, 2005; (4) 900,000 additional common shares issuable upon the exercise of common share purchase warrants sold to those investors as part of that private placement; and (5) 3,155,800

common shares held by ARC Finance Group, LLC, a founding shareholder of the company. For more complete information as to the foregoing private placement, see those sections of this prospectus captioned *Management s Discussion And Analysis Of Financial Condition And Results of Operations Liquidity And Capital Resources* and *Registration Rights* . The aforesaid common shares included in this prospectus were previously registered with the SEC pursuant to a registration statement on form SB-2 (SEC File No. 333-126220) filed with the SEC on June 14, 2005 and declared effective by the SEC on July 22, 2005. The registration containing this prospectus acts as a post-effective amendment with respect to that registration statement in order to attain that end.

Also included in this prospectus are a total of (1) 275,000 previously-registered common shares issuable upon the exercise of common share purchase warrants originally issued to an accredited investor, DKR SoundShore Oasis Holding Fund Ltd., pursuant to a private placement of a debenture to that investor on December 29, 2004; and (2) an additional pool of 275,000 previously-registered common shares held in reserve to cover the prospective payment by the company in the form of common shares of interest, penalties and/or damages that may accrue under those warrants. For more complete information as to this transaction, see those sections of this prospectus captioned *Management s Discussion And Analysis Of Financial Condition And Results of Operations Liquidity And Capital Resources* and *Registration Rights* . The aforesaid common shares included in this prospectus were previously registered with the SEC pursuant to a registration statement on form SB-2 (pre-effective amendment no. 5) (SEC File No. 333-122296) filed with the SEC on February 10, 2005 and declared effective by the SEC on February 14, 2005. The registration containing this prospectus acts as a post-effective amendment with respect to that registration statement in order to attain that end.

Included in this prospectus are a total of 1,112,157 previously-registered common shares consisting of (1) 843,218 previously-registered common shares issuable upon the exercise of class A common share purchase warrants originally sold to 101 accredited investors pursuant to a private placement to those investors effected through Maxim, as placement agent, which closed on October 2, 2003; and (2) additional 268,939 previously-registered common shares issuable upon the exercise of placement agents unit purchase warrants granted to Maxim as compensation for acting as placement agent, and the conversion or exercise of underlying series A convertible preferred stock and common share purchase warrants. For more complete information as to this transaction, see those sections of this prospectus captioned *Management s Discussion And Analysis Of Financial Condition And Results of Operations Liquidity And Capital Resources* and *Registration Rights* . The aforesaid common shares included in this prospectus were previously registered with the SEC pursuant to a registration statement on form SB-2 (pre-effective amendment no. 5) (SEC File No. 333-111683) filed with the SEC on November 4, 2004 and declared effective by the SEC on November 10, 2004. The registration containing this prospectus acts as a post-effective amendment with respect to that registration statement in order to attain that end.

Summary Financial Data

The following tables summarize the statements of operations and balance sheet data for our company for the periods or as of the dates indicated, respectively:

Statement of Operations Data	Nine Months Ended September 30, 2006	Nine Months Ended September 30, 2005	Years Ended December 31, 2005	Years Ended December 31, 2004
	(unaudited)	(unaudited)		
Exclusivity fee income	$ 1,000,000	$	$	$
Research and development expenses	$ (692,388)	$ (1,197,597)	$ (1,328,482)	$ (1,663,362)
General and administrative expenses	$ (7,441,667)	$ (4,955,336)	$ (6,224,105)	$ (5,052,580)
Interest income	$ 91,191	$ 49,318	$ 92,908	$ 53,820
Interest expense, including amortization of debt discount	$	$ (1,292,463)	$ (1,292,715)	$ (15,175)
Change in fair value of warrant liability	$	$ 318,000	$ 318,000	$ (130,430)
Warrant repricing and other financing cost	$	$ (226,294)	$ (226,294)	$ (158,516)
Net loss	$ (7,042,864)	$ (7,304,372)	$ (8,660,688)	$ (6,966,243)
Basic and diluted loss per share attributable to common stockholders	$ (0.18)	$ (0.20)	$ (0.23)	$ (0.22)
Weighted average shares outstanding, basic and diluted	38,950,260	36,889,282	37,298,692	33,632,117

Balance Sheet Data:	September 30, 2006	December 31, 2005
	(unaudited)	
Current assets	$ 3,002,744	$ 4,947,621
Total assets	$ 3,818,327	$ 5,651,377
Current liabilities	$ 1,692,326	$ 253,923
Total liabilities	$ 1,692,326	$ 253,923
Total stockholders equity	$ 2,126,001	$ 5,397,454
Total liabilities and stockholders equity	$ 3,818,327	$ 5,651,377

RISK FACTORS

An investment in our common shares involves a high degree of risk and is subject to many uncertainties. These risks and uncertainties may adversely affect our business, operating results and financial condition. In such an event, the trading price for our common shares could decline substantially, and you could lose all or part of your investment. In order to attain an appreciation for these risks and uncertainties, you should read this prospectus in its entirety and consider all of the information and advisements contained in this prospectus, including the following risk factors and uncertainties.

Risks Relating To Our Business

Our limited operating history will make it difficult for you to predict our future operating results and to otherwise assess or predict the likelihood of our business success.

To date, we are a development stage company principally engaged in research and development, organizational and startup activities which has only recently introduced our first heart monitoring product, the Fidelity 100 Monitor System, to market in March 2006. Our limited operating history will make it difficult, if not impossible, to predict future operating results and to assess the likelihood of our business success in considering an investment in our company. Risks and issues inherent in the establishment and expansion of a new business enterprise which we face include, among others, problems of entering new markets, marketing new technologies, hiring and training personnel, acquiring reliable facilities and equipment, and implementing operational controls. As a development stage company, we are also subject to risks and or levels of risk that are often greater than those encountered by companies with established operations and relationships. Development stage companies often require significant capital from sources other than operations. Since we are a start-up business, our management and employees will shoulder the burdens of the business operations and a workload associated with company growth and capitalization that is disproportionately greater than that for an established business. We cannot give you any assurance that we will successfully address these risks. Our prospects must be considered speculative, which may limit our ability to encourage further investment in our company.

We have nominal sales revenues to date and have accumulated losses since our inception. Our continued inability to generate revenues and profits could cause us to go out of business.

We have incurred cumulative net losses before preferred dividends available to common shareholders in the amount of $28,279,799 (unaudited) from our inception through September 30, 2006. We have only recently introduced our first heart monitoring product, the Fidelity 100 Monitor System, to market in March 2006, and received our first sales revenues from the sale of those products in the fourth quarter of fiscal 2006. We project that we will not be cash flow positive based solely on projected sales and service revenues less manufacturing, general and administrative, marketing expenses and other operating costs for an indefinite period of time. We anticipate that we will continue to incur substantial operating losses for the foreseeable future, notwithstanding any anticipated revenues we may receive in the near future.

If we are unable to raise additional working capital, we will be unable to fully fund our operations and to otherwise execute our business plan, leading to the reduction or suspension of our operations and ultimately our going out of business.

As noted in the prior risk factor, we commenced commercial marketing of our first heart monitoring product, the Fidelity 100 Monitor System, in March 2006, and further anticipate that after such introduction we will continue to be cash flow negative due to our anticipated costs exceeding our anticipated revenues for an indefinite period of time. We believe that our currently available working capital will be sufficient to continue our business for at least the next twelve months. Should our costs

and expenses prove to be greater than we currently anticipate, or should we change our current business plan in a manner that will increase or accelerate our anticipated costs and expenses, such as through an acquisition of new products, the depletion of our working capital would be accelerated. To the extent it becomes necessary to raise additional cash in the future as our current cash and working capital resources are depleted, we will seek to raise it through the public or private sale of debt or equity securities, the procurement of advances on contracts or licenses, funding from joint-venture or strategic partners, debt financing or short-term loans, or a combination of the foregoing. We may also seek to satisfy indebtedness without any cash outlay through the private issuance of debt or equity securities. We currently do not have any binding commitments for, or readily available sources of, additional financing. We cannot give you any assurance that we will be able to secure the additional cash or working capital we may require to continue our operations.

Even if we are able to raise additional financing, we might not be able to obtain it on terms that are not unduly expensive or burdensome to the company or disadvantageous to our existing shareholders.

Even if we are able to raise additional cash or working capital through the public or private sale of debt or equity securities, the procurement of advances on contracts or licenses, funding from joint-venture or strategic partners, debt financing or short-term loans, or the satisfaction of indebtedness without any cash outlay through the private issuance of debt or equity securities, the terms of such transactions may be unduly expensive or burdensome to the company or disadvantageous to our existing shareholders. For example, we may be forced to sell or issue our securities at significant discounts to market, or pursuant to onerous terms and conditions, including the issuance of preferred stock with disadvantageous dividend, voting or veto, board membership, conversion, redemption or liquidation provisions; the issuance of convertible debt with disadvantageous interest rates and conversion features; the issuance of warrants with cashless exercise features; the issuance of securities with anti-dilution provisions; and the grant of registration rights with significant penalties for the failure to quickly register. If we raise debt financing, we may be required to secure the financing with all of our business assets, which could be sold or retained by the creditor should we default in our payment obligations. We also might be required to sell or license our products or technologies under disadvantageous circumstances we would not otherwise consider, including granting licenses with low royalty rates and exclusivity provisions.

Our products are highly regulated. We will not be able to introduce our products to market if we cannot obtain the necessary regulatory approvals. If we are unable to obtain regulatory approvals for our products in selected key markets at all or in a timely manner, we will not be able to grow as quickly as expected, and the loss of anticipated revenues will also reduce our ability to fully fund our operations and to otherwise execute our business plan. Our failure to receive the regulatory approvals in the United States would likely cause us to go out of business.

The manufacture, sale, promotion and marketing of our heart monitoring products and other products we intend to develop are subject to regulation by the Food and Drug Administration (*FDA*) and similar government regulatory bodies in other countries. As we develop or obtain new products we will be required to determine what regulatory requirements, if any, we must comply with in order to market and sell our products in the United States and worldwide. The process of obtaining regulatory approval could take years and be very costly, if approval can be obtained at all. If we fail to comply with these requirements, we could be subjected to enforcement actions such as an injunction to stop us from marketing the product at issue or a possible seizure of our assets. We intend to work diligently to assure compliance with all applicable regulations that impact our business. We can give you no assurance, however, that we will be able to obtain regulatory approval for all of our products. We also cannot assure you that additional regulations will not be enacted in the future that would be costly or difficult to satisfy.

Because we are not diversified, we are subject to a greater risk of going out of business should our single proposed product line fail.

The only business opportunities we are presently pursuing are the heart monitoring or ECG market and, later, using the same technology, the neurological brain scan or EEG market. Unlike many established companies that are diversified, we do not presently have other businesses, properties, investments or other income producing assets upon which we could rely upon should our single product line fail, thereby increasing the risk of our going out of business.

Many of our customers will rely upon third party reimbursements from third party payors to cover all or a portion of the cost of our products. If third party payors do not provide reimbursement for our products, we will not be able to grow as quickly as expected, and the loss of anticipated revenues will also reduce our ability to fully fund our operations and to otherwise execute our business plan.

We intend to sell our heart monitoring products to individual patients and doctors, hospitals and clinics who will seek reimbursement from various third party payors, including government health programs, private health insurance plans, managed care organizations and other similar programs. We can give you no assurance that reimbursement will be available from third party payors at all, or for more than a nominal portion of the cost of our products.

We are partially dependent upon Rubbermaid in providing our United States marketing and sales functions. Should Rubbermaid s performance be unsatisfactory, we may not be able to replace it given the co exclusive nature of its rights to perform marketing and sales functions within the United States. If either Signalife or Rubbermaid terminate the agreement, we would then need to develop or procure other marketing and distribution channels within the United States, which would cause delays or interruptions in our product supply and result in the loss of significant sales or customers.

In March 2006, we signed an agreement with Rubbermaid, Inc. to act as our co-exclusive (together with the company) sales and marketing agent within the United States for up to ten years for our Fidelity 100 Monitor System and our first Signalife Holter Monitor. As a consequence, our ability to effectively market and distribute these products will be dependent in part upon Rubbermaid s strength and financial condition, its expertise and relationships with customers, and its interest in selling and marketing our products. Although there are performance conditions in the governing agreement, they are relatively low and easy for Rubbermaid to attain, and we would not generally be able to terminate the agreement due to lesser-than-expected performance by Rubbermaid. If our relationships with Rubbermaid were to terminate, we would need to either develop alternative relationships or develop our own internal sales and marketing forces to continue to sell our products. In such an event, these efforts would require significant cash and other resources that would be diverted from other uses, if available at all, and could cause delays or interruptions in our product supply to customers, which could result in the loss of significant sales or customers.

We intend to rely upon the third-party FDA-approved manufacturers or suppliers to manufacture our heart monitoring products. Should these manufacturers fail to perform as expected, we will need to develop or procure other manufacturing sources, which would cause delays or interruptions in our product supply and result in the loss of significant sales and customers.

We currently have no internal manufacturing capability, and will rely extensively on FDA-approved licensees, strategic partners or third party contract manufacturers or suppliers. We have recently entered into a contract manufacturing agreement with a private-label manufacturer to manufacture our Model 100 Monitors and package our Model 100 Monitor System. We cannot give you any assurance that this contract manufacturer or any other contract manufacturer or supplier we procure will be able to

supply our product in a timely or cost effective manner or in accordance with applicable regulatory requirements or our specifications. Further, should we be forced to manufacture our products, we cannot give you any assurance that we will be able to develop an internal manufacturing capability or procure third party suppliers.

We are dependent for our success on a few key executive officers. Were we to lose one or more of these key executive officers, we would be forced to expend significant time and money in the pursuit of a replacement, which would result in both a delay in the implementation of our business plan and the diversion of working capital.

Our success depends to a critical extent on the continued efforts of services of our executive management team comprised of Ms. Pamela M. Bunes, our Chief Executive Officer and President, and Dr. Budimir S. Drakulic, our Vice President and Chief Technology Officer. Were we to lose one or more of these key executive officers, we would be forced to expend significant time and money in the pursuit of a replacement, which would result in both a delay in the implementation of our business plan and the diversion of working capital. Ms. Bunes is currently employed pursuant to five-year employment agreements, while Dr. Drakulic is employed as a consultant under a loan-out agreement through June 26, 2016. None of these agreements will preclude any of these key officers from leaving the company. We currently maintain key man life insurance policies in the amount $3 million with respect to Dr. Drakulic which will assist us in recouping some of our costs in the event of the death of that officer.

Our inability to protect our intellectual property rights could allow competitors to use our property rights and technologies in competition against our company, which would reduce our sales. In such an event we would not be able to grow as quickly as expected, and the loss of anticipated revenues will also reduce our ability to fully fund our operations and to otherwise execute our business plan.

We rely on a combination of patent, patent pending, copyright, trademark and trade secret laws, proprietary rights agreements and non-disclosure agreements to protect our intellectual properties. We cannot give you any assurance that these measures will prove to be effective in protecting our intellectual properties. We also cannot give you any assurance that our existing patents will not be invalidated, that any patents that we currently or prospectively apply for will be granted, or that any of these patents will ultimately provide significant commercial benefits. Further, competing companies may circumvent any patents that we may hold by developing products which closely emulate but do not infringe our patents. While we intend to seek patent protection for our products in selected foreign countries, those patents may not receive the same degree of protection as they would in the United States. We can give you no assurance that we will be able to successfully defend our patents and proprietary rights in any action we may file for patent infringement. Similarly, we cannot give you any assurance that we will not be required to defend against litigation involving the patents or proprietary rights of others, or that we will be able to obtain licenses for these rights. Legal and accounting costs relating to prosecuting or defending patent infringement litigation may be substantial.

We also rely on proprietary designs, technologies, processes and know-how not eligible for patent protection. We cannot give you any assurance that our competitors will not independently develop the same or superior designs, technologies, processes and know-how.

While we have and will continue to enter into proprietary rights agreements with our employees and third parties giving us proprietary rights to certain technology developed by those employees or parties while engaged by our company, we can give you no assurance that courts of competent jurisdiction will enforce those agreements.

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Risks Relating To An Investment In Our Securities

Our common shares are sporadically or thinly traded, so you may be unable to sell at or near ask prices or at all if you need to sell your shares to raise money or otherwise desire to liquidate your shares

Our common shares have historically been sporadically or thinly traded, meaning that the number of persons interested in purchasing our common shares at or near ask prices at any given time may be relatively small or non-existent. This situation is attributable to a number of factors, including the fact that we are a small company which is relatively unknown to stock analysts, stock brokers, institutional investors and others in the investment community that generate or influence sales volume, and that even if we came to the attention of such persons, they tend to be risk-averse and would be reluctant to follow an unproven development stage company such as ours or purchase or recommend the purchase of our shares until such time as we became more seasoned and viable. As a consequence, there may be periods of several days or more when trading activity in our shares is minimal or non-existent, as compared to a seasoned issuer which has a large and steady volume of trading activity that will generally support continuous sales without a material reduction in share price. We cannot give you any assurance that a broader or more active public trading market for our common shares will develop or be sustained, or that current trading levels will be sustained. Due to these conditions, we can give you no assurance that you will be able to sell your shares at or near ask prices or at all if you need money or otherwise desire to liquidate your shares.

The market price for our common shares is particularly volatile given our status as a relatively unknown development stage company with a small and thinly-traded public float, limited operating history, nominal revenues and lack of profits to date for our newly introduced products, which could lead to wide fluctuations in our share price. The price at which you purchase our common shares may not be indicative of the price that will prevail in the trading market. You may be unable to sell your common shares at or above your purchase price, which may result in substantial losses to you. The volatility in our common share price may subject us to securities litigation.

The market for our common shares is characterized by significant price volatility when compared to seasoned issuers, and we expect that our share price will continue to be more volatile than a seasoned issuer for the indefinite future. The volatility in our share price is attributable to a number of factors. First, we have relatively few common shares outstanding in the public float since most of our shares are held by a small number of shareholders. In addition, as noted above, our common shares are sporadically or thinly traded. As a consequence of this lack of liquidity, the trading of relatively small quantities of shares by our shareholders may disproportionately influence the price of those shares in either direction. The price for our shares could, for example, decline precipitously in the event that a large number of our common shares are sold on the market without commensurate demand, as compared to a seasoned issuer which could better absorb those sales without a material reduction in share price. Secondly, we are a speculative or risky investment due to our limited operating history, nominal revenues and lack of profits to date, and uncertainty of future market acceptance for our products. As a consequence of this enhanced risk, more risk-adverse investors may, under the fear of losing all or most of their investment in the event of negative news or lack of progress, be more inclined to sell their shares on the market more quickly and at greater discounts than would be the case with the stock of a seasoned issuer. Additionally, in the past, plaintiffs have often initiated securities class action litigation against a company following periods of volatility in the market price of its securities. We may in the future be the target of similar litigation. Securities litigation could result in substantial costs and liabilities and could divert management s attention and resources.

The following factors may add to the volatility in the price of our common shares: actual or anticipated variations in our quarterly or annual operating results; acceptance of our products and services as viable security and technology

solutions; government regulations, announcements of significant acquisitions,

strategic partnerships or joint ventures; our capital commitments; and additions or departures of our key personnel. Many of these factors are beyond our control and may decrease the market price of our common shares, regardless of our operating performance. We cannot make any predictions or projections as to what the prevailing market price for our common shares will be at any time, including as to whether our common shares will sustain their current market prices, or as to what effect that the sale of shares or the availability of common shares for sale at any time will have on the prevailing market price.

Since a single shareholder currently beneficially owns the majority of our outstanding common shares, that single shareholder will retain the ability to control our management and the outcome of corporate actions requiring shareholder approval notwithstanding the overall opposition of our other shareholders. This concentration of ownership could discourage or prevent a potential takeover of our company that might otherwise result in you receiving a premium over the market price for your common shares.

ARC Finance Group, LLC, which is owned and controlled by Ms. Tracey Hampton, owns a majority of our outstanding common shares and voting securities. As a consequence of its controlling stock ownership position, ARC Finance Group retains the ability to elect a majority of our board of directors or to remove any director, and thereby controls our management. ARC Finance Group also has the ability to control the outcome of corporate actions requiring shareholder approval, including mergers and other changes of corporate control, going private transactions, and other extraordinary transactions. ARC Finance Group actively evaluates potential modifications to our board of directors and management, and could make such modifications or wholesale changes at any time if deemed to be in the company s best interest.

The sale of a large amount of common shares held by our shareholders or our executive officers or directors, or the perception that such sales could occur, could substantially depress the prevailing market prices for our shares.

In addition to the shares being sold under this prospectus, there are a substantial number of common shares either currently outstanding or acquirable upon exercise of common share purchase options or warrants that may be freely sold on the public markets. Specifically, we have previously registered under a form S-8 registration statement (1) approximately 3,800,000 common shares issuable upon the exercise of common share purchase options previously granted to selected officers, directors, consultants and advisors under our 2002 Stock Plan, and (2) approximately 5,800,000 shares reserved for prospective issuance to selected officers, directors, employees, consultants and advisors under our 2006 Omnibus Equity Compensation Plan. We have also registered for sale a large number of shares previously purchased by investors, and/or acquirable by investors upon their exercise of previously granted common share purchase warrants. We have also registered for sale 3,500,000 common shares held by our controlling shareholder, ARC Finance Group, LLC, to provide it with a mechanism to sell such shares on the public market should it decide to do so in view of its apparent ineligibility to sell those shares under the Rule 144 safe harbor under current SEC interpretations. We understand that ARC Finance Group has continuously sold and plans to continue to sell shares under that registration statement, both directly under 10b-5 plans it has established or indirectly through independent trustees under blind trusts it has established, and believe that a large number of these shares remain available for sale. A large number of our shares, both registered and unregistered, may also be sold under available resale exemptions under the federal securities laws, including Rule 144 (albeit subject to volume limitations in the case of shares held by affiliates or restricted stock held for less than two years). We anticipate that a substantial number of the aforesaid registered and unregistered shares, whether currently held or acquired in the future by way of grant or exercise of common share purchase options or warrants, will be sold on the public markets for a number of reasons, including the need to satisfy income tax liabilities, the need to cover the purchase price of option and warrant exercises, or decisions predicated on market conditions.

A large number of common shares are issuable upon conversion of our series A preferred shares or the exercise of outstanding common share purchase options or warrants. The conversion or exercise of these securities could result in the substantial dilution of your investment in terms of your percentage ownership in the company as well as the book value of your common shares. The sale of a large amount of common shares received upon the conversion or exercise of these securities on the public market to finance the exercise price or to pay associated income taxes, or the perception that such sales could occur, could substantially depress the prevailing market prices for our shares.

There are currently outstanding as of January 4, 2007, (1) 97,909 series A preferred shares (plus an additional 33,322 unissued series A preferred shares accrued as dividends for issuance through September 30, 2006), each convertible into one common share at the conversion rate of $3 per share, and (2) share purchase options and warrants entitling the holders to purchase 10,493,167 and 179,292 common shares and series A preferred shares, respectively, at weighted average exercise prices of $2.36 and $3.60 per share, respectively. Included in these share purchase options are a large number granted to directors, officers, employees and consultants that are subject to vesting conditions. In the event of the conversion or exercise of these securities, you could suffer substantial dilution of your investment in terms of your percentage ownership in the company as well as the book value of your common shares. In addition, the holders of the common share purchase options or warrants may sell common shares in tandem with their exercise of those options or warrants to finance that exercise, or may resell the shares purchased in order to cover any income tax liabilities that may arise from their conversion or exercise of these securities.

Our issuance of additional common shares or preferred shares, or options or warrants to purchase those shares, would dilute your proportionate ownership and voting rights. Our issuance of additional preferred shares, or options or warrants to purchase those shares, could negatively impact the value of your investment in our common shares as the result of preferential voting rights or veto powers, dividend rights, disproportionate rights to appoint directors to our board, conversion rights, redemption rights and liquidation provisions granted to the preferred shareholders, including the grant of rights that could discourage or prevent the distribution of dividends to you, or prevent the sale of our assets or a potential takeover of our company that might otherwise result in you receiving a distribution or a premium over the market price for your common shares.

We are entitled under our certificate of incorporation to issue up to 100,000,000 common and 10,000,000 blank check preferred shares. After taking into consideration our common and series A preferred shares outstanding or accrued for issuance as of January 4, 2007, we will be entitled to issue up to 57,323,723 additional common shares and 9,868,768 additional preferred shares. Our board may generally issue those common and preferred shares, or options or warrants to purchase those shares, without further approval by our shareholders based upon such factors as our board of directors may deem relevant at that time. Any preferred shares we may issues shall have such rights, preferences, privileges and restrictions as may be designated from time-to-time by our board, including preferential dividend rights, voting rights, conversion rights, redemption rights and liquidation provisions. It is likely that we will be required to issue a large amount of additional securities to raise capital to further our development and marketing plans. It is also likely that we will be required to issue a large amount of additional securities to directors, officers, employees and consultants as compensatory grants in connection with their services, both in the form of stand-alone grants or under our various stock plans. We cannot give you any assurance that we will not issue additional common or preferred shares, or options or warrants to purchase those shares, under circumstances we may deem appropriate at the time.

We are subject to the Delaware Business Combination Act, which could discourage or prevent a potential takeover of our company that might otherwise result in you receiving a premium over the market price for your common shares.

As a Delaware corporation, we are subject to the Delaware Business Combination Act which precludes a shareholder who owns 15% or more of our shares from entering into a business combination involving our company for a period of three years, unless (1) our board of directors approves the combination before the shareholder acquires the 15% interest; (2) the interested shareholder acquires at least 85% of our shares as part of the transaction in which he acquired the initial 15%, excluding shares owned by our officers who are also directors and voting stock held by employee benefit plans; or (3) the combination is approved by a majority vote of our board of directors and two-thirds vote of our other shareholders at a duly called shareholders meeting. A business combination is defined as (1) a merger or consolidation requiring shareholder approval, (2) the sale, lease, pledge, or other disposition of our assets, including by dissolution, having at least 50% of the entire asset value of our company, or (3) a proposed tender or exchange offer of 50% or more of our voting stock.

The elimination of monetary liability against our directors, officers and employees under our certificate of incorporation and the existence of indemnification rights to our directors, officers and employees may result in substantial expenditures by our company and may discourage lawsuits against our directors, officers and employees.

Our certificate of incorporation contains provisions which eliminate the liability of our directors for monetary damages to our company and shareholders to the maximum extent permitted under Delaware corporate law. Our bylaws also require us to indemnify our directors to the maximum extent permitted by Delaware corporate law. We may also have contractual indemnification obligations under our agreements with our directors, officers and employees. The foregoing indemnification obligations could result in our company incurring substantial expenditures to cover the cost of settlement or damage awards against directors, officers and employees, which we may be unable to recoup. These provisions and resultant costs may also discourage our company from bringing a lawsuit against directors, officers and employees for breaches of their fiduciary duties, and may similarly discourage the filing of derivative litigation by our shareholders against our directors, officers and employees even though such actions, if successful, might otherwise benefit our company and shareholders.

FORWARD-LOOKING STATEMENTS

In this prospectus we make a number of statements, referred to as *forward-looking statements*, which are intended to convey our expectations or predictions regarding the occurrence of possible future events or the existence of trends and factors that may impact our future plans and operating results. These forward-looking statements are derived, in part, from various assumptions and analyses we have made in the context of our current business plan and information currently available to us and in light of our experience and perceptions of historical trends, current conditions and expected future developments and other factors we believe to be appropriate in the circumstances. You can generally identify forward-looking statements through words and phrases such as *seek*, *anticipate*, *believe*, *estimate*, *expect*, *intend*, *plan*, *budget*, *project*, *may be*, *may continue*, *may likely result*, and similar expressions. When reac forward looking statement you should remain mindful that actual results or developments may vary substantially from those expected as expressed in or implied by that statement for a number of reasons or factors, such as those relating to: (1) the success of our research and development activities, the development of a viable commercial production model, and the speed with which regulatory authorizations and product launches may be achieved; (2) whether or not a market for our products develops and, if a market develops, the pace at which it develops; (3) our ability to

successfully sell our products if a market develops; (4) our ability to attract the qualified personnel to implement our growth strategies; (5) our ability to develop sales, marketing and distribution capabilities;

(6) our ability to obtain reimbursement from third party payers for the products that we sell; (7) the accuracy of our estimates and projections; (8) our ability to fund our short-term and long-term financing needs; (9) changes in our business plan and corporate strategies; and other risks and uncertainties discussed in greater detail in the sections of this prospectus, including those captioned *Risk Factors* and *Management s Discussion And Analysis Of Financial Condition And Results Of Operations* .

Each forward-looking statement should be read in context with, and with an understanding of, the various other disclosures concerning our company and our business made elsewhere in this prospectus as well as other public reports filed with the United States Securities and Exchange Commission (the *SEC*). You should not place undue reliance on any forward-looking statement as a prediction of actual results or developments. We are not obligated to update or revise any forward-looking statement contained in this prospectus to reflect new events or circumstances unless and to the extent required by applicable law.

USE OF PROCEEDS

The proceeds from the sale of the common shares to be sold under this prospectus will be retained by the selling shareholders, and will not be paid or remitted or otherwise made available to our company.

Included in the common shares offered for sale under this prospectus, are 4,501,453 common shares issuable upon the exercise of common share purchase warrants and placement agents unit purchase warrants (including the subsequent exercise or conversion of the underlying common share purchase warrants). A large number of these warrants contain cashless exercise provisions. In the event that the selling shareholders exercise any or all of these warrants for cash, we would be entitled to such cash proceeds.

BUSINESS

Overview

Signalife is a development stage medical device company focused on researching, developing and marketing medical devices which monitor and measure physiological signals in order to detect diseases that impact an individual s health. Physiological signals are small bioelectrical signals generated by the body. Our initial product is a patient module used as part of a heart monitor system to acquire, amplify and process physiological signals associated with a patient s cardiovascular system. Heart monitor systems are used, among other things, by heart specialists known as cardiologists to collect physiological data for electrocardiogram or ECG tests for the purpose of detecting and identifying cardiovascular disease. Our patient module operates using a proprietary and patented amplification technology which provides the capability to enlarge and process the physiological signals to discriminate them from ambient or background electromagnetic noise and to facilitate the examination of the signal data for diagnostic purposes.

Our corporate offices are located at 531 South Main Street, Suite 301,Greenville, South Carolina 29601. Our telephone number is (864) 233-2300.

Our common shares are currently quoted on the American Stock Exchange or AMEX under the symbol SGN.

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Recent Corporate History

Signalife was originally incorporated in Delaware on January 19, 1987 under the name Mt. Olympus Enterprises Inc. Since our formation, we changed our name to Recom Managed Systems, Inc. on November 6, 1998, and then to Signalife, Inc. on November 2, 2005.

Prior to September 19, 2002, we were an inactive corporate shell. On September 19, 2002, we acquired certain know how, trade secrets and other proprietary intellectual property rights relating to the development of a physiological signal amplification equipment and technology, referred to in this prospectus as the *Signal Technologies*, from ARC Finance Group, LLC (*ARC Finance Group*), our parent corporation, in exchange for 23,400,000 common shares (7,800,000 shares pre-split). The shares represented approximately 85% of our issued and outstanding common shares. We valued the Signal Technologies at $78,023 for financial accounting purposes, reflecting ARC Finance Group s cost to acquire the Signal Technologies from Dr. Budimir S. Drakulic as discussed below. The terms of the acquisition were determined by the parties on an arms-length negotiated basis. No independent valuation was sought from a business/technology appraiser or other third party due to financial constraints. There was no relationship between Signalife, including our officers, directors and shareholders, and ARC Finance Group, including its officers, directors and shareholders, prior to our acquisition of the Signal Technologies from ARC Finance Group. No finder s fees or other forms of consideration were paid by Signalife or ARC Finance Group or our respective officers, directors or shareholders in connection with our acquisition of the Signal Technologies.

The principal component of the Signal Technologies is a patented amplification technology which was originally invented by our Vice President and Chief Technology Officer, Dr. Budimir S. Drakulic. The underlying patent covers methods of discriminating different biomedical signals from ambient electromagnetic noise. Also included in the Signal Technologies was an assignment of a license agreement dated December 9, 1993 between Dr. Drakulic and Teledyne Electronic Technologies (*Teledyne*) pursuant to which Dr. Drakulic granted a limited license to that company to manufacture EEG monitor products based upon an early version of the amplification technology. This early version amplifier is also currently used by the National Institute of Health as well as companies such as Titan Systems and Teledyne, Inc. for purposes of monitoring different physiological signals. This license agreement specified that Dr. Drakulic retained ownership of the original patent and underlying technology and the right to use technology to develop new products as long as they would not infringe on Teledyne s licensed products. Dr. Drakulic has since received a letter from Teledyne acknowledging that the use of the technology for our proposed heart monitor systems does not infringe on Teledyne s licensed products. Concurrent with our acquisition of the Signal Technologies, we obtained Dr. Drakulic s services as our Vice President and Chief Technology Officer to lead our product development efforts.

ARC Finance Group is a Delaware limited liability company formed in May 2002 which is owned and controlled by Ms. Tracy Hampton. In or about May 2002, ARC Finance Group entered into an understanding with Dr. Drakulic pursuant to which it would fund informal proof-of-concept activities and product development costs to be incurred by Dr. Drakulic in order to establish to the satisfaction of ARC Finance Group the potential of the Signal Technologies for ECG applications, and would also pay other expenses of Dr. Drakulic, in exchange for the rights to acquire and market the Signal Technologies. Pursuant to that understanding, ARC Finance Group funded these activities and costs in the amount of $78,023 during the summer of 2002, and acquired the Signal Technologies from Dr. Drakulic when it became satisfied that the Signal Technologies could be applied for ECG applications. Following its acquisition of the Signal Technologies, ARC Finance Group sought a third-party company to license or acquire the Signal Technologies for its commercial development, leading to our acquisition of the Signal Technologies from ARC Finance Group. Since that acquisition, ARC Finance Group has remained a holding company for a passive investment in our company. ARC Finance Group s only investment and business activity to date relates to Signalife, ARC

Finance Group has no investments other than Signalife,

sources of revenue or liabilities, and there is no past or current relationship between ARC Finance Group and Titan Systems or Teledyne Inc.

On April 11, 2003, we completed a three for one forward stock split, resulting in a total of 31,510,848 common shares being outstanding as of that date.

Description Of Heart Monitor Systems And ECGs

A heart monitor system is a system used to monitor and record changes in physiological signals associated with a patient s cardiovascular system. Heart monitor systems are used by heart specialists known as cardiologists to collect physiological data for electrocardiogram or ECG tests for the purpose of detecting and identifying cardiovascular disease. An ECG gives the cardiologist important information about the heart. For example, by examining changes in waveforms from 0.67 Hz to 40 Hz frequency range, a cardiologist can identify irregularities in the heart s rate and rhythm, known as arrhythmia. By examining changes in waveforms in the broader 0.05 Hz to 150 Hz frequency range, a cardiologist can identify different types of heart disease, including damage to the heart muscles or tissue resulting from (1) decreased blood flow attributable to the narrowing of the arteries, known as cardiac ischemia, (2) enlargement of the heart resulting from additional effort attributable to the hardening of the heart muscle, known as hypertrophy, and (3) the existence of past or presently occurring heart attacks.

When an ECG test is ordinarily conducted in a clinical setting, the physiological signals from the patient s heart are displayed through a heart monitor system called a 12-lead ECG, based on acquiring a signal from ten electrodes, one of which is attached to each of the patient s arms, six to the chest and one to each leg. The placement of the ten electrodes enables the heart to be examined for different diseases. Physiological signals generated by the heart are amplified and recorded in the form of a series of waveforms that can be displayed on a screen or printed on paper for interpretation by a cardiologist. Any irregularity in heart rhythm, damage or stress to the heart muscle will result in a deviation from a normal waveform.

There are three settings under which ECGs are normally taken: (1) the clinical or resting setting where the patient is immobile; (2) the ambulatory setting where the patient is mobile; and (3) the exercise setting where the patient is subjected to physical stress in a controlled environment. These three types of ECG tests are more fully described as follows:

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ECGs administered in the clinical or resting setting are generally taken (1) on an annual basis for older patients as part of their annual physical examination; (2) under emergency or exigent circumstances when an individual complains of symptoms typically associated with heart disease such as chest pains, shortness of breath or heart palpitations; or (3) as part of surgeries and medical procedures, such as heart surgery. Most clinical ECGs are obtained in the resting setting. In a resting setting, the principal technical issue in interpreting ECG waveforms arise from the existence of ambient or background noise emanating from other electromagnetic sources, including (1) signals generated by the other organs, muscles and systems of the body, whether from movement or the performance by those organs of their bodily functions, and (2) signals generated by sources external to the body, such as electronic equipment, lights or engines. This ambient noise is commonly referred to as an artifact . As previously discussed, cardiologists can identify irregularities in the heart s rate and rhythm, known as arrhythmia, by examining changes in the 0.67 to 40 Hz frequency range. Because of the relatively large amplitudes of these waveforms in this range, cardiologists can, as a practical matter, easily identify arrhythmia notwithstanding the existence of electromagnetic ambient noise from other

sources. However, it is very difficult for cardiologists to distinguish physiological signals from ambient noise in the broader frequency ranges used to identify different types of heart disease, including cardiac ischemia, hypertrophy and the existence of past or presently occurring heart attacks. The reason for this difficulty is that the physiological signals associated with these other heart diseases are of a much lower amplitude

or strength in the lower 0.05 to 0.67 Hz and upper 40 to 150 Hz portions of the frequency range, meaning that they do not stand-out from the ambient noise in these portions and therefore cannot be easily discriminated from that ambient noise. In order to minimize ambient noise in the clinical setting, ECGs are normally taken in the hospital or physician offices. Cardiologists instruct the patient to lie in the supine position, being as still as possible while a reading is taken to reduce ambient noise caused by physical movement. Another method to reduce ambient noise is to reduce the sensitivity of the monitoring equipment, although this alternative results in a loss of signal quality and the ability to read certain signal intricacies.

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ECGs administered in the ambulatory setting are given in an attempt to identify so-called transient heart disease that is, problems that come and go, and that are not apparent when a standard clinical or resting ECG is performed. Examples of transient heart disease are cardiac ischemia and cardiac hypertrophy. Additionally, the existence of past or presently occurring heart attacks can escape detection without longer-term monitoring in a physically active or stressful setting. An ambulatory heart monitor system, commonly known as a Holter monitor, allows the patient s heart to be continuously monitored over a period of hours or days, while the patient carries out his or her daily activities under typical conditions of stress away from the physicians office or hospital. The principal technical limitation in deciphering ECG waveforms in an ambulatory setting is that in many cases, ambulatory heart monitor systems are unable to accurately identify many of the heart conditions they are intended to identify due to their inability to clearly distinguish and discriminate the physiological signals associated with these conditions from electromagnetic ambient noise in the lower and upper portions of the full 0.05 to 150 Hz frequency range. Therefore, the industry standard for ambulatory recorders is 0.67 to 40 Hz.

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ECGs administered in the exercise or stress setting are given while the patient exercises on a treadmill, step machine or exercise cycle to enable the cardiologist to monitor, among other things, the patient s heart behavior under conditions of physical stress. Exercise can exacerbate cardiovascular abnormalities that are not present at rest and it can be used to determine the adequacy of cardiac function. Similar to an ambulatory ECG, this allows the cardiologist to identify different heart disease such as cardiac ischemia and cardiac hypertrophy as well as the existence of past or presently occurring heart attacks that may not be evident under a clinical resting or simple ambulatory ECG test conditions. Indeed, many physicians administer a stress ECG before proceeding to an ambulatory ECG. While external sources of ambient noise can be reduced in the clinical setting when exercise ECGs are conducted, high levels of physical activity inherent in exercise ECGs generate higher internal levels of ambient noise due to necessary patient movement. To address this issue, exercise ECG devices are connected to computers which run sophisticated software to filter and process physiological signals and produce average waveforms for interpretation by the cardiologist. However, the American Heart Association and American College of Cardiology each state that computer processing is not completely reliable because of software limitations in handling noise, the technical limitations of the software algorithms and therefore, cardiologists are advised to look at the raw data and not rely solely upon the results obtained by software processing of original data.

Description of Current Products

The core component of our heart monitoring systems is our battery-operated, digital 12-lead Model 100 Module, a compact device approximately 4 x 3.5 x 1.5 inches in size and 5.5 oz. in weight, that allows a patient s heart to be continuously monitored over a period of 24 to 48 hours in a variety of settings both non-ambulatory (stationary) and

ambulatory (moving) such as hospitals, surgeries, clinics, doctors offices, exercise and sports medicine clinics and laboratories. The Model 100 Module contains both our proprietary patented amplification technology which acquires, processes and amplifies ECG signals, as well as Bluetooth technology which allows the acquired signals to be wirelessly transmitted to a personal computer for interpretation and storage by the physician.

The production version of our Model 100 Module was originally designed, engineered, fabricated and tested by Battelle Memorial Institute, Health and Life Sciences, pursuant to a research and development services agreement completed by Battelle Memorial Institute in December 2004. Battelle Memorial Institute is a global science and technology enterprise that designs, develops and commercializes technology and manages laboratories for customers. The pre-production model of our Model 100 Module, which was completed by Battelle Memorial Institute in December 2004, was tested and determined to comply with all applicable performance, safety, environmental and regulatory standards, including the United States Food And Drug Administration (*FDA*)-recognized consensual ANSI/AAMI EC-38 industry standards for ambulatory ECG devices, Federal Communications Commission (*FCC*) requirements for Human Exposure to Radiofrequency (RF), the FDA-recognized consensual industry standards for electromagnetic compatibility for medical devices (EMC), the FDA-recognized IE 60601-1 international safety standard relating to medical electrical equipment, and the FDA's Quality System Regulations. These testing results also satisfied our obligation under our abbreviated 510(k) submission to have supporting data in our files before marketing the Model 100 Module as part of the Model 100 Monitor System. The Model 100 Module also complies with ANSI/AAMI EC-11 and EC-13 ECG standards to the extent they relate to non-diagnostic features and alarm functions for stationary (non-ambulatory) ECG devices.

Fidelity 100 Monitor System

We have recently commenced commercial marketing of our first heart monitoring system using our Model 100 Module the Fidelity 100 Monitor System. This system is an integrated system in which our Model 100 Module collects, processes and amplifies ECG signals from that patient through a set of twelve electrode lead sets provided with the system, and then wirelessly transmits that signal to a nearby personal computer provided with the system. The signals are then displayed on a computer monitor and can be printed on a printer provided with the system for analysis by the cardiologist. We received our first sales revenues from this product in the fourth quarter of fiscal 2006.

We principally intend to sell the Fidelity 100 Monitor System as an integrated system containing all of the components the Model 100 Module, electrode lead sets, and a personal computer with monitor and printer, which could either be in a desk top or laptop configuration. The Model 100 Module and our proprietary ECG printing software may also be sold separate from the other components to physicians who prefer to use their own personal computers systems. As a result of these variables, the Fidelity 100 Monitor System will be offered in many different configurations.

The Fidelity 100 Monitor System will be principally used for clinical (resting) and in-patient ambulatory applications. For example, ECG data may be instantaneously acquired, processed, amplified and transmitted to the personal computer for analysis in stationary settings, such as while conducting ECG tests in resting or in-patient ambulatory settings or during surgeries.

Holter Monitor

The Model 100 Module was originally created as an ambulatory Holter device (the *Signalife Holter Monitor*), pursuant to which ECG data relating to arrhythmia and other transient heart disease is acquired, processed, amplified and stored in a computer storage chip contained in the Model 100 Module over a period of 24 to 48 hours while the patient carries out his or her daily activities away from the physicians office or hospital. The signal data can be either stored on a storage chip contained in the device and downloaded by the physician at a later date when the patient returns to the physician s office, or transmitted to a patient monitoring center that will forward the data or otherwise make it available to the physician over the Internet. We anticipate that we will commence marketing the Signalife

Holter Monitor by the end of first quarter 2007.

Description of Products in Development Stage

Intracardiac Monitor

We have recently completed and successfully tested at the Electrophysiology Laboratories at the Cleveland Clinic Heart Center a proof-of-concept proto-type intracardiac ECG monitor (the *Signalife Intracardiac Monitor*). This product applies our proprietary physiological signal acquisition and amplification technology to read intracardiac signals procured from intracardiac catheter products. An intracardiac catheter is a flexible tube that is inserted through a vein in the leg and fed into the heart to withdraw samples of blood, measure pressures within the heart s chambers or vessels, or inject contrast media. When used for diagnostic purposes with an intracardiac ECG monitor, the catheter is equipped with electrodes and the catheter data is transmitted to the monitor, which allows the physician to evaluate cardiac function, including arrhythmia, or irregular heartbeat. These readings are beneficial in that they measure signals directly from the heart, as opposed to signals read from the surface of the body as is typical in the ordinary application of heart monitors. Our next step in this project is to design, engineer and fabricate a pre-production version of this product, and we are currently formulating budgets and development schedules for this next step. Given that we intend to focus our immediate corporate efforts during fiscal 2006 on introducing our Fidelity 100 Monitor System and the Signalife Holter Monitor to market, we do not anticipate that we will complete the engineering and fabrication of a pre-production proto-type for the Signalife Intracardiac Monitor until summer 2007 at the earliest.

OTC Cardiac Monitor

We have recently completed and successfully tested in-house a proof-of-concept proto-type non-prescription over-the-counter cardiac monitor (the *Signalife OTC Cardiac Monitor*). This product incorporates our proprietary physiological signal acquisition and amplification technology to the non-prescription over-the-counter market. The Signalife OTC Cardiac Monitor is a simple one lead heart monitoring device which can be used as a non-prescription early-detection device by patients who desire to independently monitor their condition. We anticipate that this product would be sold to consumers through retail outlets such as drug stores, retail pharmacies, and major retail discount chains. The proof-of-concept proto-type tested is also a pre-production proto-type. Our next step in this project is to design, engineer and fabricate a production version of this product, and we are currently formulating budgets and development schedules for this next step. Given that we intend to focus our immediate corporate efforts during fiscal 2006 on introducing our Fidelity 100 Monitor System and the Signalife Holter Monitor to market, we do not anticipate that we will commence efforts to design, engineer and fabricated a pre-production proto-type for the Signalife OTC Cardiac Monitor until the end of fiscal 2006 at the earliest.

Patient Monitoring Centers

Signalife has previously considered in the longer term developing, acquiring or entering into joint venture, licensing or other collaborative arrangements with patient monitoring centers that would work in conjunction with our products and with certain monitoring capabilities which we have internally established. Signalife s involvement with patient monitoring centers would enable us to receive a continuous stream of revenues from monitoring devices we sell, which would allow us to substantially enhance our revenues over the initial sale of those devices.

Patient monitoring centers are typically used in ambulatory settings, where a patient wears a Holter monitor or an event recorder over an extended period of time while performing his or her daily activities away from the physicians office or hospital, and the data from the Holter monitor or event recorder is transmitted to the monitoring center either by telephone or the Internet. The data is then transferred or made available to the cardiologist.

Before making any decision relating to extending our involvement into a patient monitoring center project, there are numerous business and technical issues we would need to resolve. Further, the patient monitoring centers and software may also require FDA approval, and the server and network at the patient monitoring center would also need to be compliant with the Health Insurance Portability and Accountability Act, which requires that we meet federally mandated requirements when handling patient data. At this point we remain in the early investigation stage relative to patient monitoring centers and continuous monitoring software, and cannot provide any guidance as to any estimated timeframes as to when or even if we would formally commence or complete the project, or as to any of the estimated costs involved. Should we proceed with the project, we can give you no assurance that we will be successful with respect to patient monitoring centers, procuring the necessary FDA approval or clearance for these services, or competitively marketing these services.

EEG Products

We have initiated a study of the applicability of our technology to electroencephalogram or EEG-related applications, in particular the detection of Alzheimer s, Parkinson s and other neurological diseases. As previously discussed above, earlier versions of our amplification technology are now used in EEG equipment used to measure neurological or brain responses. We believe the enhancements Dr. Drakulic has designed since for ECG purposes may have similar application for the EEG market. As discussed below in this prospectus, this activity will not impact the Teledyne licensing agreement. We believe that we will have sufficient initial data by the end of fiscal 2006 to determine whether or not to proceed to full development of an EEG monitor device.

Terminated Projects

We have previously explored the development of a patient vest containing electrodes to be used with our monitors as an alternative to the currently-available FDA-cleared or approved electrode/wire sets. However, at this point we have not ascertained whether we will be able to develop a workable vest that is not too bulky or otherwise impracticable to wear, so we do not anticipate that we will proceed further with this project.

We have previously explored developing a version of our Model 100 Module that would contain mobile outpatient telemetry functions, which we referred to as the Model 200 Module. It was intended that this device would be engineered and designed by Battelle Memorial Institute. In reviewing this project, we ascertained that medical insurance companies still consider mobile outpatient telemetry as investigational and not medically necessary. We also determined, from medical literature, that such functions may not yield consistently useful data. In consequence, we do not anticipate that we will proceed with this project until the clinical benefits and necessity of this form of monitoring have been established.

Competitive Advantages And Marketing Strategy

As discussed in *Description Of Signal Technologies; Pending Evaluative Studies* below, Signalife believes that the Signal Technologies afford our ECG monitoring devices with the ability to amplify and discriminate physiological signals in all settings, notwithstanding the existence of electromagnetic ambient noise from other sources, and in all frequency ranges, including lower-amplitude physiological signals associated with those in the lower and upper portions of the full 0.05 to 150 Hz frequency range associated with transient heart diseases. Based upon these beliefs, Signalife will market our ECG devices as follows:

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In the case of clinical settings where resting ECGs are typically taken, Signalife will promote the ability of our ECG devices, such as the Fidelity 100 Monitor System, to allow the patient to walk around the facility or on a treadmill while the ECG is being taken, thereby allowing the physician to better identify transient heart diseases. Since competitive resting ECG devices do not presently

have this ability, this should lend our ECG devices a clear competitive advantage over traditional resting ECG devices.

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In certain clinical resting settings where there is a high incidence of electromagnetic interference, such as in surgical suites, Signalife will promote the ability of our ECG devices, such as the Fidelity 100 Monitor System, to provide clear and accurate signal data that is not adversely affected by the electromagnetic interference.

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In the case of ambulatory settings, where a patient wears a Holter monitor or event recorder for an extended period of time while performing his or her daily activities away from the physicians office or hospital, Signalife will promote the ability of our ECG devices, such as the Signalife Holter Monitor, to amplify and discriminate physiological signals in the lower-amplitude physiological signals associated with those in the lower and upper portions of the full 0.05 to 150 Hz frequency range associated with transient heart diseases. Since competitive ambulatory ECG devices do not presently have this ability, this should lend our ECG devices a clear competitive advantage.

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In the case of exercise or stress settings, Signalife will promote the ability of our ECG devices to provide clear signal data that does not need to be filtered and processed by computer software to eliminate electromagnetic noise, addressing the reliability issues arising from the use of such programs.

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The ability of our ECG devices to provide clear data output and more accurate results across the full Hz frequency ranges also allows us to provide the physician with signal data that will facilitate greater diagnostic yield , a medical term which means that the physician can more accurately and expeditiously diagnose the cardiac disease or condition, leading to better patient outcomes.

To date, the cardiac monitor market is a mature one with little innovation or product differentiation and limited market growth. Competitors principally compete on price and relatively small margins in order to maintain market share. Volume is mainly predicated on product replacement and the increased need for devices compatible with data networks. Given the product advantages afforded by our Signal Technologies, we believe that we can differentiate the benefits of our products from those of competitors and sell our products for greater prices and margins than our competitors. We also believe that our monitoring devices will cause existing versions in the market to be deemed obsolete, with will accelerate the growth of replacement sales and the overall growth of the market. The principal hurdle we must overcome in order to attain these ends will be educating prospective purchasers as to the product differences and benefits afforded by our products over competitive products.

Description of Signal Technologies; Pending Evaluative Studies

Our patient modules will operate using the Signal Technologies. The Signal Technologies are a patented amplification technology originally developed by our Vice President and Chief Technology Officer, Dr. Budimir S. Drakulic, to address the electrical interference or noise issue during physiological recordings. In an effort to explore

ways to accurately and objectively monitor pilot performance, the United States Air Force desired to record a pilot s neurological brain responses, consisting of tiny electrical impulses generated by the brain, to different tasks and stresses that occur in-flight using an electroencephalogram or EEG test. However, the Air Force found that the neurological signal monitoring equipment then available was not able to accurately monitor EEG in an electromagnetically-charged (i.e., noisy or artifact-intensive) environment such as the cockpit of a fighter jet or a B-52 bomber. In 1992, Dr. Drakulic led a team from the University of California at Los Angeles (*UCLA*) and the Veterans Administration in an effort to develop a device to resolve this problem. This effort resulted in the creation by Dr. Drakulic in 1994 of a first-generation amplifier that was successfully used by the Air Force to monitor pilot EEG signals. This early version amplifier is also currently used by the National Institute

of Health as well as companies such as Titan Systems and Teledyne, Inc. for purposes of monitoring different physiological signals.

The Signal Technologies were originally acquired by ARC Finance Group from Dr. Drakulic and then by Signalife from ARC Finance Group, based upon the belief of Dr. Drakulic and the principals of these companies that with the technological, development and financial assistance of these companies the capability of the technology to discriminate EEG signals, particularly in an electromagnetically-charged environment such as fighter aircraft cockpits, would have a similar application in discriminating ECG signals from ambient noise. Specifically, it was and continues to be believed by these persons that the Signal Technologies, as applied to the ECG market, would have the ability to amplify and discriminate the lower-amplitude physiological signals associated with those in the lower and upper portions of the full 0.05 to 150 Hz frequency range, thereby facilitating the ability to more clearly identify heart diseases in an ambulatory setting. In developing Signalife s initial ambulatory patient modules and overall heart monitor systems, and adopting the Signal Technologies for those modules and systems, Dr. Drakulic has since enhanced the signal processing technology such that Signalife has filed five additional patents covering these enhancements.

In order to validate our beliefs as to the performance of our technology in the ECG market, on August 30, 2004 we entered into an agreement with the Duke Clinical Research Institute at Duke University to evaluate the performance of our Model 100 Monitor System against top-end ECG systems. Under this agreement, the Duke Clinical Research Institute under the supervision of Dr. Mitchell W. Krucoff, as principal investigator, has since designed and conducted clinical studies evaluating our Model 100 Monitor System during catherization procedures at the Durham, North Carolina, Medical Center from January 2005 to December 2005. We presented our findings for the study at the American Heart Association Convention in November 2006, and intend to release an abstract of the study in the near future, with the full study to be presented as part of a scientific paper to be published.

Market and Competition

Market

Cardiovascular disease accounts for 40% of all hospital revenue and 1 out of every 2.7 deaths in the United States. Over 500,000 Americans survive heart attacks every year and need to be diagnostically monitored. In the United States alone, over 280,000 patients have various heart devices implanted. The US Department of Health and Human Services estimates that heart disease costs including, hospital expenses, ho care, medications and lost earnings, exceed $400 billion. Experts estimate that 85% of cardiovascular disease could be prevented or halted by sufficiently early diagnosis.

According to the American Heart Association, a patient that survives the acute stage of a heart attack has a chance of illness and death that is 1.5-15 times higher than that of the general population. Signalife's patented heart monitoring technology will allow physicians to monitor patients in an ambulatory setting, giving them access to vital life-improving and life-saving information.

Competition

Each of the ECG market segments is highly concentrated with five or six companies typically accounting for a substantial majority of all sales. Our principal competitors in the resting ECG market segment are GE Healthcare, Royal Philips Electronics, Quinton Cardiology Systems, Inc., and Welch Allyn, Inc. Our principal competitors in the

stress ECG market are GE Healthcare, Quinton Cardiology Systems, Inc., Welch Allyn, Inc., Schiller AG. Our principal competitors in the ambulatory ECG market segment include Del Mar Reynolds Medical Ltd., GE Healthcare, Royal Philips Electronics, Quinton Cardiology Systems, Inc., Mortara Instrument, Inc., Rozinn Electronics, Inc., and CardioNet, Inc., Raytel Medical Corporation, Cardiac Telecom, Inc. and Card Guard Instromedix and Lifewatch subsidiaries.

The market for heart monitoring products and services is fragmented and intensely competitive, especially for small companies. Given the lack of product differentiation and intense competition, companies principally compete on price. Given these factors, the market is characterized by strong price competition. There are no substantial barriers to entry, and we expect that competition will be intense and may increase. Many of our existing competitors may have substantially greater financial, product development, technical and marketing resources, larger customer bases, longer operating histories, better name recognition and more established relationships in the industry. As a result, certain of these competitors may be able to develop and expand their product and service offerings more rapidly, adapt to new or emerging technologies and changes in customer requirements more quickly, take advantage of acquisition and other opportunities more readily, devote greater resources to the marketing and sale of their products and services, or aggressively reduce their sales prices below the our costs. We cannot assure you that we will be able compete successfully with existing competitors or new competitors.

Marketing And Distribution Strategy

We are currently marketing our products and services through our company sales team, which we are in the process of forming and training, and in certain cases on a co-exclusive basis through Rubbermaid Inc. (*Rubbermaid*), a subsidiary of Newell Rubbermaid Inc. In the latter case, Rubbermaid has co-exclusive rights with the company to market our Fidelity 100 Monitor System in the United States pursuant to a Sales and Marketing Services Agreement dated March 26, 2006. Rubbermaid is currently in the process of developing and training its sales staff under this agreement. The initial term of this agreement is for one year, and may be renewed by Rubbermaid on an annual basis for up to nine additional years, subject to satisfaction of modest performance benchmarks and other conditions. Under this agreement, Rubbermaid will, at its cost, put together a national sales force to market the Fidelity 100 Monitor System, and will also advertise and otherwise vigorously promote these products in medical literature, at trade shows, and through other mechanisms as set forth in the agreement. This marketing arrangement may be extended to international sales or other parties upon the mutual consent of both parties. In compensation for these services, Rubbermaid will receive 35% of net product sales, as defined in the agreement. Signalife will, in turn, handle all product manufacturing, fulfillment and product servicing functions. Under this agreement, in consideration for the rights to co-exclusively market and sell the Fidelity 100 Monitor System and our first Signalife Holter Monitor within the United States, Rubbermaid paid Signalife $2,000,000 for the first year of the agreement following execution. This arrangement is seen as a good fit for Signalife due to Rubbermaid s more than 100-year history in successfully branding and marketing products worldwide.

Signalife is also actively pursuing other marketing alternatives through our internal sales staff. For example, we have recently entered into a letter of intent with Gold s Gym International, Inc. to conduct a pilot program in which patrons of the gym at selected facilities will be tested using and Signalife s Fidelity 100 Monitor System in order to detect and identify cardiovascular disease that could be triggered or exacerbated by exercise programs. As part of the program, a set of test protocols and procedures will be developed to address cardiac risks inherent to exercise. If the program is successful, the parties will explore the expansion of the program to most of Gold s gyms.

We are also actively pursuing other marketing alternatives through our internal sales staff. For example, we have recently entered into a letter of intent with Gold s Gym International, Inc. to conduct a pilot program in which patrons of the gym at selected facilities will be tested using Signalife s Fidelity 100 Monitor System in order to detect and identify cardiovascular disease that could be triggered or exacerbated by exercise programs. As part of the program, a set of test protocols and procedures will be developed to address cardiac risks inherent to exercise. If the program is

successful, the parties will explore the expansion of the program to most of Gold s gyms as well as other national fitness facilities.

Concurrent with the Gold s gym project, we are also participating in the Athletes For Life program which will focus on developing protocols to test professional and amateur athletes for cardiovascular disease

and abnormalities as part of their regular training regime, and will also promote testing for impoverished communities where early detection of cardiovascular disease simply does not exist. A large number of high-profile athletes have indicated their desire both in participating in this program given the high incidence of cardiovascular abnormalities associated with athletes involved in professional sports and track and field; and also sponsoring the community outreach portion of the program given their desire to promote community fitness and cardiovascular testing in the general community.

Manufacturing Capacity

We intend to manufacture our products both domestically and off-shore using third party FDA-certified contract manufacturers or joint-venture partners. Most of the components of our products are standard parts which are available from multiple supply sources at competitive prices. This, coupled with the significant start-up cost advantages associated with contractors, should minimize production and product costs. Currently, we have engaged one contract manufacturer, Ventrex, Inc., which has been manufacturing the Model 100 Modules used in our Fidelity 100 Monitor System since December 2005.

Research And Development

We currently conduct research and early stage development activities in-house and with engineering consultants. We retain title to all improvements or enhancements to our technology developed by or worked on by our engineering consultants under their contracts. Our research and development expenses for fiscal 2005 and 2004 were $1,328,482 and $1,663,362, respectively, and $692,388 for the nine-month interim period ended September 30, 2006. None of these expenditures were borne by customers. We have budgeted $1,661,000 for research and development for the twelve-month period commencing October 1, 2006.

Regulatory Overview

Current Status

Our Fidelity 100 Monitor System is a Class II medical device that must be cleared by the FDA in order to be marketed within the United States. On January 28, 2004, we received FDA 510(k) clearance under the FDA s abbreviated 510(k) submission format allowing us to market our Model 100 Module as part of an overall ECG system, on the basis of it being substantially equivalent to other ambulatory monitor systems on the market which satisfy the industry s consensual ANSI/AAMI EC-38 standard for non-diagnostic monitor systems. Under the terms of the abbreviated 510(k) clearance, we are required to have supporting data in our files documenting that our Fidelity 100 Monitor System will conform to performance standards before marketing the Module 100 Module. As such, we may continue to perform engineering and design work on the Model 100 Module without resubmitting the system for further FDA 510(k) clearance unless we were to significantly alter the safety or effectives of the system as cleared by FDA. We do not currently anticipate this will occur.

FDA Regulations And Requirements

ECG heart monitor products are regulated in the United States by the Food and Drug Administration (the *FDA*) under the Medical Device Amendments of 1976 (the *Medical Device Act*), a section of the Federal Food, Drug & Cosmetic Act (the *FDC Act*). Under the Medical Device Act, medical devices are designated as Class I, II or III devices depending upon the level of control and review necessary to assure the safety and effectiveness of the device, which in turn is based upon the level of risk to the patient. ECG heart monitor products are classified as a Class II medical device, which cannot be sold in the United States unless the seller can first demonstrate or represent to the FDA pursuant to section 510(k) of the FDC Act, that the device is substantially equivalent to one or more similar devices currently on the U.S. market, referred to as predicate devices. To demonstrate substantial equivalency, the applicant must

show that the new device (1) has the same intended use as the predicate device or devices, and (2) has either the same technological characteristics as the predicate device or devices, or has different technological characteristics that do not raise new questions of safety and effectiveness. A claim of substantial equivalence does not mean the new and predicate devices must be identical. Substantial equivalence is established with respect to intended use, design, energy used or delivered, materials, performance, safety, effectiveness, labeling, biocompatibility, standards and other applicable characteristics. Until the applicant receives clearance declaring a device substantially equivalent, it may not proceed to market the device within the United States.

The review period and FDA determination of substantial equivalence should be made within 90 days of submission of a 510(k) application, unless additional information or clarification or clinical studies are requested or required by the FDA. As a practical matter, the review process and FDA determination can take significantly longer than 90 days.

It should be noted that 510(k) clearance is a grandfather process. As such, 510(k) clearance does not imply that the safety, reliability and effectiveness of the medical device has been approved or validated by the FDA, but merely means that the medical device is determined to be substantially equivalent to a previously cleared commercially-related medical device.

As an alternative to the traditional 510(k) submission process, the FDA has also adopted an abbreviated or summary 510(k) submission process in cases where device-specific guidance documents or special controls have been established, or the FDA has recognized a relevant consensus standard, and the applicant certifies compliance or conformance with those documents, controls or standards. The applicant can procure abbreviated 510(k) clearance by either; (1) submitting a declaration that the applicant has in its files test data confirming that the medical device conforms to the consensus standard at the time of submission, or (2) submitting a statement that the medical device will conform to the consensus standard and that the applicant will have that supporting data in its files before marketing the device. Under either approach, the FDA reviewers will normally accept the declaration or statement without requesting the submission of information demonstrating conformity with the standard. In the case of ECG heart monitor products, the FDA has recognized the EC-38 Ambulatory Electrocardiograph, EC-11 Diagnostic ECG, and EC-13 Arrhythmia Detection and Alarm standards adopted by the American National Standards Institute or ANSI and the Association for the Advancement of Medical Instrumentation or AAMI as voluntary consensus standards for Class II 510(k) submission purposes. In the event that we make improvements to a previously-cleared device, the FDA also has a process that allows us to compare the improved device to our previously-cleared device on an expedited basis, typically 30 days.

Both domestic and foreign manufacturers and distributors of medical devices that intend to market those devices in the United States must register their establishments with the FDA and annually update the registration. Registration provides the FDA with the location of medical device manufacturing facilities and importers. In addition, all medical devices that are manufactured and imported into the United States must be listed with the FDA. Medical device listing is a means of keeping the FDA advised of the generic categories of devices an establishment is manufacturing and marketing.

Manufacturing facilities must undergo FDA inspections to assure compliance with good manufacturing practices or GMPs set forth under the quality system or QS regulation promulgated by the FDA. The quality system regulation provides a basic framework to ensure that manufacturers of finished medical devices intended for commercial distribution in the United States have in place a quality system for the design, manufacture, packaging, labeling, storage, installation and services of finished medical devices intended for commercial distribution in the United States. These regulations require that various specifications and controls be established for devices; that devices be designed under a quality system to meet these specifications; that devices be manufactured under a quality system; that finished

devices meet these specifications; that devices be correctly installed, checked and serviced; that quality data be

analyzed to identify and correct quality problems and that complaints be processed. Thus, the quality system regulation helps assure that medical devices are safe and effective for their intended use. The FDA monitors device problem data and inspects the operations and records of device developers and manufactures to determine compliance with the GMPs.

Medical devices sold in the United States must also conform to general labeling requirements adopted by the FDA stipulating the content and format of product information that must be provided with the device, including information relating to the manufacturer of, and the intended use of the device, as well as directions for use of the device.

Under Medical Device Reporting or MDR regulations established by the FDA, manufacturers, distributors and users of medical devices are required to report complaints of device malfunctions or incidents of serious injuries or deaths associated with medical devices to the FDA. The MDR regulations provide a post-surveillance mechanism for the FDA and manufacturers to identify, monitor and track significant adverse events involving medical devices for the purpose of detecting and correcting problems in a timely manner.

The FDA has established regulations governing the voluntary recall of medical devices by a manufacturer or importer should it be determined that the devices are defective, present a risk of injury, or are deceptive. Under the Medical Device Recall Authority regulation promulgated by the FDA, that agency also has the authority to order the involuntary recall of medical devices. Under the Medical Device Corrections And Removal regulations established by the FDA, manufacturers and importers are required to report to the FDA the occurrence of any correction or removal of a medical device where made to reduce a risk to health or a violation of the FDC Act.

The FDA has established regulations governing the import and export of medical devices. For a Class II medical device to be legally imported into the United States, it must meet FDA regulatory requirements. At this time, the FDA does not recognize regulatory approvals from other countries. Any Class II medical device may be legally exported from the United States without prior FDA notification or approval so long as it is in legal commercial distribution within the United States. Legal commercial distribution means that (1) the manufacturing establishment is registered with the FDA; (2) the device is listed with the FDA; (3) the sale of the device in the United States is authorized by either 510(k) notification or pre-market approval (PMA); (4) FDA labeling requirements are satisfied; and (5) the device is manufactured in accordance with GMP practices stipulated under the QS regulation. While the FDA does not place any restrictions on the export of these medical devices, certain countries may require written certification that a manufacturer or its devices are in compliance with U.S. law. In such instances the FDA will accommodate the exporter by providing a certificate of compliance called a Certificate for Foreign Government or CFG . If the medical device does not satisfying the foregoing requirements, it may be generally exported under two alternatives. First, if 510(k) clearance for the device is pending in the United States, it may be exported upon a showing that the device will reasonably obtain 510(k) clearance. In addition, the exporter must obtain a Certificate of Exportability from the FDA should the foreign country or consignee request assurance that the device complies with U.S. law. If the exporter does not intend to market the device in the United States, he may obtain a Certificate of Exportability to export the device based upon a showing that the device (1) complies with the laws of the foreign country; (2) meets the foreign purchaser s specifications; (3) is labeled for export on the shipping carton; and (4) is not sold or offered for sale in domestic commerce.

The failure of the manufacturer, importer, distributor or user to meet any of the FDA requirements imposed on it under the FDC Act or administrative regulations adopted thereunder by the FDA, may subject it to civil money penalties, administrative remedies or legal remedies under that Act or regulations.

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Other Regulations And Requirements

Our heart monitor products and systems must also conform to a number of performance, safety, environmental and regulatory standards, such as those relating to electromagnetic interference, electromagnetic susceptibility, shock and current leakage, and transmission frequency. These standards include the IEC60601-2-27 requirements for the safety of electrocardiograph devices; the IEC 60601-1-2 requirements for safety and electromagnetic compatibility; the UL2601-1 medical equipment general requirements for safety, and FCC regulations under part 15, subpart C, governing allowable frequency ranges for different types of transmission devices, including medical devices.

The server and network we will use in our monitoring station to collect heart data must comply with the Health Insurance Portability and Accountability Act, which requires that we meet federally mandated requirements when handling patient data.

Patents And Licenses

We hold patent number 5,678,559 issued by the United States Patent and Trademark Office for our core technology, the Signalife amplification methods. This patent, labeled *A Method and System of Recording Different Physiological Signal from a Human Body* , describes methods of discriminating different biomedical signals from ambient noise. This patent, which was assigned to us by ARC Finance Group as part of our acquisition of the Signal Technologies, was granted on October 21, 1997 and expires on October 21, 2014.

We also hold the following patent applications filed with the United States Patent and Trademark Office:

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number 10/293,105 captioned *System for, and Method of, Acquiring Physiological Signals of a Patient* filed on November 13, 2002, which describes technical methods for processing and amplifying different physiological signals;

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number 10/611,696 captioned *Amplified System for Determining Parameters of a Patient* filed July 1, 2003; which describes methods of amplifying physiological signals while a patient is ambulatory without changing the characteristics of the signal;

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number 10/664,711 captioned *Apparatus for, and Method of, Determining the Characteristics of a Patient s Heart* filed September 17, 2003, which describes the use of electrodes and amplifiers in a garment ;

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number 11/008706 captioned System *for, And Method of, Monitoring Heartbeats of a Patient*, filed on December 9, 2004, which describes technical methods for monitoring a patient s heart; and

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number 11/008681 captioned *Electrode for and Method of, Indicating Signal Characteristics at Particular Positions in a Patient Body* filed on December 9, 2004, which describes electrodes for monitoring a patient s heart.

Dr. Drakulic has also been issued or applied for patents in Canada, India, Japan, Mexico, Republic of Korea and the European Patent Convention for the patent captioned above *System for, and Method of, Acquiring Physiological Signals of a Patient* ; in Canada, India, Japan, Peoples Republic of China, and Republic of Korea for the patent captioned above *Amplified System for Determining Parameters of a Patient* ; in Australia, Brazil, Canada, India, Japan, Mexico, People s Republic of China for the patent captioned above *Apparatus for, and Method of, Determining the Characteristics of a Patient s Heart* , and under the Patent Cooperation Treaty for the patent captioned above *System for, And Method of, Monitoring Heartbeats of a Patient* and *Electrode for and Method of, Indicating Signal Characteristics at*

Particular Positions in a Patient Body .

Dr. Drakulic is the inventor named in our core patent and in each of the above patent applications, all of which are owned by Signalife. We are currently waiting for initial comment from the United States Patent and Trademark Office on each of the above patent applications, which generally occurs between two and two and one-half years after submission based upon current Patent and Trademark Office staffing levels. We anticipate that it will take three to four years for the above patent applications to issue**.**

Also included in the Signal Technologies agreement was an assignment of a license agreement dated December 9, 1993 between Dr. Drakulic and Teledyne Electronic Technologies pursuant to which Dr. Drakulic granted Teledyne a limited license to manufacture and sell certain products based upon early version of the amplification technology. We do not expect to earn significant revenues from that license. To our knowledge Teledyne is not currently marketing any EEG devices using that early version of the amplification technology, and we do not anticipate that they will in the future market any such products due to technical advancements that they would be required to incorporate into the products. We believe that the incorporation of these advancements would effectively change the underlying product from that which was licensed. Based upon the foregoing, we do not believe the license will prevent Signalife from competing in the broader market for EEG diagnostic products.

Costs And Effects Of Compliance With Environmental Laws

There are no special or unusual environmental laws or regulations that will require us to make material expenditures or that can be expected to materially impact on the operation of our business.

Subsidiaries

On October 21, 2003, we formed Memonitor, Inc., a Delaware corporation, to act as a vehicle for the prospective application of our technology for the treatment and monitoring of Alzheimer s, Parkinson s and related neurological diseases of the brain. To date, Memonitor has not commenced business activities, and we will not activate this subsidiary until further developments relating to our pending studies of EEG applications for our technology.

Employees

We currently have thirteen full-time employees and engage the services of five engineering, marketing and financial consultants on a part-time basis. None of our employees is represented by a labor union and we consider our relationships with our employees to be good.

PROPERTIES

Our executive offices are located at 531 South Main Street, Suite 301, Greenville, South Carolina 29601. We lease these facilities, consisting of approximately 4,029 square feet, from Falls Place, LLC, for a 36 month term commencing June 1, 2005. The lease is terminable after 18 months upon 90 days notice provided the termination is attributable to our outgrowing the premises. Our monthly base rent for years one, two and three is $6,211, $6,336 and $6,463 per month, respectively, which we believe reflects market value. We are also required to pay our share of

any increase in operating expenses over fiscal 2005. The lease is renewable for an additional 36 months subject to the payment of a 2% per year increase in base rent.

Our research and development facilities are located at 4705 Laurel Canyon Boulevard, Suite 203, Studio City, California. We lease these facilities, consisting of approximately 3,550 square feet, from Bershin Properties I, LLC on a month-to-month basis. We may terminate the lease upon 30 days notice and the payment of two months rent. We currently pay approximately $9,200 per month in base rent for these facilities, which we believe reflects market value, and are also required to pay our share of any increase in operating expenses after August 2002. Operating expenses include expenses for maintenance of common areas, heating, air conditioning, plumbing, trash disposal, janitorial and security services and other like expenses.

The aforesaid leased premises are in good condition and we believe they will be suitable for our purposes for at least twelve months. There is no affiliation between Signalife or any of our principals or agents and our landlords or any of their principals or agents.

MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

General

The following discussion of our financial condition and results of operations should be read in conjunction with (1) our audited financial statements for the year ended December 31, 2005 and explanatory notes included as part of this prospectus; and (2) our unaudited interim financial statements for the nine-month period ended September 30, 2006 and explanatory notes included as part of this prospectus.

Overview

Signalife is a medical device company focused on researching, developing medical devices which monitor and measure physiological signals in order to detect diseases that impact an individual s health. Physiological signals are small bioelectrical signals generated by the body.

Our initial product lines are heart monitor systems used to collect physiological data for electrocardiogram or ECG tests for the purpose of detecting and identifying cardiovascular disease. The core component of our products is our battery-operated, digital 12-lead Model 100 Module, a compact device approximately 4 x 3.5 x 1.5 inches in size and 5.5 oz. in weight, that allows a patient s heart to be continuously monitored over a period of 24 to 48 hours in a variety of settings both non-ambulatory (stationary) and ambulatory (moving) such as hospitals, surgeries, clinics, doctors offices, exercise and sports medicine clinics and laboratories. The Model 100 Module contains both our proprietary patented amplification technology which acquires, processes and amplifies ECG signals, as well as Bluetooth technology which allows the acquired signals to be wirelessly transmitted to a personal computer for interpretation and storage by the physician. Our Model 100 Module operates using a proprietary and patented amplification technology which provides the capability to enlarge and process the physiological signals to discriminate them from ambient or background electromagnetic noise and to facilitate the examination of the signal data for diagnostic purposes.

We have recently commenced commercial marketing of our first heart monitoring system using our Model 100 Module the Fidelity 100 Monitor System, and recorded our first revenues from product sales in October 2006. This

system is an integrated system in which our Model 100 Module collects, processes and amplifies ECG signals from that patient through a set of twelve electrode lead sets provided with the system, and then wirelessly transmits that signal to a nearby personal computer provided with the system. The signals are then displayed on a computer monitor and can be printed on a printer provided with the system for analysis by the cardiologist. We received our first sales revenues from this product in the fourth quarter of fiscal 2006.

We principally intend to sell the Fidelity 100 Monitor System as an integrated system containing all of the components the Model 100 Module, electrode lead sets, and a personal computer with monitor and printer, which could either be in a desk top or laptop configuration. The Model 100 Module and our proprietary ECG printing software may also be sold separate from the other components to physicians who prefer to use their own personal computers systems. As a result of these variables, the Fidelity 100 Monitor System will be offered in many different configurations.

The Fidelity 100 Monitor System will be principally used for clinical (resting) and in-patient ambulatory applications. For example, ECG data may be instantaneously acquired, processed, amplified and transmitted to the personal computer for analysis in stationary settings, such as while conducting ECG tests in resting or in-patient ambulatory settings or during surgeries.

We are currently marketing our products and services through our company sales team, which we are in the process of forming and training, and in certain cases on a co-exclusive basis through Rubbermaid Inc. (*Rubbermaid*), a subsidiary of Newell Rubbermaid Inc. In the latter case, Rubbermaid has co-exclusive rights with the company to market our Fidelity 100 Monitor System in the United States pursuant to a Sales and Marketing Services Agreement dated March 26, 2006. Rubbermaid is currently in the process of developing and training its sales staff under this agreement.

We are also completing development of an ambulatory Holter device (the *Signalife Holter Monitor*), which also operates using our Model 100 Module as its core component, and which will also be marketed in the United States by Rubbermaid. This device acquires, processes, amplifies and stores ECG data relating to arrhythmia and other transient heart disease over a period of 24 to 48 hours while the patient carries out his or her daily activities away from the physicians office or hospital. The signal data can be either stored on a storage chip contained in the device and downloaded by the physician at a later date when the patient returns to the physician s office, or transmitted to a patient monitoring center that will forward the data or otherwise make it available to the physician over the Internet. Although we have developed a production version of the Signalife Holter Monitor, we are still conducting physician preference testing studies on selected features of that device, and anticipate that we will make some minor modifications to that design before we commence marketing the product. We anticipate that we will complete final product modification activities and introduce the final Signalife Holter Monitor to market by the end of the first quarter of fiscal 2007. In the interim, physicians could use the Model 100 Module contained in the Fidelity 100 Monitor System in out-patient ambulatory settings should they choose to do so, although it would not have all of the features we would otherwise suggest for out-patient applications.

We are also developing several other products for the heart monitoring market, including an intracardiac monitor, a non-prescription over-the-counter cardiac monitor, and a prescription event recorder.

We are also actively pursuing other marketing alternatives through our internal sales staff. For example, we have recently entered into a letter of intent with Gold s Gym International, Inc. to conduct a pilot program in which patrons of the gym at selected facilities will be tested using Signalife s Fidelity 100 Monitor System in order to detect and identify cardiovascular disease that could be triggered or exacerbated by exercise programs. As part of the program, a set of test protocols and procedures will be developed to address cardiac risks inherent to exercise. If the program is successful, the parties will explore the expansion of the program to most of Gold s gyms as well as other national fitness facilities.

Concurrent with the Gold s gym project, we are also participating in the Athletes For Life program which will focus on developing protocols to test professional and amateur athletes for cardiovascular disease and abnormalities as part of

their regular training regime, and will also promote testing for impoverished communities where early detection of cardiovascular disease simply does not exist. A large number of high-profile athletes have indicated their desire both in participating in this program given the high incidence of cardiovascular abnormalities associated with athletes involved in professional sports and

track and field; and also sponsoring the community outreach portion of the program given their desire to promote community fitness and cardiovascular testing in the general community.

Results of Operations

Fiscal 2005 As Compared To Fiscal 2004

We incurred a net loss before preferred dividends of $8,660,688 for fiscal 2005, as compared to $6,966,243 for fiscal 2004. The $1,694,445 or 24% increase in our net loss for fiscal 2005 before preferred dividends was attributable to a $1,171,525 increase in general and administrative expenses and a $857,800 increase in net other expenses, partially offset by a $334,880 decrease in research and development expenses.

General and administrative expenses for fiscal 2005 were $6,224,105, representing a 23% increase over general and administrative expenses of $5,052,580 for fiscal 2004. The primary components of general and administrative expenses during fiscal 2005 were compensation and related costs, consulting and outside services, legal fees, audit, accounting and other professional fees and travel and entertainment. The $1,171,525 increase in general and administrative expenses was principally attributable to increases in compensation and related costs, $937,292; consulting and outside services, $1,273,123; travel and entertainment, $259,722; accounting and other professional fees, $178,545; and marketing, $94,705, all partially offset by decreases in legal fees, $896,641; investment banking, $135,187 and litigation settlement costs, $680,785. The overall increase in our general and administrative costs was the result of establishing a new headquarters and ramping up of administrative and sales and marketing functions in anticipation of the introduction of our products and services to market.

Research and development expenses for fiscal 2005 were $1,328,482, as compared to $1,663,362 for fiscal 2004. The $334,880 or 20% decrease in research and development expenses reflected the completion of research and development activities related to the development of a commercial monitoring system using our Model 100 Module. The primary components of the decrease in research and development activities for fiscal 2005 from 2004 were a decrease in prototype expenses of $431,086, partially offset by an increase in compensation and related costs and other expenses.

Net other expenses for fiscal 2005 was $1,108,101 in fiscal 2005, as compared to $250,301 for fiscal 2004. Other net expenses for fiscal 2005 was principally composed of interest expense, including amortization of debt discount, in the amount of $1,292,715 associated with our issuance of a debenture, and warrant repricing costs of $226,294, partially offset by a change in fair value of warrant liability of $318,000 and interest income of $92,908.

We also incurred preferred dividend expense of $54,920 for fiscal 2005, as compared to $295,452 for fiscal 2004. The $240,532 or 81% decrease in preferred dividend expense was principally attributable to a decrease in preferred shares outstanding, resulting from conversions of preferred shares into common shares.

Our net loss attributable to common stockholders was $8,715,608 for fiscal 2005 as compared to $7,261,695 for fiscal 2004. The $1,453,913 increase in net loss attributable to common stockholders was principally due to the aforesaid $1,694,445 increase in our net loss before preferred dividends, partially offset by the aforesaid decrease in preferred dividend expense.

Nine Months Ended September 30, 2006 As Compared To Nine Months Ended September 30, 2005 (unaudited)

We had $1,000,000 in exclusivity fee income for our nine-month interim period ended September 30, 2006. These fees were paid by Rubbermaid pursuant to a Sales and Marketing Services Agreement dated March 26, 2006. We had no exclusivity fee income for the nine-month interim period ended September 30, 2005. We recorded our first revenues from product sales in October 2006.

Research and development expenditures for our nine-month interim period ended September 30, 2006 were $692,388, as compared to $1,197,597 for the corresponding interim period in fiscal 2005. The overall decrease in research and development expenditures for the nine-month interim period ended September 30, 2006 was principally attributable to a lower overall amount of research and development activity during fiscal 2006 given the substantial completion of research and development activities relating to the development of our Fidelity 100 Monitor System in fiscal 2005. An additional factor was a shift of research and development activities to internal staff from outside consultants.

General and administrative expenses for our nine-month interim period ended September 30, 2006 were $7,441,667, as compared to $4,955,336 for the corresponding interim period in fiscal 2005. The primary components of general and administrative expenses for our nine-month interim period ended September 30, 2006 were legal fees, general consulting fees, salaries and stock based compensation and marketing and public relations. The $2,486,331 or 50% increase in general and administrative expenses was principally attributable to a $1,326,008 increase in salaries and compensation expense, a $670,191 increase in professional fees, including legal, accounting and investment banking; and a $355,449 increase in marketing and public relations expense, partially offset by a decrease of $628,670 in consulting fees. Included in salaries and stock based compensation for the nine-month interim period ended September 30, 2006 were charges of $1,501,066 related to the fair value of employee options which vested in that period, with no similar expense in 2005. These charges resulted from the implementation of a new accounting principal during the current period (see Note 2, *Basis Of Presentation And Significant Accounting Policies* contained in the explanatory notes to our interim financial statements included with this quarterly report).

We had net other income of $91,191 for our nine-month interim period ended September 30, 2006, as compared to net other expense of $1,151,439 for the corresponding interim period in fiscal 2005. The $1,242,630 improvement was principally attributable to the elimination of $1,292,463 and $226,294 in interest expense and warrant repricing, respectively, and other financing costs associated with a debenture issued and paid in fiscal 2005, together with a $41,873 increase in interest income attributable to higher average cash balances; partially offset by a elimination of $318,000 charge for warrant liability.

We incurred a net loss before preferred dividends of $7,042,864 for our nine-month interim period ended September 30, 2006, as compared to $7,304,372 for the corresponding interim period in fiscal 2005. The $261,508 or 4% decrease in our net loss before preferred dividends for our nine-month interim period ended September 30, 2006 was attributable to a $1,000,000 increase in revenues, a $1,242,630 increase in net other income, and a decrease of $505,209 in research and development expenditures, partially offset by a $2,486,331 increase in general and administrative expense.

Plan Of Operation

Our plan of operation for the twelve month period commencing October 1, 2006 is to:

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Ramp-up commercial marketing and sales efforts with respect to our Fidelity 100 Monitor Systems.

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Finalize design specifications for the Signalife Holter Monitor, and commence marketing this product by the end of first quarter 2007.

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Commence design, engineering and fabrication of a pre-production proto-type for the Signalife Intracardiac Monitor by the end of fiscal 2006.

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Commence design, engineering and fabrication of a production proto-type for the Signalife OTC Cardiac Monitor by the summer 2007.

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Complete our pilot program with Gold s Gym International, Inc. in which patrons of the gym at selected facilities will be tested using and Signalife s Fidelity 100 Monitor System in order to detect and identify cardiovascular disease that could be triggered or exacerbated by exercise programs, including developing a set of test protocols and procedures will be developed to address cardiac risks inherent to exercise.

We currently have budgeted $5,885,500 in cash expenditures for the twelve month period commencing October 1, 2006, including (1) $3,435,500 to cover our projected general and administrative expenses during this period; (2) $1,661,000 for research and development activities; (3) $583,000 to cover our projected sales and marketing expenses (excluding any sales and marketing, manufacturing and fulfillment costs associated with products sold during the twelve-month period, which we anticipate would be covered by any revenues associated with such sales); and $206,000 for production expenses. The foregoing expenditures exclude forecasted costs of good sold and direct sales costs, including sales commissions and delivery costs.

As discussed above, we have entered into a Sales and Marketing Services Agreement with Rubbermaid pursuant to which it will, at its cost, put together a national sales force to market our Fidelity 100 Monitor System and our Signalife Holter Monitor within the United States, and will also advertise and otherwise promote the products in medical literature, at trade shows, and through other mechanisms. In compensation for these services, Rubbermaid will be paid 35% of net sales of these products. Signalife will, in turn, handle all product fulfillment functions. We believe that the cost for Signalife to provide the same sales and marketing services to be provided by Rubbermaid under this agreement would be approximately $4-5 million.

We anticipate that we will add additional staff, either as employees or consultants, principally in direct sales marketing and distribution areas, during the twelve month period following the date of this quarterly report as sales activities increase. We also anticipate that we will also add additional accounting personnel, including a permanent chief financial officer, over this twelve-month period. We do not currently have an estimate as to the number or range of employees or consultants that would be added.

Our anticipated costs and projected completion dates described above are estimates based upon our current business plan, known resources and market dynamics. Our actual costs or actual project completion dates could vary materially from those projected. Our management team is continually re-evaluating our core business plan as it relates to our monitoring products and identifying new applications and markets for our technology. We may at any time decide to terminate our ongoing development plans with respect to products and services if they are deemed to be impracticable or not to be commercially viable. Further changes to our current business plan could also result, such as the acquisition of new products or services or the decision to manufacture our own products, resulting in a change in our anticipated strategic direction, investments, and expenditures. See that section of this prospectus captioned *Forward-Looking Statements* .

Liquidity And Capital Resources

Historical Sources of Capital Resources

We have principally financed our operations through a combination of (1) gross proceeds from contributed capital, the sale of our common shares, series A preferred shares and common share purchase warrants for cash, and the exercise of stock purchase warrants for cash; (2) the issuance of common shares or common share purchase warrants in

payment of the provision of services; and (3) gross proceeds from the sale of a debenture and common share purchase warrants. Included in the foregoing are the following significant transactions since January 1, 2004:

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On December 29, 2004, we sold an 8% convertible debenture in the amount of $2,000,000 to DKR SoundShore Oasis Holding Fund Ltd. (Oasis). Subject to our right to convert the debenture into common shares as discussed below, we were obligated to pay $400,000 in principal on the debenture in cash on May 16, 2005, June 1, 2005, July 1, 2005, August 1, 2005 and August 31, 2005, respectively. We were also obligated to pay 8% in interest on the outstanding principal on the debenture in cash on May 10, 2005, June 1, 2005, July 1, 2005, August 1, 2005 and August 31, 2005, respectively. On January 26, 2005, we filed a registration statement to register common shares issuable upon the conversion of the debenture as discussed below, and it was declared effective by the SEC on February 14, 2005. Accordingly, under the terms of the debenture we were also entitled to pay the principal and interest on the debenture in common shares in lieu of cash so long as we were not otherwise in default under the debenture, and satisfied certain other conditions including notice requirements.

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For so long as the debenture was unpaid, the debenture holder was entitled to convert the debenture into a number of common shares equal to the outstanding principal on the debenture divided by $5.25, such amount representing 105% of the closing price for our common shares on the trading day prior to the sale of the debenture. Principal under the debenture was convertible into shares at the rate of 85% of the average of the three lowest closing prices for those shares during the ten day period prior to the repayment date, while interest under the debenture was convertible into shares at the rate at 90% of the closing price immediately prior to the payment or delivery date. Pursuant to our right to convert all outstanding principal and interest under the debenture into common shares, we have since made all payments of interest and principal accrued through August 31, 2005 in common shares, with the exception of interest and principal payments due on June 1, 2005, which we paid in cash. As a consequence, the debenture has been paid in full.

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As additional consideration for the purchase of the debenture, we also granted to the debenture holder warrants entitling it to purchase 275,000 common shares at the price of $5.75 per share, or 115% of the closing price for those shares on the trading day prior to the sale of the debenture. These warrants lapse if unexercised by December 29, 2009. As the result of such grant, we recorded a non-cash deferred financing charge in the amount of $447,570 reflecting the fair value attributable to these warrants. We also recorded a non-cash beneficial conversion feature of $408,333, based upon the difference in the effective conversion price of the debenture and the closing price of our common stock on the date of issuance. As a result of these non-cash charges the effective annual rate of interest on the debenture is 89%. On April 20, 2005, we amended the terms of the common share purchase warrants by reducing the exercise price of that warrant from $5.75 per share to $2.40 per share. This amendment was effected in connection with procuring Oasis s waiver with respect to our issuance of $8 million in equity through two private placements as discussed below.

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On March 31, 2005, we sold a total of 1,562,500 unregistered common shares, together with common share purchase warrants entitling the holder to purchase 1,500,000 restricted common shares, to Trellus Partners, LP for the sum of $5,000,000 pursuant to a private placement. The warrants are exercisable at $1.60 per share, contain cashless exercise provisions, and lapse if unexercised on or before March 31, 2010. As part of the transaction, we agreed to file a registration statement with the SEC on or before April 20, 2005 to register the common shares sold and the common

shares issuable upon the conversion of the warrants. We further agreed to reduce the exercise price of the warrants to $1.20 per share should we fail to file the registration statement on a timely basis. Subsequent to the private placement, we procured an extension of the filing date to June 30, 2005, and filed the registration statement with the SEC on June 29, 2005. The registration statement was declared effective on July 22, 2005.

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On April 8, 2005, we sold a total of 937,500 unregistered common shares, together with common share purchase warrants entitling the holder to purchase 900,000 restricted common shares, to Lagunitas Partners LP, Gruber & McBaine International, Jon D. and Linda W. Gruber, and

J. Patterson McBaine for the sum of $3,000,000 pursuant to a private placement. The warrants are exercisable at $1.60 per share, contain cashless exercise provisions, and lapse if unexercised on or before April 8, 2010. As part of the transaction, we agreed to file a registration statement with the SEC within 20 days to register the common shares sold and the common shares issuable upon the conversion of the warrants. We further agreed to reduce the exercise price of the warrants to $1.20 per share should we fail to file the registration statement on a timely basis. Subsequent to the private placement, we procured an extension of the filing date to June 30, 2005, and filed the registration statement with the SEC on June 29, 2005. The registration statement was declared effective on July 22, 2005.

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On March 26, 2006, we entered into a Sales and Marketing Services Agreement with Rubbermaid. Under this agreement, in consideration for the rights to exclusively market and sell the Fidelity 100 Monitor System and the Signalife Holter Monitor within the United States, Rubbermaid agreed to pay Signalife $2,000,000 following execution of the agreement and an additional $1,000,000 to renew the agreement for an additional year on the first and second anniversary dates of the agreement (provided, in the event that less than 201 Fidelity 100 Monitor System units have been sold in the first year of the agreement, the first renewal fee shall be reduced to $500,000).

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On October 31, 2006, we closed several private placements to accredited institutional investors pursuant to which we received gross proceeds of $2,500,000 from Trellus Partners, LP, an existing shareholder, and its affiliates, Trellus Partners II, LP and Trellus Offshore Fund Ltd., and $430,000 from three new shareholders, Nite Capital LP, Otago Partners, LLC and Landmark Charity Foundation, through the sale of a total of 1,890,323 common shares priced at $1.55 per share, together with five-year warrants entitling the holders to purchase a total of 756,129 common shares at $2.23 per share. As part of the transaction, we agreed to file a registration statement with the SEC within 20 days of the closing date to register the common shares sold and the common shares issuable upon the conversion of the warrants. We further agreed to reduce the exercise price of the warrants to $1.83 per should we fail to file the registration statement on a timely basis, which condition we subsequently satisfied. Maxim Partners, LLC acted as placement agent with respect to procuring the three new shareholders, and was paid a cash commission of $32,250, or 7.5% of the proceeds raised from the new shareholders, plus five-year placement agents warrants entitling it to purchase units comprised of 27,742 common shares at $1.55 per share, plus warrants entitling it to purchase a total of 11,097 common shares at $2.23 per share.

Capital Resources Going Forward

We have approximately $3,564,000 of cash on hand as of the date of this prospectus to fund our operations going forward. As discussed above, our plan of operation for the twelve month period commencing October 1, 2006 is to commence our marketing and sales activities with respect to our Fidelity 100 Monitor System and Signalife Holter Monitor principally through Rubbermaid, and to continue product development activities with respect to our Signalife Intracardiac Monitor, and Signalife OTC Cardiac Monitor and Signalife Event Recorder products, and to complete our Gold s Gym pilot project, and we have budgeted $5,885,500 in cash costs for that period. The aforesaid budgeted costs exclude any manufacturing, sales and marketing and fulfillment costs associated with products sold during the twelve-month period, which we anticipate would generate positive cash flow after payment of such costs. We believe that our cash on hand, together with anticipated revenues, will be sufficient to cover these anticipated expenditures.

We are also taking steps to preserve our cash, including making payments to selected service providers and employees in common shares in lieu of cash. Should our costs and expenses prove to be greater than we currently anticipate, or should we change our current business plan in a manner that will increase or accelerate our anticipated costs and expenses, such as through an acquisition of new products, the depletion of our working capital would be accelerated. To the extent it becomes necessary to raise additional cash in the future as our current cash and working capital resources are depleted, we will seek to raise it through the public or private sale of debt or equity

securities, the procurement of advances on contracts or licenses, funding from joint-venture or strategic partners, debt financing or short-term loans, or a combination of the foregoing. We may also seek to satisfy indebtedness without any cash outlay through the private issuance of debt or equity securities. We currently do not have any binding commitments for, or readily available sources of, additional financing. We cannot give you any assurance that we will be able to secure the additional cash or working capital we may require to continue our operations.

Critical Accounting Policies

Our discussion and analysis of our financial condition and results of operations are based upon our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosures of contingent assets and liabilities. For a description of those estimates, see Note 3, *Significant Accounting Policies*, contained in the explanatory notes to our audited financial statements for the year ended December 31, 2005 which are included in this prospectus.

On an ongoing basis, we evaluate our estimates, including those related to reserves, deferred tax assets and valuation allowance, impairment of long-lived assets, fair value of equity instruments issued to consultants for services and estimates of costs to complete contracts. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions; however, we believe that our estimates, including those for the above-described items, are reasonable.

Recent Accounting Pronouncements

In December 2004, the FASB issued SFAS No.123 (revised 2004), *Share-Based Payment*. SFAS 123(R) provides investors and other users of financial statements with more complete and neutral financial information by requiring that the compensation cost relating to share-based payment transactions be recognized in financial statements. That cost will be measured based on the fair value of the equity or liability instruments issued. SFAS 123(R) covers a wide range of share-based compensation arrangements including share options, restricted share plans, performance-based awards, share appreciation rights, and employee share purchase plans. SFAS 123(R) replaces FASB Statement No. 123, *Accounting for Stock-Based Compensation*, and supersedes APB Opinion No. 25, *Accounting for Stock Issued to Employees*. SFAS 123, as originally issued in 1995, established as preferable a fair-value-based method of accounting for share-based payment transactions with employees. However, that statement permitted entities the option of continuing to apply the guidance in Opinion 25, as long as the footnotes to financial statements disclosed what net income would have been had the preferable fair-value-based method been used. Public entities (other than those filing as small business issuers) will be required to apply SFAS 123(R) as of the first interim or annual reporting period that begins after June 15, 2005. SFAS 123(R) is applicable for Signalife effective the first interim period that starts after December 15, 2005. Signalife has evaluated the impact of the adoption of SFAS 123(R), and has determined that the impact is significant to the company s overall results of operations and financial position. For a description of the impact since adoption, see Note 3, *Significant Accounting Policies*, in the interim financial statements included as part of this prospectus.

In December 2004 the FASB issued two Staff Positions FSP FAS 109-1, *Application of FASB Statement 109 Accounting for Income Taxes to the Tax Deduction on Qualified Production Activities Provided by the American Jobs Creation Act of 2004,* and FSP FAS 109-2 *Accounting and Disclosure Guidance for the Foreign Earnings Repatriation Provision within the American Jobs Creation Act of 2004.* Neither of these affected the Company as it does not participate in the related activities.

In March 2005, the staff of the SEC issued Staff Accounting Bulletin No. 107 (*SAB 107*). The interpretations in SAB 107 express views of the staff regarding the interaction between SFAS 123(R) and certain SEC rules and regulations and provide the staff s views regarding the valuation of share-based payment arrangements for public companies. In particular SAB 107 provides guidance related to share-based payment transactions with nonemployees, the transition from public entity status, valuation methods (including assumptions such as expected volatility and expected term), the accounting for certain redeemable financial instruments issued under share-based payment arrangements, the classification of compensation expense, non-GAAP financial measures, first-time adoption of SFAS 123(R) in an interim period, capitalization of compensation cost related to share-based payment arrangements, the accounting for income tax effects of share-based payment arrangements upon adoption of SFAS 123(R), the modification of employee share options prior to adoption of SFAS 123(R) and disclosures in Management s Discussion and Analysis subsequent to adoption of SFAS 123(R).

In May 2005, the FASB issued SFAS No. 154, *Accounting Changes and Error Corrections* (SFAS 154) which replaces Accounting Principles Board Opinions No. 20 *Accounting Changes* and SFAS No. 3, *Reporting Accounting Changes in Interim Financial Statements-An Amendment of APB Opinion No. 28* . SFAS 154 provides guidance on the accounting for and reporting of accounting changes and error corrections. It establishes retrospective application, or the latest practicable date, as the required method for reporting a change in accounting principle and the reporting of a correction of an error. SFAS 154 is effective for accounting changes and corrections of errors made in fiscal years beginning after December 15, 2005 and was adopted by Signalife in the first quarter of 2006 resulting in no impact on the financial statements.

In July 2006, the FASB issued FASB Interpretation No. 48 (*FIN 48*), *Accounting for Uncertainty in Income Taxes* . FIN 48 clarifies the accounting for uncertainty in income taxes recognized in an enterprises financial statements in accordance with FASB Statement No. 109, *Accounting for Income Taxes* . FIN 48 prescribes a recognition threshold and measurement attributable for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. FIN 48 also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosures and transitions. FIN 48 is effective for fiscal years beginning after December 15, 2006. Management is currently analyzing the effects of FIN 48.

In September 2006, the FASB issued SFAS No. 157, "*Fair Value Measurements*." SFAS 157 defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles, and expands disclosures about fair value measurements. SFAS 157 is effective for the company on January 1, 2008. Managenent does not expect that SFAS 157 will have a significant impact on our financial statements.

On September 13, 2006, the SEC issued Staff Accounting Bulleting No. 108 (*SAB 108*). SAB 108 provides interpretive guidance on how the effects of the carryover or reversal of prior year misstatements should be considered in quantifying a potential current year misstatement. Prior to SAB 108, companies might evaluate the materiality of financial statement misstatements using either the income statement or balance sheet approach, with the income statement approach focusing on new misstatements added in the current year, and the balance sheet approach focusing on the cumulative amount of misstatement present in a company s balance sheet. Misstatements that would be material under one approach could be viewed as immaterial under another approach, and not be corrected. SAB 108 now requires that companies view financial statement misstatements as material if they are material according to either the income statement or balance sheet approach. Management has analyzed SAB 108 and determined that upon adoption it will have no impact on the reported results of operations or financial conditions.

LEGAL PROCEEDINGS

We have summarized below (1) any legal or governmental proceedings relating to our company or properties to which we are a party which we consider to be material and which are pending as of the date of this prospectus, and (2) any proceedings to which any of our directors, executive officers or affiliates are a party adverse to us or which have a material interest adverse to us which are pending as of the date of this prospectus.

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On March 30, 2006, a complaint was filed in the Los Angeles County Superior Court against Signalife, each of its current directors, ARC Finance Group, LLC, Tracy Hampton-Stein, Mitchell Stein, and Atlas Stock Transfer Corporation, entitled *Marvin Fink, individually, and Marvin Fink as Trustee of the Fink Family Trust, Plaintiffs, vs. Signalife, Inc., et al, Defendants*. In the complaint, Mr. Fink alleges various causes of action including, without limitation, breach of contract, breach of the implied covenant of good faith and fair dealing, breach of fiduciary duty, deceit, fraud, and negligence, and seeking damages and a mandatory injunction forcing Signalife to accept a legal opinion letter from Mr. Fink's legal counsel and to remove a restrictive legend from his Signalife common shares. The gravamen of the complaint is that the defendants induced Mr. Fink to enter into an employment agreement with Signalife in 2002 providing for payment of compensation in the form of 2,100,000 shares of restricted stock, but have since refused to remove the restrictive legend from the shares to allow Mr. Fink to sell the shares on the public market under SEC Rule 144. Signalife believes that Mr. Fink's claims are without basis and is vigorously defending the action. On May 30, 2006, the company and other defendants filed Demurrers and Special Motions to Strike attacking each cause of action and the complaint as a whole as legally deficient and lacking in evidentiary support, and seeking dismissal of the action in its entirety on this and other grounds. A Motion to Quash challenging personal jurisdiction was also filed on behalf of certain of the individual defendants, which the Court granted, resulting in dismissal of four of the named defendants. Subsequently, plaintiffs filed a First Amended Complaint ("FAC"), to which defendants filed renewed Demurrers and Special Motions to Strike. At a hearing held on September 1, 2006, the Court denied defendants' Special Motions to Strike, and granted in part and denied in part the Demurrers, with leave to amend. Defendants filed a Notice of Appeal of the Court's ruling denying their Special Motions to Strike which has resulted in a stay of the lawsuit pending the appeal. Based upon certain actions of Mr. Fink the company is currently investigating, the company shall seek a determination or shall use self-help to issue a stop transfer notification on all of Mr. Fink s shares for fraud and breach of contract. As of the date of this filing, neither of these remedies have been pursued yet by the company.

MANAGEMENT

Identity

The following table identifies our current executive officers and directors, their respective offices and positions, and their respective dates of election or appointment:

Name And Municipality Of Residence	Age	Office	Initial Election Or Appointment Date

Pamela M. Bunes Greenville, South Carolina	42	President, Chief Executive Officer, and Director	March 22, 2005
Kevin F. Pickard Valencia, California	43	Interim Chief Financial Officer	October 23, 2006
Budimir S. Drakulic, Ph.D. Los Angeles, California	56	Vice President and Chief Technology Officer	October 15, 2002

Lowell T. Harmison, Ph.D. Washington, D.C.	69	Director	June 6, 2003
Ellsworth Roston Los Angeles, California	83	Director	November 1, 2002
Jennifer Black Lake Oswego, Oregon	51	Director	January 20, 2004
Norma Provencio Los Angeles, California	49	Director	July 29, 2005
Rowland Perkins Los Angeles, California	72	Director	August 23, 2005
Charles H. Harrison Boulder City, Nevada	64	Director	October 23, 2006

Ms. Bunes and Dr. Drakulic provide their services as executive officers on a full-time permanent basis. Mr. Pickard provides his services as an executive officer on a non-exclusive part-time contract basis through Pickard & Company, CPA s, P.C. We anticipate that Mr. Pickard will devote approximately 5-25% of his time, or two to fifteen hours per week, to Signalife depending upon the nature of the financial projects he is working on.

There are no family relationships between any two or more of our directors or executive officers. There is no arrangement or understanding between any of our directors or executive officers and any other person pursuant to which any director or officer was or is to be selected as a director or officer, and there is no arrangement, plan or understanding as to whether non-management shareholders will exercise their voting rights to continue to elect the current board of directors. There are also no arrangements, agreements or understandings to our knowledge between non-management shareholders that may directly or indirectly participate in or influence the management of our affairs.

Business Experience

Ms. Pamela M. Bunes has served as our President and Chief Executive Officer since April 15, 2005; as Assistant Secretary since March 26, 2005, and as a director since March 22, 2005. Prior to joining Signalife, Ms. Bunes had been employed by Biosense Webster, Inc., from August 2004 to April 2005. Prior to that, Ms. Bunes was employed as Executive Account Manager with Ethicon Endo-Surgery, Inc., having started as Account Manager of that company in October 1990 until her transfer to Biosense Webster. Biosense Webster and Ethicon Endo-Surgery are each subsidiaries of Johnson & Johnson (NYSE:JNJ). Prior to that, Ms. Bunes was a Corporate Loan Officer and Vice President from 1986 to October 1990, and Analyst for the Specialized Industries Mergers and Acquisitions Group (Banking) from 1985 to 1986, of First Union National Bank. Ms. Bunes has a Bachelors of Arts degree with double majors in Economics and Business Administration (Finance) from Converse College in Spartanburg, South Carolina.

Mr. Kevin F. Pickard has provided his services as our interim Chief Financial Officer since October 13, 2006 on a contract basis through Pickard & Company, CPA s, P.C., an accounting firm that specializes in providing SEC accounting and other management consulting services for small to medium sized companies, including preparing required SEC filings for public companies, due diligence on potential acquisitions, preparing projections and business plans, assisting with restructuring of companies, and positioning companies for initial public offerings. Mr. Pickard has been the principal of Pickard & Company, CPA s, P.C. since 1998. Prior to that, Mr. Pickard was a Partner with Singer Lewak Greenbaum & Goldstein, LLP, from 1996 to 1998, where is co-managed the firm s securities practice group. Mr. Pickard also spent over nine years with Coopers & Lybrand, L.L.P. (currently

PricewaterhouseCoopers, LLP), where he focused on the auditing companies in the insurance, high-tech and manufacturing industries. Mr. Pickard holds a Bachelors of Science and Masters degrees in Accounting from Brigham Young University.

Dr. Budimir S. Drakulic has served as our Vice President and Chief Technology Officer since October 15, 2002. Dr. Drakulic has more than 25 years of experience in the design, development and integration of hardware and software modules for biomedical microelectronics circuits and systems. From 1997 through February of 2002, Dr. Drakulic was research and development principal for Advanced Heart Technologies, Inc., and its predecessor Advanced Heart Monitoring. From February of 2002 until October 15, 2002 Dr. Drakulic was involved in independent research. Dr. Drakulic was the Consultant and Chief Scientist, Medical Device Business Unit for Teledyne Electronic Technologies from 1992 through 1997. Before that, he held numerous positions affiliated with the University of California at Los Angeles, including Visiting Assistant Professor with the Electrical Engineering Department and Director of the Microelectronics Development Lab at the Crump Institute for Medical Engineering. He holds a Bachelor of Science degree in electrical engineering from the University of Belgrade, Yugoslavia. He also holds a Masters degree and a Ph. D. in Electronic and Biomedical Engineering from the same university. Dr. Drakulic was the recipient of the Ralph and Marjorie Crump Prize for Excellence in Medical Engineering from UCLA in 1985, and was a Research Fellow with the Crump Institute for Medical Engineering at UCLA. Dr. Drakulic filed a petition for bankruptcy in November 2001.

Dr. Lowell T. Harmison has served as a director since June 6, 2003. Dr. Harmison also served as interim Chief Executive Officer from March 26, 2005 to April 15, 2005 upon the appointment of Ms. Bunes, and as Co-Chief Executive Officer thereafter until July 15, 2005 when Ms. Bunes assumed complete responsibilities for the position. Dr. Harmison has also served as a Senior Advisor since February of 2003. Dr. Harmison has a very distinguished 35 year career in the field of biomedicine. Most recently, Dr. Harmison has served as a director and as chairman of the board of World Doc Foundation, a private foundation promoting health education and expanded knowledge of telemedicine, since June 2002. Dr. Harmison has also served as a director and chief executive officer of ProCell Corporation, a cancer research company, since June 2000, and as a director of pHA Bio Remediation, an environmental restoration company, since 1997. Dr. Harmison also served as chairman of Sequella Foundation, which promotes research into tuberculosis, from 1997 to 2001, and served as a director of Sequella Inc., a research and development company for tuberculosis products, from 1997 to 2000. Dr. Harmison is the holder of the first domestic and foreign patents on the fully implantable artificial heart; and served as Chief Executive Officer of USET, Inc. from 1987 to 1989. Dr. Harmison also served as the Director of the Robert Maxwell Foundation, a private foundation operating internationally and consisting of 21 operating companies, from 1987 to 1989. He also served as the Principal Deputy Assistant Secretary for Health of the U.S. Public Health Service, Department of Health and Human Services. Dr. Harmison has a Ph. D. from the University of Maryland and a B.S. and M.S. from West Virginia University. He was also given an honorary Doctor of Science degree from West Virginia University.

Mr. Ellsworth Roston has served as a director since November 1, 2002. Mr. Roston has practiced patent law since 1943, and currently serves as Of Counsel to the patent firm of Fulwider Patton Lee & Utecht since 1997. Mr. Roston has a history of assisting technology companies during their development stages. Most recently, Mr. Roston has served as a director of Natgram, Inc., an internet software developer, since 1998, Amerlin Inc., a pet house/kennel manufacturer, since 1996, and American Legal Net, a provider of legal forms, since April 2004. Mr. Roston also served as a director of Rokenbok Corporation, a toy manufacturer, from 1996 through February 2004, and of Dome Industries, an electronic hardware manufacturer, from 1991 through 2002. Mr. Roston was one of three founders of Brooktree Corporation, and served on its board of directors for 15 years until it was purchased by Rockwell Corporation in 1998. Mr. Roston received his undergraduate degree and his law degree from Yale University.

Ms. Jennifer Black has served as a director since January 20, 2004. Ms. Black has been President of her own business, Jennifer Black & Associates, since September 2003. Her firm provides independent

research for institutional clients. Previously, since 1979, Ms. Black was with Black & Co., where she was responsible for research coverage on the apparel and specialty retail industries. Ms. Black was President of Black & Co. when it was acquired by First Security Van Kasper in April 2000. Subsequently, Wells Fargo Securities acquired First Security Van Kasper in September 2000. Ms. Black left Wells Fargo Securities in September 2003. Ms. Black serves on the Governors Council of Economic Advisors for the State of Oregon, where she has been re-appointed to a second three-year term. Ms. Black attended Washington State and Portland State Universities.

Ms. Norma Provencio has served as a director since July 29, 2005. Ms. Provencio is a certified public accountant with over 26 years of accounting experience, including significant audit and public company experience that qualify her as being financially sophisticated for AMEX audit committee purposes. Since October 2003, Ms. Provencio has been president and owner of Provencio Advisory Services, Inc., a healthcare financial advisory firm. Prior to that she was Partner-in-Charge of the Healthcare Industry for the Pacific Southwest for the KPMG LLP Partnership from May 2002 to September 2003. Prior to that she was with Arthur Andersen from 1979 to May 2003, and was Partner-in-Charge of Andersen s Pharmaceutical, Biomedical and Healthcare Practice for the Pacific Southwest from 1995 to 2002. Ms. Provencio has also served on the Board of Directors of International Aluminum Corp. since October 2005. Ms. Provencio holds a bachelors of science degree in accounting from Loyola Marymount University.

Mr. Rowland Perkins has served as a director since August 23, 2005. Mr. Perkins has been involved in the entertainment industry for more than 40 years. Since 1995, Mr. Perkins has been President of Double Eagle Entertainment, Inc., a company he established to develop and Produce feature, network and cable television films. Mr. Perkins was the founding President of Creative Artists Agency, Inc., a company he co-founded in 1975 to represent all areas of creative talent in the entertainment industry. From 1959 to 1975, Mr. Perkins was an executive with the William Morris Agency, Inc. At William Morris, Mr. Perkins established and lead its TV Talent Division as Director, and then organized an led its Creative Services Department as Vice President. Since 2001, Mr. Perkins has been Chairman of the Board of NPOWR Digital Media, Inc., a privately-held tech company which is promoting stimTV , which allows consumers to personalize their entertainment choices automatically on the broadband market. Mr. Perkins also serves as a consultant, executive producer and the U.S. representative for Eagle Pictures SpA, an Italian film production and distribution company involved in the motion picture and television businesses internationally. He also continues to executive produce select films. In addition to the above, Mr. Perkins has been a long time member of the Academy of Television Arts and Sciences and has served on its Board of Governors. He also has been a long time member of the Hollywood Radio and Television Society and served on its Board of Directors. He has also served for fifteen years on the USC Libraries Scripter s Award selection panel that annually selects the best screenplay/novel adaptation each year and gives awards to the novel s author and the screenwriter. Mr. Perkins graduated from UCLA with a bachelors of science degree in business administration ,and also holds an Honorary PhD in Media Communications from Pacific Western University.

Mr. Charles H. Harrison is a CPA with over 35 years of accounting and business management experience focusing on firms in the healthcare business. Since June 2004, Mr. Harrison has been Chief Operating Officer at the Boulder City Hospital located in Boulder City, Nevada. Prior to that, from 1996 to 2004, Mr. Harrison provided independent business consulting services to various hospitals and other healthcare providers. From 1969 to 1996, Mr. Harrison was an accountant with Arthur Andersen LLP, having risen to the position of Partner in Charge of Healthcare for the firm s Metropolitan Southern California practice. Mr. Harrison holds a Bachelors of Science degree in Accounting and a Masters of Business Administration degree in Finance from the University of Southern California.

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Board Of Directors

Our bylaws set the authorized number of directors on our board of directors at not less than three nor more than nine, with the actual number fixed by a resolution of our board. As noted above, there are currently seven directors serving on our board, Mss. Bunes, Black and Provencio, Dr. Harmison, and Messrs. Roston, Perkins and Harrison. All of the directors will serve until the next annual meeting of shareholders and until their successors are elected and qualified by our shareholders, both common and preferred, voting on a cumulative basis as one class, or until their earlier death, retirement, resignation or removal. Each of the directors other than Ms. Bunes and Dr. Harmison are independent directors as that term is defined by AMEX.

Board Committees

Our board of directors has established three committees to date, an audit committee currently comprised of Ms. Provencio, as chairman, and Ms. Black and Messrs. Harrison and Perkins as members; a compensation committee currently comprised of Mr. Perkins, as chairman, and Mr. Roston and Ms. Black as members; and a nomination and qualifications committee currently comprised of Mss. Provencio and Black.

Board Compensation

Our current policy with respect to compensating directors for serving on the full board is to compensate them through stock grants. Specifically, upon his or her appointment to our board, each new director is granted an option to purchase 50,000 common shares, exercisable at its then trading price. These options are fully vested upon grant, and lapse in five years if not exercised. Each director will thereafter automatically be granted options on the anniversary of his or her appointment date entitling such director to purchase an additional 28,000 common shares, which options will vest quarterly based upon the continued provision of services on the board, and lapse in five years if not exercised. The exercise price for these options is fixed at current market price as of the date of grant.

Our current policy with respect to compensating directors for serving on our audit committee is to compensate the members with a combination of cash and common share purchase options. Specifically, the chairman of the audit committee is entitled to receive a $3,000 quarterly cash retainer, plus $1,500 fee per each meeting attended. Upon his or her appointment, the chairman is also granted an option to purchase 30,000 common shares, exercisable at its then trading price. The chairman will thereafter automatically be granted options on the anniversary of his or her appointment entitling him or her to purchase an additional 30,000 common shares. The other members of the audit committee receive slightly lower compensation, to wit, a $2,000 quarterly cash retainer, a $1,000 cash fee per each meeting attended; and the grant of an option to purchase 25,000 common shares, exercisable at its then trading price. All committee options vest in four quarterly installments subject to attendance at least 90% of the committee meetings during that quarter, and lapse in five years if not exercised.

Our current policy with respect to compensating directors for serving on our compensation committee is to grant each member an option to purchase 5,000 common shares, exercisable at its then trading price, upon his or her appointment to the committee and upon each annual anniversary thereafter. All committee options vest in four quarterly installments subject to attendance at least 90% of the committee meetings during that quarter, and lapse in five years if not exercised.

We have not yet instituted a policy for compensating members on our nomination and qualifications committee.

The following table describes the common share purchase options granted to our directors as of the date of this prospectus as compensation for serving on our board and, if applicable, committees of our board.

The following table does not include common share purchase options principally granted for the provision of services in other capacities for the company, including as an officer or as a consultant.

Name	Type	Grant Date	Common Shares Purchasable	Exercise Price	Expiration Date
Pamela M. Bunes (1)	Board	7/22/2005	50,000	$ 3.43	7/22/2010
	Board	4/15/2006	28,000	$ 3.11	4/15/2011
Ellsworth Roston	Board	2/6/2003	150,000(2)	$ 0.88	2/5/2008
	Board	11/3/2003	28,000	$ 4.40	11/2/2008
	Comp. Com.	4/1/2004	2,000	$ 6.00	3/31/2009
	Audit Com.	7/8/2004	1,500	$ 3.95	7/7/2009
	Board	11/1/2004	28,000	$ 2.90	10/31/2009
	Audit Com.	1/3/2005	2,500	$ 5.05	1/2/2010
	Comp. Com.	1/3/2005	5,000	$ 5.05	1/2/2010
	Comp. Com.	8/8/2006	5,000	$ 2.76	8/8/2011
	Board	11/1/2005	28,000	$ 3.18	10/31/2010
Dr. Lowell T. Harmison	Board	6/5/2003	50,000	$ 4.20	6/5/2008
	Board	6/6/2004	28,000	$ 6.25	6/5/2009
	Board	6/6/2005	28,000	$ 4.20	6/5/2010
	Board	6/6/2006	28,000	$ 2.36	6/5/2011
Jennifer Black	Board	1/20/2004	50,000	$ 3.50	1/19/2009
	Audit Com.	4/1/2004	500	$ 6.00	3/31/2009
	Audit Com.	1/3/2005	10,000	$ 5.05	1/2/2010
	Board	1/20/2005	28,000	$ 3.65	1/19/2010
	Audit Com.	1/3/2006	10,000	$ 2.70	1/2/2011
	Board	1/20/2006	28,000	$ 2.90	1/19/2011
	Board	8/8/2006	25,000	$ 2.76	8/8/2011
	Comp. Com.	8/8/2006	5,000	$ 2.76	8/8/2011
Norma Provencio	Board	7/29/2005	50,000	$ 3.34	7/29/2010
	Audit	7/29/2005	10,000	$ 3.34	7/29/2010
	Board	7/29/2006	28,000	$ 2.76	7/29/2010
	Audit Com.	8/8/2006	30,000	$ 2.76	8/8/2011
Rowland Perkins	Board	8/23/2005	50,000	$ 3.45	8/23/2010