

CLEARSIGN COMBUSTION CORP
Form 424B2
December 07, 2016

Filed Pursuant to 424(b)(2)
Registration No. 333-208784

PROSPECTUS SUPPLEMENT
(To Prospectus Dated January 7, 2016)

2,594,082 Units
Consisting of an Aggregate of Up to 2,594,082 Shares
of Common Stock
and Warrants to Purchase Up to 2,594,082 Shares of
Common Stock
at a Subscription Price of \$4.00 Per Unit

We are distributing to holders of our common stock, at no charge, non-transferable subscription rights to purchase units. Each unit, which we refer to as a Unit, consists of one share of common stock and a warrant representing the right to purchase one share of common stock, which we refer to as the Warrants. We refer to the offering that is the subject of this prospectus as the Rights Offering.

In the Rights Offering, you will receive non-transferable subscription rights (Subscription Rights) to purchase 0.2 of a Unit for each share of common stock you own at 5:00 p.m. Eastern time on December 19, 2016, the record date of the Rights Offering, or the Record Date. You will need to exercise 5 Subscription Rights to purchase a Unit. The common stock and the Warrants comprising the Units will separate upon the effectiveness of the exercise of the rights and will be issued as separate securities. We intend to list the Warrants for trading on the NASDAQ Capital Market, although we cannot assure you that the listing agreement will be approved. The Subscription Rights will not be tradable.

Each 5 Subscription Rights will entitle you to purchase one Unit at a subscription price per Unit of \$4.00, which we refer to as the Subscription Price. Each Warrant entitles the holder to purchase one share of common stock at an exercise price equal to the Subscription Price from the date of issuance through its expiration two years thereafter. The Subscription Rights will expire if they are not exercised by 5:00 p.m. Eastern time on January 13, 2017, which we sometimes refer to as the Expiration Date. Once made, all exercises of Subscription Rights are irrevocable. If all the Subscription Rights are exercised we will sell 2,594,082 Units.

While none of our directors or executive officers has entered into any binding commitment or agreement to exercise Subscription Rights received in the Rights Offering, our directors and executive officers have indicated their interest in subscribing for up to an aggregate of \$404,000 in Units in the Rights Offering, which would represent full exercise of each of their respective Subscription Rights.

We have entered into a Dealer Manager and Placement Agent Agreement, referred to in this prospectus supplement as the MDB Agreement pursuant to which we have engaged MDB Capital Group LLC, or MDB , to act as the dealer manager in the Rights Offering and placement agent for any Units not purchased under the Subscription Rights. These Units are sometimes referred to as the Offered Units. MDB will offer the Offered Units on a best efforts, no minimum

2,594,082 Units Consisting of an Aggregate of Up to 2,594,082 Shares of Common Stock and Warrants to Purchas

basis. Each Offered Unit will be identical to the Units, and offered on the same terms as a Unit is sold under the Subscription Rights. Funds for the purchase of the Offered Units will be deposited in an escrow account maintained by MDB and the Company with Delaware Trust Company, until the closing of the sale of the Offered Units. If the sale of the Offered Units is not completed, if an investor's number of Offered Units to be purchased is reduced, or if the fundamental terms of the Offered Units are changed, then the funds held in escrow for Offered Units not being sold will be returned to the investor, without interest or penalty, as soon as practicable. The closing of the sale by the

Company of the Offered Units will be on one occasion, on or before January 31, 2017. MDB and certain of its affiliates beneficially own approximately 7.6% of our common stock, and they may exercise their Subscription Rights.

These persons may also purchase Offered Units.

Investing in our securities involves a high degree of risk. See the section entitled Risk Factors beginning on page S-11 of this prospectus supplement and page 8 of the prospectus. You should carefully consider these risk factors, as well as the information contained in this prospectus, before you invest.

VStock Transfer, LLC will serve as the Subscription Agent for the Rights Offering. The Subscription Agent will hold the funds we receive from subscribers until we complete, abandon or terminate the Rights Offering. If you want to participate in the Rights Offering and you are the record holder of your shares, we recommend that you submit your subscription documents to the Subscription Agent well before the deadline. If you want to participate in the Rights Offering and you hold shares through your broker, dealer, bank, or other nominee, you should promptly contact your broker, dealer, bank, or other nominee and submit your subscription documents in accordance with the instructions and within the time period provided by your broker, dealer, bank, or other nominee. For a more detailed discussion, see The Rights Offering Methods for Exercising Subscription Rights .

Our board of directors reserves the right to terminate the Rights Offering for any reason any time before the completion of the Rights Offering. If we terminate the Rights Offering, all subscription payments and funds to purchase the Offered Units received in escrow will be returned as soon as practicable, without interest or penalty.

Our common stock is listed on the NASDAQ Capital Market, or NASDAQ, under the symbol CLIR . On December 6, 2016, the last reported sale price of our common stock was \$3.85. The aggregate market value of our outstanding voting common stock held by non-affiliates, based upon a closing sale price of our common stock on October 10, 2016, was \$73,991,000. During the 12 calendar month period that ends on, and includes, the date of this prospectus supplement, we sold no securities pursuant to General Instruction I.B.6. of Form S-3. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell securities registered on this registration statement in a public primary offering with a value exceeding more than one-third of our public float in any 12-month period so long as our public float remains below \$75.0 million.

On December 29, 2015 we filed a registration statement, number 333-208784, on Form S-3 registering a total of \$30,000,000 in securities that we may issue from time-to-time. With this prospectus supplement, we are using an aggregate of up to \$21,997,816 of the securities registered on the registration statement of which this prospectus supplement is a part, consisting of \$10,376,328 for the shares of common stock and Warrants included in the Units, \$10,376,328 for the shares of common stock underlying the Warrants included in the Units sold in the Rights Offering and the Offered Units, and, if we pay MDB with Units, \$622,580 for the shares of common stock and Warrants included in the Units that we may issue to MDB and \$622,580 for the shares of common stock underlying the Warrants that we may issue to MDB upon exercise of the Warrants included in their Units. Therefore, after this transaction, assuming that we compensate MDB with Units rather than cash, we will have, as of the date hereof, \$8,002,184 available for future securities offerings under the registration statement.

The Subscription Rights are non-transferrable and will not be listed for trading on NASDAQ or any other stock exchange or market. You are urged to obtain a current price quote for our common stock before exercising your Subscription Rights.

We have agreed to compensate MDB for its services as the dealer manager and the placement agent with either (i) a cash fee equal to 6% of the gross proceeds from the sale of Units in the Rights Offering and the Offered Units, or (ii), with the agreement of MDB, with a number of Units totaling 6% of the Units sold in the Rights Offering and of the Offered Units sold. The following table represents the net proceeds to us (before expenses) assuming we compensate MDB with cash:

	Per Share	Total
Public offering price ⁽¹⁾	\$ 4.00	\$ 10,376,328
Dealer manager and placement agency fees ⁽²⁾	\$ 0.24	\$ 623,000
Proceeds to ClearSign Combustion Corporation (before expenses) ⁽³⁾	\$ 3.76	\$ 9,753,328

(1) Assumes the Rights Offering is fully subscribed, but excludes proceeds from the exercise of Warrants included within the Units.

(2) In connection with the Rights Offering, we have agreed to pay to MDB 6% of the gross proceeds from the sale of the Units for its services as a dealer manager and for its services as a placement agent. We may alternatively pay MDB with Units, in which case the dealer manager and placement agency fee of \$623,000 will not be deducted, and the Company will receive \$10,376,328. See Plan of Distribution for more information.

(3) Does not include a deduction for the expenses of the Rights Offering payable by the Company estimated to be \$155,000, including \$60,000 to be paid to MDB for its expenses.

Our board of directors is making no recommendation regarding your exercise of the Subscription Rights. You should carefully consider whether to exercise your Subscription Rights before the Expiration Date. You may not revoke or revise any exercises of Subscription Rights once made unless we terminate the Rights Offering.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is December 7, 2016

TABLE OF CONTENTS

TABLE OF CONTENTS
PROSPECTUS SUPPLEMENT

	Page
<u>About this Prospectus Supplement</u>	<u>S-1</u>
<u>Questions and Answers Relating to the Rights Offering</u>	<u>S-2</u>
<u>Summary of the Rights Offering</u>	<u>S-8</u>
<u>Risk Factors</u>	<u>S-11</u>
<u>Special Note Regarding Forward-Looking Statements</u>	<u>S-15</u>
<u>Use of Proceeds</u>	<u>S-16</u>
<u>Capitalization</u>	<u>S-17</u>
<u>Dilution</u>	<u>S-18</u>
<u>Market Price of our Common Stock and Related Shareholder Matters</u>	<u>S-20</u>
<u>The Rights Offering</u>	<u>S-21</u>
<u>Material U.S. Federal Income Tax Consequences</u>	<u>S-27</u>
<u>Description of Securities</u>	<u>S-34</u>
<u>Plan of Distribution</u>	<u>S-37</u>
<u>Legal Matters</u>	<u>S-39</u>
<u>Experts</u>	<u>S-39</u>
<u>Where You Can Find More Information</u>	<u>S-40</u>
<u>Information Incorporated By Reference</u>	<u>S-41</u>
<u>Disclosure of Commission Position on Indemnification for Securities Act Liabilities</u>	<u>S-41</u>

PROSPECTUS

	Page
<u>ABOUT THIS PROSPECTUS</u>	<u>1</u>
<u>DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS</u>	<u>2</u>
<u>OUR BUSINESS</u>	<u>3</u>
<u>RISK FACTORS</u>	<u>8</u>
<u>USE OF PROCEEDS</u>	<u>8</u>
<u>DILUTION</u>	<u>8</u>
<u>DESCRIPTION OF SECURITIES THAT MAY BE OFFERED</u>	<u>9</u>
<u>PLAN OF DISTRIBUTION</u>	<u>14</u>
<u>LEGAL MATTERS</u>	<u>16</u>
<u>EXPERTS</u>	<u>16</u>
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	<u>17</u>
<u>INFORMATION INCORPORATED BY REFERENCE</u>	<u>18</u>
<u>DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES</u>	
<u>ACT LIABILITIES</u>	<u>18</u>

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus provides the terms of the Rights Offering. This prospectus supplement incorporates by reference important business and financial information about us that is not included in or delivered with this prospectus supplement. See [Information Incorporated by Reference](#) .

This prospectus supplement and the accompanying prospectus contain forward-looking statements that are subject to a number of risks and uncertainties, many of which are beyond our control. Please read the sections titled [Risk Factors](#) and [Special Note Regarding Forward-Looking Statements and Other Information Contained in this Prospectus](#) .

It is important for you to read and consider all information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus in making your investment decision. You should also read and consider the information to which we have referred under the section titled [Where You Can Find More Information](#).

You should rely only on the information contained or incorporated by reference in this prospectus supplement. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. You should assume that the information appearing in this prospectus supplement is accurate only as of the date on the front cover of this prospectus supplement regardless of the time of delivery of this prospectus supplement or the time of any exercise of the Subscription Rights. Our business, financial condition, results of operations and prospects may have changed since the date of this prospectus supplement.

The market data and certain other statistical information contained in or incorporated by reference into this prospectus supplement are based on independent industry publications, government publications or other published independent sources. Although we believe these third-party sources are reliable and that the information is accurate and complete, we have not independently verified the information nor have we ascertained the underlying economic or operational assumptions relied upon therein.

Unless the context otherwise requires, references in this prospectus to [ClearSign](#), [the Company](#), [we](#), [us](#) and [our](#) refer to [ClearSign Combustion Corporation](#).

S-1

TABLE OF CONTENTS

QUESTIONS AND ANSWERS RELATING TO THE RIGHTS OFFERING

The following are examples of what we anticipate will be common questions about the Rights Offering. The following questions and answers do not contain all of the information that may be important to you and may not address all of the questions that you may have about the Rights Offering. This prospectus supplement and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus contain more detailed descriptions of the terms and conditions of the Rights Offering and provide additional information about us and our business, including potential risks related to the Rights Offering, the Units offered hereby, and our business. We urge you to read this entire prospectus supplement and the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus.

Why are we conducting the Rights Offering?

We are conducting the Rights Offering to raise additional capital for general corporate purposes, including working capital, research and development, protection of our intellectual property, business development and operational purposes.

What is the Rights Offering?

We are distributing, at no charge, to record holders of our common stock, non-transferable Subscription Rights to purchase Units at \$4.00 per Unit, which we refer to as the Subscription Price. Each Unit consists of one share of common stock and a Warrant representing the right to purchase one share of common stock at an exercise price equal to the Subscription Price of \$4.00, which expires two years after the Closing Date. The Subscription Rights will not be tradable. We intend to list the Warrants for trading on the NASDAQ Capital Market, but we cannot assure you that our listing application will be approved. Even if our listing application is approved, we cannot guarantee that a trading market for the Warrants will develop.

You will need to exercise 5 Subscription Rights to purchase one Unit. Upon the effectiveness of the exercise of the Subscription Rights, the common stock and Warrants included in the Units will immediately separate and will be issued as separate securities. You will receive Subscription Rights for each share of common stock that you owned as of 5:00 p.m. Eastern time on the Record Date. There is no over subscription privilege.

What are the Subscription Rights?

For each whole share of common stock you owned as of the Record Date, you will receive Subscription Rights which give you the opportunity to purchase one Unit for the price of \$4.00. Each Unit consists of one share of our common stock and a two-year Warrant to purchase one additional share of our common stock at an exercise price of \$4.00. You will need to exercise 5 Subscription Rights to purchase one whole Unit consisting of one whole share of our common stock and one Warrant. For example, if you owned 1,000 shares of our common stock as of the Record Date, you will receive Subscription Rights giving you the right to purchase Units consisting of 200 shares of our common stock and Warrants to purchase 200 additional shares of our common stock. You may exercise all or a portion of your Subscription Rights or you may choose not to exercise any Subscription Rights. Subscription Rights may only be exercised in aggregate for whole numbers of shares of our common stock; no fractional shares of our common stock

will be issued in the Rights Offering.

If you hold your shares in the name of a broker, dealer, bank, or other nominee who uses the services of the Depository Trust Company, or DTC, you will not receive a Rights Certificate. Instead, DTC will issue the Subscription Rights to your nominee record holder for each share of our common stock that you own as of the Record Date. If you are not contacted by your nominee, you should contact your nominee as soon as possible.

Are there limitations on the exercise of the Subscription Rights or purchase of Units?

Yes. In the event that the exercise by a shareholder of the Subscription Rights or purchase of any Units by a shareholder could, as determined by us in our sole discretion, potentially result in a limitation on our ability to use net operating losses, tax credits and other tax attributes, which we refer to as the Tax

S-2

TABLE OF CONTENTS

Attributes, under the Internal Revenue Code of 1986, as amended, which we refer to as the Code, and rules promulgated by the Internal Revenue Service, we may, but we are under no obligation to, reduce the number of Units to be acquired by such shareholder to such number of shares of our common stock and Warrants as we, in our sole discretion, shall determine to be advisable in order to preserve our ability to use the Tax Attributes.

What are the terms of the Warrants?

Each Warrant entitles the holder to purchase one share of common stock for each whole share of common stock purchased in the Rights Offering at an exercise price of \$4.00 for two years following the Closing Date. The Warrants will be exercisable by paying the exercise price in cash. We intend to list the Warrants for trading on the NASDAQ Capital Market, but we cannot assure you that our listing application will be approved. Even if our listing application is approved, we cannot guarantee that a trading market for the Warrants will develop.

Will fractional shares be issued upon exercise of Subscription Rights or upon the exercise of Warrants?

No. We will not issue fractional shares of common stock in the Rights Offering. Rights holders will only be entitled to purchase a number of Units representing a whole number of shares of common stock, rounded down to the nearest whole number of Units a holder would otherwise be entitled to purchase. Any excess subscription payments received by the Subscription Agent will be returned as soon as practicable after expiration of the Rights Offering, without interest or penalty. Similarly, no fractional shares of common stock will be issued in connection with the exercise of a Warrant. If, upon exercise of a Warrant, the holder thereof would be entitled to receive a fractional share of common stock, upon exercise, the holder will only be entitled to receive a whole number of shares of common stock, rounded down to the nearest whole number.

What effect will the Rights Offering have on our outstanding common stock?

Based on 12,970,410 shares of common stock outstanding, assuming no other transactions by us involving our common stock prior to the Record Date and Expiration Date, if the Rights Offering is fully subscribed at a Subscription Price of \$4.00 per Unit, we will issue 2,594,082 shares of common stock to shareholders who exercise their Subscription Rights, and we will have thereafter approximately 15,564,000 shares of our common stock issued and outstanding and Warrants to purchase approximately 2,594,082 additional shares of our common stock will be outstanding (excluding currently outstanding warrants). The exact number of shares and Warrants that we will issue in this Rights Offering will depend on the number of Units that are subscribed for in the Rights Offering and the number of unsubscribed Units that are sold through the placement agent.

How was the Subscription Price determined?

In determining the Subscription Price, our board of directors considered, among other things, the following factors:

- the current and historical trading prices of our common stock;
- the price at which shareholders might be willing to participate in the Rights Offering;
- the value of the Warrant being issued as a component of the Unit;

our need for additional capital and liquidity;
the cost of capital from other sources; and
comparable precedent transactions, including the percentage of shares offered, the terms of the Subscription Rights being offered, the subscription price and the discount that the subscription price represented to the immediately prevailing closing prices for those offerings.

In conjunction with the review of these factors, our board of directors also reviewed our history and prospects, including our past and present earnings and cash requirements, our prospects for the future, the outlook for our industry and our current financial condition. Our board of directors believes that the Subscription Price should be designed to provide an incentive to our current shareholders to participate in the Rights Offering and exercise their Subscription Rights.

S-3

TABLE OF CONTENTS

The Subscription Price does not necessarily bear any relationship to any established criteria for value. You should not consider the Subscription Price as an indication of actual value of the Company or our common stock. We cannot assure you that the market price of our common stock will not decline during or after the Rights Offering. You should obtain a current price quote for our common stock before exercising your Subscription Rights and make your own assessment of our business and financial condition, our prospects for the future, and the terms of this Rights Offering.

Once made, all exercises of Subscription Rights are irrevocable.

Am I required to exercise all of the Subscription Rights I receive in the Rights Offering?

No. You may exercise, in multiples of 5, any number of your Subscription Rights, or you may choose not to exercise any Subscription Rights. If you do not exercise any Subscription Rights, the number of shares of our common stock you own will not change. However, if you choose to not exercise your Subscription Rights in full, your proportionate ownership interest in the Company will decrease.

How soon must I act to exercise my Subscription Rights?

If you received a Rights Certificate and elect to exercise any or all of your Subscription Rights, the Subscription Agent must receive your completed and signed Rights Certificate and payment for your Subscription Rights before the Expiration Date. If you hold your shares in the name of a broker, dealer, custodian bank, or other nominee, your nominee may establish a deadline before the Expiration Date by which you must provide it with your instructions to exercise your Subscription Rights, along with the required subscription payment.

May I transfer my Subscription Rights?

No. The Subscription Rights may be exercised only by the shareholders to whom they are distributed and they may not be sold, transferred, assigned or given away to anyone else, other than by operation of law. As a result, a Rights Certificate may be completed only by the shareholder who receives the subscription documents. The Subscription Rights will not be listed for trading on any stock exchange or market.

Will our directors and executive officers participate in the Rights Offering?

To the extent they hold common stock as of the Record Date, our directors and executive officers will be entitled to participate in the Rights Offering on the same terms and conditions applicable to other Subscription Rights holders. While none of our directors or executive officers has entered into any binding commitment or agreement to exercise Subscription Rights received in the Rights Offering, our directors and executive officers have indicated their interest in subscribing for up to an aggregate of \$404,000 in Units in the Rights Offering, which would represent the full exercise of each of their respective Subscription Rights.

What is the role of MDB Capital Group LLC in the Rights Offering?

We have engaged MDB to act as both a dealer-manager and as an exclusive placement agent in the Rights Offering. As the dealer-manager and under the terms and subject to the conditions contained in the MDB Agreement, MDB will solicit the exercise of Subscription Rights held by our shareholders and provide guidance to us on general market conditions and their impact on the Rights Offering. As the placement agent and under the terms and subject to the conditions contained in the MDB Agreement, MDB will use its best efforts, on a no minimum basis, to sell any Units not subscribed for in the Rights Offering. We have agreed to pay MDB certain fees and other consideration for acting as dealer-manager and as placement agent and to reimburse MDB for certain out-of-pocket expenses incurred in connection with the Rights Offering. See the section of this prospectus supplement titled Plan of Distribution for a more complete discussion of the compensation to be paid to MDB for its services as dealer manager and as placement agent. MDB is not underwriting or backstopping the Rights Offering and is not making any recommendation with respect to the Subscription Rights (including with respect to the exercise or expiration of such Subscription Rights), shares of common stock or Warrants.

We have agreed to compensate MDB for its services as the dealer manager and the placement agent with either (i) a total cash fee equal to 6% of the gross proceeds of this Rights Offering and the sale of Offered Units, or (ii) upon the agreement of MDB, with a number of Units equal to 6% of the number of the Units sold in the Rights Offering and of the Offered Units sold to investors.

S-4

TABLE OF CONTENTS

According to public filings, MDB and its Chief Executive Officer, Christopher A. Marlett, collectively beneficially own approximately 7.6% of our common stock. As holders of our common stock on the Record Date, MDB and Mr. Marlett will have the right to exercise their subscription rights, although they are not required to do so. MDB and its affiliates and employees may buy Offered Units.

Has the board of directors made a recommendation to shareholders regarding the Rights Offering?

No. Our board of directors is not making a recommendation regarding your exercise of the Subscription Rights. Shareholders who exercise Subscription Rights will incur investment risk on new money invested. We cannot predict the price at which our shares of common stock will trade after the Rights Offering. On December 6, 2016, the closing price of our common stock was \$3.85 per share. The market price for our common stock may be above the Subscription Price or may be below the Subscription Price. If you exercise your Subscription Rights, in the future you may not be able to sell the underlying shares of our common stock or the shares issued to you upon exercise of the Warrants at the same price or a higher price. You should make your decision based on your assessment of our business and financial condition, our prospects for the future, the terms of the Rights Offering and the information contained in this prospectus. See Risk Factors for a discussion of some of the risks involved in investing in our securities.

How do I exercise my Subscription Rights?

If you are a shareholder of record (meaning you hold your shares of our common stock in your name and not through a broker, dealer, bank, or other nominee) and you wish to participate in the Rights Offering, you must deliver a properly completed and signed Rights Certificate, together with payment of the Subscription Price for the Subscription Rights you elect to exercise, to the Subscription Agent before 5:00 p.m. Eastern time on January 13, 2017. If you are exercising your Subscription Rights through your broker, dealer, bank, or other nominee, you should promptly contact your broker, dealer, bank, or other nominee and submit your subscription documents and payment for the Units subscribed for in accordance with the instructions and within the time period provided by your broker, dealer, bank or other nominee.

May I purchase Offered Units?

To the extent that Units are not subscribed for through the Subscription Rights, MDB as our placement agent will arrange the sale by the Company of the Offered Units. Those persons interested in investing in the Offered Units should directly contact MDB.

What if my shares are held in street name ?

If you hold your shares of our common stock in the name of a broker, dealer, bank, or other nominee, then your broker, dealer, bank, or other nominee is the record holder of the shares you own. The record holder must exercise the Subscription Rights on your behalf. Therefore, you will need to have your record holder act for you.

If you wish to participate in this Rights Offering and purchase Units, please promptly contact the record holder of your shares. We will ask the record holder of your shares, who may be your broker, dealer, bank, or other nominee, to notify you of this Rights Offering.

What form of payment is required?

You must timely pay the full Subscription Price for the full number of Units you wish to acquire pursuant to the exercise of Subscription Rights by delivering to the Subscription Agent:

a bank certified check; or
wire transfer.

If you send a payment that is insufficient to purchase the number of Units you requested, or if the number of Units you requested is not specified in the forms, the payment received will be applied to exercise your Subscription Rights to the fullest extent possible based on the amount of the payment received.

When will I receive my new shares of common stock and Warrants?

The Subscription Agent will arrange for the issuance of the common stock and Warrants as soon as practicable after the expiration of the Rights Offering, payment for the Units subscribed for has been received,

S-5

TABLE OF CONTENTS

and all prorating calculations and reductions contemplated by the terms of the Rights Offering have been effected. If you hold your shares in the name of a broker, dealer, bank, or other nominee, DTC will credit your account with your nominee with the securities you purchase in the Rights Offering. If you are a holder of record of shares, all shares that you purchase in the Rights Offering together with the Warrants will be issued in book-entry, or uncertificated, form meaning that you will receive a direct registration (DRS) account statement from our transfer agent reflecting ownership of the common stock and Warrants.

After I send in my payment and Rights Certificate to the Subscription Agent, may I cancel my exercise of Subscription Rights?

No. Exercises of Subscription Rights are irrevocable unless the Rights Offering is terminated, even if you later learn information that you consider to be unfavorable to the exercise of your Subscription Rights. You should not exercise your Subscription Rights unless you are certain that you wish to purchase Units at the Subscription Price.

How much will the Company receive from the Rights Offering?

Assuming that the Rights Offering is fully subscribed, through our shareholders exercising their Subscription Rights, we estimate that gross proceeds from the Rights Offering will be approximately \$10.4 million, before deducting estimated expenses of \$778,000 payable by us in connection with the Rights Offering, including fees and expenses payable to MDB for dealer manager and placement agent services. If MDB is issued Units instead of being paid a cash fee, then the estimated cash expenses will be \$155,000.

Are there risks in exercising my Subscription Rights?

Yes. The exercise of your Subscription Rights involves risks. Exercising your Subscription Rights involves the purchase of additional shares of our common stock and Warrants to purchase common stock and you should consider this investment as carefully as you would consider any other investment. We can neither assure you that the market price of our common stock will exceed the Subscription Price nor can we assure you that the market price of our common stock will not further decline during or after the Rights Offering. We also cannot assure you that you will be able to sell shares of our common stock purchased in the Rights Offering or received from the exercise of the Warrants at a price equal to or greater than the Subscription Price. In addition, you should carefully consider the risks described under the heading **Risk Factors** for discussion of some of the risks involved in investing in our securities.

Can the board of directors terminate the Rights Offering?

Yes. Our board of directors may decide to terminate the Rights Offering at any time and for any reason before the Expiration Date. We will notify shareholders if the Rights Offering is terminated by issuing a press release.

If the Rights Offering is not completed or is terminated, will my subscription payment be refunded to me?

Yes. The Subscription Agent will hold all funds it receives in a segregated bank account until completion of the

Rights Offering. If we do not complete the Rights Offering, all subscription payments received by the Subscription Agent will be returned as soon as practicable after the termination or expiration of the Rights Offering, without interest or penalty. If you own shares in street name, it may take longer for you to receive your subscription payment because the Subscription Agent will return payments through the record holder of your shares.

How do I exercise my Subscription Rights if I live outside the United States?

The Subscription Agent will hold Rights Certificates for shareholders having addresses outside the United States. To exercise Subscription Rights, foreign shareholders must notify the Subscription Agent and timely follow other procedures described in the section entitled The Rights Offering-Foreign Shareholders.

What fees or charges apply if I purchase shares in the Rights Offering?

We are not charging any fee or sales commission to issue Subscription Rights to you or to issue shares or Warrants to you if you exercise your Subscription Rights. If you exercise your Subscription Rights through a broker, dealer, custodian bank, or other nominee, you are responsible for paying any fees your broker, dealer, bank, or other nominee may charge you.

S-6

TABLE OF CONTENTS

What are the U.S. federal income tax consequences of exercising my Subscription Rights and how do I determine the cost basis of each new share of common stock and Warrant?

For U.S. federal income tax purposes, we do not believe you should recognize income or loss in connection with the receipt or exercise of Subscription Rights in the Rights Offering. If you exercise your Subscription Rights, you will need to allocate the price paid between the new common stock and Warrants received. Soon after Closing, we intend to provide a calculation of the basis in each new share of common stock and Warrant to assist those exercising to establish the initial tax basis for U.S. federal income tax purposes.

You should consult your tax advisor as to the tax consequences of the Rights Offering in light of your particular circumstances. For a more detailed discussion, see [Material U.S. Federal Income Tax Consequences](#) .

To whom should I send my forms and payment?

If your shares are held in the name of a broker, dealer, bank, or other nominee, then you should send your subscription documents and subscription payment to that broker, dealer, bank, or other nominee. If you are the record holder, then you should send your Rights Certificate and payment of your Subscription Price to the Subscription Agent hand delivery, first class mail or courier service to:

By mail:

VStock Transfer, LLC
Attn: Allison Niccolls
18 Lafayette Place
Woodmere, New York 11598
Telephone: (212) 828-8436 or
toll free at (855) 987-8625
Email: info@vstocktransfer.com

By hand or overnight courier:

VStock Transfer, LLC
Attn: Allison Niccolls
18 Lafayette Place
Woodmere, New York 11598
Telephone: (212) 828-8436 or
toll free at (855) 987-8625
Email: info@vstocktransfer.com

You or, if applicable, your nominee are solely responsible for completing delivery to the Subscription Agent of your subscription documents, Rights Certificate and payment. You should allow sufficient time for delivery of your subscription materials to the Subscription Agent and clearance of payment before the expiration of the Rights Offering at 5:00 p.m. Eastern Time, January 13, 2017.

Whom should I contact if I have other questions?

If you have other questions or need assistance, please contact the Information Agent or the dealer manager:

Information Agent

VStock Transfer, LLC
Attn: Allison Niccolls
18 Lafayette Place
Woodmere, New York 11598
Telephone: (212) 828-8436 or

Dealer Manager

MDB Capital Group LLC
Attn: Alex Zapanta
2425 Cedar Springs Road
Dallas, Texas 75201
Telephone: (310) 526-5007

toll free at (855) 987-8625

Email: info@vstocktransfer.com

S-7

TABLE OF CONTENTS

SUMMARY OF THE RIGHTS OFFERING

Securities to be offered

We are distributing to you, at no charge, non-transferable Subscription Rights to purchase one Unit for every 5 shares of our common stock that you own on the Record Date, either as a holder of record or, in the case of shares held of record by brokers, banks, or other nominees, on your behalf, as a beneficial owner of such shares. Each Unit consists of one share of common stock and a Warrant representing the right to purchase one share of common stock. You will need to exercise 5 Subscription Rights to purchase a Unit.

Size of offering

2,594,082 Units.

Subscription Price

The Subscription Price is \$4.00 per Unit.

Warrants

Each Warrant entitles the holder to purchase, for two years from the Closing Date, one share of common stock for each whole share of common stock purchased in the Rights Offering at an exercise price of \$4.00. The Warrants will be exercisable by paying the exercise price in cash only. We intend to list the Warrants for trading on the NASDAQ Capital Market, although we cannot assure you that our listing application will be approved. Even if our listing application is approved, we cannot guarantee that a trading market for the Warrants will develop. Under the terms of the Warrant Agreement, we will maintain a registration statement with the Securities and Exchange Commission so that you will be able to exercise your Warrant and receive shares of common stock that will be freely tradable at the time of purchase and receipt.

Record Date

5:00 p.m., Eastern Time, December 19, 2016.

Subscription Right

The Subscription Rights will entitle you to purchase one Unit at the Subscription Price. You will need to exercise 5 Subscription Rights to purchase a Unit. There is no over-subscription privilege.

Expiration Date

The Subscription Rights will expire at 5:00 p.m. Eastern time on January 13, 2017.

Procedure for Exercising Subscription Rights

If you are a record holder of our common stock, you must deliver a properly completed Rights Certificate to the Subscription Agent together with payment in cleared or good funds to be received before 5:00 p.m., Eastern time, on January 13, 2017. You may deliver the documents and payments by first class mail or courier service. If you use first class mail for this purpose, we recommend using registered mail, properly insured, with return receipt requested.

If you are a beneficial owner of shares that are registered in the name of a broker, dealer, custodian bank, or other nominee, you should instruct your broker, dealer, custodian bank or other nominee to exercise your Subscription Rights on your behalf. Please follow the instructions of your holder of your nominee, who may require that you meet a deadline earlier than 5:00 p.m. Eastern time on January 13, 2017.

S-8

TABLE OF CONTENTS

Delivery of Shares and Warrants

As soon as practicable after the expiration of the Rights Offering, the Subscription Agent will arrange for the issuance of the shares of common stock and Warrants purchased pursuant to the Rights Offering. If you hold your shares in the name of a custodian bank, broker, dealer, or other nominee, DTC will credit your account with your nominee with the securities you purchased in the Rights Offering. If you are a holder of record of shares, all shares of common stock and Warrants that are purchased by you in the Rights Offering will be issued in book-entry, or uncertificated, form meaning that you will receive a direct registration (DRS) account statement from our transfer agent reflecting ownership of these securities.

Non-Transferability of Subscription Rights

The Subscription Rights may not be sold, transferred, assigned or given away to anyone. The Subscription Rights will not be listed for trading on any stock exchange or market.

No Recommendation

None of the board of directors of our Company, the information agent or the dealer manager is making a recommendation regarding your exercise of the Subscription Rights. You are urged to make your decision to invest based on your own assessment of our business and the terms of the Rights Offering. Please see Risk Factors for a discussion of some of the risks involved in investing in our securities.

No Revocation

All exercises of Subscription Rights are irrevocable, even if you later learn information that you consider to be unfavorable to the exercise of your Subscription Rights. However, if we make a fundamental change to the terms of the Rights Offering set forth in this prospectus, you may cancel your subscription and receive a refund of any money you have advanced.

Use of Proceeds

We currently intend to use the net proceeds we receive from the Rights Offering as follows: approximately \$5 million for research and development, including capital expenditures, approximately \$1 million for protection of intellectual property, approximately \$1 million for business development and marketing, and the balance for general corporate purposes, including working capital.

U.S. Federal Income Tax Considerations

For U.S. federal income tax purposes, you generally should not recognize income or loss in connection with the receipt or exercise of the Subscription Rights. You are urged, however, to consult your own tax advisor as to your particular tax consequences resulting from the receipt and exercise of the Subscription Rights. You will need to allocate the price paid between the new common stock and Warrants received. Soon after Closing, we intend to provide a calculation of the basis in each new share of common stock and Warrant to assist in establishing your initial tax basis for U.S. federal income tax purposes. See Material U.S. Federal Income Tax Considerations .

S-9

TABLE OF CONTENTS

Cancellation

Our board of directors may for any reason terminate the Rights Offering at any time before the completion of the Rights Offering.

Subscription Agent

VStock Transfer, LLC

Information Agent

VStock Transfer, LLC

Dealer Manager/Placement Agent

MDB Capital Group LLC

Questions

If you have any questions about the rights offering, including questions about subscription procedures and requests for additional copies of this prospectus supplement and the accompanying prospectus or other documents, please contact VStock Transfer, LLC our subscription agent/information agent, at (212) 828-8436 or toll free at (855) 793-5068 or email at info@vstocktransfer.com or our dealer manager, MDB Capital Group LLC, attention Alex Zapanta, at (310) 526-5007.

Market for Common Stock

Our common stock is listed on the NASDAQ Capital Market under the symbol **CLIR**.

Risk Factors

You should carefully read and consider the risk factors contained in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015, and in the **Risk Factors** section beginning on page S-11 of this prospectus supplement and page 8 of the prospectus, together with all of the other information included in or incorporated by reference into this prospectus supplement and the prospectus, before you decide to exercise your subscription rights to purchase the Units. These risks include without limitation, the risks related to our growth strategy, risks related to our operating losses and our need for additional investment capital and risks related to our business.

Fees and Expenses

We will pay all fees and expenses charged by MDB as the dealer manager and placement agent, the Subscription Agent and the Information Agent in connection with the Rights Offering. You are responsible for paying any other commissions, fees, taxes or other expenses incurred in connection with the exercise of the Subscription Rights.

Distribution Arrangements

Under the terms and subject to the conditions contained in the MDB Agreement, MDB, as the dealer-manager, will solicit the exercise of Subscription Rights. We have agreed to pay MDB certain fees for acting as dealer-manager and to reimburse MDB for certain out-of-pocket expenses incurred in connection with this Rights Offering. MDB is also acting as a placement agent and, as such, will use its best efforts, on a no minimum basis, to sell any Units not subscribed for by the holders of Subscription Rights. See **Plan of Distribution** for a discussion of the fees and expenses to be paid to MDB for its services as the dealer-manager and placement agent.

S-10

TABLE OF CONTENTS

RISK FACTORS

Our business is influenced by many factors that are difficult to predict, and that involve uncertainties that may materially affect actual operating results, cash flows and financial condition. Before making an investment decision, you should carefully consider these risks, including those set forth below and those described in the Risk Factors section of our most recent Annual Report on Form 10-K, filed with the SEC on March 3, 2016, as revised or supplemented by our Quarterly Reports on Form 10-Q filed with the SEC since the filing of our most recent Annual Report on Form 10-K, each of which is incorporated by reference into this prospectus, and you should also carefully consider any other information we include or incorporate by reference in this prospectus.

Any of the risks we describe below or in the information incorporated herein by reference in this prospectus could cause our business, financial condition or operating results to suffer. The market price of our common stock could decline if one or more of these risks and uncertainties develop into actual events. You could lose all or part of your investment.

Risks Related to the Rights Offering

If you do not participate in the Rights Offering, your interest in the Company will likely be diluted.

Common shareholders who do not fully exercise their respective Subscription Rights should expect that they will, at the completion of the Rights Offering, own a smaller proportional interest in the Company than would otherwise be the case had they fully exercised their Subscription Rights.

Our common stock price may be volatile as a result of the Rights Offering.

The trading price of our common stock may fluctuate substantially as a result of the Rights Offering. The price of the common stock that will prevail in the market following the Rights Offering may be higher or lower than the Subscription Price depending on many factors, some of which are beyond our control and may not be directly related to our operating performance.

The Rights Offering may cause the price of our common stock to decline.

The Rights Offering may result in an immediate decline in the market value of our common stock. This decline may continue after the completion of Rights Offering. Further, if a substantial number of Subscription Rights are exercised and the holders of the Units received upon exercise of those rights, including the Warrants, choose to sell some or all of the shares of common stock, the resulting sales could depress the market price of our common stock. There is no assurance that, following the Expiration Date, you will be able to sell the common stock you receive from the exercise of your Subscription Rights at a price equal to or greater than the Subscription Price.

Because the exercise of your Subscription Rights is not revocable, you could be committed to buying shares of common stock above the prevailing market price.

Once you exercise your Subscription Rights, you may not revoke your exercise even if you later learn information that you consider to be unfavorable to the exercise of your Subscription Rights. The market price of our shares of common stock may decline prior to the expiration of the Rights Offering or a Subscription Rights holder may not be able to sell shares of common stock purchased in the Rights Offering, as a component of the Units, at a price equal to or greater than the Subscription Price. Until shares of our common stock are delivered upon expiration of the Rights Offering, you will not be able to sell or transfer the shares of our common stock that you purchase, as a component of the Units, in the Rights Offering. Any such delivery will occur as soon as practicable after the Rights Offering has expired, payment for the Units subscribed for has been received, and all prorating calculations and reductions contemplated by the terms of the Rights Offering have been effected.

Completion of the Rights Offering and the sale of the Offered Units is not subject to our raising a minimum offering amount and therefore proceeds may be insufficient to meet our objectives, thereby increasing the risk to investors.

Completion of the Rights Offering is not subject to our raising a minimum offering amount. As such, proceeds from the Rights Offering and the sale of the Offered Units may not be sufficient to meet the

TABLE OF CONTENTS

objectives we state in this prospectus or other corporate milestones that we may set. Shareholders should not rely on the success of the Rights Offering and the sale of the Offered Units to address our need for funding. If we fail to raise additional capital by approximately early 2017, we would anticipate having to significantly decrease our growth plans and operating expenses, which will curtail the progress of our business.

The Subscription Rights are not transferable and there is no market for the Subscription Rights.

You may not sell, transfer or assign your Subscription Rights. The Subscription Rights are only transferable by operation of law. Because the Subscription Rights are non-transferable, there is no market or other means for you to directly realize any value associated with the Subscription Rights.

Because we do not have any formal commitments from any of our shareholders to participate in the Rights Offering, the net proceeds we receive from the Rights Offering may be lower than we currently anticipate.

We do not have any formal commitments from any of our shareholders to participate in the Rights Offering, and we cannot assure you that any of our shareholders will exercise all or any part of their Subscription Rights. If our shareholders subscribe for fewer shares of our common stock than we currently anticipate, the net proceeds we receive from the Rights Offering could be significantly lower than we currently expect. Additionally, the placement agent for the unsubscribed, or Offered Units, is not committed to purchasing any of the Offered Units and is only making a placement of them on a best efforts, no minimum basis. Therefore, there is no assurance that the Offered Units will be sold.

If we terminate the Rights Offering for any reason, we will have no obligation other than to return subscription monies promptly.

We may decide, in our discretion and for any reason, to cancel or terminate the Rights Offering at any time prior to the Expiration Date. If the Rights Offering is terminated, we will have no obligation with respect to Subscription Rights that have been exercised except to return promptly, without interest or deduction, the subscription monies deposited with the Subscription Agent. Additionally, any investor funds for the unsubscribed, or Offered Units, that will be offered by the Company through the placement agent, will also be returned to the investor, without interest or deduction.

We will have broad discretion in the use of the net proceeds we receive and may not use the proceeds effectively.

We currently intend to use the net proceeds from the exercise of Subscription Rights as follows: approximately \$5 million for research and development, including capital expenditures, approximately \$1 million for protection of intellectual property, approximately \$1 million for business development and marketing, and the balance for general corporate purposes, including working capital. However, we will not be restricted to such use and will have broad discretion in determining how the proceeds of the Rights Offering will be used. Our discretion is not substantially limited by the uses set forth in this prospectus in the section titled "Use of Proceeds". While our board of directors believes the flexibility in application of the net proceeds is prudent, the broad discretion it affords entails increased risks to the purchasers in the Rights Offering, including purchasers of Offered Units. Purchasers in the Rights Offering

and purchasers of Offered Units have no current basis to evaluate the possible merits or risks of any application of the net proceeds received from the Rights Offering and the sale of Offered Units. Our shareholders may not agree with the manner in which we choose to allocate and spend the net proceeds.

If you do not act on a timely basis and follow subscription instructions, your exercise of the Subscription Rights may be rejected.

Holders of shares of common stock who desire to purchase Units in the Rights Offering must act on a timely basis to ensure that all required forms and payments are actually received by the Subscription Agent prior to 5:00 p.m. Eastern time on the Expiration Date. If you are a beneficial owner of shares of common stock and you wish to exercise your

Subscription Rights, you must act promptly to ensure that your broker, dealer, custodian bank, trustee or other nominee acts for you and that all required forms and payments are actually received by your broker, dealer, custodian bank, trustee or other nominee in sufficient time to deliver

S-12

TABLE OF CONTENTS

the forms and payments to the Subscription Agent prior to 5:00 p.m. Eastern time on the Expiration Date. We will not be responsible if your broker, dealer, custodian bank, trustee or other nominee fails to ensure that all required forms and payments are actually received by the Subscription Agent prior to 5:00 p.m. Eastern time on the Expiration Date.

If you fail to complete and sign the required subscription forms, send an incorrect payment amount, or otherwise fail to follow the subscription procedures that apply to your exercise in the Rights Offering, the Subscription Agent may, depending on the circumstances, reject your subscription or accept it only to the extent of the payment received. Neither we nor the Subscription Agent undertakes to contact you concerning an incomplete or incorrect subscription form or payment, nor are we under any obligation to correct such forms or payment. We have the sole discretion to determine whether a subscription exercise properly follows the subscription procedures.

The receipt of Subscription Rights may be treated as a taxable distribution to you.

We believe the distribution of the Subscription Rights in the Rights Offering should be a non-taxable distribution to holders of shares of common stock under Section 305(a) of the Internal Revenue Code of 1986, as amended, or the Code. Please see the discussion of Material U.S. Federal Income Tax Considerations below. This position is not binding on the IRS or the courts, however. If this Rights Offering is deemed to be part of a disproportionate distribution under Section 305 of the Code, your receipt of Subscription Rights in the Rights Offering may be treated as the receipt of a taxable distribution to you equal to the fair market value of the Subscription Rights. Any such distribution would be treated as dividend income to the extent of our current and accumulated earnings and profits, if any, with any excess being treated as a return of capital to the extent thereof and then as capital gain. Each holder of shares of common stock is urged to consult his, her or its own tax advisor with respect to the particular tax consequences of this Rights Offering.

The Subscription Price determined for the Rights Offering is not an indication of the fair value of our common stock.

In determining the method for computing the Subscription Price, our board of directors considered a number of factors, including, but not limited to, the price at which our shareholders might be willing to participate in the Rights Offering, historical and current trading prices for our common stock including volatility, the amount of proceeds desired, the potential need for liquidity and capital, potential market conditions, the value of the Warrant and the desire to provide an opportunity to our shareholders to participate in the Rights Offering. In conjunction with its review of these factors, our board of directors also reviewed a range of discounts to market value represented by the subscription prices in various prior Rights Offerings by other public companies. The Subscription Price does not necessarily bear any relationship to the book value of our assets, results of operations, cash flows, losses, financial condition or any other established criteria for value. You should not consider the Subscription Price as an indication of the fair value of our common stock. After the date of this prospectus, our common stock may trade at prices above or below the Subscription Price.

We cannot guarantee that the Warrants you receive will be listed for trading on the NASDAQ Capital Market or that a trading market for the Warrants will develop.

While we intend to submit an application to The NASDAQ Stock Market to list the Warrants you receive when you purchase the Units, we cannot guarantee that our listing application will be approved. If our listing application is not

If you do not act on a timely basis and follow subscription instructions, your exercise of the Subscription Rights may

approved, it may be difficult for you to sell or transfer the Warrants. Even if our listing application is approved, we cannot guarantee that a trading market for the Warrants will develop. Therefore, you may not realize any value from the Warrants by attempting to sell or otherwise transfer them for consideration.

The market price of our common stock may never exceed the exercise price of the Warrants issued in connection with the Rights Offering.

The Warrants being issued in connection with the Rights Offering become exercisable upon issuance and will expire two years after issuance. We cannot provide you any assurance that the market price of our

S-13

TABLE OF CONTENTS

common stock will ever exceed the exercise price of the Warrants prior to their date of expiration. Any Warrants not exercised by their date of expiration will expire worthless and we will be under no further obligation to the Warrant holder.

For you to exercise your Warrant and receive tradable shares, we must maintain a registration statement with the SEC.

For the exercise of the Warrant, we must maintain a registration statement and current prospectus to be available at the time of the common stock underlying the Warrant. If we do not, then it will be difficult for you to sell the underlying common stock, and your rights under the terms of the Warrant will be impaired. As a consequence, your Warrant may be of little or no value at the time of exercise.

There is no back-stop or standby commitment in place to purchase Units that are not purchased in the Rights Offering, and no minimum number of Units that we must sell in the Rights Offering.

While MDB, as the placement agent, has agreed to use its best efforts to sell Units that are not subscribed for in the Rights Offering, there is no back-stop or standby commitment in place to purchase those Units. Furthermore, there is no minimum number of Units that we must sell in the Rights Offering or that MDB must sell as the placement agent.

Consequently, the Rights Offering may not raise significant funds or achieve any minimum liquidity threshold.

The issuance of Units may dilute the ownership interest of those of our shareholders who do not participate in the Rights Offering and, if the Offered Units are purchased or we issue Units to MDB as compensation, the ownership interest of those shareholders who participate in the Rights Offering may also be diluted.

The issuance of Units may dilute the ownership interests of those of our shareholders who do not participate in the Rights Offering. Furthermore, issuance of any Offered Units or Units issued to MDB as compensation may dilute all of our shareholders, irrespective of whether or not they participated in the Rights Offering. See the section of this prospectus supplement titled "Dilution" for more information.

TABLE OF CONTENTS

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the documents that we incorporate by reference, may contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the Securities Act), and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act).

Forward-looking statements in this prospectus include, without limitation, statements related to our plans, strategies, objectives, expectations, intentions and adequacy of resources. Investors are cautioned that such forward-looking statements involve risks and uncertainties. Factors that could cause actual results to differ from those discussed in the forward-looking statements include, but are not limited to:

- our limited cash and our history of losses;
- our ability to successfully develop and implement our technology and achieve profitability;
- our limited operating history;
- emerging competition and rapidly advancing technology in our industry that may outpace our technology;
- customer demand for the products and services we develop;
- the impact of competitive or alternative products, technologies and pricing;
- our ability to manufacture any products we develop;
- general economic conditions and events and the impact they may have on us and our potential customers;
- our ability to obtain adequate financing in the future;
- our ability to continue as a going concern;
- our success at managing the risks involved in the foregoing items; and
- other factors discussed in this prospectus.

In some cases, you can identify forward-looking statements by terminology such as may, will, should, could, expect, plans, intends, anticipates, believes, estimates, predicts, potential, or continue or the negative of such comparable terminology. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. We do not undertake any obligation to publicly update or review any forward-looking statement.

S-15

TABLE OF CONTENTS

USE OF PROCEEDS

Assuming the sale of 2,594,082 Units either through full subscription of the Rights Offering or through partial subscription of the Rights Offering and full subscription of the Offered Units, we estimate that the gross proceeds we could receive, excluding any proceeds received upon exercise of any Warrants issued, will be approximately \$10.4 million before deducting approximately \$778,000 in fees and expenses payable by us, including the fees and expenses payable to MDB for its services as the dealer-manager and placement agent. If MDB is paid with Units instead of cash, then the estimated cash expenses will be approximately \$155,000.

We currently intend to use the net proceeds from the exercise of Subscription Rights and the sale of the Offered Units as follows: approximately \$5 million for research and development, including capital expenditures, approximately \$1 million for protection of intellectual property, approximately \$1 million for business development and marketing, and the balance for general corporate purposes, including working capital. There is no minimum amount that must be raised in the Rights Offering or the sale of the Offered Units. Our management will retain broad discretion as to the allocation of the net proceeds from the Rights Offering and the sale of the Offered Units. Until we use the net proceeds from the Rights Offering and the sale of the Offered Units, we intend to invest the funds in short-term, interest bearing investments.

S-16

TABLE OF CONTENTS**CAPITALIZATION**

The following table describes capitalization, as of September 30, 2016, on an actual basis and as adjusted to give effect to the Rights Offering, assuming gross proceeds from the Rights Offering of \$10,376,000 and after deducting the estimated offering expenses of \$778,000. The following table does not reflect any payment of the compensation to MDB that may be made in Units. Adjusted balances are subject to change based upon final participation in the Rights Offering. You should read this table together with the information under the heading Management's Discussion and Analysis of Financial Condition and Results of Operations and our unaudited consolidated financial statements and related notes and other financial information in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2016 and incorporated into this prospectus by reference.

	September 30, 2016 (unaudited)	
	Actual	Pro Forma (as adjusted)
Cash and cash equivalents	\$3,558,000	\$13,156,000
Stockholders' equity		
Preferred stock, \$0.0001 par value, zero shares issued and outstanding		
Common stock, \$0.0001 par value, 12,970,410 shares issued and outstanding at September 30, 2016 and 15,564,492 shares issued and outstanding at September 30, 2016 pro forma as adjusted	1,000	2,000
Additional paid-in capital	42,371,000	51,968,000
Accumulated deficit	(38,024,000)	(38,024,000)
Total stockholders' equity	\$4,348,000	\$13,946,000

S-17

TABLE OF CONTENTS**DILUTION**

Purchasers of our common stock in the Rights Offering and purchasers of the Offered Units (and upon exercise of the Warrants issued pursuant to the Rights Offering and with the Offered Units) will experience an immediate dilution of the net tangible book value per share of our common stock. Our net tangible book value as of September 30, 2016 was approximately \$2,612,000, or approximately \$0.20 per share of our common stock (based upon 12,970,410 shares of our common stock outstanding). Net tangible book value per share is equal to our total net tangible book value, which is our total tangible assets less our total liabilities, divided by the number of shares of our outstanding common stock. Dilution per share equals the difference between the amount per share paid by purchasers of shares of common stock in the Rights Offering or purchasers of the Purchased Units and the net tangible book value per share of our common stock immediately after the Rights Offering and the offering of the Purchased Units.

Based on the sale by us in this Rights Offering of 2,594,082 Units at the Subscription Price of \$4.00 per Unit (or, alternatively, of the partial exercise by our shareholders of their Subscription Rights and the sale of the Offered Units), and after deducting estimated offering expenses and dealer manager and placement agency fees and expenses payable by us of approximately \$778,000, and the application of the estimated \$9.6 million of net proceeds from the Rights Offering, assuming equity accounting for the Warrants, our pro forma net tangible book value as of September 30, 2016 would have been approximately \$12,210,000, or \$0.78 per share. This represents an immediate increase in pro forma net tangible book value to purchasers of \$0.58 per share and an immediate dilution to existing shareholders who purchase in the Rights Offering of \$3.22 per share.

The following table illustrates this per-share dilution on a pro forma basis, assuming a fully subscribed for Rights Offering of 2,594,082 Units at the Subscription Price of \$4.00 per Unit (excluding any issuance of shares of common stock upon exercise of Warrants):

Subscription Price	\$ 4.00
Net tangible book value per share as of September 30, 2016, before Rights Offering	\$ 0.20
Increase in net tangible book value per share attributable to Rights Offering	\$ 0.58
Pro forma net tangible book value per share as of September 30, 2016, after giving effect to Rights Offering	0.78
Dilution in net tangible book value per share to existing shareholders who purchase	\$ 3.22

The information above is as of September 30, 2016 and excludes the following as of September 30, 2016:

890,050 shares of common stock issuable upon the exercise of stock options outstanding with a weighted average exercise price of \$4.98 per share;

445,313 shares of common stock issuable upon the exercise of outstanding warrants with a weighted average exercise price of \$4.65 per share;

11,028 shares of common stock reserved for future issuance under our 2011 Equity Compensation Plan to the independent members of our board of directors after completion of services for the 4th quarter of 2016;

7,500 shares of common stock reserved for future issuance under our 2013 Consultant Stock Plan to consultants after completion of services from October 1, 2016 to June 30, 2017;

2,594,082 shares of common stock issuable upon the exercise of Warrants to be issued under this Rights Offering with an exercise price of \$4.00 per share;

263,236 shares of common stock reserved for future issuance under our 2011 Equity Compensation Plan;

85,389 shares of common stock reserved for future issuance under our 2013 Consultant Stock Plan: and
S-18

TABLE OF CONTENTS

155,645 shares of common stock and 155,645 shares of common stock underlying any Warrants included in Units that may be issued to MDB in lieu of payment of the 6% cash fee as dealer manager and placement agent (the MDB Units).

Further, our 2011 Equity Compensation Plan and our 2013 Consultant Stock Plan each provide for quarterly increases in the available number of authorized shares equal to the lesser of 10% and 1%, respectively, of any new shares issued by us during the quarter immediately prior to the adjustment date or such lesser amount as the board of directors shall determine. Based on the sale by us in this Rights Offering of a maximum of 2,594,082 Units, including 2,594,082 shares of common stock, and assuming that all of the 2,594,082 Warrants are exercised, the number shares of common stock reserved for future issuance under our 2011 Equity Compensation Plan and our 2013 Consultant Stock Plan could increase by an additional 518,816 and 51,882 shares, respectively, in the two years following the Expiration Date.

To the extent that outstanding options or warrants are exercised and reserved shares of common stock issued, if you do not purchase our common stock in the Rights Offering you will experience further dilution. To the extent that the above options and warrants were exercised and reserved shares of common stock issued, excluding the MDB Units, the pro forma net tangible book value per share of our common stock after giving effect to the Rights Offering would be \$0.61 per share. In addition, we may choose to raise additional capital due to market conditions or strategic considerations. To the extent that additional capital is raised through the sale of securities, the issuance of those securities could result in further dilution to our shareholders.

S-19

TABLE OF CONTENTS**MARKET PRICE OF OUR COMMON STOCK AND
RELATED SHAREHOLDER MATTERS**

Our common stock trades on the NASDAQ Capital Market under the symbol **CLIR** . The following table sets forth for the periods indicated the high and low sale prices per share of our common stock as reported on the NASDAQ Capital Market.

Period	High	Low
2016:		
Quarter ended December 31, 2016 (through December 6, 2016)	\$ 6.08	\$ 3.85
Quarter ended September 30, 2016	\$ 6.09	\$ 4.14
Quarter ended June 30, 2016	\$ 5.58	\$ 3.75
Quarter ended March 31, 2016	\$ 4.90	\$ 2.98
2015:		
Quarter ended December 31, 2015	\$ 6.41	\$ 4.44
Quarter ended September 30, 2015	\$ 7.23	\$ 3.44
Quarter ended June 30, 2015	\$ 5.90	\$ 4.74
Quarter ended March 31, 2015	\$ 7.62	\$ 4.97
2014:		
Quarter ended December 31, 2014	\$ 8.13	\$ 5.27
Quarter ended September 30, 2014	\$ 9.11	\$ 6.11
Quarter ended June 30, 2014	\$ 10.90	\$ 7.65
Quarter ended March 31, 2014	\$ 11.75	\$ 8.58

Dividend Policy

We have not paid any cash dividends on our common stock since our inception and do not anticipate paying any cash dividends in the foreseeable future. We plan to retain our earnings, if any, to provide funds for the expansion of our business.

S-20

TABLE OF CONTENTS

THE RIGHTS OFFERING

Subscription Rights

Your Subscription Rights will entitle you to purchase a Unit consisting of one share of our common stock and a Warrant to purchase one share of our common stock for each whole share of common stock you purchase in the Rights Offering. You will need to exercise 5 Subscription Rights to purchase one Unit. For example, if you owned 1,000 shares of common stock as of the Record Date, you will receive Subscription Rights for the purchase of 200 shares of our common stock and Warrants to purchase 200 shares of our common stock for \$4.00 per whole Unit, for a total payment of \$800. You may exercise all or a portion of your Subscription Rights, or you may choose not to exercise any of your Subscription Rights. Rights may only be exercised in aggregate for whole numbers of shares of our common stock; no fractional shares of our common stock will be issued in the Rights Offering.

Limitation on the Purchase of Units

You may only purchase the number of Units purchasable upon exercise of the number of Subscription Rights distributed to you in the Rights Offering. Accordingly, the number of Units that you may purchase in the Rights Offering is limited by the number of shares of our common stock you held on the Record Date and by the extent to which other shareholders exercise their Subscription Rights, which we cannot determine prior to completion of the Rights Offering.

Further, in the event that the purchase of Units by a shareholder could, as determined by us in our sole discretion, potentially result in a limitation on our ability to use Tax Attributes, we may, but we are under no obligation to, reduce the number of Units to be acquired by such shareholder to such number of shares of our common stock and Warrants as we, in our sole discretion, shall determine to be advisable in order to preserve our ability to use the Tax Attributes.

Subscription Price

The Subscription Price per Unit is \$4.00. The Subscription Price does not necessarily bear any relationship to our past or expected future results of operations, cash flows, current financial condition, or any other established criteria for value.

Determination of Subscription Price

In determining the Subscription Price, our board of directors considered a variety of factors including those listed below:

- the current and historical trading prices of our common stock;
- the price at which shareholders might be willing to participate in the Rights Offering;
- the value of the Warrant being issued as a component of the Unit;
- our need for additional capital and liquidity;
- the cost of capital from other sources; and

comparable precedent transactions, including the percentage of shares offered, the terms of the subscription rights being offered, the subscription price and the discount that the Subscription Price represented to the immediately prevailing closing prices for those offerings.

In conjunction with the review of these factors, our board of directors also reviewed our history and prospects, including our past and present earnings and cash requirements, our prospects for the future, the outlook for our industry and our current financial condition. Our board of directors believes that the Subscription Price should be designed to provide an incentive to our current shareholders to participate in the Rights Offering and exercise their Subscription Right.

The Subscription Price does not necessarily bear any relationship to any established criteria for value. No valuation consultant or investment banker has opined upon the fairness or adequacy of the Subscription Price. You should not consider the Subscription Price as an indication of actual value of the Company or our

S-21

TABLE OF CONTENTS

common stock. You should not assume or expect that, after the Rights Offering, our shares of common stock will trade at or above the Subscription Price in any given time period. The market price of our common stock may decline during or after the Rights Offering. We cannot assure you that you will be able to sell the shares of our common stock purchased during the Rights Offering at a price equal to or greater than the Subscription Price. You should obtain a current price quote for our common stock before exercising your Subscription Rights and make your own assessment of our business and financial condition, our prospects for the future, and the terms of this Rights Offering. Once made, all exercises of Subscription Rights are irrevocable.

Non-Transferability of Subscription Rights

The Subscription Rights are non-transferable (other than by operation of law) and, therefore, you may not sell, transfer, assign or give away your Subscription Rights to anyone. The Subscription Rights will not be listed for trading on any stock exchange or market.

Expiration Date

The subscription period during which you may exercise your Subscription Rights expires at 5:00 p.m. Eastern Time on January 13, 2017, which is the expiration of the Rights Offering. If you do not exercise your Subscription Rights before that time, your Subscription Rights will expire and will no longer be exercisable. We will not be required to issue Units to you if the Subscription Agent receives your Rights Certificate or your subscription payment after that time.

If you hold your shares of common stock in the name of a broker, dealer, custodian bank or other nominee, the nominee will exercise the Subscription Rights on your behalf in accordance with your instructions. Please note that the nominee may establish a deadline that may be before 5:00 p.m. Eastern time on January 13, 2017, which is the Expiration Date that we have established for the Rights Offering.

Termination

We may terminate the Rights Offering at any time and for any reason prior to the completion of the Rights Offering. If we terminate the Rights Offering, we will issue a press release notifying shareholders and the public of the termination.

Return of Funds upon Completion or Termination

The Subscription Agent will hold funds received in payment for Units in a segregated account pending completion of the Rights Offering. The Subscription Agent will hold this money until the Rights Offering is completed or is terminated. If the Rights Offering is terminated for any reason, all subscription payments received by the Subscription Agent and held in escrow for investors will be returned as soon as practicable, without interest or penalty.

Shares of Our Common Stock Outstanding After the Rights Offering

On the Record Date, assuming no additional issuances of our common stock prior to the Record Date, we will have

12,970,410 shares of our common stock issued and outstanding. Based on the foregoing, and assuming no other transactions by us involving our common stock prior to the expiration of the Rights Offering, if the Rights Offering is fully subscribed, approximately 2,594,082 shares of our common stock will be issued and outstanding and Warrants to purchase approximately 2,594,082 additional shares of our common stock will be outstanding (excluding the currently outstanding warrants). The exact number of shares of common stock and Warrants that we will issue in this Rights Offering will depend on the number of Units that are subscribed for in the Rights Offering and whether the unsubscribed, or Offered Units, are sold through the placement agent.

Methods for Exercising Subscription Rights

The exercise of Subscription Rights is irrevocable and may not be cancelled or modified. You may exercise your Subscription Rights as follows:

Subscription by Record Holders

If you are a shareholder of record, the number of Units you may purchase pursuant to your Subscription Rights is indicated on the enclosed Rights Certificate. You may exercise your Subscription Rights by properly

S-22

TABLE OF CONTENTS

completing and executing the Rights Certificate and forwarding it, together with your full payment of the Subscription Price, to the Subscription Agent at the address given below under Subscription Agent, to be received before 5:00 p.m. Eastern time on January 13, 2017.

Subscription by Beneficial Owners

If you are a beneficial owner of shares of our common stock that are registered in the name of a broker, dealer, custodian bank, or other nominee, you will not receive a Rights Certificate. Instead, we will issue one Subscription Right to such nominee record holder for all shares of our common stock held by such nominee at the Record Date. If you are not contacted by your nominee, you should promptly contact your nominee in order to subscribe for shares in the Rights Offering and follow the instructions provided by your nominee.

Payment Method

Payments must be made in full in U.S. currency by bank certified check or by wire transfer, and payable to VStock Transfer, LLC as escrow agent for ClearSign Combustion Corporation. You must timely pay the full Subscription Price for the full number of Units of our common stock and Warrants you wish to acquire pursuant to the exercise of Subscription Rights by delivering a:

bank certified check payable to VStock Transfer, LLC as escrow agent for ClearSign Combustion Corporation; or wire transfer of immediately available funds directly to the account maintained by VStock Transfer, LLC as escrow agent, for purposes of accepting subscriptions in this Rights Offering at:

CitiBank, N.A
530 Central Avenue
Cedarhurst, NY 11516
Routing #021000089 Account Name: VStock Transfer, LLC
as escrow agent to ClearSign Combustion Corporation
Account #6779050294
Swift # CitiUS33

You should read the instruction letter accompanying the Rights Certificate carefully and strictly follow it. **DO NOT SEND RIGHTS CERTIFICATES OR PAYMENTS DIRECTLY TO US.** We will not consider your subscription received until the Subscription Agent has received delivery of a properly completed and duly executed Rights Certificate and payment of the full Subscription Price.

The method of delivery of Rights Certificates and payment of the Subscription Price to the Subscription Agent will be at the risk of the holders of Subscription Rights. If sent by mail, we recommend that you send those statements and payments by registered mail, properly insured, with return receipt requested, or by overnight courier, and that you allow a sufficient number of days to ensure delivery to the Subscription Agent before the Rights Offering expires.

Missing or Incomplete Subscription Forms or Payment

If you fail to complete and sign the Rights Certificate or otherwise fail to follow the subscription procedures that apply to the exercise of your Subscription Rights before the Rights Offering expires, the Subscription Agent will reject your subscription or accept it to the extent of the payment received. Neither we nor our Subscription Agent undertake any responsibility or action to contact you concerning an incomplete or incorrect subscription form, nor are we under any obligation to correct such forms. We have the sole discretion to determine whether a subscription exercise properly

complies with the subscription procedures.

The payment received will be applied to exercise your Subscription Rights to the fullest extent possible based on the amount of the payment received after determination of the Subscription Price. Any excess subscription payments received by the Subscription Agent will be returned as soon as practicable, without interest or penalty, following the expiration of the Rights Offering.

Issuance of common stock and Warrants

The shares of common stock and Warrants that are purchased in the Rights Offering as part of the Units will be issued in book-entry, or uncertificated, form meaning that you will receive a direct registration (DRS)

S-23

TABLE OF CONTENTS

account statement from our transfer agent reflecting ownership of these securities if you are a holder of record of shares. If you hold your shares of common stock in the name of a custodian bank, broker, dealer, or other nominee or purchase shares of common stock and Warrants that were subscribed for through the placement agent, DTC will credit your account with your nominee with the securities you purchased in the Rights Offering.

Subscription Agent

The Subscription Agent for the Rights Offering is VStock Transfer, LLC. The address to which Rights Certificates and payments should be mailed or delivered by overnight courier is provided below. If sent by mail, we recommend that you send documents and payments by registered mail, properly insured, with return receipt requested, and that you allow a sufficient number of days to ensure delivery to the Subscription Agent and clearance or payment before the Rights Offering expires. Do not send or deliver these materials to us.

By mail:

VStock Transfer, LLC
Attn: Allison Niccolls
18 Lafayette Place
Woodmere, New York 11598
Telephone: (212) 828-8436 or
toll free at (855) 987-8625
Email: info@vstocktransfer.com

By hand or overnight courier:

VStock Transfer, LLC
Attn: Allison Niccolls
18 Lafayette Place
Woodmere, New York 11598
Telephone: (212) 828-8436 or
toll free at (855) 987-8625
Email: info@vstocktransfer.com

If you deliver the Rights Certificates in a manner different than that described in this prospectus supplement, we may not honor the exercise of your Subscription Rights.

Information

You should direct any questions or requests for assistance concerning the method of subscribing for the Units or for additional copies of this prospectus to the Information Agent or the dealer manager as follows:

Information Agent

VStock Transfer, LLC
Attn: Allison Niccolls
18 Lafayette Place
Woodmere, New York 11598
Telephone: (212) 828-8436 or
toll free at (855) 987-8625
Email: info@vstocktransfer.com

Dealer Manager

MDB Capital Group LLC
Attn: Alex Zapanta
2425 Cedar Springs Road
Dallas, Texas 75201
Telephone: (310) 526-5007

No Fractional Shares

We will not issue fractional shares of common stock in the Rights Offering. Rights holders will only be entitled to purchase a number of Units representing a whole number of shares of common stock, rounded down to the nearest whole number of Units a holder would otherwise be entitled to purchase. Any excess subscription payments received by the Subscription Agent will be returned as soon as practicable after expiration of the Rights Offering, without interest or penalty.

Notice to Brokers and Nominees

If you are a broker, dealer, bank, or other nominee holder that holds shares of our common stock for the account of others on the Record Date, you should notify the beneficial owners of the shares for whom you are the nominee of the Rights Offering as soon as possible to learn their intentions with respect to exercising their Subscription Rights. If a beneficial owner of our common stock so instructs, you should complete the Rights Certificate and submit it to the Subscription Agent with the proper subscription payment by the expiration date. You may exercise the number of Subscription Rights to which all beneficial owners in the aggregate otherwise would have been entitled had they been direct holders of our common stock on the Record Date, provided that you, as a nominee record holder, make a proper showing to the Subscription Agent by submitting the form titled Nominee Holder Certification, which is provided with your Rights Offering materials. If you did not receive this form, you should contact our Subscription Agent to request a copy.

S-24

TABLE OF CONTENTS

Validity of Subscriptions

We will resolve all questions regarding the validity and form of the exercise of your Subscription Rights, including time of receipt and eligibility to participate in the Rights Offering. Our determination will be final and binding. Once made, subscriptions are irrevocable; we will not accept any alternative, conditional, or contingent subscriptions. We reserve the absolute right to reject any subscriptions not properly submitted or the acceptance of which would be unlawful. You must resolve any irregularities in connection with your subscriptions before the Expiration Date of the Rights Offering, unless we waive them in our sole discretion. Neither we nor the Subscription Agent is under any duty to notify you or your representative of defects in your subscriptions. A subscription will be considered accepted, subject to our right to withdraw or terminate the Rights Offering, only when the Subscription Agent receives a properly completed and duly executed Rights Certificate and any other required documents and the full Subscription Price. Our interpretations of the terms and conditions of the Rights Offering will be final and binding.

Shareholder Rights

You will have no rights as a holder of the shares of our common stock you purchase in the Rights Offering until shares are issued in book-entry form or your account at your broker, dealer, bank, or other nominee is credited with the shares of our common stock purchased in the Rights Offering. Holders of Warrants issued in connection with the Rights Offering will not have rights as holders of our common stock until such Warrants are exercised and the shares of common stock underlying the Warrants are issued to the holder.

Foreign Shareholders

We will not mail this prospectus or Rights Certificates to shareholders with addresses that are outside the United States or that have an army post office or foreign post office address. The Subscription Agent will hold these Rights Certificates for their account. To exercise Subscription Rights, our foreign shareholders must notify the Subscription Agent prior to 5:00 p.m. Eastern time on January 10, 2017, the third business day prior to the Expiration Date, of your exercise of Subscription Rights and provide evidence satisfactory to us, such as a legal opinion from local counsel, that the exercise of such Subscription Rights does not violate the laws of the jurisdiction in which such shareholder resides and payment of the Subscription Price from a U.S. bank in U.S. dollars before the Expiration Date. If no notice is received by such time or the evidence presented is not satisfactory to us, the Subscription Rights represented thereby will expire.

No Revocation or Change

Once you submit the Rights Certificate or have instructed your nominee of your subscription request, you are not allowed to revoke or change the exercise or request a refund of monies paid. All exercises of Subscription Rights are irrevocable, even if you learn information about us that you consider to be unfavorable. You should not exercise your Subscription Rights unless you are certain that you wish to purchase Units at the Subscription Price.

U.S. Federal Income Tax Treatment of Rights Distribution

For U.S. federal income tax purposes, we do not believe holders of shares of our common stock should recognize income or loss upon receipt or exercise of a Subscription Right. See Material U.S. Federal Income Tax Consequences.

No Recommendation to Rights Holders

Our board of directors is not making a recommendation regarding your exercise of the Subscription Rights. Shareholders who exercise Subscription Rights risk investment loss on money invested. We cannot assure you that the market price of our common stock will reach or exceed the Subscription Price, and even if it does so, that it will not decline during or after the Rights Offering. We also cannot assure you that you will be able to sell shares of our common stock purchased in the Rights Offering at a price equal to or greater than the Subscription Price. You should make your investment decision based on your assessment of our business and financial condition, our prospects for the future and the terms of this Rights Offering. Please see **Risk Factors** for a discussion of some of the risks involved in investing in our common stock.

S-25

TABLE OF CONTENTS

Fees and Expenses

We will pay all fees and expenses charged by MDB for its services as the dealer manager and placement agent, the Subscription Agent and the Information Agent. You are responsible for paying any other commissions, fees, taxes or other expenses incurred in connection with the exercise of your Subscription Rights.

Listing

The Subscription Rights may not be sold, transferred, assigned or given away to anyone, and will not be listed for trading on any stock exchange or market. The shares of our common stock, including the shares to be issued in the Rights Offering, are traded on NASDAQ under the symbol CLIR. We intend to apply to The NASDAQ Stock Market to list the Warrants issued in the Rights Offering, but we cannot guarantee that our listing application will be approved.

Important

Do not send Rights Certificates directly to us. You are responsible for choosing the payment and delivery method for your Rights Certificate and you bear the risks associated with such delivery. If you choose to deliver your Rights Certificate and payment by mail, we recommend that you use registered mail, properly insured, with return receipt requested. We also recommend that you allow a sufficient number of days to ensure delivery to the Subscription Agent and clearance of payment prior to the Expiration Date.

Distribution Arrangements

MDB is the dealer-manager for the Rights Offering. The dealer-manager will provide marketing assistance and advice to us in connection with the Rights Offering and will solicit the exercise of Subscription Rights. MDB is also the placement agent and will use its best efforts, on a no minimum basis, to sell any Units not subscribed for by our shareholders in the Rights Offering. However, MDB is not underwriting, and therefore has no obligation to purchase, any of the Subscription Rights or the Units, shares of common stock or Warrants to be issued in the Rights Offering or sold as placement agent. We have agreed to pay MDB, for its services as the dealer-manager and the placement agent, certain fees and to reimburse MDB for certain out-of-pocket expenses incurred in connection with this offering. See Plan of Distribution for a discussion of the fees and expenses to be paid to MDB in connection with this Rights Offering.

TABLE OF CONTENTS

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES

The following discussion is a summary of material U.S. federal income tax consequences relating to the receipt and exercise (or expiration) of the Subscription Rights acquired through the Rights Offering and the ownership and disposition of shares of our common stock and Warrants received upon exercise of the Subscription Rights or shares of our common stock received upon exercise of the Warrants.

This summary deals only with Subscription Rights acquired through the Rights Offering, shares of our common stock and Warrants acquired upon exercise of Subscription Rights and shares of our common stock acquired upon exercise of the Warrants, in each case, that are held as capital assets by a beneficial owner. This discussion does not address all aspects of U.S. federal income taxation that may be relevant to such a beneficial owner in light of their personal circumstances, including the alternative minimum tax and the Medicare contribution tax on investment income. This discussion also does not address tax consequences to holders that may be subject to special tax rules, including, without limitation, insurance companies, real estate investment trusts, regulated investment companies, grantor trusts, tax-exempt organizations, employee stock purchase plans, partnerships and other pass-through entities, persons holding Subscription Rights, shares of our common stock or warrants as part of a hedging, integrated, conversion or constructive sale transaction or a straddle, financial institutions, brokers, dealers in securities or currencies, traders that elect to mark-to-market their securities, persons that acquired Subscription Rights, shares of our common stock or warrants in connection with employment or other performance of services, U.S. Holders (as defined below) that have a functional currency other than the U.S. dollar, U.S. expatriates, and certain former citizens or residents of the United States. In addition, the discussion does not describe any tax consequences arising out of the tax laws of any state, local or foreign jurisdiction, or any U.S. federal tax considerations other than income taxation (such as estate, generation skipping or gift taxation).

The discussion below is based upon the provisions of the Internal Revenue Code of 1986, as amended, or the Code, the United States Treasury regulations promulgated thereunder, rulings and judicial decisions, as of the date hereof, and such authorities may be repealed, revoked or modified, perhaps retroactively. We have not sought, and will not seek, any rulings from the Internal Revenue Service, or the IRS, regarding the matters discussed below. There can be no assurance that the IRS or a court (if the matter were contested) will not take positions concerning the tax consequences of the receipt of Subscription Rights acquired through the Rights Offering by persons holding shares of our common stock, the exercise (or expiration) of the Subscription Rights, the acquisition, ownership and disposition of shares of our common stock and the acquisition, ownership and disposition (or expiration) of Warrants acquired upon exercise of the Subscription Rights that are different from those discussed below.

As used herein, a U.S. Holder means a beneficial owner of shares of our common stock, Subscription Rights and shares of our common stock and Warrants acquired upon exercise of Subscription Rights or shares of our common stock acquired upon exercise of the Warrants, as the case may be, that is for U.S. federal income tax purposes: (1) an individual who is a citizen or resident of the United States; (2) a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States or any state thereof or the District of Columbia; (3) an estate the income of which is subject to U.S. federal income taxation regardless of its source; or (4) a trust (a) the administration of which is subject to the primary supervision of a court within the United States and one or more United States persons as described in Section 7701(a)(30) of the Code have authority to control all substantial decisions of the trust or (b) that has a valid election under the Treasury Regulations in effect to be treated as a United States person. A Non-U.S. Holder is such a beneficial owner (other than an entity or arrangement that is treated as a partnership for U.S. federal income tax purposes) that is not a U.S. Holder.

If any entity or arrangement that is treated as a partnership for U.S. federal income tax purposes is the record owner, the U.S. federal income tax treatment of a partner generally will depend upon the status of the partner and the activities of the partnership. Holders that are partnerships (and partners in such partnerships) are urged to consult their own tax advisors.

HOLDERS OF SHARES OF OUR COMMON STOCK SHOULD CONSULT THEIR OWN TAX ADVISORS REGARDING THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AND THE CONSEQUENCES UNDER FEDERAL ESTATE AND GIFT TAX

S-27

TABLE OF CONTENTS

LAWS, FOREIGN, STATE AND LOCAL LAWS AND TAX TREATIES OF THE RECEIPT, OWNERSHIP AND EXERCISE OF SUBSCRIPTION RIGHTS AND THE ACQUISITION, OWNERSHIP AND DISPOSITION OF SHARES OF OUR COMMON STOCK AND WARRANTS ACQUIRED UPON EXERCISE OF SUBSCRIPTION RIGHTS AND SHARES OF OUR COMMON STOCK ACQUIRED UPON EXERCISE OF THE WARRANTS.

Tax Consequences to U.S. Holders

Taxation of Subscription Rights

Receipt of Subscription Rights

Although the authorities governing transactions such as this Rights Offering are complex and do not speak directly to the consequences of certain aspects of this Rights Offering, including the inclusion of the right to purchase Warrants in the Subscription Rights (rather than the right to purchase only shares of our common stock), we do not believe your receipt of Subscription Rights pursuant to the Rights Offering should be treated as a taxable distribution with respect to your existing shares of common stock for U.S. federal income tax purposes. Pursuant to Section 305(a) of the Code, in general, the receipt by a shareholder of a right to acquire stock or warrants should not be included in the taxable income of the recipient. The general rule of non-recognition in Section 305(a) is subject to exceptions in Section 305(b), which include disproportionate distributions. A disproportionate distribution is a distribution or a series of distributions, including deemed distributions, that has the effect of the receipt of cash or other property by some shareholders and an increase in the proportionate interest of other shareholders in a corporation's assets or earnings and profits. During the last 36 months, we have not made any distributions of cash or non-stock property with respect to: (i) our common stock or (ii) our options or warrants to acquire common stock. Currently we do not intend to make any future distributions of cash or non-stock property with respect to: (i) our common stock or (ii) our options or warrants to acquire common stock; however, there is no guarantee that we will not make such distributions in the future.

Our position regarding the tax-free treatment of the Subscription Rights distribution is not binding on the IRS or the courts. If this position is finally determined by the IRS or a court to be incorrect, whether on the basis that the issuance of the Subscription Rights is a disproportionate distribution or otherwise, the fair market value of the Subscription Rights would be taxable to holders of our common stock as a dividend to the extent of the holder's pro rata share of our current and accumulated earnings and profits, if any, with any excess being treated as a return of capital to the extent thereof and then as capital gain. Although no assurance can be given, it is anticipated that we will not have current and accumulated earnings and profits through the end of 2016.

The following discussion is based upon the treatment of the Subscription Rights issuance as a non-taxable distribution with respect to your existing shares of common stock for U.S. federal income tax purposes.

Tax Basis in the Subscription Rights

If the fair market value of the Subscription Rights you receive is less than 15% of the fair market value of your existing shares of common stock (with respect to which the Subscription Rights are distributed) on the date you receive the Subscription Rights, the Subscription Rights will be allocated a zero dollar basis for U.S. federal income tax purposes, unless you elect to allocate your basis in your existing shares of common stock between your existing shares of common stock and the Subscription Rights in proportion to the relative fair market values of the existing shares of common stock and the Subscription Rights, determined on the date of receipt of the Subscription Rights. If you choose to allocate basis between your existing common shares and the Subscription Rights, you must make this election on a statement included with your timely filed tax return (including extensions) for the taxable year in which

you receive the Subscription Rights. Such an election is irrevocable.

However, if the fair market value of the Subscription Rights you receive is 15% or more of the fair market value of your existing shares of common stock on the date you receive the Subscription Rights, then you must allocate your basis in your existing shares of common stock between those shares and the Subscription Rights you receive in proportion to their fair market values determined on the date you receive the Subscription Rights.

S-28

TABLE OF CONTENTS

The fair market value of the Subscription Rights on the date that the Subscription Rights are distributed is uncertain, and we have not obtained, and do not intend to obtain, an appraisal of the fair market value of the Subscription Rights on that date. In determining the fair market value of the Subscription Rights, you should consider all relevant facts and circumstances, including any difference between the Subscription Price of the Subscription Rights and the trading price of our shares of common stock on the date that the Subscription Rights are distributed, the exercise price of the Warrants, the length of the period during which the Subscription Rights may be exercised and the fact that the Subscription Rights are non-transferable.

Exercise of Subscription Rights

Generally, you will not recognize gain or loss upon the effectiveness of the exercise of a Subscription Right in the Rights Offering. Your adjusted tax basis, if any, in the Subscription Right plus the Subscription Price should be allocated between the new common stock and Warrant acquired upon exercise of the Subscription Right. The basis in the stock upon which the Subscriptions Rights were issued which is allocated to the Subscription Rights under the prior section entitled Tax Basis in the Subscription Rights would be further allocated between the new common stock and the Warrant acquired upon exercise of the Subscription Right in proportion to their relative fair market values on the date the Subscription Rights were distributed. The Subscription Price should be allocated between the new common stock and Warrant acquired upon exercise of the Subscription Right in proportion to their relative fair market values on the exercise date. These allocations will establish your initial tax basis for U.S. federal income tax purposes in your new common stock and Warrants. The holding period of shares of common stock or a Warrant acquired upon exercise of a Subscription Right in the Rights Offering will begin on the date of exercise. Soon after Closing, we intend to provide a calculation of the basis in each new share of common stock and Warrant to assist those exercising to establish their initial tax basis for U.S. federal income tax purposes.

If you exercise a Subscription Right received in the Rights Offering after disposing of the shares of our common stock with respect to which such Subscription Right is received, then certain aspects of the tax treatment of the exercise of the Subscription Right are unclear, including (1) the allocation of the tax basis between the shares of common stock previously sold and the Subscription Right, (2) the impact of such allocation on the amount and timing of gain or loss recognized with respect to the shares of our common stock previously sold and (3) the impact of such allocation on the tax basis of the shares of our common stock and Warrants acquired upon exercise of the Subscription Right. If you exercise a Subscription Right received in the Rights Offering after disposing of shares of our common stock with respect to which the Subscription Right is received, you should consult with your own tax advisor.

Expiration of Subscription Rights

If you allow Subscription Rights received in the Rights Offering to expire, you should not recognize any gain or loss for U.S. federal income tax purposes, and you should re-allocate any portion of the tax basis in your existing common stock previously allocated to the Subscription Rights that have expired to the existing common stock.

Taxation of Warrants

Exercise of Warrants

Upon the exercise of a Warrant by paying the exercise price in cash, in general, you will not recognize gain or loss for U.S. federal income tax purposes, except to the extent you receive a cash payment for any such fractional share that would otherwise have been issuable upon exercise of the Warrant. Your initial tax basis in common stock received will equal your adjusted tax basis in the Warrant exercised (as determined pursuant to the rules discussed above),

increased by the amount of cash paid to exercise the Warrant and decreased by the adjusted tax basis allocable to any fractional share that would otherwise have been issuable upon exercise of the Warrant. Your holding period for the shares of our common stock received on exercise generally will commence on the day of exercise.

Expiration of Warrants

If you allow a Warrant to expire, you will generally recognize a loss for U.S. federal income tax purposes equal to your adjusted tax basis in the Warrant. In general, such a loss will be a capital loss and will be a short-term or long-term capital loss depending on your holding period for the Warrant.

S-29

TABLE OF CONTENTS

Certain Adjustments to the Warrants

Under Section 305 of the Code, an adjustment to the number of common shares that will be issued on the exercise of the Warrants, or an adjustment to the exercise price of the Warrants, may be treated as a constructive distribution to you if, and to the extent that, such adjustment has the effect of increasing your proportionate interest in our earnings and profits or assets, depending on the circumstances of such adjustment (for example, if such adjustment is to compensate for a distribution of cash or other property to our shareholders). Adjustments to the exercise price of Warrants made pursuant to a bona fide reasonable adjustment formula that has the effect of preventing dilution of the interest of the holders of the Warrants should generally not be considered to result in a constructive distribution. Any such constructive distribution would be taxable whether or not there is an actual distribution of cash or other property.

See the more detailed discussion of the rules applicable to distributions made by us under the heading **Taxation of Common Stock Distributions** below.

Sale, Exchange, Redemption or other Taxable Disposition of Warrants

Upon the sale, exchange, redemption or other taxable disposition of a Warrant, in general, you will recognize taxable gain or loss measured by the difference, if any, between (i) the amount of cash and the fair market value of any property received upon such taxable disposition and (ii) your adjusted tax basis in the Warrant as determined pursuant to the rules discussed above. Your gain or loss generally will be capital gain or loss and generally will be long-term capital gain or loss if, at the time of the sale or other disposition, your holding period for the Warrant is more than one year. The deductibility of capital losses is subject to limitations.

Taxation of Common Stock

Distributions

Distributions with respect to shares of our common stock acquired upon exercise of Subscription Rights or upon exercise of the Warrants will be taxable as dividend income when actually or constructively received to the extent of our current or accumulated earnings and profits as determined for U.S. federal income tax purposes. We currently have a substantial accumulated deficit of approximately \$38 million as of September 30, 2016.

Dividend income received by certain non-corporate U.S. Holders with respect to shares of our common stock generally will be qualified dividends subject to preferential rates of U.S. federal income tax, provided that the U.S. Holder meets applicable holding period and other requirements. Subject to similar exceptions for short-term and hedged positions, dividend income on our shares of common stock paid to U.S. Holders that are domestic corporations generally will qualify for the dividends-received deduction. To the extent that the amount of a distribution exceeds our current and accumulated earnings and profits, such distribution will be treated first as a tax-free return of capital to the extent of your adjusted tax basis in such shares of our common stock and thereafter as capital gain.

Dispositions

If you sell or otherwise dispose of shares of common stock acquired upon exercise of Subscription Rights or upon exercise of Warrants in a taxable transaction, you will generally recognize capital gain or loss equal to the difference between the amount realized and your adjusted tax basis in the shares. Such capital gain or loss will be long-term capital gain or loss if your holding period for such shares is more than one year at the time of disposition. Long-term capital gain of a non-corporate U.S. Holder is generally taxed at preferential rates of U.S. federal income tax. The deductibility of capital losses is subject to limitations.

Information Reporting and Backup Withholding

You may be subject to information reporting and/or backup withholding with respect to the gross proceeds from the disposition of Warrants, shares of our common stock acquired through the exercise of Subscription Rights or through the exercise of Warrants, or dividend payments. Backup withholding (currently at the rate of 28%) may apply under certain circumstances if you (1) fail to furnish your social security or other taxpayer identification number, or TIN, (2) furnish an incorrect TIN, (3) fail to report interest or dividends properly or (4) fail to provide a certified statement, signed under penalty of perjury, that the

S-30

TABLE OF CONTENTS

TIN provided is correct, that you are not subject to backup withholding and that you are a U.S. person for U.S. federal income tax purposes on IRS Form W-9. Any amount withheld from a payment under the backup withholding rules is allowable as a credit against (and may entitle you to a refund with respect to) your U.S. federal income tax liability, provided that the required information is timely furnished to the IRS. Certain persons are exempt from information reporting and backup withholding, including corporations and certain financial institutions, provided that they demonstrate this fact, if requested. You are urged to consult your own tax advisor as to your qualification for exemption from backup withholding and the procedure for obtaining such exemption.

Tax Consequences to Non-U.S. Holders

Taxation of the Subscription Rights

Receipt, Exercise and Expiration of the Subscription Rights

The discussion assumes that the receipt of Subscription Rights will be treated as a non-taxable distribution. See Tax Consequences to U.S. Holders-Taxation of Subscription Rights-Receipt of Subscription Rights above.

Exercise and Expiration of Warrants and Certain Adjustments to Warrants

Exercise of Warrants

In general, a Non-U.S. Holder will not recognize gain or loss for U.S. federal income tax purposes upon exercise of a Warrant, except to the extent the Non-U.S. Holder receives a cash payment for any such fractional share that would otherwise have been issuable upon exercise of the Warrant, which will be treated as a sale subject to the rules described under Sale or Other Disposition of Common Stock or Warrants below.

Expiration of Warrants

In general, a Non-U.S. Holder will not be able to utilize a loss recognized upon expiration of a Warrant against the Non-U.S. Holder's U.S. federal income tax liability unless the loss is effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if an income tax treaty so provides, is attributable to a permanent establishment in the United States) or is treated as a U.S.-source loss and the Non-U.S. Holder is present 183 days or more in the taxable year of disposition and certain other conditions are met.

Certain Adjustments to the Warrants

Under Section 305 of the Code, an adjustment to the number of common shares that will be issued on the exercise of the Warrants, or an adjustment to the exercise price of the Warrants, may be treated as a constructive distribution to a Non-U.S. Holder of the Warrants if, and to the extent that, such adjustment has the effect of increasing such Non-U.S.

Holder's proportionate interest in our earnings and profits or assets, depending on the circumstances of such adjustment (for example, if such adjustment is to compensate for a distribution of cash or other property to our shareholders). Adjustments to the exercise price of Warrants made pursuant to a bona fide reasonable adjustment formula that has the effect of preventing dilution of the interest of the holders of the Warrants should generally not be considered to result in a constructive distribution. Any such constructive distribution would be taxable whether or not there is an actual distribution of cash or other property. See the more detailed discussion of the rules applicable to

distributions made by us under the heading Taxation of Distributions on Common Stock below.

Taxation of Distributions on Common Stock

Any distributions of cash or property (including any adjustments to the Warrants described in the immediately preceding paragraph) made with respect to our common stock generally will be subject to withholding tax to the extent paid out of our current or accumulated earnings and profits as determined for U.S. federal income tax purposes, if any, at a rate of 30% (or a lower rate prescribed by an applicable income tax treaty). In order to obtain a reduced withholding tax rate, if applicable, you will be required to provide a properly completed IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable, certifying your entitlement to benefits under a treaty. In addition, you will not be subject to withholding tax if you provide an IRS

S-31

TABLE OF CONTENTS

Form W-8ECI certifying that the distributions are effectively connected with your conduct of a trade or business within the United States (and, if an applicable income tax treaty so provides, are attributable to a permanent establishment within the United States); instead, you generally will be subject to U.S. federal income tax, net of certain deductions, with respect to such income at the same rates applicable to U.S. persons. If you are a corporation, a branch profits tax of 30% (or a lower rate prescribed by an applicable income tax treaty) also may apply to such effectively connected income.

Non-U.S. Holders may be required to periodically update their IRS Forms W-8.

Any distribution will also be subject to the discussion below under the heading **FATCA**.

Sale or Other Disposition of Our Common Stock or Warrants

Subject to the discussion below regarding backup withholding and FATCA, you generally will not be subject to U.S. federal income tax on any gain realized on a sale or other disposition of shares of our common stock or Warrants unless:

the gain is effectively connected with your conduct of a trade or business within the United States (and, if an applicable income tax treaty so provides, is attributable to a permanent establishment in the United States); you are an individual, you hold your Subscription Rights, shares of common stock or Warrants as capital assets, you are present in the United States for 183 days or more in the taxable year of disposition and certain other conditions are met (in which case you will be subject to a 30% tax, or such lower rate as may be specified by an applicable income tax treaty, on the net gain derived from the disposition, which may be offset by your U.S.-source capital losses, if any); or we are or have been a United States real property holding corporation, or USRPHC, for U.S. federal income tax purposes unless an exception for 5% or less shareholders applies.

Gain that is effectively connected with your conduct of a trade or business within the United States (and, if an applicable income tax treaty so provides, is attributable to a permanent establishment within the United States) generally will be subject to U.S. federal income tax, net of certain deductions, at the same rates applicable to U.S. persons. If you are a corporation, a branch profits tax of 30% (or a lower rate prescribed in an applicable income tax treaty) also may apply to such effectively connected gain.

A domestic corporation is treated as a USRPHC if the fair market value of its United States real property interests equals or exceeds 50% of the sum of (1) the fair market value of its United States real property interests, (2) the fair market value of its non-United States real property interests and (3) the fair market value of any other of its assets which are used or held for use in a trade or business. We believe that we are not currently, and have not been within the relevant testing period, a USRPHC. However, no assurance can be given that we will not become a USRPHC in the future. If we are a USRPHC or become a USRPHC in the future, a Non-U.S. Holder may still not be subject to U.S. federal income tax on a sale or other disposition if an exception for 5% or less shareholders applies. You are urged to consult your own tax advisor regarding the U.S. federal income tax considerations that could result if we are, or become, a USRPHC and with respect to the exception for 5% or less shareholders.

Information Reporting and Backup Withholding

Distributions on our common stock and the amount of tax withheld, if any, with respect to such distributions will generally be subject to information reporting. If you comply with certification procedures to establish that you are not a United States person, additional information reporting and backup withholding should not generally apply to distributions on our common stock and information reporting and backup withholding should not generally apply to

the proceeds from a sale or other disposition of Warrants or shares of our common stock. Generally, a Non-U.S. Holder will comply with such procedures if it provides a properly executed IRS Form W-8BEN or W-8BEN-E, as applicable, (or other applicable IRS Form W-8) or otherwise meets documentary evidence requirements for establishing that it is a Non-U.S. Holder, or otherwise establishes an exemption. The amount of any backup withholding will generally be allowed as a refund or credit against your U.S. federal income tax liability, provided that the required information is timely furnished to the IRS.

S-32

TABLE OF CONTENTS

FATCA

Payments of dividends on our common stock to a Non-U.S. Holder will be subject to a 30% withholding tax if the Non-U.S. Holder fails to provide the withholding agent with documentation sufficient to show that it is compliant with FATCA. Generally such documentation is provided on an executed and properly completed IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable. If dividends are subject to the 30% withholding tax under FATCA, they will not be subject to the 30% withholding tax described above under Tax Consequences to Non-U.S. Holders-Taxation of Distributions on Common Stock. Starting in 2019, payments of the gross proceeds from a sale or exchange of our common stock or other securities may also be subject to FATCA withholding absent proof of FATCA compliance prior to January 1, 2019.

THE PRECEDING DISCUSSION OF MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES IS NOT TAX ADVICE. HOLDERS OF SUBSCRIPTION RIGHTS AND SHARES OF OUR COMMON STOCK SHOULD CONSULT THEIR OWN TAX ADVISORS REGARDING THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AND THE CONSEQUENCES UNDER FEDERAL ESTATE AND GIFT TAX LAWS, FOREIGN, STATE AND LOCAL LAWS AND TAX TREATIES OF THE RECEIPT, OWNERSHIP AND EXERCISE OF SUBSCRIPTION RIGHTS AND THE ACQUISITION, OWNERSHIP AND DISPOSITION OF SHARES OF OUR COMMON STOCK AND WARRANTS ACQUIRED UPON EXERCISE OF SUBSCRIPTION RIGHTS AND SHARES OF OUR COMMON STOCK ACQUIRED UPON EXERCISE OF THE WARRANTS.

S-33

TABLE OF CONTENTS

DESCRIPTION OF SECURITIES

The following summary of the rights of our common stock is not complete and is subject to and qualified in its entirety by reference to our articles of incorporation and bylaws, copies of which are incorporated by reference to our registration statement on Form S-1. See [Where You Can Find More Information](#).

Description of our Common Stock

We have 64,500,000 shares of capital stock authorized under our articles of incorporation, consisting of 62,500,000 shares of common stock and 2,000,000 shares of preferred stock.

As of December 6, 2016 we had 12,970,410 shares of common stock issued and outstanding. Our authorized but unissued shares of common stock are available for issuance without further action by our shareholders, unless such action is required by applicable law or the rules of The NASDAQ Capital Market or any other stock exchange or automated quotation system on which our securities may become listed or traded.

Holders of our common stock are entitled to such dividends as may be declared by our board of directors out of funds legally available for such purpose, subject to any preferential dividend rights of any then outstanding preferred stock. The shares of common stock are neither redeemable nor convertible. Holders of common stock have no preemptive or subscription rights to purchase any of our securities.

Each holder of our common stock is entitled to one vote for each such share outstanding in the holder's name. No holder of common stock is entitled to cumulate votes in voting for directors.

In the event of our liquidation, dissolution or winding up, the holders of our common stock are entitled to receive, pro rata, our assets which are legally available for distribution after payments of all debts and other liabilities and subject to the prior rights of any holders of preferred stock then outstanding. All of the outstanding shares of our common stock are fully paid and non-assessable. The shares of common stock offered by this prospectus will also be fully paid and non-assessable.

Our common stock is listed on The NASDAQ Capital Market under the symbol [CLIR](#) . On December 6, 2016, the last sale price of our common stock was \$3.85 per share.

Description of our Preferred Stock

Our articles of incorporation permit us to issue up to 2,000,000 shares of preferred stock in one or more series and with rights and preferences that may be fixed or designated by our board of directors without any further action by our shareholders. We currently have no shares of preferred stock outstanding.

Subject to the limitations prescribed in our articles of incorporation and under Washington law, our articles of incorporation authorize the board of directors, from time to time by resolution and without further shareholder action, to provide for the issuance of shares of preferred stock, in one or more series, and to fix the designation, limitations, voting powers, preferences and relative rights of the shares and to fix the qualifications, limitations and restrictions thereof.

Description of Warrants Included in Units Issuable in the Rights Offering

The Warrants to be issued as a part of the Rights Offering and sold by us through the placement services of MDB entitle the holder to purchase one share of common stock at an exercise price of \$4.00 from the date of issuance through its expiration two years after the date of issuance. We intend to apply to list the Warrants for trading on The NASDAQ Stock Market, although we cannot guarantee that our listing application will be approved. Even if our listing application is approved, we cannot guarantee that a trading market for the Warrants will develop.

The Warrants will be issued in book-entry, or uncertificated, form meaning that you will receive a direct registration (DRS) account statement from our transfer agent reflecting your ownership of the Warrants. If you hold your shares of common stock in the name of a custodian bank, broker, dealer, or other nominee or purchase shares of common stock and Warrants that were not subscribed for through the placement agent, DTC will credit your account with your nominee with the securities you purchased in the Rights Offering.

The Warrants will be exercisable by paying the exercise price in cash only; the Warrants will not include a cashless exercise provision.

S-34

TABLE OF CONTENTS

The exercise price of the Warrants and the number of shares of common stock issuable upon exercise of the Warrants are subject to adjustment in certain circumstances, including a stock split of, stock dividend on, or a subdivision, combination or recapitalization of the common stock or as a result of certain Fundamental Transactions, as defined in the Warrant Agreement. No fractional share will be issued upon exercise of the Warrants. If there is a fractional share issuable on exercise, it will be rounded down to the nearest whole share.

Under the terms of the Warrant Agreement, we have committed to maintain a registration statement to permit the exercise of the Warrants and, therefore, be able to deliver free trading shares upon the exercise of the Warrants. There is no assurance that we will be able to do so, and consequently we would be in breach of the Warrant Agreement. If we are unable to maintain such a registration statement, we will not be able to permit the exercise of the Warrants. As a consequence the Warrants may be of little or no value.

No public market currently exists for the Warrants. Therefore, even if our application to list the Warrants on the NASDAQ Capital Market is approved, we cannot assure you that a trading market for the Warrants will develop.

The Warrants do not confer upon the holder any voting or any other rights of a shareholder of the Company. A holder of the Warrants will not have any rights as a shareholder until the Warrants have been exercised in accordance with their terms and the shares of common stock purchased thereby have been issued.

The Warrants will be issued pursuant to a warrant agreement by and between us and VStock Transfer, LLC, as the warrant agent. A copy of the Warrant agreement will be available on SEC's EDGAR database through the filing of a Current Report on Form 8-K contemporaneously with the filing of this prospectus supplement. Additionally, copies of the Warrant are available at the offices of the Company and warrant agent. The foregoing description of the Warrants is qualified by the terms of the Warrant agreement

Description of Other Outstanding Warrants

As of December 6, 2016, we had outstanding warrants to purchase 445,313 shares of our common stock at a weighted average exercise price of \$4.65 as follows:

Exercise Price	Total Outstanding Warrants		Expiration Date
	Warrants	Weighted Average Exercise Price	
\$ 1.80	80,000	\$ 1.80	2/16/2021
\$ 5.00	345,000	\$ 5.00	4/25/2017
\$ 10.00	20,313	\$ 10.00	3/5/2019
	445,313	\$ 4.65	

The warrants and the shares of our common stock issuable upon exercise of the warrants were offered and sold without registration under the Securities Act of 1933, as amended (the Securities Act), or state securities laws, in reliance on the exemptions provided by Section 4(a)(2) of the Securities Act and/or Regulation D promulgated thereunder and in reliance on similar exemptions under applicable state laws. Accordingly, neither the warrants nor the shares of our common stock underlying the warrants may be offered or sold except pursuant to an effective registration statement under the Securities Act or pursuant to an available exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and in accordance with applicable state securities laws.

Transfer Agent and Warrant Agent

The transfer agent, warrant agent and registrar for our common stock is VStock Transfer LLC, 18 Lafayette Place, Woodmere, New York 11598. VStock Transfer LLC will also be the transfer agent and registrar for the Warrants.

Anti-Takeover Effects of Certain Provisions of Our Charter Documents

The following is a summary of certain provisions of our articles of incorporation and our bylaws. This summary does not purport to be complete and is qualified in its entirety by reference to the corporate law of Washington and our articles of incorporation and bylaws.

S-35

TABLE OF CONTENTS

Our charter documents include provisions that may have the effect of discouraging, delaying or preventing a change in control or an unsolicited acquisition proposal that a shareholder might consider favorable, including a proposal that might result in the payment of a premium over the market price for the shares held by our shareholders. Certain of these provisions are summarized in the following paragraphs.

Effects of authorized but unissued common stock and blank check preferred stock. One of the effects of the existence of authorized but unissued common stock and undesignated preferred stock may be to enable our board of directors to make more difficult or to discourage an attempt to obtain control of our Company by means of a merger, tender offer, proxy contest or otherwise, and thereby to protect the continuity of management. If the board of directors were to determine that a takeover proposal was not in our best interest, such shares could be issued by the board of directors without shareholder approval in one or more transactions that might prevent or render more difficult or costly the completion of the takeover transaction by diluting the voting or other rights of the proposed acquirer or insurgent shareholder group, by putting a substantial voting block in institutional or other hands that might undertake to support the position of the incumbent board of directors, by effecting an acquisition that might complicate or preclude the takeover, or otherwise.

In addition, our articles of incorporation grant our board of directors broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance also may adversely affect the rights and powers, including voting rights, of those holders and may have the effect of delaying, deterring or preventing a change in control of our Company.

Cumulative Voting. Our articles of incorporation do not provide for cumulative voting in the election of directors which would allow holders of less than a majority of the stock to elect some directors.

Vacancies. Our bylaws provide that any vacancy occurring on our board of directors may be filled by the shareholders, by the board of directors or, if the directors in office constitute less than a quorum, by the affirmative vote of a majority of the remaining directors.

Special Meeting of Shareholders. A special meeting of shareholders may only be called by our chairman of the board, the president or the board of directors or by holders of at least 25% of all the votes entitled to be cast on any issue proposed to be considered at the special meeting.

S-36

TABLE OF CONTENTS

PLAN OF DISTRIBUTION

Distribution of Rights

On or about December 27, 2016, we will distribute the Subscription Rights, Rights Certificates and copies of this prospectus to the holders of our common stock on the Record Date. Subscription Rights holders who wish to exercise their Subscription Rights and purchase shares of our common stock must complete the Subscription Rights Certificate and return it with payment for the Units to the Subscription Agent at the following address:

By mail:

VStock Transfer, LLC
Attn: Allison Niccolls
18 Lafayette Place
Woodmere, New York 11598
Telephone: (212) 828-8436 or
toll free at (855) 987-8625
Email: info@vstocktransfer.com

By hand or overnight courier:

VStock Transfer, LLC
Attn: Allison Niccolls
18 Lafayette Place
Woodmere, New York 11598
Telephone: (212) 828-8436 or
toll free at (855) 987-8625
Email: info@vstocktransfer.com

See The Rights Offering Methods for Exercising Subscription Rights.

If you have any questions, you should contact our Information Agent or MDB, our dealer manager, for the Rights Offering:

Information Agent

VStock Transfer, LLC
Attn: Allison Niccolls
18 Lafayette Place
Woodmere, New York 11598
Telephone: (212) 828-8436 or
toll free at (855) 987-8625
Email: info@vstocktransfer.com

Dealer Manager

MDB Capital Group LLC
Attn: Alex Zapanta
2425 Cedar Springs Road
Dallas, Texas 75201
Telephone: (310) 526-5007

We have agreed to compensate MDB for its services as the dealer manager and the placement agent with either (i) a cash fee equal to 6% of the gross proceeds from the sale of Units in the Rights Offering and the Offered Units, or (ii), with the agreement of MDB, with a number of Units totaling 6% of the Units sold in the Rights Offering and of the Offered Units sold.

Placement of Units by MDB

Pursuant to a Dealer Manager and Placement Agent Agreement dated December 7, 2016, which we refer to as the MDB Agreement, we have engaged MDB to act as our exclusive placement agent, on a best efforts, no minimum basis, in connection with any unexercised Subscription Rights pursuant to this prospectus supplement and accompanying prospectus, which securities we refer to as the Offered Units and which offering we refer to as the Agent Offering. The MDB Agreement does not give rise to any commitment by MDB to purchase any of the Units being offered in either the Rights Offering or the Agent Offering. MDB may engage sub-agents or selected dealers to assist with the Agent Offering.

The Offered Units will be the same as the Units sold in the Rights Offering and sold at the same price. The shares of common stock and the Warrants included in the Offered Units will be the same as those included in the Units sold in the Rights Offering.

The number of Offered Units will only be determined after the Expiration Date of the Rights Offering, which will be determined by the Subscription Agent, once it determines the number of Units correctly subscribed and paid for under the Subscription Rights. If all the Subscription Rights are exercised, there will be no Units available to be sold as the Offered Units.

Investors contacted and interested in purchasing the Offered Units will indicate their interest to MDB. The purchase price for the Offered Units will be deposited into an escrow account to be maintained by the Company and MDB with Delaware Trust Company, located at 2711 Centerville Road, Suite 400, Wilmington, Delaware. If

S-37

TABLE OF CONTENTS

the sale of the Offered Units is not completed, an investor's number of Offered Units to be purchased is reduced, or the fundamental terms of the Offered Units are changed, then the funds held in escrow for Offered Units not being sold to the investor will be returned to the investor, without interest or penalty, as soon as practicable. The closing of the Offered Units will be on one occasion, on or before January 31, 2017, as determined by the Company and MDB, without notice to the investor. An investor may withdraw its indication of interest to purchase the Offered Units at any time until the purchase has been confirmed by notice. If an investor withdraws the indication of interest, any funds that have been deposited into the escrow account for the Offered Units will be returned as promptly as practicable, without interest or penalty.

MDB and certain of its affiliates beneficially own approximately 7.6% of our common stock, and they may exercise their Subscription Rights. These persons may also purchase Offered Units.

Because MDB is acting only as a placement agent on behalf of the Company for the Units that are not subscribed for in the Rights Offering, MDB will not have the power or authority to bind us to any sale of the Offered Units. MDB, however, will have the authority to allocate the sale by the Company of the Offered Units if there are investors for more than the number of Offered Units.

The securities included in the Offered Units will be immediately separable upon sale and delivery to the investors and will be issued as shares of common stock and as Warrants, each being issued to the investors electronically through DTC upon the closing of the Agent Offering after receipt of investor funds for the purchase of the Offered Units offered pursuant to this prospectus supplement. We expect to deliver the Offered Units on or before January 25, 2017. For those investors that do not have brokerage accounts, they will be issued the securities in DRS book entry form, and receive the evidence of ownership from the Company's transfer agent.

We have agreed to pay MDB for its services as a dealer manager and placement agent either (i) a total cash fee equal to 6% of the gross proceeds of the Agent Offering or (ii) with the agreement of MDB, that number of Units equal to 6% of the number of Units placed with investors by MDB in the Agent Offering, at our election in our sole discretion. In addition, we have agreed to reimburse MDB's legal fees and expenses in the amount of \$60,000. If the fees of MDB are paid with Units, then pursuant to FINRA Rule 5110(g), any Units, including the underlying shares of common stock or Warrants issued to the placement agent shall not be sold, transferred, assigned, pledged, or hypothecated, or be the subject of any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of the securities by any person for a period of 180 days immediately following the date of effectiveness or commencement of sales of the Agent Offering, except the transfer of any security: (i) by operation of law or by reason of our reorganization; or (ii) to any FINRA member firm participating in the offering and the officers or partners thereof, if all securities so transferred remain subject to the lock-up restriction set forth above for the remainder of the time period. Notwithstanding such restrictions, the exercise or conversion of any security will not be prohibited, if all securities remain subject to the lock-up restriction set forth above for the remainder of the time period.

We have agreed to indemnify MDB and specified other persons against some civil liabilities, including liabilities under the Securities Act and the Exchange Act, and to contribute to payments that MDB may be required to make in respect of such liabilities.

MDB may be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act, and any commissions received by it and any profit realized on the resale of the securities sold by it might be deemed to be underwriting discounts or commissions under the Securities Act. As an underwriter, the placement agent would be required to comply with the requirements of the Securities Act and the Exchange Act, including, without limitation, Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of our securities by MDB acting as principal. Under these rules and regulations, MDB:

may not engage in any stabilization activity in connection with our securities; and may not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until it has completed its participation in the distribution.

S-38

TABLE OF CONTENTS

Other than as described in this prospectus, we do not know of any existing agreements between any shareholder, broker, dealer, underwriter or agent relating to the sale or distribution of the underlying common stock.

LEGAL MATTERS

Mitchell Silberberg & Knupp LLP, with an office at 11377 West Olympic Blvd., Los Angeles, California 90064, will pass upon the validity of the securities offered in this prospectus.

EXPERTS

Gumbiner Savett Inc., independent registered public accounting firm, has audited our financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2015, as set forth in their report, which is incorporated by reference in the prospectus and elsewhere in this registration statement. Our financial statements are incorporated by reference in reliance on the report of Gumbiner Savett Inc., given on their authority as experts in accounting and auditing.

S-39

TABLE OF CONTENTS

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act of 1933, as amended (Securities Act), with respect to the securities covered by this prospectus. This prospectus, which is a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed therewith. For further information with respect to us and the securities covered by this prospectus, please see the registration statement and the exhibits filed with the registration statement. A copy of the registration statement and the exhibits filed with the registration statement may be inspected without charge at the Public Reference Room maintained by the SEC, located at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the Public Reference Room. The SEC also maintains an Internet website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address of the website is <http://www.sec.gov>.

We are subject to the information and periodic reporting requirements of the Exchange Act and, in accordance therewith, we file periodic reports, proxy statements and other information with the SEC. Such periodic reports, proxy statements and other information are available for inspection and copying at the Public Reference Room and website of the SEC referred to above. We maintain a website at <http://www.clearsign.com>. You may access our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed pursuant to Sections 13(a) or 15(d) of the Exchange Act with the SEC free of charge at our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. Our website and the information contained on that site, or connected to that site, are not incorporated into and are not a part of this prospectus.

You may obtain copies of this prospectus and the documents incorporated by reference without charge by writing to ClearSign Combustion Corporation, 12870 Interurban Avenue South, Seattle, Washington 98168, Attn: Chief Financial Officer, Telephone: (206) 673-4848. You may refer any questions regarding this offering to VStock Transfer, LLC, our Information Agent or MDB, our dealer manager:

Information Agent

VStock Transfer, LLC
Attn: Allison Niccolls
18 Lafayette Place
Woodmere, New York 11598
Telephone: (212) 828-8436 or
toll free at (855) 987-8625
Email: info@vstocktransfer.com

Dealer Manager

MDB Capital Group LLC
Attn: Alex Zapanta
2425 Cedar Springs Road
Dallas, Texas 75201
Telephone: (310) 526-5007

For information regarding replacement of lost rights certificates, you may contact VStock Transfer LLC by calling toll-free number above or at the appropriate address below:

By Hand or Overnight Courier:
VStock Transfer, LLC
Attn: Allison Niccolls
18 Lafayette Place
Woodmere, New York 11598
Email: info@vstocktransfer.com

By Regular Mail:
VStock Transfer, LLC
Attn: Allison Niccolls
18 Lafayette Place
Woodmere, New York 11598
Email: info@vstocktransfer.com

TABLE OF CONTENTS

INFORMATION INCORPORATED BY REFERENCE

The SEC and applicable law permits us to incorporate by reference into this prospectus information that we have or may in the future file with or furnish to the SEC. This means that we can disclose important information by referring you to those documents. You should read carefully the information incorporated herein by reference because it is an important part of this prospectus. We hereby incorporate by reference the following documents into this prospectus:

our Annual Report on Form 10-K for the fiscal year ended December 31, 2015, as filed with the SEC on March 3, 2016;

all information in our proxy statement filed with the SEC on March 30, 2016 to the extent incorporated by reference in our Annual Report on Form 10-K for the year ended December 31, 2015;

our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2016, June 30, 2016, and September 30, 2016, as filed with the SEC on May 12, 2016, August 11, 2016, and November 14, 2016, respectively; and

our Current Reports on Form 8-K filed with the SEC on February 12, 2016, March 22, 2016, May 10, 2016 and August 23, 2016.

Additionally, all documents filed by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (other than any portions of filings that are furnished rather than filed pursuant to Items 2.02 and 7.01 of a Current Report on Form 8-K), after the date of this prospectus and before the termination or completion of this offering (including all such documents filed with the SEC after the date of the initial registration statement and prior to the effectiveness of the registration statement) shall be deemed to be incorporated by reference into this prospectus from the respective dates of filing of such documents. Any information that we subsequently file with the SEC that is incorporated by reference as described above will automatically update and supersede any previous information that is part of this prospectus.

DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers or persons controlling the company, we have been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is therefore unenforceable.

TABLE OF CONTENTS

PROSPECTUS

\$30,000,000
Common Stock, Preferred Stock, Warrants and Units
Offered
by ClearSign Combustion Corporation

By this prospectus and an accompanying prospectus supplement, we may from time to time offer and sell, in one or more offerings, up to \$30,000,000 in any combination of common stock, preferred stock, warrants and units.

We will provide you with more specific terms of the securities offered by us in one or more supplements to this prospectus. You should read this prospectus and the applicable prospectus supplement carefully before you invest.

We may offer these securities from time to time in amounts, at prices and on other terms to be determined at the time of offering. We may offer and sell these securities to or through underwriters, dealers or agents, or directly to investors, on a continuous or delayed basis.

The supplements to this prospectus will provide the specific terms of the plan of distribution. The price to the public of the securities we offer and the net proceeds we expect to receive from such sale will also be set forth in a prospectus supplement.

Our common stock is listed on The NASDAQ Capital Market under the symbol **CLIR**. On December 28, 2015, the closing price of our common stock as reported by The NASDAQ Capital Market was \$4.99 per share. The aggregate market value of our outstanding voting common stock held by non-affiliates, based upon a closing sale price of our common stock on November 4, 2015, was \$71,106,000. During the 12 calendar month period that ends on, and includes, the date of this prospectus, we sold shares of our common stock pursuant to General Instruction I.B.6. of Form S-3 and received gross proceeds of \$17,491,500. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell securities registered on this registration statement in a public primary offering with a value exceeding more than one-third of our public float in any 12-month period so long as our public float remains below \$75.0 million.

We are an emerging growth company under the federal securities laws and will be subject to reduced public company reporting requirements. An investment in our securities may be considered speculative and involves a high degree of risk, including the risk of a substantial loss of your investment. See **Risk Factors** on page 8 for more information on the risks you should consider before buying our securities. An investment in our securities is not suitable for all investors. We intend to continue to issue our securities in this offering and, as a result, your ownership in us is subject to dilution.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities, or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is January 7, 2016.

TABLE OF CONTENTS

TABLE OF CONTENTS

	Page
<u>ABOUT THIS PROSPECTUS</u>	<u>1</u>
<u>DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS</u>	<u>2</u>
<u>OUR BUSINESS</u>	<u>3</u>
<u>RISK FACTORS</u>	<u>8</u>
<u>USE OF PROCEEDS</u>	<u>8</u>
<u>DILUTION</u>	<u>8</u>
<u>DESCRIPTION OF SECURITIES THAT MAY BE OFFERED</u>	<u>9</u>
<u>PLAN OF DISTRIBUTION</u>	<u>14</u>
<u>LEGAL MATTERS</u>	<u>16</u>
<u>EXPERTS</u>	<u>16</u>
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	<u>17</u>
<u>INFORMATION INCORPORATED BY REFERENCE</u>	<u>18</u>
<u>DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES</u>	<u>18</u>
<u>ACT LIABILITIES</u>	<u>18</u>

i

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement filed with the Securities and Exchange Commission (the "SEC") using a "shelf" registration process. Under this shelf process, we may sell the securities described in this prospectus in one or more offerings. This prospectus provides you with a general description of the securities which may be offered. Each time we offer securities for sale, we will provide a prospectus supplement that contains specific information about the terms of that offering. Any prospectus supplement may also add or update information contained in this prospectus. You should read both this prospectus and any prospectus supplement together with additional information described below under "Where You Can Find More Information" and "Information Incorporated by Reference."

The registration statement that contains this prospectus (including the exhibits thereto) contains additional important information about us and the securities we may offer under this prospectus. Specifically, we have filed certain legal documents that establish the terms of the securities offered by this prospectus as exhibits to the registration statement.

We will file certain other legal documents that establish the terms of the securities offered by this prospectus as exhibits to reports we file with the SEC. You may obtain copies of that registration statement and the other reports and documents referenced herein as described below under the heading "Where You Can Find More Information."

You should rely only on the information contained or incorporated by reference in this prospectus and in any prospectus supplement. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not making offers to sell or solicitations to buy the securities in any jurisdiction in which an offer or solicitation is not authorized or in which the person making that offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation. You should not assume that the information in this prospectus or any prospectus supplement, as well as the information we file or previously filed with the SEC that we incorporate by reference in this prospectus or any prospectus supplement, is accurate as of any date other than its respective date. Our business, financial condition, results of operations and prospects may have changed since those dates.

In this prospectus, unless the context otherwise requires, references to "ClearSign," "we," "us," "our" or the "Company" refer to ClearSign Combustion Corporation.

TABLE OF CONTENTS

DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and any accompanying prospectus supplement, including the documents that we incorporate by reference, may contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the Securities Act), and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act).

Forward-looking statements in this prospectus and any accompanying prospectus supplement include, without limitation, statements related to our plans, strategies, objectives, expectations, intentions and adequacy of resources. Investors are cautioned that such forward-looking statements involve risks and uncertainties. Factors that could cause actual results to differ from those discussed in the forward-looking statements include, but are not limited to:

- our limited cash and our history of losses;
- our ability to successfully develop and implement our technology and achieve profitability;
- our limited operating history;
- emerging competition and rapidly advancing technology in our industry that may outpace our technology;
- customer demand for the products and services we develop;
- the impact of competitive or alternative products, technologies and pricing;
- our ability to manufacture any products we develop;
- general economic conditions and events and the impact they may have on us and our potential customers;
- our ability to obtain adequate financing in the future;
- our ability to continue as a going concern;
- our success at managing the risks involved in the foregoing items; and
- other factors discussed in this prospectus.

In some cases, you can identify forward-looking statements by terminology such as may, will, should, could, expect, plans, intends, anticipates, believes, estimates, predicts, potential, or continue or the negative of such comparable terminology. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. We do not undertake any obligation to publicly update or review any forward-looking statement.

TABLE OF CONTENTS

OUR BUSINESS

This is only a summary and may not contain all the information that is important to you. You should carefully read both this prospectus and any accompanying prospectus supplement and any other offering materials, together with the additional information described under the heading *Where You Can Find More Information*.

About ClearSign Combustion Corporation

We design and are currently developing technologies that aim to improve both the emission performance and operational efficiency characteristics of combustion systems. Our core technologies include our Duplex™ and Electrodynamic Combustion Control™ (ECC™) technologies. Our Duplex technology uses a unique refractory tile to homogenize the flame temperature and achieve very low emissions without the need of external flue gas recirculation, selective catalytic reduction, or higher excess air operation. Our ECC technology introduces a computer-controlled electric field into a combustion system in order to better control gas-phase chemical reactions and improve system performance and cost-effectiveness. To date, our operations have been funded primarily through sales of our common stock. We have earned no significant revenue since inception on January 23, 2008. We are headquartered in Seattle, Washington with an office in Tulsa, Oklahoma.

While we have not yet commercialized our Duplex or ECC technologies and our technologies have not been tested or verified by any independent third party we believe, based on in-house testing and field studies, that our proprietary technology platforms may improve emissions control performance and operational performance for many types of industrial and commercial combustion systems. As a result of improved performance, we expect our technologies to reduce costs associated with the construction (including refurbishment and upgrade), operation and maintenance of these combustion systems as compared to combustion systems that use no or alternative technology to enhance combustion and control emissions.

Based on the results of our testing, we believe our technologies compare favorably with current industry-standard air pollution control technologies, such as selective catalytic reduction devices, low- and ultra-low NOx burners (which address nitrogen oxides or NOx), excess air systems and other similar technologies. Such systems are used in our current target market segments of petroleum refining and petrochemical process heaters, package and utility boilers and large-scale once through steam generators (OTSGs).

Our Industry

The combustion and emissions control markets are significant, both in the wide array of industries in which the systems are used and in the amount of money spent in installing and upgrading systems. The Energy Information Administration of the U.S. Department of Energy determined in its 2014 Annual Energy Outlook, its most recent estimate, that the world's industrial sector consumed 165 quadrillion British thermal units (BTUs) of hydrocarbon fuels. These are used to provide heat for all manner of industrial processes, including boilers, furnaces, kilns and turbines. In order to maximize energy efficiency while keeping pace with regulatory guidelines for air pollution emissions, operators of these systems are continually installing, maintaining and upgrading a variety of costly process control, air pollution control and monitoring systems. Although we believe that there are many potential markets for our technologies, to date we have limited the introduction of our technologies to market segments that include petroleum refining and petrochemical process heaters, package boilers, and OTSGs.

Our Technologies

We are pursuing development of our technologies to enable future sales. These activities entail (i) field development projects in the case of our Duplex technology where we have successfully demonstrated our proprietary technology operating in our field testing with thermal output of up to 52 million BTU/hr, (ii) laboratory research in the case of our ECC technology where we have demonstrated certain attributes of our proprietary technology operating in our research facility with thermal output of up to 2 million BTU/hr, and (iii) business development and marketing activities with established entities that use steam generators, process heaters, boilers, solid fuel burners, and other combustion systems as well as original equipment

3

TABLE OF CONTENTS

manufacturers. We intend to continue to enter into collaborative arrangements, such as those described below, which would enable us to work closely with established companies in targeted industries to apply solutions developed in our laboratory and field settings.

Field Testing of our Duplex Technology in Once-Through Steam Generators

After performing testing on our Duplex technology in our laboratory furnace with thermal output up to 5 million BTU/hr, we commenced field development work in the fourth quarter of 2014 with an oil field operator in Southern California to demonstrate and test the Duplex technology in an OTSG with a thermal output ranging from 40 to 62.5 million BTU/hr used to facilitate a thermally enhanced oil recovery process in California's San Joaquin Valley. To date, we have tested an OTSG at a rate of 52 million BTU/hr and met the San Joaquin Valley Air Pollution Control District's regulations under Rule 4320 requiring NOx emissions not to exceed 5 ppm (corrected at 3% O₂). These results were achieved without major modifications to the burner or the need for flue gas recirculation (FGR). During testing, the OTSG unit continued to supply steam at the capacity and quality required for oil field operations. Our agreement with this customer includes time-sensitive pricing, delivery and installation terms, if elected, that will apply to future purchases of this Duplex application. In September 2015, this customer placed an initial commercial order to retrofit our Duplex technology in a second OTSG unit. Subject to final approval of the design, we expect the retrofit to be completed in 2016.

In May 2015, we received an order from an independent Southern California oil producer to retrofit a 25 million BTU/hr OTSG with our Duplex technology. The installation is expected to be completed 2016.

Based upon our results to date, we observed a thermal efficiency improvement in OTSGs of approximately 1% when compared to a baseline case with a conventional low NOx burner without FGR. OTSG systems typically operate with FGR to lower NOx emissions. FGR, however, penalizes thermal efficiency, increasing fuel and electricity costs. We estimate that Duplex, compared to systems operating with FGR, will provide an overall energy savings of as much as 3-4% which could represent a significant reduction in annual operating expense depending on variables such as the thermal output of the OTSG and the market price for natural gas and electricity. Further, compliance with current emissions standards would eliminate the cost of any fines associated with the retrofitted operations. We continue to conduct testing to address additional performance criteria in order to further validate the environmental and operational benefits of our Duplex technology.

Field Testing of our Duplex Technology in Refinery Process Heaters

In August 2015, we executed an agreement with Tesoro Refining & Marketing Company LLC, a subsidiary of Tesoro Corporation, to evaluate our Duplex technology in a multiple-burner process heater located in Tesoro's Los Angeles area refinery. The Duplex technology performance will be evaluated based on several performance criteria, including NOx emission criteria determined by California's South Coast Air Quality Management District. The first phase of the project, involving initial design, was completed under a fixed price agreement in 2015. Future phases of the project are subject to approval of the design by Tesoro.

In September 2015, we executed an agreement with a subsidiary of Delek US Holdings, Inc. to install our Duplex technology in a process heater located in Delek's Tyler, Texas refinery. The Duplex installation is being installed to eliminate potential flame impingement upon process tubes and reduce maintenance costs and downtime. The installation is expected to be completed in 2016.

We previously executed two agreements regarding field tests related to process heaters with thermal outputs ranging from 12 to 15 million BTU/hr with prospective customers at two separate petroleum refineries in the San Joaquin

Valley. Pursuant to each agreement, if we are able to retrofit the process heaters in accordance with the specifications set forth in the agreements, the prospective customers will purchase Duplex systems from us. These prospective customers have no other financial obligations under the agreements. We have commenced field testing in one of the refineries and expect to complete the projects in 2016.

We intend to continue field validation of our Duplex technology in order to produce sufficient data to demonstrate product attributes and dependability.

4

TABLE OF CONTENTS

Laboratory Research of our ECC Technology

We continue to conduct solid fuel laboratory testing of our ECC technology in conjunction with six parties who contributed \$125,000 in 2014 and 2015 to our research. If successful, this would create a basis for further focused laboratory studies prior to any field demonstrations. There is no assurance that additional revenues will be realized, terms will be reached, or a final agreement executed between us and any of these six parties.

Technical Components of our Duplex and ECC Technologies

Our Duplex burner technology typically consists of a traditional industrial burner and a porous ceramic tile. When the uncombusted mix of gaseous fuel and air is directed at the tile, hot gas combusts within the tile itself. Because the fuel and air have more time to mix, the NO_x-forming hot spots that are typically produced in an open flame are greatly eliminated and a dramatically shorter flame is produced. NO_x, a regulated pollutant comprised largely of nitrogen oxide and nitrogen dioxide, is greatly reduced without any external fans or associated power, thereby minimizing harmful emissions while improving system efficiency. A shorter flame allows for improved heat transfer and operation of the furnace at a higher capacity since it reduces the possibility of flame impingement and coking in a combustion chamber.

Our ECC technology consists, in its simplest form, of four major components: (a) a computer, (b) standard software delivering proprietary algorithms to (c) a power amplifier (resident outside the combustion chamber) and (d) electrodes inside the combustion chamber. ECC introduces a high voltage electric field into the combustion process to control the resulting flames electrically through the naturally forming ions. The electrodes are optimized in material and shape to best suit the specific geometry of a given installation. We have also demonstrated a technique to apply ECC to a combustion system without requiring an electrode to have physical contact with the flame. Based on our research and demonstrations, we believe ECC to be ideally suited to solid fuel combustion.

The basic components of both systems are either available off the shelf or require manufacturing techniques that are well within the current state of the art. Thus, our products are readily available and scalable for high volume demand.

We believe our technologies can be retrofitted to existing combustion systems to improve their performance and have the potential to provide substantial savings in both capital and operating costs, or, for new-builds, can serve as the basis for fundamental improvements in the design, cost and operation of combustion systems.

Research and Development Plan

We have tested aspects of our Duplex and ECC technologies in our laboratory on our 1 million and 5 million BTU/hr research furnaces, our 1 million BTU/hr boiler simulator, and our 1 million BTU/hr solid fuel furnace. We have installed our Duplex technology in three field test sites: two OTSG applications and one process heater. We also continue to conduct solid fuel laboratory testing utilizing our ECC technology in conjunction with six parties who have contributed a total of \$125,000 in 2014 and 2015 to our research. If successful, this would create a basis for further focused laboratory studies prior to any field demonstrations. Our technologies have not been tested or verified by any independent third party. Our research and development efforts are following this sequence of planned activities:

Scale up to commercially relevant sizes. With regard to our ECC technology, we have designed and built furnaces and burners at what we believe to be a commercially relevant scale. We have identified potential development partners and customers with whom we are engaged in discussions to apply our ECC technology to their particular uses at commercially relevant scales, which can be 1 million BTUs or greater. Our laboratory testing is ongoing in

conjunction with the six parties that are offering their field know-how.

Site demonstration at full scale. We have begun to demonstrate our Duplex technology at commercial sites firing retrofitted OTSGs up to 52 million BTU/hr and a retrofitted three burner, 12 million BTU/hr petroleum refinery process heater. Our early site demonstrations are aimed at retrofitting existing burners in single or multi-burner systems in order to evaluate our Duplex technology at full scale in several operating systems.

5

TABLE OF CONTENTS

Complete first installation. After completion of site demonstrations that include various applications of our Duplex technology, we anticipate that these demonstrations will transition to validation and documentary phases with extended operation periods in the field. This would include validation from prospective customer users and environmental regulatory bodies. We believe that such demonstrations would provide the impetus for commercial adoption within the applicable industry.

Enhancement of our intellectual property portfolio. We have generated inventions that we believe to be patentable subject matter and for which we have been seeking protection through patent application filings. As of December 2015, we have filed approximately 180 patent applications with the U.S. Patent and Trademark Office (USPTO) and certain foreign regulatory bodies related to our Duplex and ECC technologies, which remain pending. We have been granted 5 patents by the USPTO related to our ECC technology. We cannot predict when our patent applications may result in issued patents, if at all. Further, we may modify a patent application in the future as we develop additional information. As a result, we may create additional patent applications from an existing application, consolidate existing patent applications, abandon applications, or otherwise modify applications based upon our judgment in order to protect our intellectual property in a reasonably cost beneficial manner.

The Combustion Markets

Overview

We compete in the combustion and emissions control markets. These are highly competitive industries that are currently dominated by companies that have both substantially greater financial resources than we do and established products. However, we believe, based on the testing and the field studies done to date, that our technologies offer a unique and powerful ability to improve emissions and operational performance, energy efficiency and overall cost-effectiveness. We are targeting the following segments of the combustion market:

process heaters for petroleum refining and petrochemical processing,
heating systems in package boilers, and
larger-scale steam generation systems and power boilers.

In each segment, we plan to market solutions with our Duplex technology that we believe could simultaneously improve both pollution control and operational efficiency characteristics through (a) cost-effective retrofitting of our Duplex technology onto existing standard system designs, and (b) new system designs.

Partnership Strategy

We believe that our technologies have the potential to transform industries that rely upon combustion, and are broadly applicable in large, scalable, global markets.

In addition to our existing agreements with six prospective customers, three of whom are field testing our Duplex technology, we intend to form research and development and/or licensing partnerships to further develop our technologies within targeted market segments. Among the types of potential partners we will seek to establish relationships with both in the U.S. and globally, will be:

end users of original equipment manufacturers (OEMs) products and services interested in advancing the development of our technologies in order to address their operational needs;

large OEMs interested in our technologies;

industry research groups, whose mission is the development and testing of new technologies for the eventual benefit of their member companies; and

government entities such as the U.S. Department of Energy, who are chartered with the development of longer-range and potentially disruptive energy technologies.

6

TABLE OF CONTENTS

Implications of Being an Emerging Growth Company

We are an emerging growth company as defined in the JOBS Act. As an emerging growth company, we can take advantage of specified reduced disclosure and other requirements that are otherwise applicable generally to public companies. These provisions include:

a requirement to provide only two years of audited financial statements in addition to any required unaudited interim financial statements with correspondingly reduced Management's Discussion and Analysis of Financial Condition and Results of Operations disclosure;

reduced disclosure about our executive compensation arrangements;

no non-binding advisory votes on executive compensation or golden parachute arrangements; and exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting.

We have elected to use the extended transition period for complying with new or revised accounting standards under

Section 102(b)(1) of the JOBS Act. This election allows us to delay the adoption of new or revised accounting standards that have different effective dates for public and private companies until those standards apply to private companies. As a result of this election, our financial statements may not be comparable to companies that comply with public company effective dates.

We may take advantage of these provisions for up to five years from the date of our initial public offering which we consummated in 2012 or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company on the date that is the earliest of (i) the last day of the fiscal year in which we have total annual gross revenues of \$1 billion or more; (ii) the last day of our fiscal year ending December 31, 2017; (iii) the date on which we have issued more than \$1 billion in nonconvertible debt during the previous three years; or (iv) the date on which we are deemed to be a large accelerated filer under the rules of the Securities and Exchange Commission.

To the extent that we continue to qualify as a smaller reporting company, as such term is defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended, after we cease to qualify as an emerging growth company, certain of the exemptions available to us as an emerging growth company may continue to be available to us as a smaller reporting company, including: (1) not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes Oxley Act; (2) scaled executive compensation disclosures; and (3) the requirement to provide only two years of audited financial statements, instead of three years.

Corporate Information

Our primary facilities and executive offices are located at 12870 Interurban Avenue South, Seattle, Washington 98168, and our telephone number is (206) 673-4848. We were incorporated in Washington on January 23, 2008. Additional information about us is available on our website at www.clearsign.com. The information contained on or that may be obtained from our website is not, and shall not be deemed to be, a part of this prospectus. Our common stock, par value \$0.001 per share, is currently traded on The NASDAQ Capital Market under the ticker symbol CLIR.

For a description of our business, financial condition, results of operations and other important information regarding us, we refer you to our filings with the SEC incorporated by reference in this prospectus. For instructions on how to find copies of these documents, see *Where You Can Find More Information*.

TABLE OF CONTENTS

RISK FACTORS

Investing in our common stock involves a high degree of risk. Please see the risk factors set forth in Part I, Item 1A of our Annual Report on Form 10-K and other filings we make with the SEC, which are incorporated by reference in this prospectus. Additional risk factors may be included in a prospectus supplement relating to a particular offering of securities. Before making an investment decision, you should carefully consider these risks as well as other information we include or incorporate by reference in this prospectus. These risks could materially affect our business, results of operations or financial condition and cause the value of our securities to decline.

USE OF PROCEEDS

Unless we state otherwise in an accompanying prospectus supplement, we intend to use the net proceeds from the sale of the securities offered by us under this prospectus and any related prospectus supplement for general corporate purposes. These purposes may include capital expenditures and additions to working capital. When a particular offering of securities is made, the prospectus supplement relating to that offering will set forth our intended use of the net proceeds we receive from the sale of the securities. Pending the application of the net proceeds, we may invest the proceeds in short-term, interest-bearing instruments or other investment-grade securities.

DILUTION

We will set forth in a prospectus supplement the following information regarding any material dilution of the equity interests of investors purchasing securities sold by ClearSign in an offering under this prospectus:

- the net tangible book value per share of our equity securities before and after the offering;
- the amount of the increase in such net tangible book value per share attributable to the cash payments made by purchases in the offering; and
- the amount of the immediate dilution from the public offering price which will be absorbed by such purchasers.

8

TABLE OF CONTENTS

DESCRIPTION OF THE SECURITIES THAT MAY BE OFFERED

Description of Common Stock

The following summary of the rights of our common stock is not complete and is subject to and qualified in its entirety by reference to our articles of incorporation and bylaws, copies of which are incorporated by reference to our registration statement on Form S-1. See *Where You Can Find More Information*.

We have 52,000,000 shares of capital stock authorized under our articles of incorporation, consisting of 50,000,000 shares of common stock and 2,000,000 shares of preferred stock.

As of December 28, 2015 we had 12,860,161 shares of common stock issued and outstanding. Our authorized but unissued shares of common stock are available for issuance without further action by our shareholders, unless such action is required by applicable law or the rules of The NASDAQ Capital Market or any other stock exchange or automated quotation system on which our securities may become listed or traded. If the approval of our shareholders is not so required, our board of directors may determine not to seek shareholder approval.

Holders of our common stock are entitled to such dividends as may be declared by our board of directors out of funds legally available for such purpose, subject to any preferential dividend rights of any then outstanding preferred stock. The shares of common stock are neither redeemable nor convertible. Holders of common stock have no preemptive or subscription rights to purchase any of our securities.

Each holder of our common stock is entitled to one vote for each such share outstanding in the holder's name. No holder of common stock is entitled to cumulate votes in voting for directors.

In the event of our liquidation, dissolution or winding up, the holders of our common stock are entitled to receive, pro rata, our assets which are legally available for distribution after payments of all debts and other liabilities and subject to the prior rights of any holders of preferred stock then outstanding. All of the outstanding shares of our common stock are fully paid and non-assessable. The shares of common stock offered by this prospectus will also be fully paid and non-assessable.

Our common stock is listed on The NASDAQ Capital Market under the symbol *CLIR*. On December 28, 2015, the last sale price of our common stock was \$4.99 per share. The transfer agent and registrar for our common stock is VStock Transfer, LLC. Its address is 18 Lafayette Place, Woodmere, New York 11598, and its telephone number is (212) 828-8436.

Description of Preferred Stock

Our articles of incorporation permit us to issue up to 2,000,000 shares of preferred stock in one or more series and with rights and preferences that may be fixed or designated by our board of directors without any further action by our shareholders. We currently have no shares of preferred stock outstanding.

Subject to the limitations prescribed in our articles of incorporation and under Washington law, our articles of

incorporation authorize the board of directors, from time to time by resolution and without further shareholder action, to provide for the issuance of shares of preferred stock, in one or more series, and to fix the designation, limitations, voting powers, preferences and relative rights of the shares and to fix the qualifications, limitations and restrictions thereof.

Description of Warrants to Purchase Common Stock or Preferred Stock

We may issue warrants for the purchase of our preferred stock or common stock, which we refer to in this prospectus as equity warrants . As explained below, each equity warrant will entitle its holder to purchase our equity securities at an exercise price set forth in, or to be determined as set forth in, the related prospectus supplement. Equity warrants may be issued separately or together with equity securities. The equity warrants are to be issued under equity warrant agreements.

The particular terms of each issue of equity warrants and the equity warrant agreement relating to the equity warrants will be described in the applicable prospectus supplement, including, as applicable:

the title of the equity warrants;

9

TABLE OF CONTENTS

the initial offering price;

the aggregate number of equity warrants and the aggregate number of shares of the equity security purchasable upon exercise of the equity warrants;

if applicable, the designation and terms of the equity securities with which the equity warrants are issued, and the number of equity warrants issued with each equity security;

the date on which the right to exercise the equity warrants will commence and the date on which the right will expire;

if applicable, the minimum or maximum number of the equity warrants that may be exercised at any one time;

anti-dilution provisions of the equity warrants, if any;

redemption or call provisions, if any, applicable to the equity warrants;

any additional terms of the equity warrants, including terms, procedures and limitations relating to the exchange and exercise of the equity warrants; and

the exercise price.

Holders of equity warrants will not be entitled, solely by virtue of being holders, to vote, to consent, to receive dividends, to receive notice as shareholders with respect to any meeting of shareholders for the election of directors or any other matter, or to exercise any rights whatsoever as a holder of the equity securities purchasable upon exercise of the equity warrants.

Description of Units

We may, from time to time, issue units comprised of one or more of the other securities described in this prospectus in any combination. A prospectus supplement will describe the specific terms of the units offered under that prospectus supplement, and any special considerations applicable to investing in those units. You must read the applicable prospectus supplement and any applicable unit agreement for a full understanding of the specific terms of any units.

We will incorporate by reference into the registration statement of which this prospectus is a part the form of unit agreement, including a form of unit certificate, if any, that describes the terms of the series of units we are offering before the issuance of the related series of units. While the terms we have summarized below will generally apply to any future units that we may offer under this prospectus, we will describe the particular terms of any series of units that we may offer in more detail in the applicable prospectus supplement and incorporated documents. The terms of any units offered under a prospectus supplement may differ from the terms described below.

We may issue units consisting of common stock, preferred stock, warrants or any combination thereof. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time, or at any time before a specified date.

We will describe in the applicable prospectus supplement and any incorporated documents the terms of the series of units, including the following:

the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;

any unit agreement under which the units will be issued; and

any provisions for the issuance, payment, settlement, transfer, or exchange of the units or of the securities comprising the units.

The provisions described in this section, as well as those described under *Description of Common Stock*, *Description of Preferred Stock*, and *Description of Warrants to Purchase Common Stock or Preferred Stock* will apply to each unit and to any common stock, preferred stock, or warrant included in each unit, respectively.

TABLE OF CONTENTS

We may issue units in such amounts and in such numerous distinct series as we determine.

Each unit agent will act solely as our agent under the applicable unit agreement and will not assume any obligation or relationship of agency or trust with any holder of any unit. A single bank or trust company may act as unit agent for more than one series of units. A unit agent will have no duty or responsibility in case of any default by us under the applicable unit agreement or unit, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a unit, without the consent of the related unit agent or the holder of any other unit, may enforce by appropriate legal action its rights as holder under any security included in the unit.

We, the unit agent, and any of their agents may treat the registered holder of any unit certificate as an absolute owner of the units evidenced by that certificate for any purposes and as the person entitled to exercise the rights attaching to the units so requested, despite any notice to the contrary.

Anti-Takeover Effects of Certain Provisions of Washington Law and Our Charter Documents

The following is a summary of certain provisions of Washington law, our articles of incorporation and our bylaws. This summary does not purport to be complete and is qualified in its entirety by reference to the corporate law of Washington and our articles of incorporation and bylaws.

Effect of Washington Anti-Takeover Statute. We are subject to Section 23B.19 of the Washington Revised Statutes, an anti-takeover law (the Anti-Takeover Statute). In general, the Anti-Takeover Statute prohibits a target corporation from entering into a significant business transaction with an acquiring person for a period of five years following the acquiring person's share acquisition unless

the share acquisition is exempt because it was inadvertently made and the acquiring person divests himself of a sufficient amount of the voting shares so that he is no longer the beneficial owner, directly or indirectly, of 10% or more of the outstanding voting shares of the target corporation and would not have, during the five year period prior to the announcement date of the significant business transaction, been an acquiring person but for the inadvertent acquisition,

the significant business transaction or the purchase of shares made by the acquiring person is approved prior to the acquiring person's share acquisition time by a majority of the members of the board of directors of the target corporation; or

at or subsequent to the acquiring person's share acquisition time, the significant business transaction is approved by a majority of the members of the board of directors of the target corporation and approved at an annual or special meeting of shareholders, and not by written consent, by the affirmative vote of at least two-thirds of the outstanding voting shares, except shares beneficially owned by or under the voting control of the acquiring person.

The Anti-Takeover Statute generally defines an acquiring person as a person or group of persons, other than the target corporation or a subsidiary of the target corporation, who beneficially owns 10% or more of the outstanding voting shares of the target corporation. The term acquiring person does not include a person who (a) beneficially owned 10% or more of the outstanding voting shares of the target corporation on March 23, 1988; (b) acquires its shares by gift, inheritance, or in a transaction in which no consideration is exchanged; (c) exceeds the 10% threshold as a result of action taken solely by the target corporation, such as redemption of shares, unless that person, by his own action, acquires additional shares of the target corporation; (d) beneficially was the owner of 10% or more of the outstanding voting shares prior to the time the target corporation had a class of voting shares registered with the SEC pursuant to section 12 or 15 of the Securities Exchange Act; or (e) beneficially was the owner of 10% or more of the outstanding

voting shares prior to the time the target corporation amended its articles of incorporation to provide that the corporation shall be subject to the provisions of this chapter.

The Anti-Takeover Statute defines a significant business transaction as:

A merger, share exchange, or consolidation of a target corporation or a subsidiary of a target corporation with (i) an (a) acquiring person, or (ii) any other domestic or foreign corporation which is, or after the merger, share exchange, or consolidation would be, an affiliate or associate of the acquiring person;

11

TABLE OF CONTENTS

- A sale, lease, exchange, mortgage, pledge, transfer, or other disposition or encumbrance, whether in one transaction or a series of transactions, to or with an acquiring person or an affiliate or associate of an acquiring person of assets of a target corporation or a subsidiary of a target corporation (i) having an aggregate market value (b) equal to 5% or more of the aggregate market value of all the assets, determined on a consolidated basis, of the target corporation, (ii) having an aggregate market value equal to 5% or more of the aggregate market value of all the outstanding shares of the target corporation, or (iii) representing 5% or more of the earning power or net income, determined on a consolidated basis, of the target corporation;
- The termination, while the corporation has an acquiring person and as a result of the acquiring person's acquisition of 10% or more of the shares of the corporation, of 5% or more of the employees of the target corporation or its (c) subsidiaries employed in this state, whether at one time or over the five-year period following the share acquisition time;
- The issuance, transfer, or redemption by a target corporation or a subsidiary of a target corporation, whether in one transaction or a series of transactions, of shares or of options, warrants, or rights to acquire shares of a target corporation or a subsidiary of a target corporation to or beneficially owned by an acquiring person or an affiliate or (d) associate of an acquiring person except pursuant to the exercise of warrants or rights to purchase shares offered, or a dividend, distribution, or redemption paid or made pro rata to, all shareholders or holders of options, warrants, or rights to acquire shares of the target corporation, and except for involuntary redemptions permitted by the target corporation's charter or by the law of this state or the state of incorporation;
- The liquidation or dissolution of a target corporation proposed by, or pursuant to an agreement, arrangement, or (e) understanding, whether or not in writing, with an acquiring person or an affiliate or associate of an acquiring person;
- A reclassification of securities, including, without limitation, any shares split, shares dividend, or other distribution of shares in respect of stock, or any reverse shares split, or recapitalization of a target corporation, or a merger or consolidation of a target corporation with a subsidiary of the target corporation, or any other transaction, whether or not with or into or otherwise involving an acquiring person, proposed by, or pursuant to an agreement, (f) arrangement, or understanding, whether or not in writing, with an acquiring person or an affiliate or associate of an acquiring person, that has the effect, directly or indirectly, of increasing the proportionate share of the outstanding shares of a class or series of voting shares or securities convertible into voting shares of a target corporation or a subsidiary of the target corporation that is directly or indirectly owned by an acquiring person or an affiliate or associate of an acquiring person, except as a result of immaterial changes due to fractional share adjustments; or
- A receipt by an acquiring person or an affiliate or associate of an acquiring person of the benefit, directly or (g) indirectly, except proportionately as a shareholder of a target corporation, of loans, advances, guarantees, pledges, or other financial assistance or tax credits or other tax advantages provided by or through a target corporation.

Finally, the Anti-Takeover Statute defines a target corporation as:

- (a) Every domestic corporation, if:
- (i) The corporation has a class of voting shares registered with the SEC pursuant to Section 12 or 15 of the Securities Exchange Act; or
- (ii) The corporation's articles of incorporation have been amended to provide that such a corporation shall be subject to the provisions of this chapter, if the corporation did not have a class of voting shares registered with the SEC pursuant to section 12 or 15 of the Securities Exchange Act on the effective date of that amendment; and

TABLE OF CONTENTS

- (b) Every foreign corporation required to have a certificate of authority to transact business in the State of Washington if:
- (i) The corporation has a class of voting shares registered with the SEC pursuant to section 12 or 15 of the Securities Exchange Act;
 - (ii) The corporation's principal executive office is located in the state;
 - (iii) The corporation has: (A) more than 10% of its shareholders of record resident in the state; or (B) more than 10% of its shares owned of record by state residents; or (C) 1,000 or more shareholders of record resident in the state;
 - (iv) A majority of the corporation's employees, together with those of its subsidiaries, are residents of the state or the corporation, together with its subsidiaries, employs more than one thousand residents of the state; and
 - (v) A majority of the corporation's tangible assets, together with those of its subsidiaries, measured by market value, are located in the state or the corporation, together with its subsidiaries, has more than fifty million dollars' worth of tangible assets located in the state.

Our Charter Documents. Our charter documents include provisions that may have the effect of discouraging, delaying or preventing a change in control or an unsolicited acquisition proposal that a shareholder might consider favorable, including a proposal that might result in the payment of a premium over the market price for the shares held by our shareholders. Certain of these provisions are summarized in the following paragraphs.

Effects of authorized but unissued common stock and blank check preferred stock. One of the effects of the existence of authorized but unissued common stock and undesignated preferred stock may be to enable our board of directors to make more difficult or to discourage an attempt to obtain control of our Company by means of a merger, tender offer, proxy contest or otherwise, and thereby to protect the continuity of management. If, in the due exercise of its fiduciary obligations, the board of directors were to determine that a takeover proposal was not in our best interest, such shares could be issued by the board of directors without shareholder approval in one or more transactions that might prevent or render more difficult or costly the completion of the takeover transaction by diluting the voting or other rights of the proposed acquirer or insurgent shareholder group, by putting a substantial voting block in institutional or other hands that might undertake to support the position of the incumbent board of directors, by effecting an acquisition that might complicate or preclude the takeover, or otherwise.

In addition, our articles of incorporation grant our board of directors broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance also may adversely affect the rights and powers, including voting rights, of those holders and may have the effect of delaying, deterring or preventing a change in control of our Company.

Cumulative Voting. Our articles of incorporation do not provide for cumulative voting in the election of directors which would allow holders of less than a majority of the stock to elect some directors.

Vacancies. Our bylaws provide that any vacancy occurring on our board of directors may be filled by the shareholders, by the board of directors or, if the directors in office constitute less than a quorum, by the affirmative vote of a majority of the remaining directors.

Special Meeting of Shareholders. A special meeting of shareholders may only be called by our chairman of the board, the president or the board of directors or by holders of at least 25% of all the votes entitled to be cast on any issue proposed to be considered at the special meeting.

TABLE OF CONTENTS

PLAN OF DISTRIBUTION

We may offer and sell the securities in any one or more of the following ways:

to or through underwriters, brokers or dealers;
directly to one or more other purchasers;
through a block trade in which the broker or dealer engaged to handle the block trade will attempt to sell the securities as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
through agents on a best-efforts basis;
in at the market offerings, as defined in Rule 415 under the Securities Act, at negotiated prices, at prices prevailing at the time of sale or at prices related to such prevailing market prices, including sales made directly on NASDAQ or sales made through a market maker other than on an exchange or other similar offerings through sales agents; or otherwise through any other method permitted by applicable law or a combination of any of the above methods of sale.

In addition, we may enter into option, share lending or other types of transactions that require us to deliver shares of common stock to an underwriter, broker or dealer, who will then resell or transfer the shares of common stock under this prospectus. We may also enter into hedging transactions with respect to our securities. For example, we may:

enter into transactions involving short sales of the shares of common stock by underwriters, brokers or dealers;
sell shares of common stock short and deliver the shares to close out short positions;
enter into option or other types of transactions that require the delivery shares of common stock to an underwriter, broker or dealer, who will then resell or transfer the shares of common stock under this prospectus; or
loan or pledge the shares of common stock to an underwriter, broker or dealer, who may sell the loaned shares or, in the event of default, sell the pledged shares.

We may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of stock. The third party in such sale transactions will be an underwriter and, if not identified in this prospectus, will be identified in the applicable prospectus supplement (or a post-effective amendment). In addition, we may otherwise loan or pledge securities to a financial institution or other third party that in turn may sell the securities short using this prospectus. Such financial institution or other third party may transfer its economic short position to investors in our securities or in connection with a concurrent offering of other securities.

Each time we sell securities, we will provide a prospectus supplement that will name any underwriter, dealer or agent involved in the offer and sale of the securities. Any prospectus supplement will also set forth the terms of the offering, including:

the purchase price of the securities and the proceeds we will receive from the sale of the securities;
any underwriting discounts and other items constituting underwriters' compensation;
any public offering or purchase price and any discounts or commissions allowed or re-allowed or paid to dealers;

TABLE OF CONTENTS

any commissions allowed or paid to agents;
any other offering expenses;
any securities exchanges on which the securities may be listed;
the method of distribution of the securities;
the terms of any agreement, arrangement or understanding entered into with the underwriters, brokers or dealers; and
any other information we think is important.

If underwriters or dealers are used in the sale, the securities will be acquired by the underwriters or dealers for their own account. We may sell the securities from time to time in one or more transactions:

at a fixed price or prices, which may be changed;
at market prices prevailing at the time of sale;
at prices related to such prevailing market prices;
at varying prices determined at the time of sale; or
at negotiated prices.

Such sales may be effected:

in transactions on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;

in transactions in the over-the-counter market;

in block transactions in which the broker or dealer so engaged will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction, or in crosses, in which the same broker acts as an agent on both sides of the trade;

through the writing of options; or
through other types of transactions.

Any shares of common stock covered by this prospectus that qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than pursuant to this prospectus.

The securities may be offered to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more of such firms. Unless otherwise set forth in the prospectus supplement, the obligations of underwriters or dealers to purchase the securities offered will be subject to certain conditions precedent and the underwriters or dealers will be obligated to purchase all the offered securities if any are purchased. Any public offering price and any discount or concession allowed or reallowed or paid by underwriters or dealers to other dealers may be changed from time to time.

The securities may be sold directly by us or through agents as designated from time to time. Any agent involved in the offer or sale of the securities in respect of which this prospectus is delivered will be named, and any commissions payable to such agent will be set forth in, the prospectus supplement. Unless otherwise indicated in the prospectus supplement, any such agent will be acting on a best efforts basis for the period of its appointment.

Offers to purchase the securities offered by this prospectus may be solicited, and sales of the securities may be made by us directly to institutional investors or others, who may be deemed to be underwriters within the meaning of the Securities Act with respect to any resale of the securities. The terms of any offer made in this manner will be included in the prospectus supplement relating to the offer.

Some of the underwriters, dealers or agents used by us in any offering of securities under this prospectus may be customers of, engage in transactions with, and perform services for us or affiliates of ours in the

TABLE OF CONTENTS

ordinary course of business. Underwriters, dealers, agents and other persons may be entitled to indemnification against and contribution toward certain civil liabilities, including liabilities under the Securities Act, and to be reimbursed for certain expenses.

Subject to any restrictions relating to debt securities in bearer form, any securities initially sold outside the United States may be resold in the United States through underwriters, dealers or otherwise.

Any underwriters to which offered securities are sold by us for public offering and sale may make a market in such securities, but those underwriters will not be obligated to do so and may discontinue any market making at any time.

The anticipated date of delivery of the securities offered by this prospectus will be described in the applicable prospectus supplement relating to the offering.

Any broker-dealer participating in the distribution of the shares of common stock may be deemed to be an underwriter within the meaning of the Securities Act with respect to any securities such entity sells pursuant to this prospectus.

To comply with the securities laws of some states, if applicable, the securities may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the securities may not be sold unless they have been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

There can be no assurance that we will sell all or any of the securities offered by this prospectus.

LEGAL MATTERS

Mitchell Silberberg & Knupp LLP, with an office at 11377 West Olympic Blvd., Los Angeles, California 90064, will pass upon the validity of the securities offered in this prospectus. As of December 28, 2015, an entity controlled by a principal of Mitchell Silberberg & Knupp owns 38,000 shares of our common stock.

EXPERTS

Gumbiner Savett Inc., independent registered public accounting firm, has audited our financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2014, as set forth in their report, which is incorporated by reference in the prospectus and elsewhere in this registration statement. Our financial statements are incorporated by reference in reliance on the report of Gumbiner Savett Inc., given on their authority as experts in accounting and auditing.

TABLE OF CONTENTS

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act of 1933, as amended (Securities Act), with respect to the securities covered by this prospectus. This prospectus, which is a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed therewith. For further information with respect to us and the securities covered by this prospectus, please see the registration statement and the exhibits filed with the registration statement. A copy of the registration statement and the exhibits filed with the registration statement may be inspected without charge at the Public Reference Room maintained by the SEC, located at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the Public Reference Room. The SEC also maintains an Internet website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address of the website is <http://www.sec.gov>.

We are subject to the information and periodic reporting requirements of the Exchange Act and, in accordance therewith, we file periodic reports, proxy statements and other information with the SEC. Such periodic reports, proxy statements and other information are available for inspection and copying at the Public Reference Room and website of the SEC referred to above. We maintain a website at <http://www.clearsign.com>. You may access our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed pursuant to Sections 13(a) or 15(d) of the Exchange Act with the SEC free of charge at our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. Our website and the information contained on that site, or connected to that site, are not incorporated into and are not a part of this prospectus.

TABLE OF CONTENTS

INFORMATION INCORPORATED BY REFERENCE

The SEC and applicable law permits us to incorporate by reference into this prospectus information that we have or may in the future file with or furnish to the SEC. This means that we can disclose important information by referring you to those documents. You should read carefully the information incorporated herein by reference because it is an important part of this prospectus. We hereby incorporate by reference the following documents into this prospectus:

our Annual Report on Form 10-K for the fiscal year ended December 31, 2014, as filed with the SEC on February 26, 2015;

all information in our proxy statement filed with the SEC on March 31, 2015 and amended on April 1, 2015 to the extent incorporated by reference in our Annual Report on Form 10-K for the year ended December 31, 2014;

our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2015, September 30, 2015 and September 30, 2015, as filed with the SEC on May 14, 2015, August 13, 2015 and November 12, 2015, respectively; and

our Current Reports on Form 8-K filed with the SEC on February 5, 2015, February 12, 2015, May 11, 2015 and August 5, 2015.

Additionally, all documents filed by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (other than any portions of filings that are furnished rather than filed pursuant to Items 2.02 and 7.01 of a Current Report on Form 8-K), after the date of this prospectus and before the termination or completion of this offering (including all such documents filed with the SEC after the date of the initial registration statement and prior to the effectiveness of the registration statement) shall be deemed to be incorporated by reference into this prospectus from the respective dates of filing of such documents. Any information that we subsequently file with the SEC that is incorporated by reference as described above will automatically update and supersede any previous information that is part of this prospectus.

Upon written or oral request, we will provide you without charge, a copy of any or all of the documents incorporated by reference, other than exhibits to those documents unless the exhibits are specifically incorporated by reference in the documents. Please send requests to ClearSign Combustion Corporation, 12870 Interurban Avenue South, Seattle, Washington 98168, Attn: Chief Financial Officer, Telephone: (206) 673-4848.

DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers or persons controlling the company, we have been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is therefore unenforceable.