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PROSPECTUS SUPPLEMENT
(to Prospectus dated October 31, 2019)

RELMADA THERAPEUTICS, INC.

Up to $75,000,000
Common Stock

We have entered into an Open Market Sale Agreement[SM] (the "Sales Agreement"), with Jefferies LLC ("Jefferies"), relating to shares of our common stock offered by this prospectus supplement and the accompanying prospectus. In accordance with the terms of the Sales Agreement, we may offer and sell shares of our common stock having an aggregate offering price of up to $75,000,000 from time to time through Jefferies, acting as our sales agent.

Our common stock is listed on The Nasdaq Capital Market ("Nasdaq") under the symbol "RLMD." On May 13, 2020, the last reported sale price of our common stock on Nasdaq was $40.97 per share.

Sales of our common stock, if any, under this prospectus supplement may be made in sales deemed to be an "at the market offering" as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended (the "Securities Act"). Jefferies is not required to sell any specific amount of our common stock, but will act as our sales agent and use commercially reasonable efforts to sell on our behalf all of the shares of common stock requested to be sold by us, consistent with its normal trading and sales practices, on mutually agreed terms between Jefferies and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

Jefferies will receive from us a commission equal to 3.0% of the gross proceeds of any shares of common stock sold through it under the Sales Agreement. In connection with the sale of our common stock on our behalf, Jefferies will be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of Jefferies will be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contribution to Jefferies with respect to certain liabilities, including liabilities under the Securities Act.

An investment in our securities involves a high degree of risk. Please read "Risk Factors" on page S-4 of this prospectus supplement and in the documents incorporated by reference into this prospectus supplement before investing in our securities.

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 supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

Jefferies

The date of this prospectus supplement is May 15, 2020

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus relate to the offering of our common stock. Before buying any of the common stock that we are offering, we urge you to carefully read this prospectus supplement and the accompanying prospectus, together with the information incorporated by reference as described under the headings "Where You Can Find More Information" and "Incorporation of Certain Information by Reference" in this prospectus supplement. These documents contain important information that you should consider when making your investment decision.

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this offering and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference herein or therein. The second part, the accompanying prospectus, provides more general information. Generally, when we refer to this prospectus, we are referring to both parts of this document combined. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in any document incorporated by reference into this prospectus supplement that was filed with the Securities and Exchange Commission (the "SEC"), before the date of this prospectus supplement, on the other hand, you should rely on the information in this prospectus supplement. If any statement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference into this prospectus supplement—the statement in the document having the later date modifies or supersedes the earlier statement.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference herein or in the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreement, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

You should rely only on the information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus and any free writing prospectuses we may provide to you in connection with this offering. We have not, and Jefferies has 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, and Jefferies is not, making an offer to sell or seeking an offer to buy our common stock under this prospectus in any jurisdiction where the offer or sale is not permitted. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the securities and the distribution of this prospectus outside the United States. Furthermore, you should not consider this prospectus to be an offer or solicitation relating to the securities if the person making the offer or solicitation is not qualified to do so, or if it is unlawful for you to receive such an offer or solicitation. You should not assume that the information contained in this prospectus or free writing prospectus is accurate as of any date other than the date on the front cover of those documents, or that the information contained in any document incorporated by reference is accurate as of any date other than the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of a security. Our business, financial condition, results of operations and prospects may have changed since those dates. It is important for you to read and consider all information contained in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference herein and therein, and any free writing prospectus prepared by or on behalf of us that we may authorize for use in connection with this offering, in their entirety, before making an investment decision. You should also read and consider the information in the documents to which we have referred you in the sections entitled "Where You Can Find More Information" and "Incorporation of Certain Information by Reference" in this prospectus supplement and in the accompanying prospectus.

In this prospectus supplement and the accompanying prospectus, unless the context otherwise requires, references to "Relmada," "we," "our" and "us" refer, collectively, to Relmada Therapeutics, Inc. (a Nevada corporation), and its subsidiary, Relmada Therapeutics, Inc. (a Delaware corporation).

This prospectus supplement and the accompanying prospectus contains references to our trademarks and to trademarks belonging to other entities. Solely for convenience, trademarks and trade names referred to in this prospectus supplement and the accompanying prospectus, including logos, artwork and other visual displays, may appear without the ® or TM symbols, but such references are not intended to indicate, in any way, that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. We do not intend our use or display of other companies' trade names or trademarks to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights certain information about this offering and selected information contained elsewhere in or incorporated by reference into this prospectus supplement and the accompanying prospectus. This summary is not complete and does not contain all of the information that you should consider before deciding whether to invest in our shares of common stock. You should carefully read this entire prospectus supplement and accompanying prospectus, including the information incorporated herein and therein, including the "Risk Factors" section contained in this prospectus supplement and the other documents incorporated by reference into this prospectus supplement.

Overview

Relmada Therapeutics, Inc. ("Relmada," the "Company," "we," "us" or "our") is a clinical-stage biotechnology company focused on the development of d-methadone ("dextromethadone" or "REL-1017"), an N-methyl-D-aspartate ("NMDA") receptor antagonist. d-methadone is a new chemical entity ("NCE") that potentially addresses areas of high unmet medical need in the treatment of central nervous system ("CNS") diseases and other disorders.

NMDA receptors are present in many parts of the central nervous system and play important roles in regulating neuronal activity. We believe that dextromethadone acting as an NMDA receptor antagonist can have potential applications in a number of disease indications which mitigates risk and offers significant upside.

Our lead product candidate, d-methadone, is an NCE being developed as a rapidly acting, sustained effect oral agent for the treatment of depression and other potential indications. We have previously completed Phase 1 single and multiple ascending dose studies and on October 15, 2019 we reported top-line data from study REL-1017-202. This was a double-blind, placebo-controlled Phase 2 clinical trial evaluating the safety, tolerability and efficacy of two oral doses of REL-1017, 25 mg once a day and 50 mg once a day, as an adjunctive treatment in patients with major depressive disorder ("MDD") who experienced an inadequate response to 1 to 3 adequate antidepressant treatments with an antidepressant medication.

In the REL-1017-202 study, 62 subjects, average age 49.2 years, with an average Hamilton Depression Rating Scale score of 25.3 and an average Montgomery-Asberg Depression Rating Scale ("MADRS") score of 34.0 (severe depression), were randomized. Other demographic characteristics were balanced across all arms. After an initial screening period, subjects were randomized to one of three arms: placebo, REL-1017 25 mg or REL-1017 50 mg, in addition to stable background antidepressant therapy. Subjects in the REL-1017 treatment arms received one loading dose of either 75 mg (25 mg arm) or 100 mg (50 mg arm) of REL-1017. Subjects were treated inpatient for 7 days and discharged home at Day 9. They returned for follow-up visits at Day 14 and Day 21. Efficacy was measured on Days 2, 4 and 7 in the dosing period and on Day 14, one week after treatment discontinuation. 61 subjects received all treatment doses and were included in the per-protocol population (PPP) treatment analysis; 57 subjects completed all visits. All 62 randomized subjects were part of the intention-to-treat (ITT) analysis. No differences were observed between the ITT and PPP analyses and results.

Key findings:

We observed that subjects in both the REL-1017 25 mg and 50 mg treatment groups experienced statistically significant improvement on all efficacy measures tested as compared to subjects in the placebo group, including: the MADRS; the Clinical Global Impression – Severity (CGI-S) scale; the Clinical Global Impression – Improvement (CGI-I) scale; and the Symptoms of Depression Questionnaire (SDQ).

Improvements on the MADRS endpoint appeared on Day 4 in both REL-1017 dose groups and continued through Day 7 and Day 14, seven days after treatment discontinuation, with P values< 0.03 and large effect sizes (a measure of quantifying the difference between two groups), ranging from 0.7 to 1.0. Similar findings emerged from the CGI-S and CGI-I scales.

MADRS: Analysis of Change from Baseline to Day 7 and to Day 14 ITT Population

	Day 2			Day 4			Day 7			Day 14		
	LS Means Difference	P-value	d	LS Means Difference	P-value	d	LS Means Difference	P-value	d	LS Means Difference	P-value	d
REL-1017 25mg vs Placebo	-1.9	0.4340	0.3	-7.9	0.0087	0.9	-8.7	0.0122	0.8	-9.4	0.0103	0.9
REL-1017 50mg vs Placebo	-0.3	0.9092	0.0	-7.6	0.0096	0.8	-7.2	0.0308	0.7	-10.4	0.0039	1.0

LS = Least Squares; d = Cohen's effect size

The study also confirmed the favorable tolerability profile of REL-1017, which was also observed in the Phase 1 studies. Subjects experienced mild and moderate adverse events (AEs), and no serious adverse events, without significant differences between placebo and treatment groups. The AEs observed in the Phase 2 clinical study were of the same nature as those observed in the Phase 1 clinical studies in d-Methadone, and there was no evidence of either treatment induced psychotomimetic and dissociative AEs or withdrawal signs and symptoms upon treatment discontinuation.

Corporate Information

Our principal executive offices are located at 880 Third Avenue, 12th Floor, New York, NY 10022 and our telephone number is +1-646-876-3459. Our website address is *www.relmada.com*. The information contained therein or connected thereto shall not be deemed to be incorporated into this prospectus or the registration statement of which it forms a part. The information on our website is not part of this prospectus.

For additional information about us, please refer to other documents we have filed with the SEC and that are incorporated by reference into this prospectus, as listed under the heading "Incorporation of Certain Information by Reference."

THE OFFERING

Common stock offered by us	Shares of our common stock having an aggregate offering price of up to $75,000,000.
Common stock to be outstanding after this offering	Up to 16,771,276 shares of common stock (as more fully described in the notes following this table), assuming sales of 1,830,608 shares of our common stock in this offering at an offering price of $40.97 per share, which was the last reported sale price of our common stock on Nasdaq on May 13, 2020. The actual number of shares issued will vary depending on the sales price under this offering.
Plan of Distribution	"At the market offering" that may be made from time to time through our sales agent, Jefferies. See the section entitled "Plan of Distribution" on page S-8 of this prospectus supplement.
Use of Proceeds	We intend to use the net proceeds from this offering for working capital and general corporate purposes, which includes, without limitation, clinical studies required to gain regulatory approvals, implementation of adequate systems and controls to allow for regulatory approvals, further development of our product candidates, investing in or acquiring companies that are synergistic with or complimentary to our technologies, licensing activities related to our current and future product candidates and working capital, the development of emerging technologies, investing in or acquiring companies that are developing emerging technologies, licensing activities, or the acquisition of other businesses. See the section titled "Use of Proceeds" on page S-6 of this prospectus supplement.
Risk Factors	See "Risk Factors" beginning on page S-4 of this prospectus supplement and in the documents incorporated by reference herein for a discussion of factors you should consider carefully before investing in our common stock.
Nasdaq symbol	"RLMD"

The number of shares of our common stock to be outstanding after this offering is based on 14,940,668 shares of our common stock outstanding as of March 31, 2020, and excludes:

- 834,719 shares of our common stock issuable upon the exercise of stock options outstanding at March 31, 2020, at a weighted average exercise price of $9.61 per share;
- 3,160,715 shares of our common stock issuable upon the exercise of warrants outstanding at March 31, 2020, at a weighted average exercise price of $6.79 per share (of which warrants to purchase approximately 177,700 shares have been exercised since March 31, 2020, and such shares are outstanding); and
- 1,155,086 additional shares of our common stock available for future issuance as of March 31, 2020, under our 2014 Stock Option and Equity Incentive Plan.

RISK FACTORS

An investment in our common stock involves a high degree of risk. Prior to making a decision about investing in our common stock, you should carefully consider the risk factors described below and the risk factors discussed in the sections entitled "Risk Factors" contained in our most recent Transition Report on Form 10-KT, and our other filings with the SEC and incorporated by reference in this prospectus supplement, together with all of the other information contained in this prospectus supplement. Additional risks and uncertainties not presently known to us, or that we currently view as immaterial, may also impair our business. Our business, financial condition and results of operations could be materially and adversely affected as a result of these risks. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment.

Risks Related to this Offering

We will have broad discretion in the use of the net proceeds from this offering and, despite our efforts, we may use the net proceeds in a manner that does not increase the value of your investment.

We currently intend to use the net proceeds from this offering for working capital and general corporate purposes, which includes, without limitation, clinical studies required to gain regulatory approvals, implementation of adequate systems and controls to allow for regulatory approvals, further development of our product candidates, investing in or acquiring companies that are synergistic with or complimentary to our technologies, licensing activities related to our current and future product candidates and working capital, the development of emerging technologies, investing in or acquiring companies that are developing emerging technologies, licensing activities, or the acquisition of other businesses. However, we have not determined the specific allocation of the net proceeds among these potential uses. Our management will have broad discretion over the use and investment of the net proceeds from this offering, and, accordingly, investors in this offering will need to rely upon the judgment of our management with respect to the use of proceeds, with only limited information concerning our specific intentions. These proceeds could be applied in ways that do not improve our operating results or increase the value of your investment.

You may experience immediate and substantial dilution in the net tangible book value per share of the common stock you purchase in the offering. In addition, we may issue additional equity or convertible debt securities in the future, which may result in additional dilution to you.

The offering price per share in this offering may exceed the pro forma net tangible book value per share of our common stock outstanding as of March 31, 2020. Assuming that an aggregate of 1,830,608 shares of our common stock are sold at a price of $40.97 per share, the last reported sale price of our common stock on Nasdaq on May 13, 2020, for aggregate gross proceeds of approximately $75,000,000, and after deducting commissions and estimated aggregate offering expenses payable by us, you will experience immediate dilution of $29.89 per share, representing the difference between our pro forma as adjusted net tangible book value per share as of March 31, 2020 after giving effect to this offering and the assumed offering price. The exercise of outstanding stock options could result in further dilution of your investment. See the section titled "Dilution" below for a more detailed illustration of the dilution you would incur if you participate in this offering. In addition, to the extent we need to raise additional capital in the future and we issue additional shares of common stock or securities convertible or exchangeable for our common stock, our then existing stockholders may experience dilution and the new securities may have rights senior to those of our common stock offered in this offering.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the information incorporated by reference herein and therein contain or incorporate forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). These forward-looking statements reflect management's beliefs and assumptions. In addition, these forward-looking statements reflect management's current views with respect to future events or our financial performance, and involve certain known and unknown risks, uncertainties and other factors, including those identified below, which may cause our or our industry's actual or future results, levels of activity, performance or achievements to differ materially from those expressed or implied by any forward-looking statements or from historical results. We intend the forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in Section 27A of the Securities Act and Section 21E of the Exchange Act. Forward-looking statements include information concerning our possible or assumed future results of operations and statements preceded by, followed by, or that include the words "may," "will," "could," "would," "should," "believe," "expect," "plan," "anticipate," "intend," "estimate," "predict," "potential" or similar expressions.

Forward-looking statements are inherently subject to risks and uncertainties, many of which we cannot predict with accuracy and some of which we might not even anticipate. Although we believe that the expectations reflected in the forward-looking statements are based upon reasonable assumptions at the time made, we can give no assurance that the expectations will be achieved. Future events and actual results, financial and otherwise, may differ materially from the results discussed in the forward-looking statements. Readers are cautioned not to place undue reliance on these forward-looking statements.

The factors described under "Risk Factors" in this prospectus supplement and in any documents incorporated by reference herein, and other factors could cause our or our industry's future results to differ materially from historical results or those anticipated or expressed in any of our forward-looking statements. We operate in a continually changing business environment, and new risk factors emerge from time to time. Other unknown or unpredictable factors also could have material adverse effects on our future results, performance or achievements. We cannot assure you that projected results or events will be achieved or will occur.

You should read this prospectus supplement, the accompanying prospectus and the information incorporated by reference herein and therein completely and with the understanding that our actual future results may be materially different from what we expect. Any forward-looking statement speaks only as of the date of this prospectus supplement. We do not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

USE OF PROCEEDS

We may issue and sell shares of our common stock having aggregate gross sales proceeds of up to $75,000,000 from time to time. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time.

We will retain broad discretion over the use of the net proceeds from the sale of the securities offered hereby. We currently intend to use the net proceeds from this offering for working capital and general corporate purposes, which includes, without limitation, clinical studies required to gain regulatory approvals, implementation of adequate systems and controls to allow for regulatory approvals, further development of our product candidates, investing in or acquiring companies that are synergistic with or complimentary to our technologies, licensing activities related to our current and future product candidates and working capital, the development of emerging technologies, investing in or acquiring companies that are developing emerging technologies, licensing activities, or the acquisition of other businesses. The precise amount and timing of the application of such proceeds will depend upon our funding requirements and the availability and cost of other capital. As of the date of this prospectus supplement, we cannot specify with certainty all of the particular uses for the net proceeds that we will have from the sale of the shares of our common stock. Pending the use of the net proceeds from this offering, if any, we may invest the net proceeds in investment grade, short-term interest-bearing obligations, such as money-market funds, certificates of deposit, or direct or guaranteed obligations of the United States government, or hold the net proceeds as cash.

DILUTION

If you purchase shares of our common stock in this offering, your interest will be diluted to the extent of the difference between the public offering price per share and the net tangible book value per share of our common stock after this offering. We calculate net tangible book value per share by dividing our net tangible assets (tangible assets less total liabilities) by the number of shares of our common stock issued and outstanding as of March 31, 2020.

Our historical net tangible book value at March 31, 2020 was $113,159,533 or approximately $7.57 per share of our common stock. After giving effect to the sale of our common stock in the aggregate amount of $75,000,000 in this offering, at an assumed offering price of $40.97 per share, the last reported sale price of our common stock on Nasdaq on May 13, 2020, and after deducting estimated offering expenses and commissions payable by us (net proceeds of $72,620,000), our adjusted net tangible book value as of March 31, 2020 would have been approximately $185,779,533, or approximately $11.08 per share of our common stock. This represents an immediate increase in the net tangible book value of $3.50 per share of our common stock to our existing stockholders and an immediate dilution in net tangible book value of approximately $29.89 per share of our common stock to new investors. The following table illustrates per share dilution:

Assumed public offering price per share		$ 40.97
Net tangible book value per share as of March 31, 2020	$ 7.57	
Increase in net tangible book value per share attributable to this offering	$ 3.51	
Adjusted net tangible book value per share as of March 31, 2020, after giving effect to this offering		$ 11.08
Dilution per share to new investors purchasing shares in this offering		$ 29.89

The table above assumes for illustrative purposes that an aggregate of 1,830,608 shares of our common stock are sold at a price of $40.97 per share, the last reported sale price of our common stock on Nasdaq on May 13, 2020, for aggregate gross proceeds of $75,000,000. The shares sold in this offering, if any, will be sold from time to time at various prices. An increase of $1.00 per share in the price at which the shares are sold from the assumed offering price of $40.97 per share shown in the table above, assuming all of our common stock in the aggregate amount of $75,000,000 is sold at that price, would increase our adjusted net tangible book value per share after the offering to $11.11 per share and would increase the dilution in net tangible book value per share to new investors in this offering to $30.86 per share, after deducting estimated offering expenses and commissions payable by us. A decrease of $1.00 per share in the price at which the shares are sold from the assumed offering price of $40.97 per share shown in the table above, assuming all of our common stock in the aggregate amount of $75,000,000 is sold at that price, would decrease our adjusted net tangible book value per share after the offering to $11.05 per share and would decrease the dilution in net tangible book value per share to new investors in this offering to $28.92 per share, after deducting estimated offering expenses and commissions payable by us. This information is supplied for illustrative purposes only.

Unless we indicate otherwise, all information in this prospectus supplement is based on 14,940,668 shares of our common stock outstanding as of March 31, 2020, and excludes:

- 834,719 shares of our common stock issuable upon the exercise of stock options outstanding at March 31, 2020, at a weighted average exercise price of $9.61 per share;
- 3,160,715 shares of our common stock issuable upon the exercise of warrants outstanding at March 31, 2020, at a weighted average exercise price of $6.79 per share (of which warrants to purchase approximately 177,700 shares have been exercised since March 31, 2020, and such shares are outstanding); and
- 1,155,086 additional shares of our common stock available for future issuance as of March 31, 2020, under our 2014 Stock Option and Equity Incentive Plan.

To the extent that outstanding options are exercised, or we issue other shares, investors purchasing shares in this offering could experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the issuance of those securities could result in further dilution to our stockholders.

PLAN OF DISTRIBUTION

We have entered into a Sales Agreement with Jefferies, under which we may offer and sell up to $75,000,000 of our shares of common stock from time to time through Jefferies acting as agent. Sales of our shares of common stock, if any, under this prospectus supplement and the accompanying prospectus will be made by any method that is deemed to be an "at the market offering" as defined in Rule 415(a)(4) under the Securities Act.

Each time we wish to issue and sell shares of common stock under the Sales Agreement, we will notify Jefferies of the number of shares to be issued, the dates on which such sales are anticipated to be made, any limitation on the number of shares to be sold in any one day and any minimum price below which sales may not be made. Once we have so instructed Jefferies, unless Jefferies declines to accept the terms of such notice, Jefferies has agreed to use its commercially reasonable efforts consistent with its normal trading and sales practices to sell such shares up to the amount specified on such terms. The obligations of Jefferies under the Sales Agreement to sell our shares of common stock are subject to a number of conditions that we must meet.

The settlement of sales of shares between us and Jefferies is generally anticipated to occur on the second trading day following the date on which the sale was made. Sales of our shares of common stock as contemplated in this prospectus supplement will be settled through the facilities of The Depository Trust Company or by such other means as we and Jefferies may agree upon. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

We will pay Jefferies a commission equal to 3.0% of the aggregate gross proceeds we receive from each sale of our shares of common stock. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. In addition, we have agreed to reimburse Jefferies for the fees and disbursements of its counsel, payable upon execution of the Sales Agreement, in an amount not to exceed $50,000, in addition to certain ongoing disbursements of its legal counsel. We estimate that the total expenses for the offering, excluding any commissions or expense reimbursement payable to Jefferies under the terms of the Sales Agreement, will be approximately $130,000. The remaining sale proceeds, after deducting any other transaction fees, will equal our net proceeds from the sale of such shares.

Jefferies will provide written confirmation to us before the open on Nasdaq on the day following each day on which shares of common stock are sold under the Sales Agreement. Each confirmation will include the number of shares sold on that day, the aggregate gross proceeds of such sales and the proceeds to us.

In connection with the sale of our shares of common stock on our behalf, Jefferies will be deemed to be an "underwriter" within the meaning of the Securities Act, and the compensation of Jefferies will be deemed to be underwriting commissions or discounts. We have agreed to indemnify Jefferies against certain civil liabilities, including liabilities under the Securities Act. We have also agreed to contribute to payments Jefferies may be required to make in respect of such liabilities.

The offering of our shares of common stock pursuant to the Sales Agreement will terminate upon the earlier of (i) the sale of all shares of common stock subject to the Sales Agreement and (ii) the termination of the Sales Agreement as permitted therein.

This summary of the material provisions of the Sales Agreement does not purport to be a complete statement of its terms and conditions. A copy of the Sales Agreement is filed as an exhibit to a current report on Form 8-K filed under the Exchange Act and incorporated by reference in this prospectus supplement.

Jefferies and its affiliates may in the future provide various investment banking, commercial banking, financial advisory and other financial services for us and our affiliates, for which services they may in the future receive customary fees. In the course of its business, Jefferies may actively trade our securities for its own account or for the accounts of customers, and, accordingly, Jefferies may at any time hold long or short positions in such securities. Jefferies also acted as an underwriter in our public offering consummated in December 2019, for which it received compensation.

A prospectus supplement and the accompanying prospectus in electronic format may be made available on a website maintained by Jefferies, and Jefferies may distribute the prospectus supplement and the accompanying prospectus electronically.

LEGAL MATTERS

The validity of the issuance of the common stock offered by this prospectus supplement will be passed upon for us by Sichenzia Ross Ference LLP, New York, New York. Jefferies LLC is being represented in connection with this offering by Cooley LLP, New York, New York.

EXPERTS

Our consolidated financial statements as of December 31, 2019, June 30, 2019, and June 30, 2018, and for the six months ended December 31, 2019, and the fiscal years ended June 30, 2019 and 2018, incorporated in this prospectus supplement by reference to our Transition Report on Form 10-KT filed with the SEC on March 26, 2020, have been so incorporated in reliance on the report of Marcum LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

Our consolidated financial statements as of June 30, 2019 and 2018, and for the fiscal years ended June 30, 2019 and 2018, incorporated in this prospectus supplement by reference to our Annual Report on Form 10-K filed with the SEC on September 24, 2019, have been so incorporated in reliance on the report of Marcum LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

Our consolidated financial statements as of June 30, 2019 and 2018, and for the fiscal years ended June 30, 2019 and 2018 retroactively restated to reflect the effects of the reverse stock split effective on September 30, 2019, incorporated in this prospectus supplement by reference to our Current Report on Form 8-K filed with the SEC on October 18, 2019, have been so incorporated in reliance on the report of Marcum LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are also available to the public at the SEC's web site at http://www.sec.gov.

We make available free of charge on or through our Internet website www.relmada.com, 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 or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file the material with, or furnish it to, the SEC. The references to www.relmada.com in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein or therein are inactive textual references only, and the information found on our internet website is not incorporated by reference into, and should not be considered part of, this prospectus supplement, the accompanying base shelf prospectus or the documents incorporated by reference herein or therein. Investors should not rely on any such information in deciding whether to invest in our common stock.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference information contained in documents we file with it, which means that we can disclose important information to you by referring you to those documents already on file with the SEC that contain that information. The information incorporated by reference is considered to be part of this prospectus supplement, and later information that we file with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future information filed (rather than furnished) with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, between the date of this prospectus supplement and the termination of the offering of the securities covered by this prospectus supplement, provided, however, that we are not incorporating any information furnished under any of Item 2.02 or Item 7.01 of any Current Report on Form 8-K (and exhibits filed on such form that are related to such items):

- Our Transition Report on Form 10-KT for the transition period from July 1, 2019 to December 31, 2019, filed with the SEC on March 26, 2020;
- Our Annual Report on Form 10-K for the fiscal year ended June 30, 2019, filed with the SEC on September 24, 2019;
- Our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2020, filed with the SEC on May 15, 2020;
- Our Current Reports on Form 8-K and 8-K/A filed with the Commission on July 17, 2019, July 18, 2019, July 29, 2019, September 27, 2019, October 1, 2019, October 18, 2019, October 21, 2019; December 3, 2019, December 6, 2019, December 26, 2019, January 10, 2020, March 9, 2020, March 12, 2020, and April 6, 2020; and
- The description of certain capital stock contained in our Registration Statement 8-A filed on October 10, 2019, as it may further be amended from time to time.

Upon written or oral request, we will provide at no cost to the requester a copy of all of the information that has been incorporated by reference in this prospectus supplement but not delivered with this prospectus supplement. You may obtain copies of these documents from us, without charge (other than exhibits, unless the exhibits are specifically incorporated by reference), by contacting our chief financial officer, c/o Relmada Therapeutics, Inc., at 880 Third Avenue, 12th Floor, New York, NY 10022. Our telephone number is 646-876-3459.

You may also access the documents incorporated by reference in this prospectus supplement through our website at www.relmada.com. Except for the specific incorporated documents listed above, no information available on or through our website shall be deemed to be incorporated in this prospectus supplement or the registration statement of which it forms a part.

Prospectus

RELMADA THERAPEUTICS, INC.

$200,000,000

COMMON STOCK
PREFERRED STOCK
WARRANTS
SUBSCRIPTION RIGHTS
DEPOSITARY SHARES
PURCHASE CONTRACTS
UNITS

- common stock;
- preferred stock;
- warrants to purchase our securities;
- subscription rights to purchase any of the foregoing securities;
- depositary shares;
- purchase contracts; or
- units comprised of, or other combinations of, the foregoing securities.

We may offer and sell these securities separately or together, in one or more series or classes and in amounts, at prices and on terms described in one or more offerings. We may offer securities through underwriting syndicates managed or co-managed by one or more underwriters or dealers, through agents or directly to purchasers. The prospectus supplement for each offering of securities will describe in detail the plan of distribution for that offering. For general information about the distribution of securities offered, please see "Plan of Distribution" in this prospectus.

Each time our securities are offered, we will provide a prospectus supplement containing more specific information about the particular offering and attach it to this prospectus. The prospectus supplements may also add, update or change information contained in this prospectus. **This prospectus may not be used to offer or sell securities without a prospectus supplement which includes a description of the method and terms of this offering.**

Our common stock is quoted on the Nasdaq Capital Market under the symbol "RLMD." The last reported sale price of our common stock on The Nasdaq Capital Market on October 24, 2019 was $23.49 per share. The aggregate market value of our outstanding common stock held by non-affiliates is $232,611,722 based on 10,045,842 shares of outstanding common stock, of which 9,902,585 shares are held by non-affiliates, and a per share price of $23.49, which was the closing sale price of our common stock as quoted on the NASDAQ Capital Market on October 24, 2019. During the 12 calendar month period that ends on, and includes, the date of this prospectus, we have not offered and sold any of our securities pursuant to General Instruction I.B.6 of Form S-3.

If we decide to seek a listing of any preferred stock, warrants, subscriptions rights, depositary shares or units offered by this prospectus, the related prospectus supplement will disclose the exchange or market on which the securities will be listed, if any, or where we have made an application for listing, if any.

Investing in our securities involves certain risks. See "Risk Factors" beginning on page 7 and the risk factors in our most recent Annual Report on Form 10-K, which are incorporated by reference herein, as well as in any other more recently filed annual, quarterly or current reports and, if any, in the relevant prospectus supplement. We urge you to carefully read this prospectus and the accompanying prospectus supplement, together with the documents we incorporate by reference, describing the terms of these securities before investing.

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 October 31, 2019.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or SEC, utilizing a "shelf" registration process. Under this shelf registration process, we may offer and sell, either individually or in combination, in one or more offerings, any of the securities described in this prospectus, for total gross proceeds of up to $200,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we offer securities under this prospectus, we will provide a prospectus supplement to this prospectus that will contain more specific information about the terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change any of the information contained in this prospectus or in the documents that we have incorporated by reference into this prospectus.

We urge you to read carefully this prospectus, any applicable prospectus supplement and any free writing prospectuses we have authorized for use in connection with a specific offering, together with the information incorporated herein by reference as described under the heading "Incorporation of Documents by Reference," before investing in any of the securities being offered. You should rely only on the information contained in, or incorporated by reference into, this prospectus and any applicable prospectus supplement, along with the information contained in any free writing prospectuses we have authorized for use in connection with a specific offering. We have not authorized anyone to provide you with different or additional information. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so.

The information appearing in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, any applicable prospectus supplement or any related free writing prospectus, or any sale of a security.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the section entitled "Where You Can Find Additional Information."

CAUTIONARY NOTE REGARDING FORWARD LOOKING STATEMENTS

This prospectus and any accompanying prospectus supplement and the documents incorporated by reference herein may contain forward looking statements that involve risks and uncertainties. All statements other than statements of historical fact contained in this prospectus and any accompanying prospectus supplement and the documents incorporated by reference herein, including statements regarding future events, our future financial performance, business strategy, and plans and objectives of management for future operations, are forward-looking statements. We have attempted to identify forward-looking statements by terminology including "anticipates," "believes," "can," "continue," "could," "estimates," "expects," "intends," "may," "plans," "potential," "predicts," "should," or "will" or the negative of these terms or other comparable terminology. Although we do not make forward looking statements unless we believe we have a reasonable basis for doing so, we cannot guarantee their accuracy. These statements are only predictions and involve known and unknown risks, uncertainties and other factors, including the risks outlined under "Risk Factors" or elsewhere in this prospectus and the documents incorporated by reference herein, which may cause our or our industry's actual results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. Moreover, we operate in a highly regulated, very competitive, and rapidly changing environment. New risks emerge from time to time and it is not possible for us to predict all risk factors, nor can we address the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause our actual results to differ materially from those contained in any forward-looking statements.

We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy, short term and long term business operations, and financial needs. These forward-looking statements are subject to certain risks and uncertainties that could cause our actual results to differ materially from those reflected in the forward looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in this prospectus, and in particular, the risks discussed below and under the heading "Risk Factors" and those discussed in other documents we file with the Securities and Exchange Commission (the "Commission"). The following discussion should be read in conjunction with the consolidated financial statements as of and for the years ended June 30, 2019 and 2018, and related notes incorporated by reference into this prospectus. We undertake no obligation to revise or publicly release the results of any revision to these forward-looking statements, except as required by law. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this prospectus may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statement.

You should not place undue reliance on any forward-looking statement, each of which applies only as of the date of this prospectus. Except as required by law, we undertake no obligation to update or revise publicly any of the forward-looking statements after the date of this prospectus to conform our statements to actual results or changed expectations.

Any forward-looking statement you read in this prospectus, any prospectus supplement or any document incorporated by reference reflects our current views with respect to future events and is subject to these and other risks, uncertainties and assumptions relating to our operations, operating results, growth strategy and liquidity. You should not place undue reliance on these forward-looking statements because such statements speak only as to the date when made. We assume no obligation to publicly update or revise these forward-looking statements for any reason, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future, except as otherwise required by applicable law. You are advised, however, to consult any further disclosures we make on related subjects in our reports on Forms 10-K, 10-Q and 8-K filed with the Commission. You should understand that it is not possible to predict or identify all risk factors. Consequently, you should not consider any such list to be a complete set of all potential risks or uncertainties.

PROSPECTUS SUMMARY

This summary highlights selected information contained elsewhere in this prospectus. This summary does not contain all the information that you should consider before investing in our Company. You should carefully read the entire prospectus, including all documents incorporated by reference herein. In particular, attention should be directed to our "Risk Factors," "Information with Respect to the Company," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the financial statements and related notes thereto contained herein or otherwise incorporated by reference hereto, before making an investment decision.

All references to "we," "us," "our," and the "Company" mean Relmada Therapeutics, Inc. and its subsidiary Relmada Therapeutics, Inc.(Delaware).

Business Overview

Relmada is a clinical-stage, publicly traded biotechnology company focused on the development of d-methadone (dextromethadone, REL-1017), an N-methyl-D-aspartate (NMDA) receptor antagonist. d-methadone is a new chemical entity that potentially addresses areas of high unmet medical need in the treatment of central nervous system (CNS) diseases and other disorders.

Our lead product candidate, d-methadone, is a New Chemical Entity (NCE) being developed as a rapidly acting, oral agent for the treatment of depression and other potential indications. We have completed Phase 1 single and multiple ascending dose studies. On October 15, 2019, we reported top-line data from our Phase 2 study of d-methadone in adults with major depressive disorder. Subjects in both dose groups experienced statistically significant improvement of their depression compared to subjects in the placebo group on all efficacy measures. Subjects experienced mild and moderate adverse events (AEs), and no serious AEs, without significant differences between placebo and treatment groups. There was no evidence of either treatment induced psychotomimetic and dissociative AEs or withdrawal signs and symptoms upon treatment discontinuation.

NMDA receptors are present in many parts of the central nervous system and play important roles in regulating neuronal activity. We believe that dextromethadone acting as a NMDA receptor antagonist can have potential applications in a number of disease indications which mitigates risk and offers significant upside.

In addition, the Company has a portfolio of three 505b2 product candidates at various stages of development. These products are: LevoCap ER (REL-1015), an abuse resistant, sustained release dosage form of the opioid analgesic levorphanol; BuTab (oral buprenorphine, REL-1028), an oral dosage form of the opioid analgesic buprenorphine; and MepiGel (topical mepivacaine, REL-1021), an orphan drug designated topical formulation of the local anesthetic mepivacaine.

Our four development projects are briefly described below:

d-Methadone (dextromethadone, REL-1017) and Treatment-Resistant Depression (TRD)

Background

In 2014, the National Institute of Mental Health (NIMH) estimated that 15.7 million adults aged 18 or older in the United States had at least one major depressive episode in the past year. According to data from nationally representative surveys supported by NIMH, only about half of Americans diagnosed with major depression in a given year receive treatment. Of those receiving treatment with as many as four different standard antidepressants, 33% of drug-treated depression patients do not achieve adequate therapeutic benefits according to the Sequenced Treatment Alternatives to Relieve Depression (STAR*D) trial published in the American Journal of Psychiatry. Accordingly, we believe that approximately 3 million patients with such treatment-resistant depression are in need of new treatment options.

In addition to the high failure rate, none of the marketed products for depression can demonstrate rapid antidepressant effects and most of the products take up to a month to show effectiveness. The urgent need for improved, faster acting antidepressant treatments is underscored by the fact that severe depression can be life-threatening, due to heightened risk of suicide.

Recent studies have shown that ketamine, a drug known previously as an anesthetic, can lift depression in many patients within hours. Like d-methadone, ketamine is an NMDA receptor antagonist. However, it is unlikely that ketamine itself will become a practical treatment for most cases of depression. It must be administered through intravenous infusion or intranasally, requiring a hospital setting, and more importantly can potentially trigger adverse side effects including psychedelic symptoms (hallucinations, memory defects, panic attacks), nausea/vomiting, somnolence, cardiovascular stimulation and, in a minority of patients, hepatoxicity. Ketamine also hasn't been thoroughly studied for long-term safety and effectiveness, and the FDA hasn't approved it to treat depression.

d-Methadone Overview and Mechanism of Action

d-Methadone's mechanism of action, as a non-competitive NMDA channel blocker or antagonist, is fundamentally differentiated from all currently FDA-approved antidepressants, as well as all atypical antipsychotics used adjunctively with standard, FDA-approved antidepressants. Working through the same brain mechanisms as ketamine but potentially lacking its adverse side effects, Relmada's d-methadone is being developed as a rapidly acting, oral agent for the treatment of depression and/or other potential CNS pathological conditions.

In chemistry an enantiomer, also known as an optical isomer, is one of two stereoisomers that are mirror images of each other that are non-superposable (not identical), much as one's left and right hands are the same except for being reversed along one axis. A racemic compound, or racemate, is one that has equal amounts of left- and right-handed enantiomers of a chiral molecule. For racemic drugs, often only one of a drug's enantiomers is responsible for the desired physiologic effects, while the other enantiomer is less active or inactive.

Racemic methadone has been used since the 1950s as a treatment for opioid addiction and has remained the primary therapy for this condition for more than 40 years. Methadone is a highly lipophilic molecule that is suitable for a variety of administration routes, with oral bioavailability close to 80%.

As a single isomer of racemic methadone, d-methadone has been shown to possess NMDA antagonist properties with virtually no traditional opioid or ketamine-like adverse events at the expected therapeutic doses. In contrast, racemic methadone is associated with common opioid side effects that include anxiety, nervousness, restlessness, sleep problems (insomnia), nausea, vomiting, constipation, diarrhea, drowsiness, and others. It has been shown that the left (levo) isomer, l-methadone, is largely responsible for methadone's opioid activity, while the right (dextro) isomer, d-methadone, is much less active as an opioid while maintaining affinity for the NMDA receptor.

NMDA receptors are present in many parts of the central nervous system and play important roles in regulating neuronal activity and promoting synaptic plasticity in brain areas important for cognitive functions such as executive function, learning and memory. Based on these premises, d-methadone could show benefits in several different CNS indications.

d-Methadone Phase 1 Clinical Safety Studies

The safety data from two Company-funded d-methadone Phase 1 clinical safety studies and a third study conducted by researchers at Memorial Sloan-Kettering Cancer Center indicate that d-methadone was safe and well tolerated in both healthy subjects and cancer patients at all projected therapeutic doses tested.

In November 2014, Health Canada approved a Clinical Trial Application (CTA) to conduct the first Phase 1 study with d-methadone. This was a Single Ascending Dose (SAD) study and was followed by a Multiple Ascending Dose (MAD) study, both in healthy volunteers. The two studies were designed to assess the safety, tolerability and pharmacokinetics of d-methadone in healthy, opioid-naïve subjects. The SAD study included single escalating oral doses of d-methadone to determine the maximum tolerated dose, defined as the highest dose devoid of unacceptable adverse events. In the MAD study, healthy subjects received daily oral doses of d-methadone for several days to assess its safety, pharmacokinetics and tolerability. In March 2015, we reported that d-methadone demonstrated an acceptable safety profile with no dose limiting side effects after four cohorts were exposed to increasing higher doses. In April 2015, the Company received clearance from Health Canada to continue with dose escalation and explore even higher single doses of d-methadone. In June 2015, the Company successfully completed the SAD study identifying the maximum tolerated dose and subsequently received a No Objection Letter (NOL) from Health Canada to conduct the MAD clinical study in August 2015. The MAD study was completed in January 2016 and the results successfully demonstrated a potential therapeutic dosing regimen for d-methadone with a favorable side effect and tolerability profile. The data from these studies was used to design a Phase 2a study in patients with depression.

d-Methadone In Vivo Study for Depression

In May 2016, we announced the results of an in vivo study showing that administration of d-methadone results in antidepressant-like effects in a well-validated animal model of depression, known as the forced swim test (FST), providing preclinical support for its potential as a novel treatment of depression.

According to the Journal of Visualized Experiments, the FST is based on the assumption that when placing an animal in a container filled with water, it will first make efforts to escape by swimming or climbing, but eventually will exhibit "immobility" that may be considered to reflect a measure of behavioral despair. This test has been extensively used because it involves the exposure of the animals to stress, which was shown to have a role in the tendency for major depression. Additionally, the FST has been shown to be influenced by some of the factors that are altered by or worsen depression in humans, including changes in food consumption and sleep abnormalities. The main advantages of this procedure are that it is relatively easy to perform and that its results are easily and quickly analyzed. Importantly, the FST's sensitivity to a broad range of antidepressant drugs makes it a suitable screening test and is one of the most important features leading to its high predictive validity.

In the Company's FST study, male Sprague Dawley rats were administered single doses of placebo, ketamine, or d-methadone on day one (after habituation; 24 hours prior to forced swim testing). At all doses tested, d-methadone significantly decreased immobility of the rats compared to the placebo, suggesting antidepressant-like activity. In addition, the effect of d-methadone on immobility at the two highest doses tested was larger than the effect seen with ketamine. Moreover, the effects of d-methadone in the forced swim test were not caused by a stimulant effect on spontaneous locomotor activity of the rats. Locomotor activity of lab animals is often monitored to assess the behavioral effects of drugs.

In September 2017 we completed two additional in vivo studies to confirm and support the antidepressant-like effect of dextromethadone in validated animal models, the Novelty Suppressed Feeding Test (NSFT) and the Female Urine-Sniffing test (FUST) test. The studies were performed by Professor Ronald S. Duman, Ph.D. at Yale University School of Medicine.

For FUST, rats are first exposed to a cotton tip dipped in tap water and later exposed to another cotton tip infused with fresh female urine. Male behavior was video recorded and total time spent sniffing the cotton-tipped applicator is determined. For NSFT, rats were food deprived for 24 hr and then placed in an open field with food pellets in the center; latency to eat is recorded in seconds. As a control, food consumption in the home cage is quantified. Rats were administered vehicle, ketamine or d-methadone.

The results of the FUST demonstrate that administration of ketamine significantly increases the time male rats spent engaged in sniffing female urine compared to vehicle group. Similarly, a single dose of d-methadone significantly increased the time spent sniffing female urine compared to vehicle. In contrast, ketamine or d-methadone had no effect on time sniffing water, demonstrating that the effect of drug treatment was specific to the rewarding effects of female urine. The results of the NSFT demonstrate that a single dose of ketamine significantly decreases the latency to eat in a novel open field. Similarly, a single dose of d-methadone also significantly decreased the latency to enter and eat in the novel feed. In contrast, neither ketamine nor methadone influenced latency to feed in the home cage.

These findings demonstrate that ketamine and d-methadone produce rapid antidepressant actions in the FUST and NSFT, effects that are only observed after chronic administration of an SSRI antidepressant.

A separate in vitro electrophysiology study of d-methadone was conducted using 2 subtypes of cloned human NMDA receptors.

The results of this study demonstrated functional antagonist activity with d-methadone comparable to that of both racemic ketamine and the isomer S-ketamine.

Phase 2 Program for d-Methadone in Depression

Combined with the results of our Phase 1 studies, the encouraging results of in vivo and in vitro studies strongly support further evaluation of d-methadone in a Phase 2 study as a rapidly acting, oral agent for the treatment of major depressive disorder. Relmada filed an Investigational New Drug (IND) application for the Phase 2 study with the FDA, which was accepted on January 25, 2017.

On April 13, 2017, we announced that the FDA granted Fast Track designation for d-methadone (REL-1017 dextromethadone) for the adjunctive treatment of major depressive disorder. Fast Track designation is a process designed to facilitate the development and expedite the review of drugs to treat serious conditions and fill an unmet medical need. The purpose, according to the FDA, is to get important new drugs to the patient earlier. Drugs that receive Fast Track designation may be eligible for more frequent meetings and written communications with the FDA, accelerated review and priority approval, and rolling New Drug Application (NDA) review.

On January 17, 2018, we announced that Relmada had acquired the global rights to develop and market dextromethadone for the treatment of neurological conditions including certain rare diseases with symptoms affecting the CNS.

In February 2018, Relmada initiated its Phase 2 study of d-methadone in adults with major depressive disorder.

In July 2019, Relmada announced the completion of dosing of the last patient in its Phase 2 study of d-methadone in patients with major depressive disorder.

On October 15, 2019, we reported top-line data from our Phase 2 study of d-methadone in adults with major depressive disorder. Subjects in both dose groups experienced statistically significant improvement of their depression compared to subjects in the placebo group on all efficacy measures, including: the Montgomery-Asberg Depression Rating Scale (MADRS); the Clinical Global Impression – Severity (CGI-S) scale; the Clinical Global Impression – Improvement (CGI-I) scale; and the Symptoms of Depression Questionnaire (SDQ). The improvement on the MADRS appeared on Day 4 in both REL-1017 dose groups and continued through Day 7 and Day 14, seven days after treatment discontinuation, with P values < 0.03 and large effect sizes (a measure of quantifying the difference between two groups), ranging from 0.7 to 1.0. Similar findings emerged from the CGI-S and CGI-I scales. The study also confirmed the favorable safety and tolerability profile of d-methadone, which was also observed in the Phase 1 studies. Subjects experienced mild and moderate adverse events (AEs), and no serious adverse events, without significant differences between placebo and treatment groups. There was no evidence of either treatment induced psychotomimetic and dissociative AEs or withdrawal signs and symptoms upon treatment discontinuation.

d-Methadone (dextromethadone, REL-1017) in other indications

In addition to developing dextromethadone in major depression, Relmada is initiating work in additional indications. In particular, we have initiated a preclinical program to test the potential efficacy of dextromethadone in Rett syndrome. Rett syndrome is an X-linked neurodevelopmental disorder with high unmet need caused by Mecp2 gene mutation. Loss of Mecp2 disrupts synaptic function and structure and neuronal networks. Rett syndrome is an Orphan Disease affecting ~15,000 in U.S., primarily girls, with no approved therapy. The disease begins with a short period of developmental stagnation, then rapid regression in language and motor skills, followed by long-term stability.

Studies of ketamine, an NMDAR antagonist with mechanistic similarities with dextromethadone, in Rett Syndrome mouse models show that low-dose ketamine acutely reverses multiple disease manifestations and chronic administration of ketamine improves Rett Syndrome progression, providing a solid rationale to pursue this indication with dextromethadone.

Other indications that Relmada may explore in the future, potentially includes restless leg syndrome, and other glutamatergic system activation related diseases.

In January 2018, we entered into an Intellectual Property Assignment Agreement (the Assignment Agreement) and License Agreement (the "License Agreement" and together with the Assignment Agreement, the Agreements) with Dr. Charles E. Inturrisi and Dr. Paolo Manfredi (collectively, the Licensor). Pursuant to the Agreements, Relmada assigned its existing rights, including patents and patent applications, to d-methadone in the context of psychiatric use (the Existing Invention) to Licensor. Licensor then granted Relmada under the License Agreement a perpetual, worldwide, and exclusive license to commercialize the Existing Invention and certain further inventions regarding d-methadone in the context of other indications such as those contemplated above.

LevoCap ER (REL-1015)

LevoCap ER (REL-1015) is a novel version of a proven drug product. LevoCap ER -is an extended release, abuse deterrent, and proprietary formulation of levorphanol (levo-3-hydroxy-N-methyl-morphinan), a unique, broad spectrum opioid with additional "non-opioid" mechanisms of action. In particular, levorphanol binds to all three opioid receptor subtypes involved in analgesia (mu, kappa, and delta), the NMDA receptor, and the norepinephrine and serotonin reuptake pumps, whereas morphine, oxycodone, hydrocodone, and other opioids are highly selective for the mu receptor subtype. Due to its multi-modal mechanism of action, levorphanol could achieve analgesia in patients resistant to other strong opioids. In clinical studies, levorphanol has demonstrated a remarkably broad spectrum of analgesic activity against many different types of pain including neuropathic pain, post-surgical pain, and chronic pain in patients refractory to other opioids.

Levorphanol is a potent opioid analgesic first introduced in the U.S. around 1953 for the treatment of moderate to severe pain where an opioid analgesic is appropriate. Extended-release (long-acting opioid) agents may be preferable to immediate release formulations due to better patient adherence, less dose-watching, and result in improved sleep. Both immediate- and extended-release opioids can potentially be crushed to produce concentrated drug with greater appeal to abusers. Intentional crushing or extracting the active ingredient from the extended-release dosage form by addicts and recreational drug users can destroy the timed-release mechanism and result in a rapid surge of drug into the bloodstream for the purpose of achieving a high or euphoric feeling. Serious side effects and death have been reported from such misuse.

LevoCap ER is the first product candidate utilizing SECUREL™, Relmada's proprietary abuse deterrent extended release technology for opioid drugs. SECUREL dosage forms cannot be easily crushed for inhalation or to obtain rapid euphoria from high blood levels when swallowed. It is also exceedingly difficult for intravenous abusers to extract the active drug from the dosage form using common solvents, including alcohol.

LevoCap ER can be developed under the 505(b)(2) regulatory pathway. Following an exchange of correspondence and meeting with the FDA in January 2017, we have defined a path forward for the Phase 3 clinical study for LevoCap ER and a new drug application (NDA) filing. In light of the promising data generated by Relmada's d-methadone research program, and Relmada's focus on the d-methadone program, Relmada is currently limiting the investments in LevoCap ER.

BuTab (REL-1028)

BuTab (REL-1028) represents a novel formulation of oral, modified release buprenorphine as a potential therapeutic for both chronic pain and opioid dependence. Buprenorphine has been widely used by the sublingual and transdermal routes of administration, but was believed to be ineffective by the oral route because of poor oral bioavailability. We have completed a preclinical program to better define the pharmacokinetic profile of BuTab and to assess the time course of systemic absorption of buprenorphine using several different oral modified release formulations of buprenorphine in dogs, compared to an intravenous administration. Based on the results of this work, we obtained approval from Health Canada and initiated a Phase 1 pharmacokinetic study in healthy volunteers in the second quarter of 2015. This trial was completed in the fourth quarter of 2015. The absolute bioavailability of BuTab relative to intravenous (IV) administration exceeded published data with non-modified buprenorphine when administered orally and compares favorably with a currently marketed transdermal patch. There were no safety or tolerability issues. The data generated by this study will guide formulation optimization and inform the design of subsequent clinical pharmacology studies. BuTab can be developed under the 505(b)(2) regulatory pathway. In light of the promising data generated by Relmada's d-methadone research program, and Relmada's focus on the d-methadone program, Relmada is currently limiting the investments in BuTab.

MepiGel (REL-1021)

MepiGel (REL-1021), is a proprietary topical dosage form of the local anesthetic mepivacaine for the treatment of painful peripheral neuropathies, such as painful diabetic neuropathy, postherpetic neuralgia and painful HIV-associated neuropathy. Mepivacaine is an anesthetic (numbing medicine) that blocks the nerve impulses that send pain signals to the brain. It is chemically related to bupivacaine but pharmacologically related to lidocaine. Mepivacaine is currently indicated for infiltration, nerve block and epidural anesthesia. Relmada has received two FDA Orphan Drug Designations for mepivacaine, one each for "the treatment of painful HIV-associated neuropathy" and for "the management of postherpetic neuralgia," or PHN. We have selected the formulations to be advanced into clinical studies for MepiGel after the evaluation of results from in vitro and ex vivo studies comparing various topical prototypes of mepivacaine that were conducted by MedPharm Ltd, a specialist formulation development company recognized internationally for its expertise in topical and transdermal products. Multiple toxicology studies were successfully conducted and completed in 2015. MepiGel can be developed under the 505(b)(2) regulatory pathway. In light of the promising data generated by Relmada's d-methadone research program, and Relmada's focus on the d-methadone program, Relmada is currently limiting the investments in MepiGel.

Overview of the 505(b)(2) Pathway

Part of our strategy is the utilization of FDA's 505(b)(2) NDA for approval. The 505(b)(2) NDA is one of three FDA drug approval pathways and represents an appealing regulatory strategy for many companies. The pathway was created by the Hatch-Waxman Amendments of 1984, with 505(b)(2) referring to a section of the Federal Food, Drug, and Cosmetic Act. The provisions of 505(b)(2) were created, in part, to help avoid unnecessary duplication of studies already performed on a previously approved (reference or listed) drug; the section gives the FDA express permission to rely on data not developed by the NDA applicant.

A 505(b)(2) NDA contains full safety and effectiveness reports but allows at least some of the information required for NDA approval, such as safety and efficacy information on the active ingredient, to come from studies not conducted by or for the applicant. This can result in a much less expensive and much faster route to approval, compared with a traditional development path such as 505(b)(1), while creating new, differentiated products with tremendous commercial value.

Overview of Orphan Drug Status

In accordance with laws and regulations pertaining to the Regulatory Agencies, a sponsor may request that the Regulatory Agencies designate a drug intended to treat a "Rare Disease or Condition" as an "Orphan Drug." For example, in the United States, a "Rare Disease or Condition" is defined as one which affects less than 200,000 people in the United States, or which affects more than 200,000 people but for which the cost of developing and making available the product is not expected to be recovered from sales of the product in the United States. Upon the approval of the first NDA or BLA for a drug designated as an orphan drug for a specified indication, the sponsor of that NDA or BLA is entitled to 7 years of exclusive marketing rights in the United States unless the sponsor cannot assure the availability of sufficient quantities to meet the needs of persons with the disease. In Europe, this exclusivity is 10 years, and in Australia it is 5 years. However, orphan drug status is particular to the approved indication and does not prevent another company from seeking approval of an off-patent drug that has other labeled indications that are not under orphan or other exclusivities. Orphan drugs may also be eligible for federal income tax credits for costs associated with such as the disease state, the strength and complexity of the data presented, the novelty of the target or compound, risk-management approval and whether multiple rounds of review are required for the agency to evaluate the submission. There is no guarantee that a potential treatment will receive marketing approval or that decisions on marketing approvals or treatment indications will be consistent across geographic areas.

Uplisting to The Nasdaq Capital Market

On October 10, 2019, our common stock was listed and commenced trading on The Nasdaq Capital Market under its existing symbol "RLMD."

Corporate Information

Our principal executive offices are located at 880 Third Avenue, 12th Floor, New York, NY 10022 and our telephone number is +1-646-876-3459. Our website address is *www.relmada.com*. The information contained therein or connected thereto shall not be deemed to be incorporated into this prospectus or the registration statement of which it forms a part. The information on our website is not part of this prospectus.

RISK FACTORS

An investment in our common stock involves a high degree of risk. Before making an investment decision, you should consider carefully the risks, uncertainties and other factors described below and those described in our most recent Annual Report on Form 10-K, as supplemented and updated by subsequent quarterly reports on Form 10-Q and current reports on Form 8-K, that we have filed or will file with the Commission, which are incorporated by reference into this prospectus. Our business, affairs, prospects, assets, financial condition, results of operations and cash flows could be materially and adversely affected by these risks. For more information about our Commission filings, please see "Where You Can Find More Information."

The number of shares we have registered for sale is significant in relation to the number of our outstanding shares of common stock.

We have filed separate registration statements to register in aggregate up to 6,843,397 shares of our common stock for sale into the public market by certain selling stockholders named therein. These shares represent a large number of shares of our common stock, and if sold in the market all at once or at about the same time, could depress the market price of our common stock during the period the registration statement remains effective and could also affect our ability to raise equity capital.

USE OF PROCEEDS

Unless otherwise indicated in a prospectus supplement, we intend to use the net proceeds from these sales for working capital and general corporate purposes, which includes, without limitation, clinical studies required to gain regulatory approvals, implementation of adequate systems and controls to allow for regulatory approvals, further development of our product candidates, investing in or acquiring companies that are synergistic with or complimentary to our technologies, licensing activities related to our current and future product candidates and working capital, the development of emerging technologies, investing in or acquiring companies that are developing emerging technologies, licensing activities, or the acquisition of other businesses. The amounts and timing of these expenditures will depend on numerous factors, including the development of our current business initiatives.

PLAN OF DISTRIBUTION

We may sell the securities from time to time to or through underwriters or dealers, through agents, or directly to one or more purchasers. A distribution of the securities offered by this prospectus may also be effected through the issuance of derivative securities, including without limitation, warrants, rights to purchase and subscriptions. In addition, the manner in which we may sell some or all of the securities covered by this prospectus includes, without limitation, through:

- a block trade in which a broker-dealer will attempt to sell as agent, but may position or resell a portion of the block, as principal, in order to facilitate the transaction;
- purchases by a broker-dealer, as principal, and resale by the broker-dealer for its account; or
- ordinary brokerage transactions and transactions in which a broker solicits purchasers.

A prospectus supplement or supplements with respect to each series of securities will describe the terms of the offering, including, to the extent applicable:

- the terms of the offering;
- the name or names of the underwriters or agents and the amounts of securities underwritten or purchased by each of them, if any;
- the public offering price or purchase price of the securities or other consideration therefor, and the proceeds to be received by us from the sale;

- any delayed delivery requirements;
- any over-allotment options under which underwriters may purchase additional securities from us;
- any underwriting discounts or agency fees and other items constituting underwriters' or agents' compensation
- any discounts or concessions allowed or re-allowed or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

The offer and sale of the securities described in this prospectus by us, the underwriters or the third parties described above may be effected from time to time in one or more transactions, including privately negotiated transactions, either:

- at a fixed price or prices, which may be changed;
- in an "at the market" offering within the meaning of Rule 415(a)(4) of the Securities Act;
- at prices related to such prevailing market prices; or
- at negotiated prices.

Only underwriters named in the prospectus supplement will be underwriters of the securities offered by the prospectus supplement.

Underwriters and Agents; Direct Sales

If underwriters are used in a sale, they will acquire the offered securities for their own account and may resell the offered securities from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate.

Unless the prospectus supplement states otherwise, the obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. Subject to certain conditions, the underwriters will be obligated to purchase all of the securities offered by the prospectus supplement, other than securities covered by any over-allotment option. Any public offering price and any discounts or concessions allowed or re-allowed or paid to dealers may change from time to time. We may use underwriters with whom we have a material relationship. We will describe in the prospectus supplement, naming the underwriter, the nature of any such relationship.

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities, and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

We may authorize agents or underwriters to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

Dealers

We may sell the offered securities to dealers as principals. The dealer may then resell such securities to the public either at varying prices to be determined by the dealer or at a fixed offering price agreed to with us at the time of resale.

Institutional Purchasers

We may authorize agents, dealers or underwriters to solicit certain institutional investors to purchase offered securities on a delayed delivery basis pursuant to delayed delivery contracts providing for payment and delivery on a specified future date. The applicable prospectus supplement or other offering materials, as the case may be, will provide the details of any such arrangement, including the offering price and commissions payable on the solicitations.

We will enter into such delayed contracts only with institutional purchasers that we approve. These institutions may include commercial and savings banks, insurance companies, pension funds, investment companies and educational and charitable institutions.

Indemnification; Other Relationships

We may provide agents, underwriters, dealers and remarketing firms with indemnification against certain civil liabilities, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to these liabilities. Agents, underwriters, dealers and remarketing firms, and their affiliates, may engage in transactions with, or perform services for, us in the ordinary course of business. This includes commercial banking and investment banking transactions.

Market-Making; Stabilization and Other Transactions

There is currently no market for any of the offered securities, other than our common stock, which is quoted on the Nasdaq Capital Market. If the offered securities are traded after their initial issuance, they may trade at a discount from their initial offering price, depending upon prevailing interest rates, the market for similar securities and other factors. While it is possible that an underwriter could inform us that it intends to make a market in the offered securities, such underwriter would not be obligated to do so, and any such market-making could be discontinued at any time without notice. Therefore, no assurance can be given as to whether an active trading market will develop for the offered securities. We have no current plans for listing of the preferred stock, warrants or subscription rights on any securities exchange or quotation system; any such listing with respect to any particular preferred stock, warrants or subscription rights will be described in the applicable prospectus supplement or other offering materials, as the case may be.

Any underwriter may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum price. Syndicate-covering or other short-covering transactions involve purchases of the securities, either through exercise of the over-allotment option or in the open market after the distribution is completed, to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a stabilizing or covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

Any underwriters or agents that are qualified market makers on the Nasdaq Capital Market may engage in passive market making transactions in our common stock on the Nasdaq Capital Market in accordance with Regulation M under the Exchange Act, during the business day prior to the pricing of the offering, before the commencement of offers or sales of our common stock. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded. Passive market making may stabilize the market price of the securities at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

Fees and Commissions

If 5% or more of the net proceeds of any offering of securities made under this prospectus will be received by a FINRA member participating in the offering or affiliates or associated persons of such FINRA member, the offering will be conducted in accordance with FINRA Rule 5121.

DESCRIPTION OF SECURITIES WE MAY OFFER

General

This prospectus describes the general terms of our capital stock. The following description is not complete and may not contain all the information you should consider before investing in our capital stock. For a more detailed description of these securities, you should read the applicable provisions of Nevada law and our amended and restated certificate of incorporation, referred to herein as our certificate of incorporation, and our amended and restated bylaws, referred to herein as our bylaws. When we offer to sell a particular series of these securities, we will describe the specific terms of the series in a supplement to this prospectus. Accordingly, for a description of the terms of any series of securities, you must refer to both the prospectus supplement relating to that series and the description of the securities described in this prospectus. To the extent the information contained in the prospectus supplement differs from this summary description, you should rely on the information in the prospectus supplement.

We, directly or through agents, dealers or underwriters designated from time to time, may offer, issue and sell, together or separately, up to $200,000,000 in the aggregate of:

- common stock;
- preferred stock;
- warrants to purchase our securities;
- subscription rights to purchase our securities ;
- depositary shares ;
- purchase contracts; or
- units comprised of, or other combinations of, the foregoing securities.

The preferred stock may also be exchangeable for and/or convertible into shares of common stock, another series of preferred stock or other securities that may be sold by us pursuant to this prospectus or any combination of the foregoing. When a particular series of securities is offered, a supplement to this prospectus will be delivered with this prospectus, which will set forth the terms of the offering and sale of the offered securities.

Authorized Capital Stock; Issued and Outstanding Capital Stock

On September 27, 2019, we completed a 1-for-4 reverse stock split. We have authorized 62,500,000 shares of capital stock, par value $0.001 per share, of which 12,500,000 are shares of common stock and 50,000,000 are shares of preferred stock, 875,000 of which are designated Class A Convertible Preferred Stock. On October 24, 2019, there were 10,045,842 shares of common stock issued and outstanding. There are no preferred issued and outstanding. The authorized and unissued shares of common stock and the authorized and undesignated shares of preferred stock are available for issuance without further action by our stockholders, unless such action is required by applicable law or the rules of any stock exchange on which our securities may be listed. Unless approval of our stockholders is so required, our board of directors does not intend to seek stockholder approval for the issuance and sale of our common stock or preferred stock.

We also have warrants that are outstanding, which are described below.

Common Stock

The holders of our common stock are entitled to one vote per share. Our certificate of incorporation does not provide for cumulative voting. Our directors are divided into three classes. At each annual meeting of stockholders, directors elected to succeed those directors whose terms expire are elected for a term of office to expire at the third succeeding annual meeting of stockholders after their election. The holders of our common stock are entitled to receive ratably such dividends, if any, as may be declared by our board of directors out of legally available funds. However, the current policy of our board of directors is to retain earnings, if any, for operations and growth. Upon liquidation, dissolution or winding-up, the holders of our common stock are entitled to share ratably in all assets that are legally available for distribution. The holders of our common stock have no preemptive, subscription or conversion rights and there are no redemption or sinking fund provisions applicable to the common stock. The rights, preferences and privileges of holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of any series of preferred stock, which may be designated solely by action of our board of directors and issued in the future.

On October 10, 2019, our common stock started trading on The Nasdaq Capital Market under the symbol "RLMD."

Preferred Stock

Outstanding Preferred Stock

As of October 24, 2019, there were no shares of Class A Convertible Preferred Stock issued and outstanding.

The rights and preferences of our Class A Convertible Preferred Stock include the following:

Liquidation Preference

In the event of any dissolution, liquidation or winding up of our Company, whether voluntary or involuntary, the holders of our Class A Convertible Preferred Stock are entitled to participate in any distribution out of our assets of on an equal basis per share with the holders of our common stock.

Dividends

The Class A Convertible Preferred Stock is, with respect to dividend rights, entitled to two times the amount of any dividend granted by our board of directors to the holders of our common stock.

Conversion

Optional Conversion. Subject to certain exceptions, each share of Class A Convertible Preferred Stock is convertible at the option of the holder and without the payment of additional consideration by the holder, at any time, into shares of our common stock at a conversion rate of one share of our common stock for every one share of our Class A Convertible Preferred Stock. However, a holder of our Class A Convertible Preferred Stock cannot convert shares of our Class A Convertible Preferred Stock to shares of our common stock if such conversion would cause the holder or any "group" (within the meaning of Section 13(d) of the Securities Exchange Act of 1934 (the "Exchange Act") of which such holder is or deemed to be a part, to "beneficially own" (within the meaning of Rule 13d-3 under the Exchange Act) more than 9.9% of the number of shares of our common stock listed as outstanding by in our most recent public filing with the Commission prior to us receiving the conversion demand.

Automatic Conversion. Subject to the limitation on conversion described above, on the first day of each month until there are no shares of our Class A Convertible Preferred Stock outstanding, each share of our Class A Convertible Preferred Stock will convert without the payment of additional consideration by a holder into shares of our common stock on the automatic conversion date at a conversion rate of one share of our common stock for every one share of our Class A Convertible Preferred Stock.

Voting

The holders of our Class A Convertible Preferred Stock are not entitled to vote on any matter submitted to a vote of the holders of our common stock, including the election of directors.

Other Series of Preferred Stock We May Issue

The board of directors is authorized, subject to any limitations prescribed by law, without further vote or action by our stockholders, to issue from time to time shares of preferred stock in one or more series. Each such series of preferred stock shall have such number of shares, designations, preferences, voting powers, qualifications and special or relative rights or privileges as determined by our board of directors, which may include, among others, dividend rights, voting rights, liquidation preferences, conversion rights and preemptive rights. Issuance of preferred stock by our board of directors may result in such shares having dividend and/or liquidation preferences senior to the rights of the holders of our common stock and could dilute the voting rights of the holders of our common stock.

Prior to the issuance of shares of each series of preferred stock, our board of directors is required by the Nevada Revised Law and our amended and restated certificate of incorporation to adopt resolutions and file a certificate of designations with the Secretary of State of the State of Nevada, which fixes for each class or series the designations, powers, preferences, rights, qualifications, limitations and restrictions. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the Commission, the form of any certificate of designations for the series of preferred stock we are offering before the issuance of the related series of preferred stock. The prospectus supplement relating to any preferred stock that we may offer will contain the specific terms of the class or series and of the offering, which terms may include the following::

- the title and stated value;
- the number of shares we are offering;
- the offering price;
- the number of shares constituting that series, which number may be increased or decreased (but not below the number of shares then outstanding) from time to time by action of our board of directors;
- the dividend rate and the manner and frequency of payment of dividends on the shares of that series, whether dividends will be cumulative, and, if so, from which date;
- whether that series will have voting rights, in addition to any voting rights provided by law, and, if so, the terms of such voting rights;
- whether that series will have conversion privileges, and, if so, the terms and conditions of such conversion, including provision for adjustment of the conversion rate in such events as our board of directors may determine;
- whether or not the shares of that series will be redeemable, and, if so, the terms and conditions of such redemption;
- whether that series will have a sinking fund for the redemption or purchase of shares of that series, and, if so, the terms and amount of such sinking fund;
- whether or not the shares of the series will have priority over or be on a parity with or be junior to the shares of any other series or class in any respect;
- the rights of the shares of that series in the event of voluntary or involuntary liquidation, dissolution or winding up of the corporation, and the relative rights or priority, if any, of payment of shares of that series;

- preemptive rights, if any;
- restrictions on transfer, sale or other assignment, if any;
- whether interests in the preferred stock will be represented by depositary shares;
- a discussion of any material or special United States federal income tax considerations applicable to the preferred stock;
- any limitations on issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs; and
- any other relative rights, preferences and limitations of that series.

Once designated by our board of directors, each series of preferred stock may have specific financial and other terms that will be described in a prospectus supplement. The description of the preferred stock that is set forth in any prospectus supplement is not complete without reference to the documents that govern the preferred stock. These include our amended and restated certificate of incorporation and any certificates of designation that our board of directors may adopt.

All shares of our preferred stock will, when issued, be fully paid and non-assessable, including shares of our preferred stock issued upon the exercise of preferred stock warrants or subscription rights, if any.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock. Preferred stock could be issued quickly with terms designed to delay or prevent a change in control of our Company or make removal of management more difficult. Additionally, the issuance of preferred stock could have the effect of decreasing the market price of our common stock.

Although our board of directors has no intention at the present time of doing so, it could authorize the issuance of a series of preferred stock that could, depending on the terms of such series, impede the completion of a merger, tender offer or other takeover attempt.

Warrants

We may issue warrants to purchase our securities or other rights, including rights to receive payment in cash or securities based on the value, rate or price of one or more specified commodities, currencies, securities or indices, or any combination of the foregoing. Warrants may be issued independently or together with any other securities that may be sold by us pursuant to this prospectus or any combination of the foregoing and may be attached to, or separate from, such securities. To the extent warrants that we issue are to be publicly-traded, each series of such warrants will be issued under a separate warrant agreement to be entered into between us and a warrant agent.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the Commission, forms of the warrant and warrant agreement, if any. The prospectus supplement relating to any warrants that we may offer will contain the specific terms of the warrants and a description of the material provisions of the applicable warrant agreement, if any. These terms may include the following:

- the title of the warrants;
- the aggregate number of warrants;
- the price or prices at which the warrants will be offered;

- the designation, amount and terms of the securities or other rights for which the warrants are exercisable;
- the designation and terms of the other securities, if any, with which the warrants are to be issued and the number of warrants issued with each other security;
- if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- the price or prices at which the securities or other rights purchasable upon exercise of the warrants may be purchased;
- any provisions for adjustment of the number or amount of securities receivable upon exercise of the warrants or the exercise price of the warrants;
- the manner of exercise of the warrants, including any cashless exercise rights;
- the terms of any rights of us to redeem or call the warrants;
- the identities of any warrant agent and any calculation or other agent for the warrants;
- a discussion of any material U.S. federal income tax considerations applicable to the exercise of the warrants;
- the date on which the right to exercise the warrants will commence, and the date on which the right will expire;
- If any, the maximum or minimum number of warrants that may be exercised at any time;
- information with respect to book-entry procedures, if any; and
- any other terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Exercise of Warrants. Each warrant will entitle the holder of warrants to purchase the amount of securities or other rights, at the exercise price stated or determinable in the prospectus supplement for the warrants. Warrants may be exercised at any time up to the close of business on the expiration date shown in the applicable prospectus supplement, unless otherwise specified in such prospectus supplement. After the close of business on the expiration date, if applicable, unexercised warrants will become void. Warrants may be exercised in the manner described in the applicable prospectus supplement. When the warrant holder makes the payment and properly completes and signs the warrant certificate at the corporate trust office of the warrant agent, if any, or any other office indicated in the prospectus supplement, we will, as soon as possible, forward the securities or other rights that the warrant holder has purchased. If the warrant holder exercises less than all of the warrants represented by the warrant certificate, we will issue a new warrant certificate for the remaining warrants.

Enforceability of Rights By Holders of Warrants. Any warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action the holder’s right to exercise, and receive the securities purchasable upon exercise of, its warrants in accordance with their terms.

Warrant Agreement Will Not Be Qualified Under Trust Indenture Act. No warrant agreement will be qualified as an indenture, and no warrant agent will be required to qualify as a trustee, under the Trust Indenture Act. Therefore, holders of warrants issued under a warrant agreement will not have the protection of the Trust Indenture Act with respect to their warrants.

Outstanding Warrants

Series A Preferred Warrants

In connection with our sale of Series A preferred stock and 8% senior subordinated unsecured convertible notes in 2012 and 2013, we sold to the purchasers 124,610 warrants to purchase common stock at an exercise price of $16.00 per share (the "Series A Preferred Warrants"). As of October 24, 2019, there were 70,231 Series A Preferred Warrants outstanding. The Series A Preferred Warrants have a seven-year term from their issuance dates, which occurred between July 10, 2012 and September 26, 2013. The exercise price of the Series A Preferred Warrants is subject to adjustment upon certain events. If we at any time while the Series A Preferred Warrants remain outstanding and unexpired shall declare a dividend or make a distribution on the outstanding common stock payable in shares of its capital stock, or split, subdivide or combine the common stock into a different number of securities of the same class, the exercise price for the Series A Preferred Warrants shall be proportionately decreased in the case of a dividend, split or subdivision or proportionately increased in the case of a combination. The Series A Preferred Warrants contained an anti-dilution provision that was eliminated upon the Company going public.

Notes Warrants

In connection with our 2012 & 2013 notes financing, we sold to the purchasers 14,063 warrants to purchase common stock at an exercise price of $16.00 per share. The note warrants have a seven-year term from their issuance dates and have substantially the same terms as the Series A Preferred Warrants (as described above). As of October 24, 2019 there were 9,593 of these warrants to purchase common stock outstanding.

Advisory Firm Warrants

In connection with an agreement with an advisory firm, we issued to such advisory firm warrants ("Advisory Firm Warrants") to purchase 12% of the fully diluted shares of Relmada, or 432,790 shares of common stock. As of October 24, 2019 there were 15,078 Advisory Firm Warrants outstanding. The Advisory Firm Warrants are exercisable at $0.004 per share, provide for cashless exercise and expire seven years after the date of issuance. Shares purchased by exercise of the Advisory Firm Warrants have unlimited piggyback registration rights should we have a public offering registered with the Commission and are subject to lock-ups, if any, required by SEC regulations or other applicable law, or by investors.

Placement Agent Warrants

In connection with our sale of Series A preferred stock and 8% senior subordinated unsecured convertible notes in 2012 and 2013, we issued to a placement agent warrants to purchase 62,500 shares of common stock at an exercise price of $16.00 per share (the "Placement Agent Warrants"). As of October 24, 2019 there were 44,029 of these warrants to purchase common stock outstanding. These Placement Agent Warrants include a cashless exercise provision and have substantially the same terms as the Series A Preferred Warrants.

In connection with the 2013 notes financing, the placement agent or its designees also received warrants to purchase 7,032 shares of our common stock at a price of $16.00 per share. As of October 24, 2019 there were 7,032 of these warrants to purchase common stock outstanding.

In connection with our merger with Medeor in December 2013, we issued to a placement agent 10,003 warrants exercisable for shares of our common stock at an exercise price of $22.00 per share. As of October 24, 2019 there were 10,003 of these warrants to purchase common stock outstanding.

2017 Note Warrants

In connection with our sale of notes in 2017, we sold to the purchasers an aggregate of 1,200,826 warrants to purchase common stock at an exercise price of $6.00 per share (the "Note Warrants"). As of October 24, 2019, there were 1,191,486 of these 2017 Note Warrants outstanding. In connection with our sale of notes in 2017, we issued to a placement agent warrants to purchase 201,000 shares of common stock at an exercise price of $6.60 per share. As of October 24, 2019 there are 201,000 warrants to purchase common stock outstanding. The 2017 Note Warrants have a seven-year term from their respective issuance dates. There is no cashless exercise provision.

2018 Warrants

In connection with our sale of units in October 2018, November 2018, December 2018 and February 2019, we sold to the purchasers an aggregate of 1,184,336 warrants to purchase common stock at an exercise price of $6.00 per share, and an additional 213,585 warrants to purchase common stock at an exercise price of $3.96 per share were issued to the placement agent (the "2018 Warrants"). As of October 24, 2019, there were 1,319,411 of these 2018 Warrants outstanding. The 2018 Warrants have a five-year term from their respective issuance dates. There is no cashless exercise provision.

2019 Warrants

In connection with our sale of units in March 2019, we sold to a single investor 89,286 warrants ("March 2019 Warrants") to purchase common stock at an exercise price of $9.00 per share. As of October 24, 2019, there were 89,286 of these March 2019 Warrants outstanding. The March 2019 Warrants have a five-year term from their respective issuance dates. There is no cashless exercise provision.

In connection with our sale of units in May and June 2019, we sold to the purchasers 987,280 warrants to purchase common stock at an exercise price of $9.00 per share. An additional 90,697 warrants to purchase common stock at an exercise price of $6.60 per share and 53,118 warrants to purchase common stock at an exercise price of $9.00 per share were issued to placement agents. As of October 24, 2019, the 997,863 warrants with an exercise price of $9.00 and 42,823 warrants with an exercise price of $6.60 were outstanding. The warrants have a five-year term from their respective issuance dates. There is no cashless exercise provision.

Additional Warrants

An additional 201,883 warrants have been issued to employees and consultants and are outstanding as of October 24, 2019. These warrants have a weighted average exercise price of $5.28.

Subscription Rights

We may issue rights to purchase our securities. The rights may or may not be transferable by the persons purchasing or receiving the rights. In connection with any rights offering, we may enter into a standby underwriting or other arrangement with one or more underwriters or other persons pursuant to which such underwriters or other persons would purchase any offered securities remaining unsubscribed for after such rights offering. In connection with a rights offering to holders of our capital stock a prospectus supplement will be distributed to such holders on the record date for receiving rights in the rights offering set by us.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the Commission, forms of the subscription rights, standby underwriting agreement or other agreements, if any. The prospectus supplement relating to any rights that we offer will include specific terms relating to the offering, including, among other matters:

- the date of determining the security holders entitled to the rights distribution;
- the aggregate number of rights issued and the aggregate amount of securities purchasable upon exercise of the rights;
- the exercise price;

- the aggregate number of rights to be issued;
- the date, if any, on and after which the rights will be separately transferable;
- the conditions to completion of the rights offering;
- the date on which the right to exercise the rights will commence and the date on which the rights will expire;
- any applicable federal income tax considerations; and
- any other terms of the rights, including terms, procedures and limitations relating to the distribution, exchange and exercise of the rights.

Each right would entitle the holder of the rights to purchase the principal amount of securities at the exercise price set forth in the applicable prospectus supplement. Rights may be exercised at any time up to the close of business on the expiration date for the rights provided in the applicable prospectus supplement. After the close of business on the expiration date, all unexercised rights will become void.

Holders may exercise rights as described in the applicable prospectus supplement. Upon receipt of payment and the rights certificate properly completed and duly executed at the corporate trust office of the rights agent, if any, or any other office indicated in the prospectus supplement, we will, as soon as practicable, forward the securities purchasable upon exercise of the rights. If less than all of the rights issued in any rights offering are exercised, we may offer any unsubscribed securities directly to persons other than stockholders, to or through agents, underwriters or dealers or through a combination of such methods, including pursuant to standby underwriting arrangements, as described in the applicable prospectus supplement.

Depositary Shares

General. We may offer fractional shares of preferred stock, rather than full shares of preferred stock. If we decide to offer fractional shares of our preferred stock, we will issue receipts for depositary shares. Each depositary share will represent a fraction of a share of a particular series of our preferred stock, and the applicable prospectus supplement will indicate that fraction. The shares of preferred stock represented by depositary shares will be deposited under a deposit agreement between us and a depositary that is a bank or trust company that meets certain requirements and is selected by us. The depositary will be specified in the applicable prospectus supplement. Each owner of a depositary share will be entitled to all of the rights and preferences of the preferred stock represented by the depositary share. The depositary shares will be evidenced by depositary receipts issued pursuant to the deposit agreement. Depositary receipts will be distributed to those persons purchasing the fractional shares of our preferred stock in accordance with the terms of the offering. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the Commission, forms of the deposit agreement, form of certificate of designation of underlying preferred stock, form of depositary receipts and any other related agreements.

*Dividends and Other Distributions***.** The depositary will distribute all cash dividends or other cash distributions received by it in respect of the preferred stock to the record holders of depositary shares relating to such preferred shares in proportion to the numbers of depositary shares held on the relevant record date.

In the event of a distribution other than in cash, the depositary will distribute securities or property received by it to the record holders of depositary shares in proportion to the numbers of depositary shares held on the relevant record date, unless the depositary determines that it is not feasible to make such distribution. In that case, the depositary may make the distribution by such method as it deems equitable and practicable. One such possible method is for the depositary to sell the securities or property and then distribute the net proceeds from the sale as provided in the case of a cash distribution.

Redemption of Depositary Shares. Whenever we redeem the preferred stock, the depositary will redeem a number of depositary shares representing the same number of shares of preferred stock so redeemed. If fewer than all of the depositary shares are to be redeemed, the depositary shares to be redeemed will be selected by lot, pro rata or by any other equitable method as the depositary may determine.

Voting of Underlying Shares. Upon receipt of notice of any meeting at which the holders of our preferred stock of any series are entitled to vote, the depositary will mail the information contained in the notice of the meeting to the record holders of the depositary shares relating to that series of preferred stock. Each record holder of the depositary shares on the record date will be entitled to instruct the depositary as to the exercise of the voting rights represented by the number of shares of preferred stock underlying the holder's depositary shares. The depositary will endeavor, to the extent it is practical to do so, to vote the number of whole shares of preferred stock underlying such depositary shares in accordance with such instructions. We will agree to take all action that the depositary may deem reasonably necessary in order to enable the depositary to do so. To the extent the depositary does not receive specific instructions from the holders of depositary shares relating to such preferred shares, it will abstain from voting such shares of preferred stock.

Withdrawal of Shares. Upon surrender of depositary receipts representing any number of whole shares at the depositary's office, unless the related depositary shares previously have been called for redemption, the holder of the depositary shares evidenced by the depositary receipts will be entitled to delivery of the number of whole shares of the related series of preferred stock and all money and other property, if any, underlying such depositary shares. However, once such an exchange is made, the preferred stock cannot thereafter be re-deposited in exchange for depositary shares. Holders of depositary shares will be entitled to receive whole shares of the related series of preferred stock on the basis set forth in the applicable prospectus supplement. If the depositary receipts delivered by the holder evidence a number of depositary shares representing more than the number of whole shares of preferred stock of the related series to be withdrawn, the depositary will deliver to the holder at the same time a new depositary receipt evidencing the excess number of depositary shares.

Amendment and Termination of Depositary Agreement. The form of depositary receipt evidencing the depositary shares and any provision of the applicable depositary agreement may at any time be amended by agreement between us and the depositary. We may, with the consent of the depositary, amend the depositary agreement from time to time in any manner that we desire. However, if the amendment would materially and adversely alter the rights of the existing holders of depositary shares, the amendment would need to be approved by the holders of at least a majority of the depositary shares then outstanding.

The depositary agreement may be terminated by us or the depositary if:

- all outstanding depositary shares have been redeemed; or
- there has been a final distribution in respect of the shares of preferred stock of the applicable series in connection with our liquidation, dissolution or winding up and such distribution has been made to the holders of depositary receipts.

Resignation and Removal of Depositary. The depositary may resign at any time by delivering to us notice of its election to do so. We may remove a depositary at any time. Any resignation or removal will take effect upon the appointment of a successor depositary and its acceptance of appointment.

Charges of Depositary. We will pay all transfer and other taxes and governmental charges arising solely from the existence of any depositary arrangements. We will pay all charges of each depositary in connection with the initial deposit of the preferred shares of any series, the initial issuance of the depositary shares, any redemption of such preferred shares and any withdrawals of such preferred shares by holders of depositary shares. Holders of depositary shares will be required to pay any other transfer taxes.

Notices. Each depositary will forward to the holders of the applicable depositary shares all notices, reports and communications from us which are delivered to such depositary and which we are required to furnish the holders of the preferred stock represented by such depositary shares.

Miscellaneous. The depositary agreement may contain provisions that limit our liability and the liability of the depositary to the holders of depositary shares. Both the depositary and we are also entitled to an indemnity from the holders of the depositary shares prior to bringing, or defending against, any legal proceeding. We or any depositary may rely upon written advice of counsel or accountants, or information provided by persons presenting preferred shares for deposit, holders of depositary shares or other persons believed by us to be competent and on documents believed by us or them to be genuine.

Purchase Contracts

We may issue purchase contracts, representing contracts obligating holders to purchase from us, and us to sell to the holders, a specific or varying number of common stock, preferred stock, warrants, depositary shares or any combination of the above, at a future date or dates. Alternatively, the purchase contracts may obligate us to purchase from holders, and obligate holders to sell to us, a specific or varying number of common stock, preferred stock, warrants, depositary shares, or any combination of the above. The price of the securities and other property subject to the purchase contracts may be fixed at the time the purchase contracts are issued or may be determined by reference to a specific formula set forth in the purchase contracts. The purchase contracts may be issued separately or as a part of a unit that consists of (a) a purchase contract and (b) one or more of the other securities that may be sold by us pursuant to this prospectus or any combination of the foregoing, which may secure the holders' obligations to purchase the securities under the purchase contract. The purchase contracts may require us to make periodic payments to the holders or require the holders to make periodic payments to us. These payments may be unsecured or prefunded and may be paid on a current or on a deferred basis. The purchase contracts may require holders to secure their obligations under the contracts in a manner specified in the applicable prospectus supplement.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the Commission, forms of the purchase contracts and purchase contract agreement, if any. The applicable prospectus supplement will describe the terms of any purchase contracts in respect of which this prospectus is being delivered, including, to the extent applicable, the following:

- whether the purchase contracts obligate the holder or us to purchase or sell, or both purchase and sell, the securities subject to purchase under the purchase contract, and the nature and amount of each of those securities, or the method of determining those amounts;
- whether the purchase contracts are to be prepaid or not;
- whether the purchase contracts are to be settled by delivery, or by reference or linkage to the value, performance or level of the securities subject to purchase under the purchase contract;
- any acceleration, cancellation, termination or other provisions relating to the settlement of the purchase contracts;
- whether the purchase contracts will be issued in fully registered or global form; and
- any applicable federal income tax considerations; and

Units

We may issue units consisting of any combination of the other types of securities offered under this prospectus in one or more series. We may evidence each series of units by unit certificates that we may issue under a separate agreement. We may enter into unit agreements with a unit agent. Each unit agent, if any, may be a bank or trust company that we select. We will indicate the name and address of the unit agent, if any, in the applicable prospectus supplement relating to a particular series of units. Specific unit agreements, if any, will contain additional important terms and provisions. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report that we file with the Commission, the form of unit and the form of each unit agreement, if any, relating to units offered under this prospectus.

If we offer any units, certain terms of that series of units will be described in the applicable prospectus supplement, including, without limitation, the following, as applicable

- the title of the series of units;
- identification and description of the separate constituent securities comprising the units;
- the price or prices at which the units will be issued;
- the date, if any, on and after which the constituent securities comprising the units will be separately transferable;
- a discussion of certain United States federal income tax considerations applicable to the units; and
- any other material terms of the units and their constituent securities.

Registration Rights

In connection with our fall 2018, spring 2019, and September 2019 private placement offerings, we are obligated to file within 45 days of the final closing of the offering a registration statement registering for resale all shares of our common stock issued as part of the units and all of our common shares issuable upon exercise of the warrants issued in the offerings.

Forum for Adjudication of Disputes

Pursuant to our bylaws, to the fullest extent permitted by law, and unless we consent in writing to the selection of an alternative forum, the Eighth Judicial District Court of Clark County, Nevada, shall be the sole and exclusive forum for any stockholder (including a beneficial owner of stock) to bring (a) any derivative action or proceeding brought in the name or right of the Company or on our behalf, (b) any action asserting a claim of, or a claim based on, breach of any fiduciary duty owed by any current or former director, officer, employee, agent or stockholder of the Company to the Company or the Company's stockholders, (c) any action arising or asserting a claim arising pursuant to any provision of NRS Chapters 78 or 92A or any provision of the Articles of Incorporation or our Bylaws or (d) any action asserting a claim against us or any current or former director, officer, employee or stockholder (including a beneficial owner of stock) governed by the internal affairs doctrine, including, without limitation, any action to interpret, apply, enforce or determine the validity of the Articles of Incorporation or our Bylaws. To the fullest extent permitted by law, our forum selection provision applies to actions arising under the Securities Act or Exchange Act. Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. The Company does not intend for its exclusive forum jurisdiction provision to apply to Exchange Act claims.

Anti-takeover Effects of Our Articles of Incorporation and By-laws

Our Articles of Incorporation and Bylaws contain certain provisions that may have anti-takeover effects, making it more difficult for or preventing a third party from acquiring control of our Company or changing our Board of Directors and management. According to our Bylaws and Articles of Incorporation, neither the holders of our common stock nor the holders of our preferred stock have cumulative voting rights in the election of our directors. The combination of the present ownership by a few stockholders of a significant portion of our issued and outstanding common stock and lack of cumulative voting makes it more difficult for other stockholders to replace our Board of Directors or for a third party to obtain control of our Company by replacing our Board of Directors.

Anti-takeover Effects of Nevada Law

Business Combinations

The "business combination" provisions of Sections 78.411 to 78.444, inclusive, of the Nevada Revised Statutes, or NRS, generally prohibit a Nevada corporation with at least 200 stockholders of record, a "resident domestic corporation," from engaging in various "combination" transactions with any "interested stockholder" unless certain conditions are met or the corporation has elected in its articles of incorporation to not be subject to these provisions.

A "combination" is generally defined to include (a) a merger or consolidation of the resident domestic corporation or any subsidiary of the resident domestic corporation with the interested stockholder or affiliate or associate of the interested stockholder; (b) any sale, lease, exchange, mortgage, pledge, transfer, or other disposition, in one transaction or a series of transactions, by the resident domestic corporation or any subsidiary of the resident domestic corporation to or with the interested stockholder or affiliate or associate of the interested stockholder having: (i) an aggregate market value equal to 5% or more of the aggregate market value of the assets of the resident domestic corporation, (ii) an aggregate market value equal to 5% or more of the aggregate market value of all outstanding shares of the resident domestic corporation, or (iii) 10% or more of the earning power or net income of the resident domestic corporation; (c) the issuance or transfer in one transaction or series of transactions of shares of the resident domestic corporation or any subsidiary of the resident domestic corporation having an aggregate market value equal to 5% or more of the resident domestic corporation to the interested stockholder or affiliate or associate of the interested stockholder; and (d) certain other transactions with an interested stockholder or affiliate or associate of the interested stockholder.

An “interested stockholder” is generally defined as a person who, together with affiliates and associates, owns (or within three years, did own) 10% or more of a corporation’s voting stock. An “affiliate” of the interested stockholder is any person that directly or indirectly through one or more intermediaries is controlled by or is under common control with the interested stockholder. An “associate” of an interested stockholder is any (a) corporation or organization of which the interested stockholder is an officer or partner or is directly or indirectly the beneficial owner of 10% or more of any class of voting shares of such corporation or organization; (b) trust or other estate in which the interested stockholder has a substantial beneficial interest or as to which the interested stockholder serves as trustee or in a similar fiduciary capacity; or (c) relative or spouse of the interested stockholder, or any relative of the spouse of the interested stockholder, who has the same home as the interested stockholder.

If applicable, the prohibition is for a period of two years after the date of the transaction in which the person became an interested stockholder, unless such transaction is approved by the board of directors prior to the date the interested stockholder obtained such status; or the combination is approved by the board of directors and thereafter is approved at a meeting of the stockholders by the affirmative vote of stockholders representing at least 60% of the outstanding voting power held by disinterested stockholders; and extends beyond the expiration of the two-year period, unless (a) the combination was approved by the board of directors prior to the person becoming an interested stockholder; (b) the transaction by which the person first became an interested stockholder was approved by the board of directors before the person became an interested stockholder; (c) the transaction is approved by the affirmative vote of a majority of the voting power held by disinterested stockholders at a meeting called for that purpose no earlier than two years after the date the person first became an interested stockholder; or (d) if the consideration to be paid to all stockholders other than the interested stockholder is, generally, at least equal to the highest of: (i) the highest price per share paid by the interested stockholder within the three years immediately preceding the date of the announcement of the combination or in the transaction in which it became an interested stockholder, whichever is higher, plus compounded interest and less dividends paid, (ii) the market value per share of common shares on the date of announcement of the combination and the date the interested stockholder acquired the shares, whichever is higher, plus compounded interest and less dividends paid, or (iii) for holders of preferred stock, the highest liquidation value of the preferred stock, plus accrued dividends, if not included in the liquidation value. With respect to (i) and (ii) above, the interest is compounded at the rate for one-year United States Treasury obligations from time to time in effect.

Applicability of the Nevada business combination law would discourage parties interested in taking control of our company if they cannot obtain the approval of our board of directors. These provisions could prohibit or delay a merger or other takeover or change in control attempt and, accordingly, may discourage attempts to acquire our company even though such a transaction may offer our stockholders the opportunity to sell their stock at a price above the prevailing market price. The Company has elected to not be governed by the Nevada business combination provisions.

Control Share Acquisitions

The “control share” provisions of Sections 78.378 to 78.3793, inclusive, of the NRS, apply to “issuing corporations,” which are Nevada corporations with at least 200 stockholders of record, including at least 100 stockholders of record who are Nevada residents, and which conduct business directly or indirectly in Nevada, unless the corporation has elected to not be subject to these provisions.

The control share statute prohibits an acquirer of shares of an issuing corporation, under certain circumstances, from voting its shares of a corporation's stock after crossing certain ownership threshold percentages, unless the acquirer obtains approval of the target corporation's disinterested stockholders. The statute specifies three thresholds: (a) one-fifth or more but less than one-third, (b) one-third but less than a majority, and (c) a majority or more, of the outstanding voting power. Generally, once a person acquires shares in excess of any of the thresholds, those shares and any additional shares acquired within 90 days thereof become "control shares" and such control shares are deprived of the right to vote until disinterested stockholders restore the right. These provisions also provide that if control shares are accorded full voting rights and the acquiring person has acquired a majority or more of all voting power, all other stockholders who do not vote in favor of authorizing voting rights to the control shares are entitled to demand payment for the fair value of their shares in accordance with statutory procedures established for dissenters' rights.

A corporation may elect to not be governed by, or "opt out" of, the control share provisions by making an election in its articles of incorporation or bylaws, provided that the opt-out election must be in place on the 10th day following the date an acquiring person has acquired a controlling interest, that is, crossing any of the three thresholds described above. We have opted out of the control share statutes, and, provided the "opt out" election remains in place, we will not be subject to the control share statutes.

The effect of the Nevada control share statute is that the acquiring person, and those acting in association with the acquiring person, will obtain only such voting rights in the control shares as are conferred by a resolution of the stockholders at an annual or special meeting. The Nevada control share law, if applicable, could have the effect of discouraging takeovers of our company.

Listing

Our common stock is listed on The Nasdaq Capital Market under the symbol "RLMD."

Transfer Agent

The transfer agent and registrar for our common stock and preferred stock is Empire Stock Transfer Inc. The transfer agent's address 1859 Whitney Mesa Dr., Henderson, NV 89014, and its telephone number is (702) 818-5898.

FORMS OF SECURITIES

Each security may be represented either by a certificate issued in definitive form to a particular investor or by one or more global securities representing the entire issuance of securities. Certificated securities in definitive form and global securities will be issued in registered form. Definitive securities name you or your nominee as the owner of the security, and in order to transfer or exchange these securities or to receive payments other than interest or other interim payments, you or your nominee must physically deliver the securities to the trustee, registrar, paying agent or other agent, as applicable. Global securities name a depositary or its nominee as the owner of the warrants or units represented by these global securities. The depositary maintains a computerized system that will reflect each investor's beneficial ownership of the securities through an account maintained by the investor with its broker/dealer, bank, trust company or other representative, as we explain more fully below.

Registered Global Securities

We may issue the securities in the form of one or more fully registered global securities that will be deposited with a depositary or its nominee identified in the applicable prospectus supplement and registered in the name of that depositary or nominee. In those cases, one or more registered global securities will be issued in a denomination or aggregate denominations equal to the portion of the aggregate principal or face amount of the securities to be represented by registered global securities. Unless and until it is exchanged in whole for securities in definitive registered form, a registered global security may not be transferred except as a whole by and among the depositary for the registered global security, the nominees of the depositary or any successors of the depositary or those nominees.

The specific terms of the depositary arrangement with respect to any securities to be represented by a registered global security will be described in the prospectus supplement relating to those securities. We anticipate that the following provisions will apply to all depositary arrangements.

Ownership of beneficial interests in a registered global security will be limited to persons, called participants, that have accounts with the depositary or persons that may hold interests through participants. Upon the issuance of a registered global security, the depositary will credit, on its book-entry registration and transfer system, the participants' accounts with the respective principal or face amounts of the securities beneficially owned by the participants. Any dealers, underwriters or agents participating in the distribution of the securities will designate the accounts to be credited. Ownership of beneficial interests in a registered global security will be shown on, and the transfer of ownership interests will be effected only through, records maintained by the depositary, with respect to interests of participants, and on the records of participants, with respect to interests of persons holding through participants. The laws of some states may require that some purchasers of securities take physical delivery of these securities in definitive form. These laws may impair your ability to own, transfer or pledge beneficial interests in registered global securities.

So long as the depositary, or its nominee, is the registered owner of a registered global security, that depositary or its nominee, as the case may be, will be considered the sole owner or holder of the securities represented by the registered global security for all purposes under the applicable indenture, warrant agreement or unit agreement.

Except as described below, owners of beneficial interests in a registered global security will not be entitled to have the securities represented by the registered global security registered in their names, will not receive or be entitled to receive physical delivery of the securities in definitive form and will not be considered the owners or holders of the securities under the applicable indenture, warrant agreement or unit agreement. Accordingly, each person owning a beneficial interest in a registered global security must rely on the procedures of the depositary for that registered global security and, if that person is not a participant, on the procedures of the participant through which the person owns its interest, to exercise any rights of a holder under the applicable indenture, warrant agreement or unit agreement. We understand that under existing industry practices, if we request any action of holders or if an owner of a beneficial interest in a registered global security desires to give or take any action that a holder is entitled to give or take under the applicable indenture, warrant agreement or unit agreement, the depositary for the registered global security would authorize the participants holding the relevant beneficial interests to give or take that action, and the participants would authorize beneficial owners owning through them to give or take that action or would otherwise act upon the instructions of beneficial owners holding through them.

Payments to holders with respect to securities represented by a registered global security registered in the name of a depositary or its nominee will be made to the depositary or its nominee, as the case may be, as the registered owner of the registered global security. None of the Company, the trustees, the warrant agents, the unit agents or any other agent of the Company, agent of the trustees, the warrant agents or unit agents will have any responsibility or liability for any aspect of the records relating to payments made on account of beneficial ownership interests in the registered global security or for maintaining, supervising or reviewing any records relating to those beneficial ownership interests.

We expect that the depositary for any of the securities represented by a registered global security, upon receipt of any payment of principal, premium, interest or other payment or distribution to holders of that registered global security, will immediately credit participants' accounts in amounts proportionate to their respective beneficial interests in that registered global security as shown on the records of the depositary. We also expect that payments by participants to owners of beneficial interests in a registered global security held through participants will be governed by standing customer instructions and customary practices, as is now the case with the securities held for the accounts of customers or registered in "street name," and will be the responsibility of those participants.

If the depositary for any of these securities represented by a registered global security is at any time unwilling or unable to continue as depositary or ceases to be a clearing agency registered under the Exchange Act and a successor depositary registered as a clearing agency under the Exchange Act is not appointed by us within 90 days, we will issue securities in definitive form in exchange for the registered global security that had been held by the depositary. Any securities issued in definitive form in exchange for a registered global security will be registered in the name or names that the depositary gives to the relevant trustee, warrant agent, unit agent or other relevant agent of ours or theirs. It is expected that the depositary's instructions will be based upon directions received by the depositary from participants with respect to ownership of beneficial interests in the registered global security that had been held by the depositary.

LEGAL MATTERS

Unless otherwise indicated in the applicable prospectus supplement, the validity of the securities offered by this prospectus and certain other legal matters as to Nevada law will be passed upon for us by Sichenzia Ross Ference LLP, New York, New York. If legal matters in connection with offerings made by this prospectus are passed on by counsel for the underwriters, dealers or agents, if any, that counsel will be named in the applicable prospectus supplement.

EXPERTS

The financial statements incorporated by reference into this prospectus have been so included in reliance on the report of Marcum LLP, related to the consolidated financial statements for the years ended June 30, 2019 and 2018, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We filed with the Commission a registration statement under the Securities Act for the common stock in this offering. This prospectus does not contain all of the information in the registration statement and the exhibits and schedule that were filed with the registration statement. For further information with respect to us and our common stock, we refer you to the registration statement and the exhibits that were filed with the registration statement. Statements contained in this prospectus about the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and we refer you to the full text of the contract or other document filed as an exhibit to the registration statement.

We file annual, quarterly, and current reports and other information with the Commission. Our filings with the Commission are available to the public on the Commission's website at *www.sec.gov*. Those filings are also available to the public on our corporate website at*www.relmada.com*. The information we file with the Commission or contained on, or linked to through, our corporate website or any other website that we may maintain is not part of this prospectus or the registration statement of which this prospectus is a part. You may also read and copy, at the Commission's prescribed rates, any document we file with the Commission, including the registration statement (and its exhibits) of which this prospectus is a part, at the Commission's Public Reference Room located at 100 F Street, N.E., Washington, D.C. 20549. You can call the Commission at 1-800-SEC-0330 to obtain information on the operation of the Public Reference Room.

INCORPORATION OF DOCUMENTS BY REFERENCE

We are "incorporating by reference" in this prospectus certain documents we file with the Commission, which means that we can disclose important information to you by referring you to those documents. The information in the documents incorporated by reference is considered to be part of this prospectus. Statements contained in documents that we file with the Commission and that are incorporated by reference in this prospectus will automatically update and supersede information contained in this prospectus, including information in previously filed documents or reports that have been incorporated by reference in this prospectus, to the extent the new information differs from or is inconsistent with the old information. We have filed or may file the following documents with the Commission and they are incorporated herein by reference as of their respective dates of filing.

1. Our Annual Report on Form 10-K for the fiscal year ended June 30, 2019, filed with the Commission on September 24, 2019;

2. Our Current Reports on Form 8-K and 8-K/A filed with the Commission on July 17, 2019, July 18, 2019, July 29, 2019, September 27, 2019, October 1, 2019, October 18, 2019 and October 21, 2019; and

3. The description of certain capital stock contained in our Registration Statement 8-A filed on October 10, 2019, as it may further be amended from time to time.

All documents that we filed with the Commission pursuant to Sections 13(a), 13(c), 14, and 15(d) of the Exchange Act subsequent to the date of this registration statement and prior to the filing of a post-effective amendment to this registration statement that indicates that all securities offered under this prospectus have been sold, or that deregisters all securities then remaining unsold, will be deemed to be incorporated in this registration statement by reference and to be a part hereof from the date of filing of such documents.

Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus shall be deemed modified, superseded or replaced for purposes of this prospectus to the extent that a statement contained in this prospectus, or in any subsequently filed document that also is deemed to be incorporated by reference in this prospectus, modifies, supersedes or replaces such statement. Any statement so modified, superseded or replaced shall not be deemed, except as so modified, superseded or replaced, to constitute a part of this prospectus. None of the information that we disclose under Items 2.02 or 7.01 of any Current Report on Form 8-K or any corresponding information, either furnished under Item 9.01 or included as an exhibit therein, that we may from time to time furnish to the Commission will be incorporated by reference into, or otherwise included in, this prospectus, except as otherwise expressly set forth in the relevant document. Subject to the foregoing, all information appearing in this prospectus is qualified in its entirety by the information appearing in the documents incorporated by reference.

You may request, orally or in writing, a copy of these documents, which will be provided to you at no cost (other than exhibits, unless such exhibits are specifically incorporate by reference), by contacting our Chief financial Officer, c/o Relmada Therapeutics, Inc., at 880 Third Avenue, 12th Floor, New York, NY 10022. Our telephone number is +1-646-876-3459. Information about us is also available at our website at *www.relmada.com*. However, the information in our website is not a part of this prospectus and is not incorporated by reference.

Up to $75,000,000

Common Stock

PROSPECTUS SUPPLEMENT

Jefferies

May 15, 2020