

IMMUCELL CORP /DE/

Form 424B5

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The information in this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are part of an effective registration statement filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities and are not soliciting an offer to buy these securities in any state or other jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED JANUARY 28, 2016

PROSPECTUS SUPPLEMENT

(To Prospectus dated November 10, 2015)

_____ Shares of Common Stock

ImmuCell Corporation

We are offering _____ shares of our common stock pursuant to this prospectus supplement and the accompanying prospectus. Our common stock is listed on The Nasdaq Capital Market under the symbol "ICCC". On January 27, 2016, the last reported sale price of our common stock on The Nasdaq Capital Market was \$7.66 per share.

Investing in our securities involves certain risks. Before deciding whether to invest in our securities, you should review carefully the information described under the heading "Risk Factors" beginning on page S-9 of this prospectus supplement, on page 5 of the accompanying prospectus, in our Annual Report on Form 10-K for the year ended December 31, 2014, and in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2015.

	Per Share	Total
Public offering price	\$	\$
Underwriting discount(1)	\$	\$
Proceeds, before expenses, to us	\$	\$

(1) In addition to the underwriting discount, we have agreed to pay up to \$100,000 of the fees and expenses of the underwriter in connection with this offering. See "Underwriting."

As of January 27, 2016, the aggregate market value of our outstanding common equity held by non-affiliates was approximately \$16,936,352 based on 3,055,034 shares of outstanding common stock, of which 844,022 shares are held by affiliates, and a price of \$7.66 per share, which was the last reported sale price of our common stock on The

Nasdaq Capital Market on January 27, 2016. As of the date of this prospectus supplement, we have not sold any securities pursuant to General Instruction I.B.6 of Form S-3 during the prior 12-calendar month period that ends on, and includes, the date of this prospectus supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The underwriter expects to deliver the shares of our common stock on or about _____, 2016, subject to customary closing conditions.

Craig-Hallum Capital Group

The date of this prospectus supplement is January __, 2016.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus are part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, utilizing a “shelf” registration process. Under this process, we may sell from time to time in one or more offerings up to an aggregate of \$10,000,000 of our securities described in the accompanying prospectus.

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. The second part is the accompanying prospectus, which provides general information, some of which may not apply to this offering. If information in this prospectus supplement is inconsistent with the accompanying prospectus, you should rely on this prospectus supplement.

You should rely only on the information contained in or incorporated by reference in this prospectus supplement and the accompanying prospectus. We have not, and the underwriter 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 making an offer to sell common stock only in jurisdictions where offers and sales are permitted. You should assume that the information appearing in this prospectus supplement, in the accompanying prospectus and in the documents incorporated by reference is accurate only as of their respective dates or other dates which are specified in those documents. 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 of the information contained in or incorporated by reference in this prospectus supplement and the accompanying prospectus in making your investment decision. See “Where You Can Find More Information” on page S-16 of this prospectus supplement and “Where You Can Find Additional Information” on page 3 of the accompanying prospectus.

Unless the context otherwise requires, references in this prospectus supplement to “ImmuCell”, the “Company”, “we”, “us” and “our”, or similar terms, refer to ImmuCell Corporation.

FORWARD-LOOKING STATEMENTS

Some of the statements contained in or incorporated by reference in this prospectus supplement and in the accompanying prospectus that are not historical facts constitute “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These statements relate to future events concerning our business and to our future revenues, operating results and financial condition, and involve a number of known and unknown risks, uncertainties and other factors that could cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as “may”, “will”, “could”, “would”, “should”, “expect”, “plan”, “anticipate”, “aim”, “intend”, “believe”, “forecast”, “predict”, “project”, “propose”, “potential”, or “continue”, or the negative of those terms or other comparable terminology.

These statements are only estimates or predictions of future events based on information currently available to our management and management’s current beliefs about the potential outcome of future events. There are a number of important factors that could cause actual results to differ materially from the results anticipated by these forward-looking statements, including the following:

- Our reliance on sales of our existing products;
- Our dependence on a small number of significant customers and the concentration of our existing product sales;

- Our ability to complete the development of (including obtaining required regulatory approvals for), and to achieve successful commercialization of, a key new product;
- The risk of cost overruns or delays in constructing our expanded manufacturing facility, including inadequacy of available funding for the project;

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- Uncertainties arising from the volatile economics of the dairy and beef cattle industries;
- Risks related to ongoing regulatory compliance and associated substantial costs;
- Our dependence on third parties for raw materials and manufacturing services;
- Competitive pressures from larger and better capitalized competitors;
- Possible technical obsolescence or loss of cost competitiveness of our products;
- Our small size and dependence on key personnel;
- Risks of product recalls and product liability claims;
- Risks of sales order backlogs and possible loss of key customers due to product delivery issues or concerns;
- Risks associated with incurring substantial additional indebtedness to fund our facilities expansion and new product commercialization efforts;
- Our reliance on our intellectual property rights and risks associated with protecting such rights; and
- Other risks listed in Item 1A. "Risk Factors" of our Annual Report on Form 10-K for the year ended December 31, 2014, or in Item 1A. "Risk Factors" of our Quarterly Report on Form 10-Q for the quarter ended September 30, 2015, which are incorporated by reference in this prospectus supplement and the accompanying prospectus.

Given these risks and uncertainties, investors should not place undue reliance on forward-looking statements as a prediction of actual results. Forward-looking statements contained in or incorporated by reference in this prospectus supplement and the accompanying prospectus present our views only as of the date of the applicable document containing such forward-looking statements. We do not assume any obligation, and do not intend, to update any forward-looking statement except as required by law. All forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by these cautionary statements.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights information contained in or incorporated by reference in this prospectus supplement. It does not contain all the information you should consider before investing in shares of our common stock. Before deciding to invest in shares of our common stock, you should carefully read this entire prospectus supplement, the accompanying prospectus and the documents incorporated herein and therein by reference, including the “Risk Factors” beginning on page S-9 of this prospectus supplement, our financial statements and the related notes and other information that is incorporated by reference in this prospectus supplement.

Overview

ImmuCell Corporation is a rapidly growing animal health company focused on developing, manufacturing and delivering scientifically-proven, practical and effective products that result in measurable positive economic impacts on animal health and productivity in the dairy and beef industries. Our lead product, First Defense®, is derived from colostrum collected from dairy cows and provides significant, immediate immunity against scours in newborn dairy and beef cattle. We are in the late stages of developing and securing final regulatory approvals for Mast Out®, an intramammary treatment for subclinical mastitis in lactating dairy cows, the active ingredient of which is Nisin, an anti-bacterial peptide that has been demonstrated in clinical studies to be an effective aid in the reduction of mastitis-causing organisms in dairy cows. We currently expect to be in a position to commence commercial sales of Mast Out® in the United States in late 2018 or 2019 (subject to receipt of final approvals from the U.S. Food and Drug Administration’s Center for Veterinary Medicine (FDA)). Across all product lines, our product sales during the twelve month period ended September 30, 2015 increased by 28%, or \$2,143,000, to \$9,740,000 from \$7,597,000 for the year ended December 31, 2014, and gross margin as a percentage of product sales was 61% during the twelve months ended September 30, 2015, as compared to 59% during the year ended December 31, 2014.

First Defense®

Growth in sales of our lead product, First Defense® and related product line extensions, is driving the increase in our total product sales. Sales of First Defense® and related product line extensions aggregated 92.8% and 91.6% of our total product sales during the twelve months ended September 30, 2015 and the year ended December 31, 2014, respectively. Sales of First Defense® and related product line extensions increased by 43%, 27%, and 14% during the twelve months ended September 30, 2015 and the years ended December 31, 2014 and 2013, respectively, in comparison to the corresponding prior full twelve month periods. We estimate that sales of First Defense® and related product line extensions increased by 22% and 36% during the fourth quarter and year ended December 31, 2015, respectively, as compared to the fourth quarter and year ended December 31, 2014, respectively. First Defense® is manufactured from hyper-immune cows’ colostrum (the milk that a cow produces immediately after giving birth) utilizing our proprietary vaccine and milk protein purification technologies. The target disease, bovine enteritis (calf scours), causes diarrhea and dehydration in newborn calves and often leads to serious sickness and even death. First Defense® is the only orally delivered scours preventive product on the market for calves that is licensed by the U.S. Department of Agriculture (USDA) with claims against E. coli K99 and coronavirus (two leading causes of scours). We are actively pursuing licensing of First Defense® for claims against rotavirus, which could further favorably differentiate our product from the competition. First Defense® provides bovine antibodies that newborn calves need but are unable to produce on their own immediately after birth. Our milk antibody products provide Immediate Immunity™ during the first few critical days of life™ when calves need this protection most. Studies have shown that calves that scour are more susceptible to other diseases later in life and under-perform calves that do not contract scours. We estimate that scours causes approximately \$740 million in economic losses to the U.S. dairy and beef industries per year.

Mast Out®

The majority of our product development budget from 2000 through 2015 has been focused on the development of Mast Out®, a Nisin-based intramammary treatment of subclinical mastitis in lactating dairy cows. Mastitis is a very common infection in dairy cows that results in inflammation of the mammary gland. It is the largest single cause of economic harm to the U.S. dairy industry, with an estimated cost of approximately \$2 billion per year, including approximately \$300 million in discarded milk from cows that have been treated with traditional antibiotic mastitis drugs. During the period that began on January 1, 2000 (the year we began the development of Mast Out®) and ended on September 30, 2015, we invested an aggregate of approximately \$11,612,000 in the development of

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Mast Out®. This estimated allocation to Mast Out® reflects only direct expenditures and includes no allocation of product development or administrative overhead expenses. Approximately \$2,891,000 of this investment was offset by product licensing revenues and grant income related to Mast Out®. Nisin is an antibacterial peptide that has been demonstrated in clinical studies to be an effective aid in the reduction of mastitis-causing organisms in dairy cows. Because dairy producers are required to discard milk for a period during and after treatment with all currently marketed mastitis treatment products due to concerns about antibiotic residue in milk, it is generally current practice to only treat mastitis when the disease has progressed to the clinical stage where the milk from an infected cow cannot be sold. We believe that Mast Out® could revolutionize the way that mastitis is treated in the United States by making earlier treatment of subclinically infected cows economically feasible by not requiring a milk discard during, or for a period of time after, treatment. No other FDA-approved mastitis treatment product on the market can offer this value proposition. Growing concerns about the presence of traditional antibiotics in our food supply, we believe, will aid in the marketing of Mast Out® and growth in its sales. Based on publicly available information on the size of the U.S. dairy herd, the incidence of mastitis and likely mastitis treatment protocols, we have estimated first year commercial sales of Mast Out® totaling \$5.8 million and potential growth for the fifth year to \$36.1 million. Commercial introduction of Mast Out® in the United States is subject to approval of our New Animal Drug Application by the FDA, which approval cannot be assured. Foreign regulatory approvals would be required for sales in key markets outside of the United States, which would involve some similar and some different requirements.

Our Planned Expansion

We presently operate a facility that produces Nisin, the active ingredient in Mast Out®, only in small quantities, which has been adequate for purposes of product testing and evaluation and process yield optimization. We had previously entered into an agreement with a multi-national pharmaceutical ingredient manufacturer for our commercial-scale supplies of Nisin. However, we determined in 2014 that that agreement did not offer us the most advantageous supply arrangement in terms of either cost or long-term dependability. As a result, we undertook preliminary design work on construction of new manufacturing facilities that would enable us to generate our own Nisin supply at commercial scale, with sufficient capacity to meet approximately 35% of the estimated sales potential for Mast Out® by the fifth year of sales. If Mast Out® sales in the first two years reflect strong market acceptance, we would need additional supplies of Nisin to continue to grow sales. We would evaluate all Nisin supply options, but we presently anticipate that building an additional Nisin production facility to meet our needs would be the most cost-effective solution.

Based on an analysis completed by two different independent engineering firms in October 2015 and January 2016, respectively, a quote from a construction contractor and some quotes received from major equipment vendors, we expect that the building shell that will house the expanded Nisin manufacturing operation on land that we acquired in December 2015 will cost approximately \$1.0 million to construct, and that the purchase and installation of the Nisin production equipment and the infrastructure fit-up of the building shell will cost approximately \$17.3 million, for a total estimated cost of approximately \$18.3 million. We plan to begin construction in May 2016 and expect the facility to be ready to operate in late 2017 or during 2018 to enable receipt of the final FDA approvals for Mast Out®.

As discussed under “Use of Proceeds”, we intend to fund the cost of the expanded Nisin production facility with a combination of the net proceeds of this offering, borrowings from our existing secured lender, TD Bank, N.A., under new credit facilities totaling \$4.3 million, cash on hand and cash generated from operations during 2016 and 2017. We believe that we will have sufficient available cash (in addition to the proceeds of this offering and the borrowings from TD Bank, N.A.) to fund the cost of constructing and equipping the expanded facility, as well as to fund our ongoing working capital needs and debt service requirements.

As set forth in a commitment letter issued by TD Bank, N.A. on January 19, 2016, the credit facilities are comprised of: (a) a \$3.3 million construction loan, drawable over an 18 month period at up to 80% of total equipment cost, during which interest only will be payable at a variable rate equal to 30 day LIBOR plus 2.25%, which converts to a seven (7) year term loan facility at the end of construction at the same interest rate with monthly principal and interest

payments over a seven (7) year amortization schedule; and (b) a \$1.0 million construction loan, drawable over a 12 month period, with monthly interest payments (with interest accruing at a variable rate equal to 30 day LIBOR plus 2.25%), which converts to a nine (9) year term loan facility at the end of construction with monthly principal and interest payments based on a twenty (20) year amortization schedule at the same interest rate. Both facilities will be secured by liens on all of our assets (pari passu with TD Bank's existing liens securing an aggregate

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of \$3,227,000 in bank debt as of December 31, 2015). We may enter into interest rate swap arrangements at the end of the construction period with respect to the new loans under which the variable interest rate would effectively be converted into a fixed rate at then-current market rates. The credit facilities will contain financial covenants, including a minimum debt service coverage ratio (calculated quarterly on a trailing four quarter basis) of 1.3 to 1, and a maximum debt to tangible net worth ratio of 1.25 to 1, measured at the end of each fiscal year. The credit facilities will restrict our ability to incur additional debt or to make distributions in respect of our common stock. The disbursement of the credit facilities is conditioned upon our receipt of at least \$4.5 million in proceeds from this offering, on the expenditure by us for the new Nisin production facility of at least \$7.0 million from cash on hand or the proceeds from this offering, and the receipt of an “as built” appraisal with respect to the new Nisin production facility showing a loan-to-value ratio of not greater than 75%.

Summary Historical and ProForma Balance Sheet Data

As a consequence of this offering and the borrowings under the new credit facilities with TD Bank, our capitalization will undergo significant change. The table below presents unaudited summary balance sheet data as of September 30, 2015 on both a historical basis and on an as adjusted basis (assuming that the credit facilities described above had been established and fully drawn, and the proceeds of this offering had been received, as of September 30, 2015). The summary financial data has been derived from our unaudited financial statements, which are incorporated by reference in this prospectus supplement. The as adjusted summary financial data is not necessarily indicative of what our financial position or results of operations would have been if this offering had been completed as of the date indicated, nor is such data necessarily indicative of our financial position for any future date. The following summary and as adjusted financial data should be read in conjunction with, and are qualified in their entirety by reference to, “Use of Proceeds”, “Capitalization”, “Summary Financial Data”, and our financial statements and the related notes included elsewhere in this prospectus supplement or incorporated by reference herein.

	(Unaudited) As of September 30, 2015 (Actual)	As of September 30, 2015 (As Adjusted)
Assets		
Total current assets	\$ 8,187,315	\$ _____
Property, plant and equipment, net	4,955,614	\$ 4,955,614
Long-term investments	487,000	487,000
Long-term portion of deferred tax asset	543,602	543,602
Other assets, net	49,615	49,615
Total Assets	\$ 14,223,146	\$ _____
Liabilities and Stockholders' Equity		
Total current liabilities	\$ 679,886	\$ _____
Total long-term liabilities	3,244,777	_____
Total Liabilities	3,924,663	_____
Total Stockholders' Equity	10,298,483	_____
Total Liabilities and Stockholders' Equity	\$ 14,223,146	\$ _____
Corporate Information		

We are a growing animal health company whose purpose is to create scientifically-proven and practical products that result in a measurable economic impact on animal health and productivity in the dairy and beef industries. We were originally incorporated in Maine in 1982 and reincorporated in Delaware in 1987, in conjunction with our initial public offering of common stock. Our principal executive offices are located at 56 Evergreen Drive, Portland, Maine 04103. Our telephone number is (207) 878-2770. We maintain an Internet website at www.immucell.com. The information contained in, or accessible from, our website is not a part of this prospectus supplement or the

accompanying prospectus.

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The Offering

The following summary contains basic information about this offering. The summary is not intended to be complete. You should read the full text and more specific details contained elsewhere in this prospectus supplement.

Common stock offered
by us _____ shares of common stock, par value \$0.10 per share.

Common stock
outstanding
immediately after this
offering(1) _____ shares of common stock.

Use of proceeds We estimate that our net proceeds from this offering will be approximately \$____ million, assuming \$____ of common stock is sold in this offering. We intend to use the net proceeds from this offering of common stock, together with borrowings from our existing bank lender totaling approximately \$4.3 million and cash on hand and generated by operations, to fund the anticipated \$18.3 million cost of building and equipping a new pharmaceutical production facility to produce the active pharmaceutical ingredient (Nisin) in our new mastitis product, Mast Out®. See “Use of Proceeds.”

Risk Factors See the information described under the heading “Risk Factors” beginning on page S-9 of this prospectus supplement and other information contained in or incorporated by reference in this prospectus supplement and the accompanying prospectus for a discussion of factors you should consider carefully before investing in our common stock.

Nasdaq Capital Market
symbol ICCC

(1) The number of shares of common stock that will be outstanding immediately after this offering is based on 3,055,034 shares outstanding as of January 27, 2016, and excludes 237,000 shares of our common stock reserved for future issuance upon the exercise of outstanding options (of which options with respect to 173,000 shares are currently exercisable).

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SUMMARY FINANCIAL DATA

The following table sets forth, for the periods and dates indicated, our summary financial data. The summary financial data has been derived from our unaudited historical consolidated financial statements and accompanying notes for the nine months ended September 30, 2015 and the nine months ended September 30, 2014. The results included in this table are not necessarily indicative of future performance. The following table should be read in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the audited historical financial statements and accompanying notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2014 and the unaudited historical financial statements and accompanying notes thereto included in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2015, which are incorporated by reference in this prospectus supplement and the accompanying prospectus.

(Dollar amounts in thousands, except per share amounts)	Nine Months Ended September 30, 2015 (unaudited)	September 30, 2014 (unaudited)
Product sales	\$ 7,534	\$ 5,392
Cost of goods sold	2,941	2,285
Gross margin	4,593	3,107
Selling and administrative expenses	2,028	1,796
Product development expenses	904	1,716
Operating Expenses	2,932	3,512
Net operating income (loss)	1,661	(405)
Other expenses, net	27	39
Income (loss) before income taxes	1,634	(444)
Income tax expense (benefit)	710	(146)
Net income (loss)	\$ 924	\$ (298)
Weighted average common shares outstanding (as of September 30, 2015 and September 30, 2014):		
Basic	3,038	3,027
Diluted	3,163	3,027
Net income (loss) per share		
Basic	\$ 0.30	\$ (0.10)
Diluted	\$ 0.29	\$ (0.10)
Recent Developments		

We are in the process of finalizing our results for the year and quarter ended December 31, 2015.

Based on currently available information, we estimate that, as of and for the full year and the fourth quarter ended December 31, 2015:

- Product sales for 2015 will be approximately \$10.2 million, compared to \$7.6 million in 2014, an increase of \$2.6 million or 35%;
- Product sales for the fourth quarter of 2015 will be approximately \$2.7 million, compared to \$2.2 million in the prior year’s fourth quarter, an increase of \$489,000 or 22%;
- Earnings per share (EPS) for 2015 will be in the range of \$0.34 to \$0.41, compared to a loss per share of (\$0.06) in 2014;
- EPS for the fourth quarter of 2015 will be in the range of \$0.05 to \$0.12, compared to fourth quarter 2014 EPS of \$0.04; and

- Cash, cash equivalents, short-term and long-term investments will be approximately \$6.5 million as of December 31, 2015, as compared to \$3.8 million as of December 31, 2014.

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This unaudited preliminary financial information for the year and quarter ended December 31, 2015 is based upon our estimates and subject to completion of our financial closing procedures. Moreover, these data have been prepared solely on the basis of currently available information by, and are the responsibility of, management. This preliminary financial information is not a comprehensive statement of our financial results for this period, and our actual results may differ materially from these estimates due to the completion of our financial closing procedures, final adjustments, and other developments that may arise between now and the time the closing procedures for the quarter are completed. There can be no assurance that these estimates will be realized, and estimates are subject to risks and uncertainties, many of which are not within our control.

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RISK FACTORS

An investment in our securities involves risk. You should consider carefully the risk factors described below and set forth in the “Risk Factors” sections of the Annual Report on Form 10-K for the year ended December 31, 2014 and the Quarterly Report on Form 10-Q for the quarter ended September 30, 2015, together with the other information contained in our financial statements and the related notes, which are incorporated by reference herein, before deciding to invest in our common stock. We operate in a changing environment that involves numerous known and unknown risks and uncertainties that could materially adversely affect our operations. If any of such risks materialize, our business, financial condition, results of operations and the value of our common stock could be materially and adversely affected. In such case, you may lose all or part of your investment in our common stock. Please also refer to the section above entitled “Forward-Looking Statements” regarding forward-looking statements included or incorporated herein by reference.

Risks Related to This Offering and Our Common Stock

You will experience immediate dilution in the book value per share of the common stock you purchase.

Because the price per share of our common stock being offered is substantially higher than the net tangible book value per share of our common stock, you will suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering. If you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of approximately \$_____ per share in the net tangible book value of the common stock. See the section entitled “Dilution” below for a more detailed discussion of the dilution you will incur if you purchase common stock in this offering.

Our common stock has had limited trading.

Trading in our common stock has historically been thin. Because of the thinness of the market for our stock, the price of our common stock may be subject to manipulation and may be volatile. This limited trading may adversely affect the liquidity of our common stock, in terms of the number of shares that can be bought and sold at a given price. As a result, there could be a larger spread between the bid and the ask prices of our common stock and investors may not be able to sell shares of our common stock when or at prices they desire.

Fluctuations in the price of our common stock, including as a result of actual or anticipated sales of shares by stockholders, may make our common stock more difficult to resell.

The market price and trading volume of our common stock have been and may continue to be subject to significant fluctuations due not only to general stock market conditions, but also to a change in sentiment in the market regarding the industry in which we operate, our operations, business prospects or liquidity or this offering. During the period from January 1, 2013 to January 27, 2016, our common stock has fluctuated from a low of \$3.19 per share to a high of \$11.40 per share. In addition to the risk factors discussed in our periodic reports and in this prospectus supplement, the price and volume volatility of our common stock may be affected by actual or anticipated sales of common stock by existing stockholders, including of shares purchased in this offering, whether in the market or in subsequent public offerings. Stock markets in general have experienced extreme volatility recently that has at times been unrelated to the operating performance of particular companies or industries. These broad market fluctuations may adversely affect the trading price of our common stock, regardless of our operating results. As a result, these fluctuations in the market price and trading volume of our common stock may make it difficult to predict the market price of our common stock in the future, cause the value of your investment to decline and make it more difficult to resell our common stock.

Our stockholders may experience further dilution if we issue additional shares of common stock in the future.

Any additional future issuances of common stock by us will reduce the percentage of our common stock owned by investors purchasing shares in this offering who do not participate in such future issuances. In most circumstances stockholders will not be entitled to vote on whether or not we issue additional common stock. In addition, depending on the terms and pricing of an additional offering of our common stock and the value of our assets, our stockholders may experience dilution in both the book value and the market value of their shares.

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There may be future sales or other dilution of our equity which may adversely affect the market price of our common stock.

Except as described under “Underwriting”, we are not restricted from issuing additional common stock, including securities that are convertible into or exchangeable for, or that represent the right to receive, common stock. We are offering _____ shares of common stock. The issuance of additional shares of our common stock in this offering or other issuances of our common stock or convertible or other equity linked securities, including options and warrants, or otherwise, in connection with capital raising transactions or for employee compensation or other purposes will dilute the ownership interest of our common stockholders. As of January 27, 2016, we had 3,055,034 outstanding shares of common stock, which excludes 237,000 shares of common stock issuable upon the exercise of outstanding stock options.

Sales of a substantial number of shares of our common stock or other equity-related securities in the public market could depress the market price of our common stock and impair our ability to raise capital through the sale of additional equity securities. We cannot predict the effect that future sales of our common stock or other equity-related securities would have on the market price of our common stock.

We are not currently paying dividends and will likely continue not paying dividends for the foreseeable future.

We have never paid or declared any cash dividends on our common stock. We currently intend to retain all available funds and any future earnings to repay indebtedness and to fund the development and expansion of our business, and we do not anticipate paying any cash dividends or repurchasing shares of our common stock in the foreseeable future. In addition, the terms of our existing credit agreements restrict the payment of cash dividends on our common stock and the repurchase by us of our common stock. Any future determination to pay dividends or to repurchase stock will be at the discretion of our board of directors and will depend on our financial condition, results of operations, capital requirements, contractual restrictions and other factors that our board of directors deems relevant.

Provisions in our rights plan and in Delaware law could make it more difficult for a third party to acquire us, discourage a takeover and adversely affect existing stockholders.

Our board of directors adopted in 1995 a common stock rights plan under which, if the rights issued thereunder are not redeemed by the board and the board has not approved the acquisition by a prospective acquirer of 20% or more of our outstanding common stock, the holders of such rights (other than such prospective acquirer) have the right, in effect, to purchase an additional share of our common stock for each right held at a discount of 50% from the market price of such stock, immediately preceding the prospective acquirer’s acquisition of such ownership (or announcement of an offer to acquire such ownership).

We are also subject to the provisions of Section 203 of the Delaware General Corporation Law, which could prevent us from engaging in a “business combination” with a 15% or greater stockholder for a period of three years from the date such person acquired that status unless appropriate board or stockholder approvals are obtained.

These provisions could deter unsolicited takeovers or delay or prevent changes in our control or management, including transactions in which stockholders might otherwise receive a premium for their shares over the then current market price. These provisions may also limit the ability of stockholders to approve transactions that they may deem to be in their best interests.

We could experience cost over-runs or delays in completing our expanded manufacturing facility or fail to obtain necessary funding for the project.

As noted above, we have obtained estimates for the costs of building and equipping our expanded Nisin manufacturing facility; however, we do not have in place a fixed price construction contract or fixed price equipment

supply agreements. Accordingly, actual project costs could exceed our estimates. In addition, completion of the project could be delayed due to factors outside our control, including construction or equipment delivery delays or delays in obtaining FDA approvals for Mast Out®. Also, our ability to fund the completion of the project depends (in addition to receipt of the proceeds from this offering) on receipt of borrowed funds (which are subject to certain conditions and contingencies) and cash flow from future operations, which may not materialize or be available at the needed levels.

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USE OF PROCEEDS

We estimate that the net proceeds of this offering to us will be approximately \$_____ million, after deducting estimated underwriting discounts and our estimated offering expenses. We intend to use the net proceeds from this offering, together with borrowings of \$4.3 million under construction and term credit facilities from TD Bank, N.A., our existing secured lender, as well as cash on hand and cash generated from our operations during 2016 and 2017, to fund the estimated \$18.3 million cost (see “Prospectus Supplement Summary — Our Planned Expansion”) of constructing and equipping a facility (to be located on land we acquired in December 2015 nearby our existing manufacturing facility in Portland, Maine) that will produce Nisin, the active ingredient in our Mast Out® product for treatment of subclinical mastitis in lactating dairy cows. We have determined that manufacturing our own Nisin is the most cost-effective and dependable means of obtaining adequate supplies of this critical ingredient. With the additional indebtedness described above (assuming such indebtedness were fully drawn at the outset of 2016) and with the debt we incurred in September 2015 being outstanding for the full year beginning in 2016, our annual debt service costs (principal and interest) will increase from \$148,000 in 2015 to \$871,000 in 2016. We believe that we will have sufficient revenues, working capital and tangible assets in order to comply with the financial covenants contained in the new debt facilities. Pending the use of the net proceeds from this offering as described above, we intend to invest the proceeds in investment grade, interest-bearing instruments.

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PRICE RANGE OF OUR COMMON STOCK

Our common stock is traded on The Nasdaq Capital Market under the symbol “ICCC”. The last reported sales price of our common stock on The Nasdaq Capital Market on January 27, 2016 was \$7.66 per share.

The following table sets forth, for the periods indicated, the high and low sale prices for our common stock.

	High	Low
Year ending December 31, 2016		
First Quarter (through January 27, 2016)	\$ 8.29	\$ 6.95
Year ended December 31, 2015		
First Quarter	\$ 7.22	\$ 4.99
Second Quarter	8.69	5.50
Third Quarter	11.40	5.95
Fourth Quarter	7.80	6.03
Year ended December 31, 2014		
First Quarter	\$ 4.95	\$ 4.06
Second Quarter	5.30	3.30
Third Quarter	5.68	4.17
Fourth Quarter	5.44	3.96

As of January 27, 2016, there were approximately 850 holders of record of our common stock.

We have not paid any cash dividends on our common stock to date, and we do not expect to pay cash dividends in the foreseeable future. Future dividend policy will depend on our earnings, capital requirements, financial condition, contractual restrictions, and other factors considered relevant by our board of directors.

DILUTION

Our net tangible book value as of September 30, 2015 was approximately \$9.6 million, or approximately \$3.16 per share. Net tangible book value per share is determined by dividing our total tangible assets (total assets less debt issuance costs and deferred taxes) less total liabilities by the number of shares of our common stock outstanding as of September 30, 2015.

After giving effect to our sale of _____ shares of our common stock in this offering at the public offering price of \$____ per share, and after deducting the estimated underwriting discounts and our estimated offering expenses payable by us, our as adjusted net tangible book value as of September 30, 2015 would have been approximately \$____ million, or \$____ per share. This represents an immediate increase in net tangible book value of \$____ per share to existing stockholders and immediate dilution in net tangible book value of \$____ per share to new investors participating in this offering at the public offering price. The following table illustrates this dilution on a per share basis:

Public offering price for one share of common stock		\$ _____
Net tangible book value per share as of September 30, 2015	\$ 3.16	
Increase per share attributable to new investors	\$	
As adjusted net tangible book value per share after this offering		\$
Dilution per share to new investors		\$

The information set forth above is based on 3,055,034 shares of common stock issued and outstanding as of September 30, 2015 and excludes 227,000 shares of common stock reserved for future issuance upon the exercise of outstanding options as of September 30, 2015 (of which options with respect to 173,000 shares are currently exercisable).

The above illustration of dilution per share to investors participating in this offering assumes no exercise of outstanding options to purchase our common stock. The exercise of outstanding options having an exercise price less than the offering price will increase dilution to new investors. 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 additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

UNDERWRITING

The underwriter named below has agreed to buy, subject to the terms of the underwriting agreement, the number of shares of common stock listed opposite its name below. The underwriter is committed to purchase and pay for all of the shares if any are purchased. Craig-Hallum Capital Group LLC is the sole underwriter.

	Number of Shares	
Underwriter	_____	
Craig-Hallum Capital Group LLC		

The underwriter has advised us that it proposes to offer the shares of common stock to the public at a price of \$ _____ per share. The underwriter proposes to offer the shares of common stock to certain dealers at the same price less a concession of not more than \$ _____ per share. After the offering, these figures may be changed by the underwriter.

The shares sold in this offering are expected to be ready for delivery on or about _____, 2016, against payment in immediately available funds. The underwriter may reject all or part of any order.

The table below summarizes the underwriting discount that we will pay to the underwriter. In addition to the underwriting discount, we have agreed to pay up to \$100,000 of the fees and expenses of the underwriter, which may include the fees and expenses of counsel to the underwriter. The fees and expenses of the underwriter that we have agreed to reimburse are not included in the underwriting discount set forth in the table below. The underwriting discount and reimbursable expenses the underwriter will receive were determined through arms' length negotiations between us and the underwriter.

	Per Share	Total
Underwriting discount to be paid by us	\$	\$

We estimate that the total expenses of this offering, excluding underwriting discount, will be approximately \$193,000. This includes \$100,000 of fees and expenses of the underwriter which are payable by us.

We also have agreed to indemnify the underwriter against certain liabilities, including civil liabilities under the Securities Act of 1933, as amended, or to contribute to payments that the underwriter may be required to make in respect of those liabilities.

The underwriter is offering the shares, subject to prior sale, when, as and if issued to and accepted by it, subject to approval of legal matters by its counsel, including the validity of the shares, and other conditions contained in the underwriting agreement, such as the receipt by the underwriter of officers' certificates and legal opinions. The underwriter reserves the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

The underwriter initially proposes to offer part of the shares of common stock directly to the public at the offering price listed on the cover page of this prospectus and part to certain dealers. After the initial offering of the shares of common stock, the offering price and other selling terms may from time to time be varied by the underwriter.

We and each of our directors and officers have agreed not to offer, sell, agree to sell, directly or indirectly, or otherwise dispose of any shares of our common stock or any securities convertible into or exchangeable for shares of our common stock without the prior written consent of the underwriter for a period of 90 days after the date of this prospectus supplement. These lock-up agreements provide limited exceptions and their restrictions may be waived at any time by the underwriter.

To facilitate this offering, the underwriter may engage in transactions that stabilize, maintain or otherwise affect the price of our common stock during and after the offering. Specifically, the underwriter may create a short position in our common stock for its own account by selling more shares of common stock than we have sold to the underwriter.

The underwriter may close out any short position by purchasing shares in the open market.

In addition, the underwriter may stabilize or maintain the price of our common stock by bidding for or purchasing shares in the open market and may impose penalty bids. If penalty bids are imposed, selling concessions allowed to broker-dealers participating in this offering are reclaimed if shares previously distributed in this offering are repurchased, whether in connection with stabilization transactions or otherwise. The effect of these transactions may

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be to stabilize or maintain the market price of our common stock at a level above that which might otherwise prevail in the open market. The imposition of a penalty bid may also affect the price of our common stock to the extent that it discourages resales of our common stock. The magnitude or effect of any stabilization or other transactions is uncertain. These transactions may be effected on The Nasdaq Capital Market or otherwise and, if commenced, may be discontinued at any time.

In connection with this offering, the underwriter and selling group members may also engage in passive market making transactions in our common stock on The Nasdaq Capital Market. Passive market making consists of displaying bids on The Nasdaq Capital Market limited by the prices of independent market makers and effecting purchases limited by those prices in response to order flow. Rule 103 of Regulation M promulgated by the SEC limits the amount of net purchases that each passive market maker may make and the displayed size of each bid. Passive market making may stabilize the market price of our common stock at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

Neither we nor the underwriter make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. In addition, neither we nor the underwriter make any representation that the underwriter will engage in these transactions or that any transaction, if commenced, will not be discontinued without notice.

The underwriter and its affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The underwriter may in the future engage in investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. The underwriter may in the future receive customary fees and commissions for these transactions.

In the ordinary course of its various business activities, the underwriter and its affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments of the issuer. The underwriter and its affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

The underwriter may facilitate the marketing of this offering online directly or through one of its affiliates. In those cases, prospective investors may view offering terms and a prospectus supplement online and place orders online or through their financial advisors.

Selling Restrictions

Canada. The offering of the common stock in Canada is being made on a private placement basis in reliance on exemptions from the prospectus requirements under the securities laws of each applicable Canadian province and territory where the common stock may be offered and sold, and therein may only be made with investors that are purchasing as principal and that qualify as both an “accredited investor” as such term is defined in National Instrument 45-106-Prospectus Exemptions and as a “permitted client” as such term is defined in National Instrument 31-103-Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any offer and sale of the common stock in any province or territory of Canada may only be made through a dealer that is properly registered under the securities legislation of the applicable province or territory wherein the common stock is offered and/or sold or, alternatively, by a dealer that qualifies under and is relying upon an exemption from the registration requirements therein.

Any resale of the common stock by an investor resident in Canada must be made in accordance with applicable Canadian securities laws, which may require resales to be made in accordance with prospectus and registration requirements, statutory exemptions from the prospectus and registration requirements or under a discretionary exemption from the prospectus and registration requirements granted by the applicable Canadian securities regulatory authority. These resale restrictions may under certain circumstances apply to resales of the common stock outside of Canada.

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LEGAL MATTERS

The validity of the shares of common stock offered by this prospectus supplement and the accompanying prospectus will be passed upon for us by Pierce Atwood LLP of Portland, Maine. The underwriter is represented in this offering by Faegre Baker Daniels LLP, Minneapolis, Minnesota.

EXPERTS

The financial statements of ImmuCell Corporation as of December 31, 2014 and 2013 and for each of the three years in the period ended December 31, 2014 incorporated by reference in this prospectus supplement have been so incorporated in reliance on the report of Baker Newman & Noyes LLC, an independent registered public accounting firm, incorporated herein by reference, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and other reports and information with the SEC under the Securities Exchange Act of 1934, as amended, or the Exchange Act. You may read and copy any of the reports, statements, or other information we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549 at prescribed rates. Information on the operation of the Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330. The SEC maintains a website at <http://www.sec.gov> that contains reports, proxy statements and other information regarding issuers that file electronically with the SEC. Our SEC File Number for documents we filed under the Exchange Act is 001-12934. Our website address is www.immucell.com. We have included our website address in this document as an inactive textual reference only, and the information contained in, or that can be accessed through, our website does not constitute part of this prospectus supplement.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference the documents we file with them. This means that we can disclose important information to you in this prospectus supplement by referring you to the documents that contain such information. These incorporated documents contain important business and financial information about us that is not included in or delivered with this prospectus supplement or the accompanying prospectus. The information incorporated by reference is considered to be part of this prospectus supplement and accompanying prospectus, and later information filed with the SEC will update and supersede this information.

We incorporate by reference the documents listed below as well as any future filings made with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (other than information deemed to have been furnished or not filed in accordance with the SEC's rules) from the date of this prospectus supplement and prior to the termination of this offering:

- Our Annual Report on Form 10-K for the fiscal year ended December 31, 2014 filed with the SEC on March 26, 2015;
- Our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2015, June 30, 2015 and September 30, 2015, filed with the SEC on May 12, 2015, August 13, 2015 and November 12, 2015, respectively;
- Our Current Reports on Form 8-K filed with the SEC on February 25, 2015, April 15, 2015, June 12, 2015, July 8, 2015, September 24, 2015, December 22, 2015 and January 7, 2016; and
- Our definitive proxy statement on Schedule 14A filed on April 24, 2015 for our annual meeting of shareholders held on June 11, 2015.

You may request, and we will provide to you at no cost, a copy of these filings by writing or telephoning our Corporate Secretary at 56 Evergreen Drive, Portland, Maine, 04103, telephone number (207) 878-2770.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and we are not soliciting offers to buy these securities in any state where the offer or sale is not permitted.

PROSPECTUS

Subject To Completion, Dated November 10, 2015

Prospectus

IMMUCELL CORPORATION

\$10,000,000.00

Common Stock

Warrants

Units

From time to time, we may offer up to \$10,000,000.00 of our common stock, warrants to purchase common stock and/or units consisting of common stock, warrants or any combination of these securities, in one or more transactions.

We will provide specific terms of these offerings and securities in one or more supplements to this prospectus. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. The prospectus supplement, and any documents incorporated by reference, may also add, update or change information contained in this prospectus. You should read this prospectus, the applicable prospectus supplement, any documents incorporated by reference and any related free writing prospectus carefully before buying any of the securities being offered.

We may offer and sell these securities to or through one or more underwriters, dealers and agents, or directly to purchasers, on a continuous or delayed basis.

Our common stock is listed on the NASDAQ Capital Market under the symbol "ICCC." The applicable prospectus supplement will contain information, where applicable, as to any other listing, if any, of the securities covered by the applicable prospectus supplement. The aggregate market value of our outstanding common stock held by non-affiliates was approximately \$14,281,188 based on 3,055,034 shares of outstanding common stock, of which 868,022 shares are held by affiliates, and a price of \$6.53 per share, which was the last reported sale price of our common stock as quoted on NASDAQ Capital Market on November 3, 2015. We have not offered any securities pursuant to General Instruction I.B.6 of Form S-3 during the prior 12 calendar month period that ends on, and includes, the date of this prospectus.

INVESTING IN OUR SECURITIES INVOLVES RISKS. YOU SHOULD REVIEW CAREFULLY THE RISKS AND UNCERTAINTIES DESCRIBED UNDER THE HEADING "RISK FACTORS" CONTAINED IN THE APPLICABLE PROSPECTUS SUPPLEMENT AND ANY RELATED FREE WRITING PROSPECTUS, AND UNDER SIMILAR HEADINGS IN THE OTHER DOCUMENTS THAT ARE INCORPORATED BY REFERENCE INTO THIS PROSPECTUS.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED THESE SECURITIES OR DETERMINED IF THIS

PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is November 10, 2015

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Some of the statements in this prospectus and in any prospectus supplement we may file constitute “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These statements relate to future events concerning our business and to our future revenues, operating results and financial condition. In some cases, you can identify forward-looking statements by terminology such as “may,” “will,” “could,” “would,” “should,” “expect,” “plan,” “anticipate,” “aim,” “intend,” “believe,” “estimate,” “target,” “predict,” “project,” “propose,” “potential,” or “continue,” or the negative of those terms or other comparable terminology.

Any forward looking statements contained in this prospectus or any prospectus supplement are only estimates or predictions of future events based on information currently available to our management and management’s current beliefs about the potential outcome of future events. Whether these future events will occur as management anticipates, whether we will achieve our business objectives, and whether our revenues, operating results or financial condition will be sustained or improve in future periods are subject to numerous risks. There are a number of important factors that could cause actual results to differ materially from the results anticipated by these forward-looking statements. These important factors include those that we discuss under the heading “Risk Factors” and in other sections of our Annual Report on Form 10-K for the year ended December 31, 2014 and our Form 10-Q for the quarterly period ended June 30, 2015, all filed with the Securities and Exchange Commission (“SEC”), as well as in our other reports filed from time to time with the SEC that are incorporated by reference into this prospectus. You should read these factors and the other cautionary statements made in this prospectus and in the documents we incorporate by reference into this prospectus as being applicable to all related forward-looking statements wherever they appear in this prospectus or the documents we incorporate by reference into this prospectus. If one or more of these factors materialize, or if any underlying assumptions prove incorrect, our actual results, performance or achievements may vary materially from any future results, performance or achievements expressed or implied by these forward-looking statements. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

ABOUT THIS PROSPECTUS

This document is called a prospectus and is part of a registration statement that we have filed with the SEC, using a “shelf” registration process. Under this shelf registration process, we may, from time to time, offer shares of our common stock, warrants to purchase common stock and/or units consisting of common stock, warrants or any combination of these securities, in one or more transactions and in amounts we will determine from time to time, up to a total dollar amount of \$10,000,000.00.

This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities described in this prospectus, we will provide a prospectus supplement or information that is incorporated by reference into this prospectus, containing more specific information about the terms of the securities that we are 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 and securities. This prospectus, together with applicable prospectus supplements, any information incorporated by reference and any related free writing prospectuses, includes all material information relating to these offerings and securities. We may also add, update or change in the prospectus supplement any of the information contained in this prospectus or in the documents that we have incorporated by reference into this prospectus, including, without limitation, a discussion of any risk factors or other special considerations that apply to these offerings or securities or the specific plan of distribution. If there is any inconsistency between the information in this prospectus and a prospectus supplement or information incorporated by reference having a later date, you should rely on the information in that prospectus supplement or incorporated information having a later date. We urge you to read carefully this prospectus, any applicable prospectus supplement and any related free writing prospectus, together with the information incorporated herein by reference as described under the heading “Where You Can Find More Information,” before buying any of the securities being offered.

You should rely only on the information we have provided or incorporated by reference in this prospectus, any applicable prospectus supplement and any related free writing prospectus. We have not authorized anyone to provide you with different information. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus.

Neither the delivery of this prospectus nor any sale made under it implies that there has been no change in our affairs or that the information in this prospectus is correct as of any date after the date of this prospectus. You should assume that the information 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 that 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 “Where You Can Find More Information”. **THIS PROSPECTUS MAY NOT BE USED TO CONSUMMATE A SALE OF SECURITIES, UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.**

In this prospectus, unless the context otherwise requires, references to “we”, “us”, “our” or similar terms, as well as references to “ImmuCell” or the “Company”, refer to ImmuCell Corporation.

ABOUT IMMUCELL CORPORATION

We are a growing animal health company whose purpose is to create scientifically-proven and practical products that result in a measurable economic impact on animal health and productivity in the dairy and beef industries. We were originally incorporated in Maine in 1982 and reincorporated in Delaware in 1987, in conjunction with our initial public offering of common stock. We have developed products that provide significant, immediate immunity to newborn dairy and beef cattle and are in the late stages of developing a new product that addresses mastitis, the most significant cause of economic loss to the dairy industry. Across all product lines, our product sales during the year ended December 31, 2014 increased by 26%, or \$1,590,000, to \$7,597,000 from \$6,007,000 in 2013, and gross margins as a percentage of product sales were 59% in 2014, as compared to 51% during 2013.

Growth in sales of our lead product, First Defense® and related product line extensions, is driving the increase in our total product sales. Sales of First Defense®, and related product line extensions aggregated 91.6% and 91.4% of our total product sales during the years ended December 31, 2014 and 2013, respectively. Sales of First Defense® and related product line extensions increased by 27%, 14% and 5% during the years ended December 31, 2014, 2013 and 2012, respectively, in comparison to the prior years. First Defense® is manufactured from hyperimmune cows’ colostrum (the milk that a cow produces immediately after giving birth) utilizing our proprietary vaccine and milk protein purification technologies. The target disease, bovine enteritis (calf scours), causes diarrhea and dehydration in newborn calves and often leads to serious sickness and even death. First Defense® is the only orally delivered scours preventive product on the market for calves that is licensed by the U.S. Department of Agriculture (USDA) with claims against E. coli K99 and coronavirus (two leading causes of scours). First Defense® provides bovine antibodies that newborn calves need but are unable to produce on their own immediately after birth. Our milk antibody products provide Immediate Immunity™ during the first few critical days of life when calves need this protection most. Studies have shown that calves that scour are more susceptible to other diseases later in life and under-perform calves that do not contract scours.

The majority of our product development budget from 2000 through 2015 has been focused on the development of Mast Out®, a Nisin-based intramammary treatment of subclinical mastitis in lactating dairy cows. During the fifteen-year period that began on January 1, 2000 (the year we began the development of Mast Out®) and ended on December 31, 2014, we invested the aggregate of approximately \$11,032,000 in the development of Mast Out®. This estimated allocation to Mast Out® reflects only direct expenditures and includes no allocation of product development or administrative overhead expenses. Approximately \$2,891,000 of this investment was offset by product licensing revenues and grant income related to Mast Out®. Nisin is an antibacterial peptide that has been

demonstrated in clinical studies to be an effective aid in the reduction of mastitis-causing organisms in dairy cows. Mastitis is a very common infection in dairy cows that results in inflammation of the mammary gland. Because dairy producers are required to discard milk for a period during and after treatment with all currently marketed mastitis treatment products due to concerns about antibiotic residue in milk, it is generally current practice to only treat mastitis when the disease has progressed to the clinical stage where the milk from an infected cow cannot be sold. We believe that Mast Out® could revolutionize the way that mastitis is treated by making earlier treatment of subclinically infected cows economically feasible by not requiring a milk discard during, or for a period of time after, treatment. No other FDA-approved mastitis treatment product on the market can offer this value proposition. Commercial introduction of Mast Out® in the United States is subject to approval of our New Animal Drug Application by the U.S. Food and Drug Administration's Center for Veterinary Medicine (FDA), which approval cannot be assured. Foreign regulatory approvals would be required for sales in key markets outside of the United States, which would involve some similar and some different requirements.

Our principal executive offices are located at 56 Evergreen Drive, Portland, ME 04103. Our telephone number is (207) 878-2770. Our website is located at www.immucell.com. Information contained on, or that can be accessed through, our website is not part of this prospectus.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

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

We are subject to the information and periodic reporting requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and, in accordance therewith, we file periodic reports, proxy statements and other information with the SEC. Such periodic reports, proxy statements and other information are available for inspection and copying at the Public Reference Room and website of the SEC referred to above. We maintain a website at www.immucell.com. You may access our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed pursuant to Sections 13(a) or 15(d) of the Exchange Act with the SEC free of charge at our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. Our website and the information contained on that site, or connected to that site, are not incorporated into and are not a part of this prospectus.

INCORPORATION OF INFORMATION BY REFERENCE

The SEC allows us to “incorporate by reference” the information we file with it, which means that we can disclose important information to you by referring you to those documents. The information we incorporate by reference is an important part of this prospectus, and certain information that we will later file with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below, as well as any future filings made with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act from the date of the initial registration statement and prior to the effectiveness of this registration statement, and any filings made after the date of this prospectus until we sell all of the securities under this prospectus, except that we do not incorporate any document or portion of a document that was furnished and deemed by the rules of the SEC not to have been filed:

- Our Annual Report on Form 10-K for the fiscal year ended December 31, 2014, filed with the SEC on March 26, 2015;
- Our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2015 and June 30, 2015, filed with the SEC on May 12, 2015 and August 13, 2015, respectively;
- Our Current Reports on Form 8-K filed with the SEC on February 11, 2015, February 25, 2015, April 15, 2015, May 12, 2015, June 12, 2015, July 8, 2015, August 13, 2015, and September 24, 2015; and
- Our definitive proxy statement on Schedule 14A filed on April 24, 2015 for our annual meeting of shareholders held on June 11, 2015.

Additionally, all reports and other documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after (i) the date of the initial registration statement and prior to effectiveness of the registration statement; and (ii) the date of this prospectus and prior to the termination or completion of this offering, shall be deemed to be incorporated by reference in this prospectus and to be part hereof from the date of filing of such reports and other documents. Any information that we subsequently file with the SEC that is incorporated by reference as described above will automatically update and supersede any previous information that is part of this prospectus.

We hereby undertake to provide without charge to each person, including any beneficial owner, to whom a copy of this prospectus is delivered, upon written or oral request of any such person, a copy of any and all of the information that has been or may be incorporated by reference in this prospectus, other than exhibits to such documents. Requests for such copies should be directed to our Corporate Secretary at 56 Evergreen Drive, Portland, ME 04103. Our telephone number is (207) 878-2770.

RISK FACTORS

Investing in our securities involves significant risks. You should review carefully the risks and uncertainties described under the heading “Risk Factors” contained in, or incorporated into, the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference herein or therein. Each of the referenced risks and uncertainties could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our securities. Additional risks not known to us or that we believe are immaterial may also adversely affect our business, operating results and financial condition and the value of an investment in our securities.

DESCRIPTION OF SECURITIES WE MAY OFFER

We may offer, from time to time, shares of our common stock, warrants to purchase common stock or units comprised of shares of common stock, warrants, or a combination of these securities, under this prospectus at prices and on terms to be determined by market conditions at the time of offering. This prospectus provides you with a general description of the securities we may offer. See “Description of Common Stock,” “Description of Warrants,” and “Description of Units” below. Each time we offer a type or series of securities, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities.

The prospectus supplement and any related free writing prospectus also may supplement or, as applicable, add, update or change information contained in this prospectus or in documents we have incorporated by reference. However, no prospectus supplement or free writing prospectus will offer a security that is not registered and described in this prospectus at the time of the effectiveness of the registration statement of which this prospectus is a part.

The terms of any particular offering, the initial offering price and the net proceeds to us will be contained in the prospectus supplement, information incorporated by reference or free writing prospectus relating to such offering.

DESCRIPTION OF COMMON STOCK

The description below of our common stock and provisions of our certificate of incorporation and bylaws are summaries and are qualified by reference to the certificate of incorporation and the bylaws. These documents are filed as exhibits to the registration statement of which this prospectus is a part.

Our authorized capital stock consists of 8,000,000 shares of common stock. As of November 3, 2015, there were 3,055,034 shares of common stock outstanding.

Common Stock

The holders of common stock are entitled to receive ratably dividends, if any, as may be declared from time to time by the Board of Directors out of funds legally available for that purpose. In the event of our liquidation, dissolution or winding up, whether voluntary or involuntary, the holders of common stock are entitled to share ratably in all assets remaining after payment of or provision for liabilities. The common stock has no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of common stock are fully paid and nonassessable, and the shares of common stock to be issued upon the closing of this offering will be fully paid and nonassessable.

The holders of common stock are entitled to one vote per share on all matters to be voted upon by the shareholders. There is no cumulative voting.

Effect of Certain Provisions of our Certificate of Incorporation, Bylaws and Common Stock Rights Plan

Provisions of our certificate of incorporation, our bylaws, our Common Stock Rights Plan or Delaware law may discourage, delay or prevent a merger, acquisition or other change in control that stockholders may consider favorable, including transactions in which stockholders might otherwise receive a premium for their shares of our common stock. These provisions may also prevent or frustrate attempts by our stockholders to replace or remove our management. These provisions include:

- limitations on the removal of directors; advance notice requirements for stockholder proposals and nominations;
- the ability of our Board of Directors to alter or repeal our bylaws;
- the ability of our Board of Directors to refuse to redeem rights issued under our Common Stock Rights Plan or otherwise to limit or suspend its operation that would work to dilute the stock ownership of a potential hostile acquirer, likely preventing acquisitions that have not been approved by our Board of Directors; and
- Section 203 of the Delaware General Corporation Law, which prohibits a publicly-held Delaware corporation from engaging in a business combination with an interested stockholder (generally defined as a person which together with its affiliates owns, or within the last three years has owned, 15% of our voting stock, for a period of three years after the date of the transaction in which the person became an interested stockholder) unless the business combination is approved in a prescribed manner.

The existence of the foregoing provisions and anti-takeover measures could depress the trading price of our common stock or limit the price that investors might be willing to pay in the future for shares of our common stock. They could also deter potential acquirers of our Company, thereby reducing the likelihood of obtaining a premium for our common stock in an acquisition.

These provisions, summarized below, are expected to discourage coercive takeover practices and inadequate takeover bids and to promote stability in our management. These provisions are also designed to encourage persons seeking to

acquire control of us to first negotiate with our Board of Directors.

- Shareholder Meetings. Our bylaws provide that a special meeting of shareholders may be called only by the President or by the Board of Directors or by shareholders holding a majority of the outstanding shares of our common stock.

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- Requirements for Advance Notification of Shareholder Nominations and Proposals. Our bylaws establish advance notice procedures with respect to shareholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of our Board of Directors or a committee of the Board of Directors.
- Board of Directors Vacancies. Under our bylaws, any vacancy on the Board of Directors, including a vacancy resulting from an enlargement of the Board of Directors, may only be filled by vote of a majority of the remaining directors. Any director may be removed by vote of the holders of a majority of the outstanding shares of our common stock. The limitations on the removal of directors and filling of vacancies would have the effect of making it more difficult for a third party to acquire control of us, or of discouraging a third party from acquiring control of us.
- Board of Directors Size. Within the range specified by our bylaws, our Board of Directors determines the size of our Board of Directors and may create new directorships and elect new directors, which may enable an incumbent Board of Directors to maintain control by adding directors.
- Indemnification. Our certificate of incorporation and our bylaws, as amended, provide that we will indemnify officers and directors against losses as they incur in investigations and legal proceedings resulting from their services to us, which may include service in connection with takeover defense measures.

In September 1995, our Board of Directors adopted a Common Stock Rights Plan and declared a dividend of one common share purchase right (a "Right") for each of the then outstanding shares of the common stock of the Company. Each Right entitles the registered holder to purchase from the Company one share of common stock at an initial purchase price of \$70.00 per share, subject to adjustment. The description and terms of the Rights are set forth in a Rights Agreement between the Company and American Stock Transfer & Trust Company, LLC, as Rights Agent.

The Rights (as amended) become exercisable and transferable apart from the common stock upon the earlier of i) 10 days following a public announcement that a person or group (Acquiring Person) has, without the prior consent of the Continuing Directors (as such term is defined in the Rights Agreement), acquired beneficial ownership of 20% or more of the outstanding common stock or ii) 10 days following commencement of a tender offer or exchange offer the consummation of which would result in ownership by a person or group of 20% or more of the outstanding common stock (the earlier of such dates being called the Distribution Date).

Upon the Distribution Date, the holder of each Right not owned by the Acquiring Person would be entitled to purchase common stock at a discount to the initial purchase price of \$70.00 per share, effectively equal to one half of the market price of a share of common stock on the date the Acquiring Person becomes an Acquiring Person. If, after the Distribution Date, the Company should consolidate or merge with any other entity and the Company were not the surviving company, or, if the Company were the surviving company, all or part of the Company's common stock were changed or exchanged into the securities of any other entity, or if more than 50% of the Company's assets or earning power were sold, each Right would entitle its holder to purchase, at the Rights' then-current purchase price, a number of shares of the acquiring company's common stock having a market value at that time equal to twice the Right's exercise price.

At any time after a person or group becomes an Acquiring Person and prior to the acquisition by such person or group of 50% or more of the outstanding common stock, the Board of Directors of the Company may exchange the Rights (other than Rights owned by such person or group which have become void), in whole or in part, at an exchange ratio of one share of common stock per Right (subject to adjustment). At any time prior to 14 days following the date that any person or group becomes an Acquiring Person (subject to extension by the Board of Directors), the Board of Directors of the Company may redeem the then outstanding Rights in whole, but not in part, at a price of \$0.005 per Right, subject to adjustment.

On June 8, 2005, our Board of Directors voted to authorize an amendment of the Rights Agreement to extend the Final Expiration Date by an additional three years, to September 19, 2008. As of June 30, 2005, we entered into an amendment to the Rights Agreement with the Rights Agent reflecting such extension. On June 6, 2008 our Board of Directors voted to authorize an amendment of the Rights Agreement to extend the Final Expiration Date by an additional three years, to September 19, 2011, and to increase the ownership threshold for determining

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“Acquiring Person” status from 15% to 18%. As of June 30, 2008, we entered into an amendment to the Rights Agreement with the Rights Agent reflecting such extension and threshold increase. On August 5, 2011, our Board of Directors voted to authorize amendments of the Rights Agreement to extend the Final Expiration Date by an additional three years to September 19, 2014 and to increase the ownership threshold for determining “Acquiring Person” status from 18% to 20%. As of August 9, 2011, we entered into an amendment to the Rights Agreement with the Rights Agent reflecting such extension and threshold increase. On June 10, 2014, our Board of Directors voted to authorize an amendment to the Rights Agreement to extend the final expiration date by an additional three years to September 19, 2017. As of June 16, 2014, we entered into an amendment to the Rights Agreement with the Rights Agent reflecting such extension. As of April 15, 2015, we entered into an amendment to the Rights Agreement with the Rights Agent deleting the provisions requiring that redemptions of the Rights, waivers or consents avoiding “Acquiring Person” status or certain amendments to the Rights Agreement be approved by “Continuing Directors”. No other changes have been made to the terms of the Rights or the Rights Agreement.

Our Board of Directors believes that there is some risk that the potential value of the Mast Out® product development initiative is not fairly reflected in the market price of our common stock, as it fluctuates from time to time, and that opportunistic buyers could take advantage of that disparity to the detriment of our stockholders. If this were to happen and result in a potential threat through an unsolicited acquisition effort or otherwise, our Board of Directors feels that the Common Stock Rights Plan could enhance stockholder value by providing management with negotiating leverage.

Listing

Our common stock is listed on the NASDAQ Capital Market under the symbol “ICCC”.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC.

DESCRIPTION OF WARRANTS

General

We may issue warrants to purchase common stock. We may issue the warrants independently or together with any underlying securities, and the warrants may be attached to or separate from the underlying securities. We may also issue a series of warrants under a separate warrant agreement to be entered into between us and a warrant agent. The warrant agent will act solely as our agent in connection with the warrants of such series and will not assume any obligation or relationship of agency for or with holders or beneficial owners of warrants.

The following description is a summary of selected provisions relating to the warrants that we may issue. The summary is not complete. If warrants are offered in the future, a prospectus supplement, information incorporated by reference or a free writing prospectus, as applicable, will explain the particular terms of those securities and the extent to which these general provisions may apply. The specific terms of the warrants as described in a prospectus supplement, information incorporated by reference, or free writing prospectus will supplement and, if applicable, may modify or replace the general terms described in this section.

This summary and any description of warrants in the applicable prospectus supplement, information incorporated by reference or free writing prospectus is subject to and is qualified in its entirety by reference to all the provisions of any specific warrant document or agreement. We will file each of these documents, as applicable, with the SEC and incorporate them by reference as an exhibit to the registration statement of which this prospectus is a part on or before the time we issue a series of warrants. See “Where You Can Find Additional Information” and “Incorporation of Information by Reference” above for information on how to obtain a copy of a warrant document when it is filed.

When we refer to a series of warrants, we mean all warrants issued as part of the same series under the applicable warrant agreement.

Terms

The applicable prospectus supplement, information incorporated by reference or free writing prospectus, may describe the terms of any warrants that we may offer, including, but not limited to, the following:

- the title of the warrants;
- the total number of warrants;
- the price or prices at which the warrants will be issued;
- the price or prices at which the warrants may be exercised;
- the currency or currencies that investors may use to pay for the warrants;
- the date on which the right to exercise the warrants will commence and the date on which the right will expire;
- whether the warrants will be issued in registered form or bearer form;
- information with respect to book-entry procedures, if any;
- if applicable, the minimum or maximum amount of warrants that may be exercised at any one time;
- if applicable, the number of warrants issued with each underlying security;

- if applicable, the date on and after which the warrants and the related underlying common stock will be separately transferable;
- if applicable, a discussion of material United States federal income tax considerations;
- if applicable, the terms of redemption of the warrants;
- the identity of the warrant agent, if any;

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- the procedures and conditions relating to the exercise of the warrants; and
- any other terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Warrant Agreement

We may issue the warrants in one or more series under one or more warrant agreements, each to be entered into between us and a bank, trust company or other financial institution as warrant agent. We may add, replace or terminate warrant agents from time to time. We may also choose to act as our own warrant agent.

The warrant agent under a warrant agreement will act solely as our agent in connection with the warrants issued under that agreement. Any holder of warrants may, without the consent of any other person, enforce by appropriate legal action, on its own behalf, its right to exercise those warrants in accordance with their terms.

Form, Exchange and Transfer

We may issue the warrants in registered form or bearer form. Warrants issued in registered form, i.e., book-entry form, will be represented by a global security registered in the name of a depository, which will be the holder of all the warrants represented by the global security. Those investors who own beneficial interests in a global warrant will do so through participants in the depository's system, and the rights of these indirect owners will be governed solely by the applicable procedures of the depository and its participants. In addition, we may issue warrants in non-global form, i.e., bearer form. If any warrants are issued in non-global form, warrant certificates may be exchanged for new warrant certificates of different denominations, and holders may exchange, transfer or exercise their warrants at the warrant agent's office or any other office indicated in the applicable prospectus supplement, information incorporated by reference or free writing prospectus.

Prior to the exercise of their warrants, holders of warrants exercisable for shares of common stock will not have any rights of holders of common stock purchasable upon such exercise and will not be entitled to dividend payments, if any, or voting rights of the common stock purchasable upon such exercise.

Exercise of Warrants

A warrant will entitle the holder to purchase for cash an amount of common stock at an exercise price that will be stated in, or that will be determinable as described in, the applicable prospectus supplement, information incorporated by reference or free writing prospectus. Warrants may be exercised at any time up to the close of business on the expiration date set forth in the applicable offering material. After the close of business on the expiration date, unexercised warrants will become void. Warrants may be redeemed as set forth in the applicable offering material.

Warrants may be exercised as set forth in the applicable offering material. Upon receipt of payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable offering material, we will forward, as soon as practicable, the common stock purchasable upon such exercise. If less than all of the warrants represented by such warrant certificate are exercised, a new warrant certificate will be issued for the remaining warrants.

DESCRIPTION OF UNITS

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

The following description is a summary of selected provisions relating to units that we may offer. The summary is not complete. When units are offered in the future, a prospectus supplement, information incorporated by reference or a free writing prospectus, as applicable, will explain the particular terms of those securities and the extent to which these general provisions may apply. The specific terms of the units as described in a prospectus supplement, information incorporated by reference, or free writing prospectus will supplement and, if applicable, may modify or replace the general terms described in this section.

This summary and any description of units in the applicable prospectus supplement, information incorporated by reference or free writing prospectus is subject to and is qualified in its entirety by reference to the unit agreement, collateral arrangements and depositary arrangements, if applicable. We will file each of these documents, as applicable, with the SEC and incorporate them by reference as an exhibit to the registration statement of which this prospectus is a part on or before the time we issue a series of units. See “Where You Can Find Additional Information” and “Incorporation of Information by Reference” above for information on how to obtain a copy of a document when it is filed.

The applicable prospectus supplement, information incorporated by reference or free writing prospectus may describe:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities composing the units;
- whether the units will be issued in fully registered or global form; and
- any other terms of the units.

The applicable provisions described in this section, as well as those described under “Description of Common Stock” and “Description of Warrants” above, will apply to each unit and to each security included in each unit, respectively.

USE OF PROCEEDS

Unless otherwise indicated in the applicable prospectus supplement, information incorporated by reference or free writing prospectus, we intend to use the net proceeds from the sale of securities to fund our growth plans, for working capital, and for other general corporate purposes, including capital expenditures related to our growth. More specifically, without limiting the foregoing in any way, we anticipate that a primary use of the net proceeds would be to fund a significant portion of the cost of building and equipping a pharmaceutical plant to produce our Drug Substance (which is the Active Pharmaceutical Ingredient, Nisin) for Mast Out®. This would help us fulfill the manufacturing objectives required to complete the New Animal Drug Application for Mast Out® with the FDA and build inventory for commercial launch.

PLAN OF DISTRIBUTION

We may sell the securities offered by this prospectus from time to time in one or more transactions, including, without limitation:

- through agents;
- to or through underwriters;
- through broker-dealers (acting as agent or principal);
- directly by us to purchasers (including our affiliates and shareholders), through a specific bidding or auction process, a rights offering or otherwise;
- through a combination of any such methods of sale; or
- through any other methods described in a prospectus supplement.

The distribution of securities may be effected, from time to time, in one or more transactions, including:

- block transactions (which may involve crosses) and transactions on the NASDAQ Capital Market or any other organized market where the securities may be traded;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its own account pursuant to a prospectus supplement;
- ordinary brokerage transactions and transactions in which a broker-dealer solicits purchasers;
- sales “at the market” to or through a market maker or into an existing trading market, on an exchange or otherwise; and
- sales in other ways not involving market makers or established trading markets, including direct sales to purchasers.

The securities may be sold at a fixed price or prices, which may be changed, or at market prices prevailing at the time of sale, at prices relating to the prevailing market prices or at negotiated prices. The consideration may be cash or another form negotiated by the parties. Agents, underwriters or broker-dealers may be paid compensation for offering and selling the securities. That compensation may be in the form of discounts, concessions or commissions to be received from us or from the purchasers of the securities. Dealers and agents participating in the distribution of the securities may be deemed to be underwriters, and compensation received by them on resale of the securities may be

deemed to be underwriting discounts and commissions under the Securities Act. If such dealers or agents were deemed to be underwriters, they may be subject to statutory liabilities under the Securities Act.

We may also make direct sales through subscription rights distributed to our existing shareholders on a pro rata basis, which may or may not be transferable. In any distribution of subscription rights to our shareholders, if all of the underlying securities are not subscribed for, we may then sell the unsubscribed securities directly to third parties or may engage the services of one or more underwriters, dealers or agents, including standby underwriters, to sell the unsubscribed securities to third parties.

Some of the securities that we offer through this prospectus may be new issues of securities with no established trading market. Any underwriters to whom we sell our securities for public offering and sale may make a market in those securities, but they will not be obligated to do so and they may discontinue any market making at any time without notice. Accordingly, we cannot assure you of the liquidity of, or continued trading markets for, any securities that we offer.

Agents may, from time to time, solicit offers to purchase the securities. If required, we will name in the applicable prospectus supplement, document incorporated by reference or free writing prospectus, as applicable, any agent involved in the offer or sale of the securities and set forth any compensation payable to the agent. Unless otherwise indicated, any agent will be acting on a best efforts basis for the period of its appointment. Any agent selling the securities covered by this prospectus may be deemed to be an underwriter of the securities.

If underwriters are used in an offering, securities will be acquired by the underwriters for their own account and may be resold, 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, or under delayed delivery contracts or other contractual commitments. Securities may be offered to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more firms acting as underwriters. If an underwriter or underwriters are used in the sale of securities, an underwriting agreement will be executed with the underwriter or underwriters at the time an agreement for the sale is reached. The applicable prospectus supplement will set forth the managing underwriter or underwriters, as well as any other underwriter or underwriters, with respect to a particular underwritten offering of securities, and will set forth the terms of the transactions, including compensation of the underwriters and dealers and the public offering price, if applicable. This prospectus, the applicable prospectus supplement and any applicable free writing prospectus will be used by the underwriters to resell the securities.

If a dealer is used in the sale of the securities, we, or an underwriter, will sell the securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale. To the extent required, we will set forth in the prospectus supplement document incorporated by reference or free writing prospectus, as applicable, the name of the dealer and the terms of the transactions.

We may directly solicit offers to purchase the securities and may make sales of securities directly to institutional investors or others. These persons may be deemed to be underwriters with respect to any resale of the securities. To the extent required, the prospectus supplement, document incorporated by reference or free writing prospectus, as applicable, will describe the terms of any such sales, including the terms of any bidding or auction process, if used.

Agents, underwriters and dealers may be entitled under agreements which may be entered into with us to indemnification by us against specified liabilities, including liabilities incurred under the Securities Act, or to contribution by us to payments they may be required to make in respect of such liabilities. If required, the prospectus supplement, documents incorporated by reference or free writing prospectus, as applicable, will describe the terms and conditions of such indemnification or contribution. Some of the agents, underwriters or dealers, or their affiliates may be customers of, engage in transactions with or perform services for us or our subsidiaries or affiliates in the ordinary course of business.

Under the securities laws of some states, the securities offered by this prospectus may be sold in those states only through registered or licensed brokers or dealers.

Any person participating in the distribution of common stock registered under the registration statement that includes this prospectus will be subject to applicable provisions of the Exchange Act, and the applicable SEC rules and regulations, including, among others, Regulation M, which may limit the timing of purchases and sales of any of our common stock by any such person. Furthermore, Regulation M may restrict the ability of any person engaged in the distribution of our common stock to engage in market-making activities with respect to our common stock. These restrictions may affect the marketability of our common stock and the ability of any person or entity to engage in

market-making activities with respect to our common stock.

Certain persons participating in an offering may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Exchange Act that stabilize, maintain or otherwise affect the price of the offered securities. If any such activities will occur, they will be described in the applicable prospectus supplement.

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In compliance with the guidelines of the Financial Industry Regulatory Authority (“FINRA”), the aggregate maximum discount, commission or agency fees or other items constituting underwriting compensation to be received by any FINRA member or independent broker-dealer will not exceed 8% of any offering pursuant to this prospectus and any applicable prospectus supplement, as the case may be.

If more than 10% of the net proceeds of any offering of securities made under this prospectus will be received by FINRA members participating in the offering or affiliates or associated persons of such FINRA members, the offering will be conducted in accordance with FINRA Conduct Rule 5110(h).

So long as the aggregate market value of our common equity held by non-affiliates is less than \$75,000,000.00 and so long as required by the rules of the SEC, the amount of securities we may offer hereunder will be limited such that the aggregate market value of securities sold by us during a period of 12 calendar months cannot exceed one-third of the aggregate market value of the common equity held by non-affiliates.

To the extent required, this prospectus may be amended or supplemented from time to time to describe a specific plan of distribution.

LEGAL MATTERS

Pierce Atwood LLP will pass upon legal matters in connection with the validity of the securities offered hereby for us.

EXPERTS

The financial statements incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2014 have been audited by Baker Newman & Noyes LLC, an independent registered public accounting firm, as stated in their reports incorporated by reference herein, and have been so incorporated in reliance upon such reports and upon the authority of such firm as experts in accounting and auditing.

INTERESTS OF NAMED EXPERTS AND COUNSEL

No expert or counsel named in this prospectus as having prepared or certified any part of this prospectus or having given an opinion upon the validity of the securities being registered or upon other legal matters in connection with the registration or offering of the securities was employed on a contingency basis, or had, or is to receive, in connection with the offering, a substantial interest, direct or indirect, in the registrant. Nor was any such person connected with the registrant as a promoter, managing or principal underwriter, voting trustee, director, officer, or employee.

_____ Shares of Common Stock

ImmuCell Corporation

PROSPECTUS SUPPLEMENT

Craig-Hallum Capital Group

The date of this prospectus supplement is January __, 2016