Cellular Biomedicine Group, Inc.
Form S-3
October 10, 2018

As filed with the Securities and Exchange Commission on October 10, 2018
Registration No. 333-

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Cellular Biomedicine Group, Inc.
(Exact name of registrant as specified in its charter)

Delaware	86-1032927
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

19925 Stevens Creek Blvd., Suite 100
Cupertino, CA 95014
(408) 973-7884
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Tony Liu, Chief Executive Officer
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Cupertino, CA 95014
(408) 973-7884
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

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Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this Registration Statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box:

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box:

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

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

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer	Accelerated filer
Non-accelerated filer	Smaller reporting company
	Emerging Growth Company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of Securities Act.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)(2)	Proposed Maximum Aggregate Offering Price per Security(1)(2)	Proposed Maximum Aggregate Offering Price(2)	Amount of Registration Fee
Common Stock, par value $0.001 per share	1,458,257	$17.47	$25,475,750	$3,088

(1) Pursuant to Rule 416 of the Securities Act of 1933, as amended (the “Securities Act”), the shares of common stock offered hereby also include such presently indeterminate number of shares of the registrant’s common stock as a result of stock splits, stock dividends or similar transactions.

(2) Estimated solely for the purpose of calculating the registration fee for the secondary offering, pursuant to Rule 457(c) under the Securities Act, based on the average of the high and low prices of the Registrant’s Common Stock

on The NASDAQ Global Market on October 8, 2018.

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

The information in this prospectus is not complete and may be changed. We may not sell the securities until the Registration Statement filed with the Securities and Exchange Commission, of which this prospectus is a part, is effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED OCTOBER 10, 2018

PROSPECTUS

Up to 1,458,257 Shares of Common Stock

This prospectus relates to the resale of up to 1,458,257 shares (the "Shares") of our common stock, par value $.001 per share of Cellular Biomedicine Group, Inc., a Delaware corporation, for sale by the selling stockholder named herein for its own account. The shares to be sold by the selling stockholder represent shares purchased by Novartis Pharma AG ("Novartis") pursuant to that certain Share Purchase Agreement (the "Purchase Agreement"), dated as of September 25, 2018.

To the extent the selling stockholder wishes to sell its shares of our common stock as provided for herein, it may offer and sell such shares on a continuous or delayed basis in the future. These sales may be conducted in the open market or in privately negotiated transactions and at market prices, fixed prices or negotiated prices. We will not receive any of the proceeds from the sale of the Shares. See "Use of Proceeds" on page 17. We have agreed to pay the expenses in connection with the registration of the Shares.

Our common stock is listed on The NASDAQ Global Market under the symbol "CBMG." The last reported sale price of our common stock on October 9, 2018 was $17.59.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" beginning on page 16, and under similar headings in the other documents that are incorporated by reference into this prospectus or any prospectus supplement before making a decision to purchase our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of 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 , 2018.

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You should rely only on the information we have provided or incorporated by reference in this prospectus or in any prospectus supplement. We have not authorized anyone to provide you with information different from that contained or incorporated by reference in this prospectus or in any prospectus supplement.

You should assume that the information contained in this prospectus and in any prospectus supplement is accurate only as of their respective dates 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 or any prospective supplement or any sale of securities.

In this prospectus, we rely on and refer to information and statistics regarding our industry. We obtained this statistical, market and other industry data and forecasts from publicly available information. While we believe that the statistical data, market data and other industry data and forecasts are reliable, we have not independently verified the data.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and any accompanying prospectus supplement and the documents we have filed or will file with the "Securities and Exchange Commission" that are or will be incorporated by reference into this prospectus and the accompanying prospectus supplement contain forward-looking statements, within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), that involve risks and uncertainties. Any statements contained, or incorporated by reference, in this prospectus and any accompanying prospectus that are not statements of historical fact may be forward-looking statements. When we use the words “anticipate,” “believe,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “will” and other and phrases, including references to assumptions, we are identifying forward-looking statements. Forward-looking statements involve risks and uncertainties which may cause our actual results, performance or achievements to be materially different from those expressed or implied by forward-looking statements.

A variety of factors, some of which are outside our control, may cause our operating results to fluctuate significantly. They include:

- overall economic and business conditions;
- the demand for our products and services;
- competitive factors in the market in which we compete;
- the emergence of new technologies which compete with our product and service offerings;
- our cash position and cash burn rate;
- other capital market conditions, including availability of funding sources;
- the strength of our intellectual property portfolio; and
- changes in government regulations in China and in the U.S. related to our industries.

The foregoing does not represent an exhaustive list of risks that may impact upon the forward-looking statements used herein or in the documents incorporated by reference herein. Please see “Risk Factors” in this prospectus, in our reports filed with the SEC and in any prospectus supplement related to this prospectus for additional risks that could adversely impact our business and financial performance. Moreover, new risks regularly emerge and it is not possible for our management to predict all risks, nor can we assess the impact of all risks on our business or the extent to which any risk, or combination of risks, may cause actual results to differ from those contained in any forward-looking statements. All forward-looking statements included in this prospectus and any accompanying prospectus supplement are based on information available to us on the date hereof or thereof. Except to the extent required by applicable laws or rules, we undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise. All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the cautionary statements contained throughout (or incorporated by reference in) this prospectus, any accompanying prospectus and the documents we have filed with the SEC.

PROSPECTUS SUMMARY

The following summary highlights selected information contained or incorporated by reference in this prospectus. This summary does not contain all of the information you should consider before investing in the securities. Before making an investment decision, you should read the entire prospectus and any supplement hereto carefully, including the risk factors section as well as the financial statements and the notes to the financial statements incorporated herein by reference.

In this prospectus and any amendment or supplement hereto, unless otherwise indicated, the terms “Cellular Biomedicine Group, Inc.,” “CBMG,” the “Company,” “we,” “us,” and “our” refer and relate to Cellular Biomedicine Group, In and its consolidated subsidiaries.

Overview

Cellular Biomedicine Group, Inc. is a clinical stage biopharmaceutical company, principally engaged in the development of therapies for cancer and degenerative diseases utilizing proprietary cell-based technologies. Our technology includes two major platforms: (i) Immune cell therapy for treatment of a broad range of cancer indications comprised of technologies in Chimeric Antigen Receptor modified T cells ("CAR-T"), T-Cell Receptor ("TCR"), and (ii) human adipose-derived mesenchymal progenitor cells ("haMPC") for treatment of joint diseases. CBMG’s Research & Development facilities are based in Gaithersburg, Maryland and Shanghai, China, and its manufacturing facilities are based in China in the cities of Shanghai, Wuxi, and Beijing.

We are focused on developing and marketing safe and effective cell-based therapies based on our cellular platforms, to treat cancer and orthopedic diseases. We have developed proprietary technologies and know-hows in our cell therapy platforms. We are conducting clinical studies in China with our stem cell based therapies to treat knee osteoarthritis (“KOA”). We have completed a Phase IIb autologous haMPC KOA clinical study and published its promising results. Led by Shanghai Renji Hospital, one of the largest teaching hospitals in China, we have completed a Phase I clinical trial of our off-the-shelf allogeneic haMPC (AlloJoin™) therapy for treating KOA patients. We have completed and presented the Allojoin™ Phase I 48-week data in China and have met with the China Food and Drug Administration (“CFDA”) in a pre-IND meeting to discuss methods to potentially enhance development.

Our primary target market is China. We believe that our cell-based therapies will be able to help patients with high unmet medical needs. We expect to carry out clinical studies leading to the eventual CFDA approval of our products through Biologics License Application ("BLA") filings and authorized clinical centers throughout Greater China.

We have launched clinical trials using our CAR-T products in B-cell non-Hodgkin lymphoma ("NHL"). Diffuse large B-cell lymphoma (“DLBCL”) and adult acute lymphoblastic leukemia (“ALL”). We may also establish partnerships with other companies for co-development in CAR-T, TCR-T and stem cell based therapies. We are striving to build a highly competitive research and development function, a translational medicine unit, along with a well-established cellular manufacturing capability and ample capacity, to support the development of multiple assets in multiple indications. These efforts will allow us to boost the Company's Immuno-Oncology presence and pave the way for additional future partnerships.

Corporate History

Headquartered in Cupertino, California, the Company is a Delaware biopharmaceutical company focused on developing treatment for cancer and orthopedic diseases for patients in China. The Company started its regenerative medicine business in China in 2009 and expanded to CAR-T therapies in 2014.

Recent Developments

On January 3, 2017, we announced the signing of a ten-year lease of an 113,038-square foot building located in the "Pharma Valley" in Shanghai Zhangjiang High-Tech Park. The new facility designed and built to GMP standards has approximately 40,000 square feet dedicated to advanced cell manufacturing. We invested approximately $10 million to transform the Zhangjiang GMP facility and leasehold improvement. At the end of 2017, the combination of new Zhangjiang facility, an expanded Wuxi, and Beijing facilities, have an aggregate of approximately 70,000 square feet for cell manufacturing. The Company expects that it will be capable of supporting clinical trials for five different CAR-T and stem cell products simultaneously, or the ability to produce products to treat approximately 10,000 cancer patients and 10,000 KOA patients per year. To reach this capacity, we continue to acquire talented scientists and technicians with relevant experience and will continue to expand our equipment acquisition by earmarking $3.4 million in systems and equipment purchases.

On January 9, 2017, we announced the commencement of patient enrollment in China for our CALL-1 (“CAR-T against Acute Lymphoblastic Leukemia”) Phase I clinical trial of CD19 CAR-T therapy utilizing our optimized proprietary C-CAR011 construct for the treatment of patients with relapsed or refractory (r/r) CD19+ B-cell ALL. We have been enrolling patients and working with the China Center for Drug Evaluation (“CDE”) of the CFDA to obtain approval of the Company’s IND application.

On May 15, 2017, we announced the addition of a new independent Phase I clinical trial of the Company’s ongoing CARD-1 study in patients with chemorefractory or refractory B cell Non-Hodgkin Lymphoma ("NHL"). The Company and Shanghai Tongji Hospital are conducting a single arm, non-randomized study to evaluate the safety and efficacy of C-CAR011 (Anti-CD19 single-chain variable fragment (scFv) (41BB-CD3zeta)) therapy in relapsed or refractory B cell NHL patients. We have been enrolling patients and working with CDE to obtain approval of the Company’s IND application.

On June 1, 2017, we announced that our Board of Directors approved a stock repurchase program (the “2017 Share Repurchase Program”) granting the Company authority to repurchase up to $10 million in common shares through open market purchases pursuant to a plan adopted in accordance with Rule 10b5-1 and Rule 10b-18 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). The program contemplated repurchases of shares of the Company’s common stock in the open market in accordance with all applicable securities laws and regulations. From June 2017 to June 2018 the Company repurchased a total of 560,768 shares at a total price of $6,513,993, or an average of $11.62 per share.

On June 20, 2017, we announced the establishment of an External Advisory Board and the appointment of Michael A. Caligiuri, MD, then President of the AACR and director of The Ohio State University Comprehensive Cancer Center and CEO of the Arthur G. James Cancer Hospital and Richard J. Solove Research Institute in Columbus, Ohio, as Chair of the External Advisory Board to bring together experts from diverse disciplines to provide knowledge and insight to help CBMG fulfill its mission and build a network for development opportunities. Dr. Caligiuri is president of City of Hope National Medical Center and physician-in-chief.

On June 26, 2017, we announced the appointment of Dr. Xia Meng as Chief Operating Officer for the Company. On February 6, 2018, driven by the Company’s strategic move to expand its business operations in early diagnosis and cancer intervention, Meng Xia transitioned from the role of Chief Operating Officer to Head of the Early Diagnosis & Intervention for the Company.

On November 4, 2017, we announced the grand opening of our Zhangjiang facility. On the same day, we announced the signing of a strategic partnership with Thermo Fisher Scientific (China) Ltd. to build a joint Cell Therapy Technology Innovation and Application Center at CBMG’s newly opened Shanghai Zhangjiang facility.

On December 28, 2017, we announced the closing of two private placement transactions pursuant to which we sold an aggregate of 1,208,333 shares of the Company’s common stock to select key executives and private investors at $12.00 per share, for total aggregate gross proceeds of approximately $14.5 million.

On January 30, 2018 and February 5, 2018, we entered into securities purchase agreements with certain investors pursuant to which the Company agreed to sell, and the investors agreed to purchase from the Company, an aggregate of 1,719,324 shares (the “February 2018 Private Placement”) of the Company’s common stock, par value $0.001 per share, at $17.80 per share, for total gross proceeds of approximately $30.6 million. The transaction closed on February 5, 2018. Pursuant to the purchase agreement, the Investors have the right to nominate one director to the board of directors of the Company to stand for election at the 2018 Annual Meeting of Stockholders. Effective as of the closing of the February 2018 Private Placement, Bosun S. Hau was appointed as a non-executive Class III director of the Company and his appointment was subsequent ratified by the shareholders during the Annual Shareholders

Meeting on April 27, 2018,

On February 15, 2018, we obtained a 36–month exclusive option with Augusta University to negotiate a royalty-bearing, exclusive license to the patent rights owned by the Augusta University relating to an invention to identify novel alpha fetoprotein (“AFP”) specific TCR for a hepatocellular carcinoma (“HCC”) immunotherapy. The Company is evaluating the feasibility and opportunities of this novel alpha fetoprotein TCR to redirect T Cells for the HCC indication. We are evaluating the efficacy and specificity of the AFP TCR to identity the most appropriate candidate for first time in human ("FTIH") study. In addition, human CD8+ T cells will be redirected with the AFP TCRs and their anti-tumor activity will be evaluated by in vitro cytokine release assay and cytotoxicity assay. Concurrently, potential on/off-target toxicity including allo-reactivity will also be evaluated and the best candidate TCRs for clinical use will be further tested in humanized mouse models. We plan to exercise our exclusive right to license the technology from Augusta University if and when the FTIH proof of mechanism study shows promising clinical efficacy signal and manageable safety profile.

On March 16, 2018, we issued a press release announcing the presentation of the Allojoin™ Phase I 48-week data in China, as well as the termination of the Company's U.S. Allojoin™ program with CIRM to focus the clinical development in China. Prior to termination, the Company had received $1.2 million of the potential $2.29 million available under the CIRM grant.

On April 18, 2018 and April 21, 2018, the CFDA CDE posted on its website acceptance of the IND application for CAR-T cancer therapies in treating patients with NHL and ALL submitted by two of the wholly-owned subsidiaries of the Company, respectively. Thus far, a total of three Chinese companies that submitted their IND application ahead of the Company have received approval of their IND application for CAR-T cancer therapies.

On June 22, 2018, the Company announced the grand opening of its new research and development center in Gaithersburg, Maryland.

On September 25, 2018, the Company, together with certain of its subsidiaries and controlled entities, entered into a License and Collaboration Agreement (the "Collaboration Agreement") with Novartis pursuant to which the Company will manufacture and supply Novartis the T CAR-T cell therapy Kymriah® (tisagenlecleucel) (the "Product") in China. The Company also granted Novartis a world-wide license certain of its intellectual property and technology, including intellectual property and technology related to the Product. Such license is exclusive with respect to the development, manufacture and commercialization of the Product and non-exclusive with respect to the development, manufacture and commercialization of other products.

Also, on September 25, 2018, we entered into a Share Purchase Agreement with Novartis pursuant to which the Company agreed to sell, and Novartis agreed to purchase from the Company, an aggregate of 1,458,257 shares of the Company's common stock, at a purchase price of $27.43 per share, which was the equivalent of 130% of the volume-weighted average price of the Common Stock for the prior 20 consecutive trading days, for total gross proceeds of approximately $40 million (the "Private Placement"). In connection with the Private Placement, the Company and Novartis entered into a Registration Rights Agreement (the "Registration Rights Agreement") pursuant to which the Company has agreed, subject to certain conditions set forth therein, to file a registration statement on Form S-3 or other appropriate form to register the resale of the shares and any securities issued or then issuable upon stock split and other events set forth under the Registration Rights Agreement. This registration statement on Form S-3 is being filed in order to satisfy such registration requirement.

On October 2, 2018, we entered into entered into a non-exclusive license agreement with The U.S. Department of Health and Human Services, as represented by National Cancer Institute, an Institute or Center (the "IC") of the National Institutes of Health, pursuant to which the Company was granted rights to the worldwide development, manufacture and commercialization of autologous, tumor-reactive lymphocyte adoptive cell therapy products, isolated from tumor infiltrating lymphocytes as claimed in the IC licensed patent rights, for the treatment of non-small cell lung, stomach, esophagus, colorectal, and head and neck cancer(s) in humans.

On October 10, 2018, we announced that we commenced a stock repurchase program (the "2018 Share Repurchase Program") granting the Company authority to purchase up to $8.48 million in common shares through open market purchases pursuant to a plan adopted in accordance with Rule 10b5-1 and Rule 10b-18 of the Exchange Act. The program contemplated repurchases of shares of the Company's common stock in the open market in accordance with all applicable securities laws and regulations. It is contemplated that total shares to be repurchased under the 2017 and 2018 Share Repurchase Programs shall not exceed $15 million in the aggregate.

In the next 12 months, we aim to accomplish the following, though there can be no assurances that we will be able to accomplish any of these goals:

Execute the technical transfer and align the manufacturing processes with Novartis to support Novartis' development of the Kymriah® therapy in China;

File Allojoin™, Rejoin™ and KOA IND application with the CFDA's CDE and initiate clinical studies to support the BLA applications in China;

Bolster R&D resources to fortify our intellectual properties portfolio and scientific development. Continue to develop a competitive immune cell therapy pipeline for CBMG. Seek opportunities to file new patent applications in potentially the rest of the world and in China;

Leveraging our quality system and our strong scientific expertise to develop a platform as preferred parties for international pharmaceutical companies to co-develop cell therapies in China by implementing our quality strategies and leveraging the experience and expertise of our strong scientific team in the U.S. and in China;

Continue to identify and evaluate advanced technologies and seek partnerships to bolster our competitive edge in the cell therapy field in China;

Initiate an investigator sponsored phase I trial of anti-BCMA CAR-T in adults with relapsed/refractory multiple myeloma;

Implement our GE Joint Technology Laboratory's integrated and automated cell manufacturing system to enable robust, scalable and cost effective processes for the manufacturing of CAR-T and Stem Cell Therapies;

Implement the digital tracking system of our Thermo Fisher Joint Cell Therapy Technology Innovation and Application Center and develop a fully chemically-defined culture medium for improved virus production and assess Next-Generation Sequencing (NGS) technology to accelerate our research and development;

Evaluate new regenerative medicine technology platform for other indications and review recent development in the competitive landscape;

Evaluate entry into the gene therapies segment for certain rare diseases;

Evaluate our corporate development strategy on maintaining the CAR-T and regenerative medicine dual technology platform;

Advance the evaluation on feasibility and opportunities of novel Alpha Fetoprotein Specific TCR to redirect T Cells for a HCC Immunotherapy;

Develop the new cancer diagnostics and intervention business;

Reassess the return of investment to develop GVAX for cancer therapeutics in the current competitive market;

Advance our Quality Management System (QMS), Validation Master Plan VMP) and quality assurance automation;

Advance the plan to initiate an investigator sponsored trial (IIT) of neoantigen enriched TIL for solid tumor in China;

Improve liquidity and fortify our balance sheet by courting institutional investors; and

Evaluate possibility of dual listing on the Hong Kong Stock Exchange to expand investor base in Asia.

BIOPHARMACEUTICAL BUSINESS

The biopharmaceutical business was founded in 2009 by a team of seasoned Chinese-American executives, scientists and doctors. In 2010, we established a facility designed and built to China's Good Manufature Practice (GMP) standards in Wuxi, China and in 2012 we established a U.S. Food and Drug Administration (FDA) GMP standard protocol-compliant manufacturing facility in Shanghai. In October 2015, we opened a facility designed and built to GMP standards in Beijing. In November 2017, we opened our Zhangjiang facility in Shanghai, of which 40,000 square feet was designed and built to GMP standards and dedicated to advanced cell manufacturing. Our focus has been to serve the rapidly growing health care market in China by marketing and commercializing immune cell and stem cell therapeutics, related tools and products from our patent-protected homegrown and acquired cell technology, as well as by utilizing in-licensed and other acquired intellectual properties.

Our current treatment focal points are KOA and cancer and we are evaluating companion diagnostics that can benefit personalized cancer treatment.

Cancer. We are focusing our clinical efforts on CAR-T and TCR, and with the execution of the Novartis Collaboration Agreement we have prioritized our efforts on working with Novartis to bring Kymriah to patients in China as soon as practicable. In view of our collaboration with Novartis, we will no longer pursue our own ALL and DLBCL BLA submission with the National Medical Products Administration (MNPA, renamed from CFDA). On the research and development side we will endeavor to bring our CD22 HCL and CD19 CAR-T relapsing ALL, CD 20 for CD19 CAR-T Relapsing NHL, BCMA in Multiple Myeloma (MM), NKG2D in acute myeloid leukemia (AML), AFP TCR-T in Hepatocellular carcinoma (HCC) and neoantigen enriched TIL on solid tumors, respectively, in first in human trial as soon as possible. We plan to continue to leverage our quality system and our strong scientific expertise to develop a platform as preferred parties for international pharmaceutical companies to co-develop cell therapies with the Company in China by implementing our quality strategies and leveraging the experience and expertise of our strong scientific team in China and the U.S.

KOA. In 2013, we completed a Phase I/IIa clinical study, in China, for our KOA therapy named Re-Join®. The trial tested the safety and efficacy of intra-articular injections of autologous haMPCs in order to reduce inflammation and repair damaged joint cartilage. The 6-month follow-up clinical data showed Re-Join® therapy to be both safe and effective.

In Q2 of 2014, we completed patient enrollment for the Phase IIb clinical trial of Re-Join® for KOA. The multi-center study enrolled 53 patients to participate in a randomized, single blind trial. We published 48 weeks follow-up data of Phase I/IIa on December 5, 2014. The 48 week data indicated that patients have reported a decrease in pain and a significant improvement in mobility and flexibility, while the clinical data shows our Re-Join® regenerative medicine treatment to be safe. We announced the interim 24 week results for Re-Join® on March 25, 2015 and released positive Phase IIb 48 week follow-up data in January 2016, which shows the primary and secondary endpoints of Re-Join® therapy group having all improved significantly compared to their baseline, which has confirmed some of the Company’s Phase I/IIa results. Our Re-Join® human adipose-derived mesenchymal progenitor cell (haMPC) therapy for KOA is an interventional therapy using proprietary process, culture and medium.

Our process is distinguishable from sole Stromal Vascular Fraction (SVF) therapy. The immunophenotype of our haMPCs exhibited multiple biomarkers such as CD29+, CD73+, CD90+, CD49d+, HLA-I+, HLA-DR-, Actin-, CD14-, CD34-, and CD45-. In contrast, SVF is merely a heterogeneous fraction including preadipocytes, endothelial cells, smooth muscle cells, pericytes, macrophages, fibroblasts, and adipose-derived stem cells.

In January 2016, we launched the Allogeneic KOA Phase I Trial in China to evaluate the safety and efficacy of AlloJoin™, an off-the shelf allogeneic adipose derived progenitor cell (haMPC) therapy for the treatment of KOA. On

August 5, 2016 we completed patient treatment for the Allogeneic KOA Phase I trial, and on December 9, 2016 we announced interim 3-month safety data from the Allogenic KOA Phase I Trial in China. The interim analysis of the trial has preliminarily demonstrated a safety and tolerability profile of AlloJoin™ in the three doses tested, and no serious adverse events (SAE) have been observed. On March 16, 2018, we announced the positive 48-week Allojoin™ Phase I data in China, which demonstrated good safety and early efficacy for the prevention of cartilage deterioration. We plan to file anew the IND application for AlloJoin™ with NMPA in the near future.

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The unique lines of adult adipose-derived progenitor cells and the immune cell therapies enable us to create multiple cell formulations in treating specific medical conditions and diseases. The quality management systems of CBMG Shanghai were issued a Certificate of ISO-9001:2015 in 2018 and to be updated to 9001:2015 in this year. (i)The cleanrooms in our new facility are ISO 14644 certified and in compliance with China's Good Manufacture Practice (GMP) requirement (2010 edition); (ii) the equipment in the new Shanghai facility has been calibrated and qualified, and the biological safety cabinets were also qualified. The quality management systems of CBMG Wuxi were certified as meeting the requirement of ISO-9001:2015, and the facility and equipment were also qualified.

Our proprietary processes and procedures include (i) banking of allogenic cellular product and intermediate product; (ii) manufacturing procedures of GMP-grade viral vectors; (iii) manufacturing procedures of GMP-grade cellular product; (iv) analytical testing to ensure the safety, identity, purity and potency of cellular product.

Recent Developments in Cancer Cell Therapy

According to the U.S. National Cancer Institute's 2013 cancer topics research update on CAR-T-Cells, excitement is growing for immunotherapy—therapies that harness the power of a patient's immune system to combat their disease, or what some in the research community are calling the "fifth pillar" of cancer treatment.

One approach to immunotherapy involves engineering patients' own immune cells to recognize and attack their tumors. This approach is called adoptive cell transfer (ACT). ACT's building blocks are T cells, a type of immune cell collected from the patient's own blood. One of the well-established ACT approaches is CAR-T cancer therapy. After collection, the T cells are genetically engineered to produce special receptors on their surface called chimeric antigen receptors (CARs). CARs are proteins that allow the T cells to recognize a specific protein (antigen) on tumor cells. These engineered CAR-T cells are then grown until they number in the billions. The expanded population of CAR-T cells is then infused into the patient. After the infusion, if all goes as planned, the T cells multiply in the patient's body and, with guidance from their engineered receptor, recognize and kill cancer cells that harbor the antigen on their surfaces. This process builds on a similar form of ACT pioneered from NCI's Surgery Branch for patients with advanced melanoma. According to www.cancer.gov/.../research-updates/2013/CAR-T-Cells, in 2013 NCI's Pediatric Oncology Branch commented that the CAR-T cells are much more potent than anything they can achieve with other immune-based treatments being studied. Although investigators working in this field caution that there is still much to learn about CAR T-cell therapy, the early results from trials like these have generated considerable optimism.

CAR-T cell therapies, such as anti-CD19 CAR-T and anti-BCMA CAR-T, have been tested in several hematological indications on patients that are refractory/relapsing to chemotherapy, and many of them have relapsed after stem cell transplantation. All of these patients had very limited treatment option prior to CAR-T therapy. CAR-T has shown encouraging clinical efficacy in many of these patients, and some of them have durable clinical response for years. However, some adverse effects, such as cytokine release syndrome (CRS) and neurological toxicity, have been observed in patients treated with CAR-T cells. For example, in July 2016, Juno Therapeutics, Inc. reported the death of patients enrolled in the U.S. Phase II clinical trial of JCAR015 (anti-CD19 CAR-T) for the treatment of relapsed or refractory B cell acute lymphoblastic leukemia (B-ALL). The US FDA put the trial on hold and lifted the hold within a week after Juno provided satisfactory explanation and solution. Juno believes that the patient deaths were caused by the use of Fludarabine preconditioning and they will use only cyclophosphamide pre-conditioning in future enrollment.

In August 2017, the U.S. FDA approved Novartis' Kymriah (tisagenlecleucel), a CD19-targeted CAR-T therapy, for the treatment of patients up to 25 years old for relapsed or refractory (r/r) acute lymphoblastic leukemia (ALL), the most common cancer in children. Current treatments show a rate of 80% remission using intensive chemotherapy. However, there are almost no conventional treatments to help patients who have relapsed or are

refractory to traditional treatment. Kymriah has shown results of complete and long lasting remission, and was the first FDA-approved CAR-T therapy. In October 2017, the U.S. FDA approved Kite Pharmaceuticals' (Gilead) CAR-T therapy for diffuse large B-cell lymphoma (DLBCL), the most common type of NHL in adults. The initial results of axicabtagene ciloleucel (Yescarta), the prognosis of high-grade chemo refractory NHL is dismal with a medium survival time of a few weeks. Yescarta is a therapy for patients who have not responded to or who have relapsed after at least two other kinds of treatment.

In May 2018, the FDA approved Novartis' Kymriah for intravenous infusion for its second indication - the treatment of adult patients with relapsed or refractory (r/r) large B-cell lymphoma after two or more lines of systemic therapy including diffuse large B-cell lymphoma (DLBCL) not otherwise specified, high grade B-cell lymphoma and DLBCL arising from follicular lymphoma. Kymriah is now the only CAR-T cell therapy to receive FDA approval for two distinct indications in non-Hodgkin lymphoma (NHL) and B-cell ALL. On September 25, 2018, we entered into the Collaboration Agreement with Novartis to manufacture and supply Kymriah to Novartis in China.

Besides anti-CD19 CAR-Ts, anti-BCMA (b-cell maturation antigen), CAR-Ts have shown very promising clinical outcomes in treatment of multiple myeloma. For example, bb2121, a CAR-T therapy targeting BCMA, has been developed by Bluebird bio, Inc. and Celgene for previously treated patients with multiple myeloma. Based on preliminary clinical data from the ongoing phase 1 study CRB-401, bb2121 has been granted Breakthrough Therapy Designation by the U.S. FDA and PRIME eligibility by the European Medicines Agency (EMA) in November 2017.

Recent progress in Universal Chimeric Antigen Receptor (UCAR) T-cells showed benefits such as ease of use, availability and the drug pricing challenge. Currently, most therapeutic UCAR products have been developed with gene editing platforms such as CRISPR or TALEN. For example, UCART19 is an allogeneic CAR T-cell product candidate developed by Cellectis for treatment of CD19-expressing hematological malignancies. UCART19 Phase I clinical trials started in adult and pediatric patients in Europe in June 2016 and in the U.S. in 2017. The use of UCAR may has the potential to overcome the limitation of the current autologous approach by providing an allogeneic, frozen, "off-the-shelf" T cell product for cancer treatment.

While CAR-T cell therapy has been proven successful in treatment of several hematological malignancies, other cell therapy approaches, including Tumor Infiltrating Lymphocytes (TIL) and T Cell Receptor engineered T cells (TCR-Ts) are being developed to treat solid tumors. For example, Iovance Biotherapeutics is focused on the development of autologous tumor-directed TILs for treatments of patients with various solid tumor indications. Iovance is conducting four Phase 2 clinical trials to assess the efficacy and safety of autologous TIL for treatment of patients with Metastatic Melanoma, Squamous Cell Carcinoma of the Head and Neck, Non-Small Cell Lung Cancer (NSCLC) and Cervical Cancer in the US and Europe.

Adaptimmune is partnering with GlaxoSmithKline to develop TCR-T therapy targeting the NY-ESO-1 peptide, which is present across multiple cancer types. Their NY-ESO SPEAR T-cell has been used in multiple Phase 1/2 clinical trials in patients with solid tumors and haematological malignancies, including synovial sarcoma, myxoid round cell liposarcoma, multiple myeloma, melanoma, NSCLC and ovarian cancer. The initial data suggested positive clinical responses and evidence of tumor reduction in patients. NY-ESO SPEART T-cell has been granted breakthrough therapy designation by the U.S. FDA and PRIME regulatory access in Europe. Adaptimmune's other TCR-T product, AFP SPEAR T-cell targeting AFP peptide, is aimed at the treatment of patients with hepatocellular carcinoma (HCC). AFP SPEAR T-cell is in a Phase I study and enrolling HCC patients in the U.S.

In December 2017, the Chinese government issued trial guidelines concerning the development and testing of cell therapy products in China. Although these trial guidelines are not yet codified as mandatory regulation, we believe they provide a measure of clarity and a preliminary regulatory pathway for our cell therapy operations in a still uncertain regulatory environment. On April 18 and April 21, 2018, the CDE posted on its website acceptance of the IND application for CAR-T cancer therapies in treating patients with NHL and adult ALL submitted by the Company's wholly-owned subsidiaries Cellular Biomedicine Group (Shanghai) Ltd. and Shanghai Cellular Biopharmaceutical Group Ltd.

With the acceptance of Novartis' Kymriah U.S. FDA's, EU's and Canada's approval based on its proof of efficacy indications and safety data, management believes that CBMG is well positioned and poised to help Novartis in manufacturing Kymriah for patients in China.

7

Market for Stem Cell-Based Therapies

The forecast is that in the United States, shipments of treatments with stem cells or instruments which concentrate stem cell preparations for injection into painful joints will fuel an overall increase in the use of stem cell based treatments and an increase to $5.7 billion in 2020, with key growth areas being Spinal Fusion, Sports Medicine and Osteoarthritis of the joints. According to Centers for Disease Control and Prevention. Prevalence of doctor-diagnosed arthritis and arthritis-attributable activity limitation United States. 2010-2012, Osteoarthritis (OA) is a chronic disease that is characterized by degeneration of the articular cartilage, hyperosteogeny, and ultimately, joint destruction that can affect all of the joints. According to Dillon CF, Rasch EK, Gu Q et al. Prevalence of knee osteoarthritis in the United States: Arthritis Data from the Third National Health and Nutrition Examination Survey 1991-94. J Rheumatol. 2006, the incidence of OA is 50% among people over age 60 and 90% among people over age 65. KOA accounts for the majority of total OA conditions and in adults, OA is the second leading cause of work disability and the disability incidence is high (53%). The costs of OA management have grown exponentially over recent decades, accounting for up to 1% to 2.5% of the gross national product of countries with aging populations, including the U.S., Canada, the UK, France, and Australia. According to the American Academy of Orthopedic Surgeons (AAOS), the only pharmacologic therapies recommended for OA symptom management are non-steroidal anti-inflammatory drugs (NSAIDs) and tramadol (for patients with symptomatic osteoarthritis). Moreover, there is no approved disease modification therapy for OA in the world. Disease progression is a leading cause of hospitalization and ultimately requires joint replacement surgery. In 2009, the U.S. spent over $42 billion on replacement surgery for hip and knee joints alone. International regulatory guidelines on clinical investigation of medicinal products used in the treatment of OA were updated in 2015, and clinical benefits (or trial outcomes) of a disease modification therapy for KOA has been well defined and recommended. Medicinal products used in the treatment of osteoarthritis need to provide both a symptom relief effect for at least 6 months and a structure modification effect to slow cartilage degradation by at least 12 months. Symptom relief is generally measured by a composite questionnaire Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) score, and structure modification is measured by MRI, or radiographic image as accepted by international communities. The Company uses the WOMAC as primary end point to demonstrate symptom relief, and MRI to assess structure and regeneration benefits as a secondary endpoint.

According to the Foundation for the National Institutes of Health, there are 27 million Americans with Osteoarthritis (OA), and symptomatic Knee Osteoarthritis (KOA) occurs in 13% of persons aged 60 and older. The International Journal of Rheumatic Diseases, 2011 reports that approximately 57 million people in China suffer from KOA. Currently no treatment exists that can effectively preserve knee joint cartilage or slow the progression of KOA. Current common drug-based methods of management, including anti-inflammatory medications (NSAIDs), only relieve symptoms and carry the risk of side effects. Patients with KOA suffer from compromised mobility, leading to sedentary lifestyles; doubling the risk of cardiovascular diseases, diabetes, and obesity; and increasing the risk of all causes of mortality, colon cancer, high blood pressure, osteoporosis, lipid disorders, depression and anxiety. According to the Epidemiology of Rheumatic Disease (Silman AJ, Hochberg MC. Oxford Univ. Press, 1993:257), 53% of patients with KOA will eventually become disabled.

Our Strategy

In addition to the manufacturing Novartis' Kymriah for patients in China that is contemplated by the Collaboration Agreement and Manufacture and Supply Agreement with Novartis, we are also actively developing and evaluating other therapies comprised of other CAR-T, AFP TCR-T and neoantigen enriched TIL. We plan to file anew our KOA IND applications for Allojoin™ and Rejoin™ with the CFDA in the near future.

In addition to our development efforts, we also actively seek co-development opportunities with international partners. We believe that such partnership will enable us to take advantage of the technologies of our partners such as international pharmaceutical companies while leveraging our quality control and manufacturing infrastructure and

further expand our pipelines in a relatively rapid fashion.

Our goal is to develop safe and effective cellular medicine therapies for indications that represent a large unmet need in China, based on technologies developed both in-house and obtained through acquisition, licensing and collaboration arrangements with other companies. We intend to use our first-mover advantage in China, against a backdrop of enhanced regulation by the central government, to differentiate ourselves from the competition and establish a leading position in the China cell therapeutic market. We believe that few competitors in China are as well-equipped as we are in the clinical trial development, diversified international standard protocol compliant manufacturing facilities, quality assurance and control processes, regulatory compliance vigor, as well as continuous process improvement to speed up manufacturing timelines for its cell therapy clinical trials and commercial launch.

In order to expedite fulfillment of patient treatment, we have been actively developing technologies and products with a strong intellectual properties protection, including haMPC, derived from fat tissue, for the treatment of KOA and other indications. CBMG's acquisition of a 36-month exclusive option to license the patent rights owned by the Augusta University relating to an invention to identify novel alpha fetoprotein specific T-cell receptors (TCR) for a hepatocellular carcinoma (HCC) immunotherapy provides an enlarged opportunity to expand the application of CBMG's cancer therapy-enabling technologies and to initiate clinical trials with leading cancer hospitals.

Our proprietary and patent-protected production processes enable us to produce raw material, manufacture cells, and conduct cell banking and distribution. Our clinical protocols include medical assessment to qualify each patient for treatment, evaluation of each patient before and after a specific therapy, cell transplantation methodologies including dosage, frequency and the use of adjunct therapies, potential adverse effects and their proper management. Applying our proprietary intellectual property, we plan to customize specialize formulations to address complex diseases and debilitating conditions.

We operate our manufacturing facilities under the design of the standard (GMP) conditions in the ISO accredited laboratories standard. We employ institutionalized and proprietary process and quality management system to optimize reproducibility and to hone our efficiency. Our Beijing, Shanghai and Wuxi facilities are designed and built to meet international GMP standards. With our integrated Plasmid, Viral Vectors, and CAR-T cells Chemistry, Manufacturing, and Controls processes and expanding capacity, we are highly distinguishable from other companies in the cellular medicine space.

In total, our facilities have approximately 70,000 square feet of space and are expected to have a capacity to provide therapies that can treat approximately 10,000 cancer patients and 10,000 patients per year.

Most importantly, our seasoned cell therapy team members have decades of highly-relevant experience in the United States, China, and European Union. We believe that these are the primary factors that make CBMG a high quality cell products manufacturer in China.

Our Targeted Indications and Potential Therapies

The chart below illustrates CBMG's pipelines:

Immuno-oncology (I/o)

Our CAR-T platform is built on lenti-virial vector and second-generation CAR design, which is used by most of the current trials and studies. We rigorously select the patient population for each asset and indication to allow the optimal path forward for regulatory approval. We also fully integrate the state of art translational medicine effort into each clinical study to aid in dose selection, to confirm the mechanism of action and proof of concept, and to identify the optimal targeting patient population whenever appropriate. We plan to continue to grow our translational medicine team and engage key opinion leaders to meet the demand.

Solid tumors pose more challenges than hematological cancers. The patients are more heterogeneous, making it difficult to have one drug to work effectively in the majority of the patients in any cancer indication. The duration of response is most likely shorter and patients are likely to relapse even after initial positive clinical response. We will continue our effort in developing cell based therapies to target both hematological cancers and solid tumors.

Knee Osteoarthritis (KOA)

We are currently pursuing two primary therapies for the treatment of KOA: our Re-Join® therapy and our AlloJoin™ therapy.

We completed the Phase I/IIa clinical trial for the treatment of KOA. The trial tested the safety and efficacy of intra-articular injections of autologous haMPCs in order to reduce inflammation and repair damaged joint cartilage. The 6-month follow-up clinical data showed Re-Join® therapy to be both safe and effective.

In the second quarter of 2014, we completed patient enrollment for the Phase IIb clinical trial of Re-Join® for KOA. The multi-center study has enrolled 53 patients to participate in a randomized, single blind trial. We published 48 weeks follow-up data of Phase I/IIa on December 5, 2014. The 48 weeks data indicated that patients have reported a decrease in pain and a significant improvement in mobility and flexibility, while the clinical data shows our Re-Join® regenerative medicine treatment to be safe. We announced positive Phase IIb 48-week follow-up data in January 2016, with statistical significant evidence that Re-Join® enhanced cartilage regeneration, which concluded the planned phase IIb trial.

In January 2016, we launched the Allogeneic KOA Phase I Trial in China to evaluate the safety and efficacy of AlloJoin™, an off-the shelf haMPC therapy for the treatment of KOA. On August 5, 2016 we completed patient treatment for the Allogeneic KOA Phase I trial. On August 5, 2016 we completed patient treatment for the Allogenic KOA Phase I Trial, and on December 9, 2016, we announced interim 3-month safety data from the Allogenic KOA Phase I Trial in China. The interim analysis of the trial has preliminarily demonstrated a safety and tolerability profile of AlloJoin™ in the three doses tested, and no SAEs have been observed. On March 16, 2018, we announced the positive 48-week Allojoin™ Phase I data in China, which demonstrated good safety and early efficacy for the prevention of cartilage deterioration.

Osteoarthritis is a degenerative disease of the joints. KOA is one of the most common types of osteoarthritis. Pathological manifestation of osteoarthritis is primarily local inflammation caused by immune response and subsequent damage of joints. Restoration of immune response and joint tissues are the objective of therapies.

According to International Journal of Rheumatic Diseases, 2011, 53% of KOA patients will degenerate to the point of disability. Conventional treatment usually involves invasive surgery with painful recovery and physical therapy. As drug-based methods of management are ineffective, the same journal estimates that some 1.5 million patients with this disability will degenerate to the point of requiring artificial joint replacement surgery every year. However, only 40,000 patients will actually be able to undergo replacement surgery, leaving the majority of patients to suffer from a life-long disability due to lack of effective treatment.

Adult mesenchymal stem cells can currently be isolated from a variety of adult human sources, such as liver, bone marrow, and adipose (fat) tissue. We believe the advantages in using adipose tissue (as opposed to bone marrow or blood) are that it is one of the richest sources of pluripotent cells in the body, the easy and repeatable access to fat via liposuction, and the simple cell isolation procedures that can begin to take place even on-site with minor equipment needs. The procedure we are testing for autologous KOA involves extracting a very small amount of fat using a minimally invasive extraction process which takes up to 20 minutes and leaves no scarring. The haMPC cells are then processed and isolated on site, and injected intra articularly into the knee joint with ultrasound guidance. For allogeneic KOA we use donor haMPC cells.

These haMPC cells are capable of differentiating into bone, cartilage, tendon, skeletal muscle, and fat under the right conditions. As such, haMPCs are an attractive focus for medical research and clinical development. Importantly, we believe both allogeneic and autologously sourced haMPCs may be used in the treatment of disease. Numerous studies have provided preclinical data that support the safety and efficacy of allogeneic and autologously derived haMPC, offering a choice for those where factors such as donor age and health are an issue.

Additionally, certain disease treatment plans call for an initial infusion of these cells in the form of SVF, an initial form of cell isolation that can be completed and injected within ninety minutes of receiving lipoaspirate. The therapeutic potential conferred by the cocktail of ingredients present in the SVF is also evident, as it is a rich source for preadipocytes, mesenchymal stem cells, endothelial progenitor cells, T regulatory cells and anti-inflammatory macrophages.

haMPCs are currently being considered as a new and effective treatment for osteoarthritis, with a huge potential market. Osteoarthritis is one of the ten most disabling diseases in developed countries. Worldwide estimates are that 9.6% of men and 18.0% of women aged over 60 years have symptomatic osteoarthritis. It is estimated that the global OA therapeutics market was worth $4.4 billion in 2010 and is forecast to grow at a compound annual growth rate of 3.8% to reach $5.9 billion by 2018.

In order to bring haMPC-based KOA therapy to market, our market strategy is to: (a) establish regional laboratories that comply with cGMP standards in Shanghai and Beijing that meet Chinese regulatory approval; and (b) submit to

the CFDA an IND package for Allojoin™ to treat patients with donor haMPC cells, and (c) file joint applications with Class AAA hospitals to use Re-Join® to treat patients with their own haMPC cells.

Our competitors are pursuing treatments for osteoarthritis with knee cartilage implants. However, unlike their approach, our KOA therapy is not surgically invasive – it uses a small amount (30ml) of adipose tissue obtained via liposuction from the patient, which is cultured and re-injected into the patient. The injections are designed to induce the body's secretion of growth factors promoting immune response and regulation, and regrowth of cartilage. The down-regulation of the patient's immune response is aimed at reducing and controlling inflammation which is a central cause of KOA.

We believe our proprietary method, subsequent haMPC proliferation and processing know-how will enable haMPC therapy to be a low cost and relatively safe and effective treatment for KOA. Additionally, banked haMPCs can continue to be stored for additional use in the future.

AFP TCR-T

We are evaluating the efficacy and specificity of the AFP TCR to identity the most appropriate candidate for first time in human (FTIH) study. In addition, human CD8+ T cells will be redirected with the AFP TCRs and their anti-tumor activity will be evaluated by in vitro cytokine release assay and cytotoxicity assay. Concurrently, potential on/off-target toxicity including allo-reactivity will be also evaluated and the best candidate TCRs for clinical use will be further tested in humanized mouse models. We plan to exercise our exclusive right to license the technology from Augusta University if and when the FTIH proof of mechanism study shows promising clinical efficacy signal and manageable safety profile. Based on current estimates, we expect our biopharmaceutical business to generate collaboration payment and revenues through our sale of Kymriah products to Novartis and primarily through the development of therapies for the treatment of CD22 HCL and CD19 CAR-T for relapsing ALL, BCMA MM, NKG2D on AML, and KOA within the next three to four years although we cannot assure you that we will be successful at all or within the foregoing timeframe.

NKG2D CAR

Early studies on CAR-T therapy targeting NK cell signaling has shown promising clinical benefits. We are developing novel generation CARs using NKG2D extracellular fragment as antigen binding domain. These CARs can recognize targets tumor cells expressing NKG2D ligands. We plan to initiate first in human investigator initiated trial with R/R AML patients in the next couple of quarters.

TIL

CBMG plans to develop tumor infiltrating lymphocytes (TIL) based therapies in the near future. In the early stages of cancer, the immune system tries to fight cancer by mobilizing lymphocytes to attack the tumor. Lymphocytes has the capacity to recognize and attack the tumor traffic to, and infiltrate into the tumor. These cells are known as TIL. TIL based therapies have shown some encouraging promises in early development. For example, in Phase-2 clinical studies in patients with metastatic melanoma performed by Dr. Rosenberg at NCI, TIL therapy demonstrated robust efficacy in patients with metastatic melanoma with objective response rates of 56% and complete response rates of 24%. We plan to start our development with NSCLC, and eventually expand into other cancer indications.

Competition

Many companies operate in the cellular biopharmaceutical field. Currently there are several approved stem cell therapies on the market including Canada’s pediatric graft-versus-host disease and the European Commission’s approval in March 2018 for the treatment of complex perianal fistulas in adult Crohn’s disease. There are several public and private cellular biopharmaceutical focused companies outside of China with varying phases of clinical trials addressing a variety of diseases. We compete with these companies in bringing cellular therapies to the market. However, our focus is to develop a core business in the China market. This difference in focus places us in a different competitive environment from other western companies with respect to fund raising, clinical trials, collaborative partnerships, and the markets in which we compete.

The PRC central government has a focused strategy to enable China to compete effectively in certain designated areas of biotechnology and the health sciences. Because of the aging population in China, China’s Ministry of Science and Technology (MOST) has targeted stem cell development as high priority field, and development in this field has been

intense in the agencies under MOST. For example, the 973 Program has funded a number of stem cell research projects such as differentiation of human embryonic germ cells and the plasticity of adult stem cells. To the best of our knowledge, none of the companies in China are utilizing our proposed international manufacturing protocol and our unique technologies in conducting what we believe will be fully compliant CFDA-sanctioned clinical trials to commercialize cell therapies in China. Our management believes that it is difficult for most of these Chinese companies to turn their results into translational stem cell science or commercially successful therapeutic products using internationally acceptable standards.

We compete globally with respect to the discovery and development of new cell-based therapies, and we also compete within China to bring new therapies to market. In the biopharmaceutical specialty segment, namely in the areas of cell processing and manufacturing, clinical development of cellular therapies and cell collection, processing and storage, are characterized by rapidly evolving technology and intense competition. Our competitors worldwide include pharmaceutical, biopharmaceutical and biotechnology companies, as well as numerous academic and research institutions and government agencies engaged in drug discovery activities or funding, in the U.S., Europe and Asia. Many of these companies are well-established and possess technical, research and development, financial, and sales and marketing resources significantly greater than ours. In addition, many of our smaller potential competitors have formed strategic collaborations, partnerships and other types of joint ventures with larger, well established industry competitors that afford these companies potential research and development and commercialization advantages in the technology and therapeutic areas currently being pursued by us. Academic institutions, governmental agencies and other public and private research organizations are also conducting and financing research activities which may produce products directly competitive to those being commercialized by us. Moreover, many of these competitors may be able to obtain patent protection, obtain government (e.g. FDA) and other regulatory approvals and begin commercial sales of their products before us.

Our primary competitors in the field of stem cell therapy for osteoarthritis, and other indications include Cytori Therapeutics Inc., Caladrius Biosciences, Inc. and others. Among our competitors, to our knowledge, the only ones based in and operating in Greater China are Lorem Vascular, which has partnered with Cytori to commercialize Cytori Cell Therapy for the cardiovascular, renal and diabetes markets in China and Hong Kong, and OLife Bio, a Medi-Post joint venture with JingYuan Bio in Taian, Shandong Province, who planned to initiate clinical trial in China in 2016. To our knowledge, none of the aforementioned companies have made any progress or advancement in the clinical development in China.

Our primary competitors in the field of cancer immune cell therapies include pharmaceutical, biotechnology companies such as Novartis, Juno Therapeutics, Inc. (Celgene), Kite Pharma, Inc. (Gilead), CARSgen, Sorrento Therapeutics, Inc. and others. Among our competitors, the ones based in and operating in Greater China are CARsgen, Hrain Biotechnology, Nanjing Legend Biotechnology, Galaxy Biomed, Persongen and Anke Biotechnology, Shanghai Minju Biotechnology, Unicar Therapy, Immuno China Biotech, Chongqing Precision Biotech, SiDanSai Biotechnology and China Oncology Focus Limited, which has licensed Sorrento’s anti-PD-L1 monoclonal antibody for Greater China. Other western big pharma and biotech companies in the cancer immune cell therapies space have made inroads in China by partnering with local companies. For example, in April, 2016, Seattle-based Juno Therapeutics, Inc (Celgene) started a new company with WuXi AppTec in China named JW Biotechnology (Shanghai) Co., Ltd. by leveraging Juno's CAR-T and TCR technologies together with WuXi AppTec's R&D and manufacturing platform and local expertise to develop novel cell-based immunotherapies for patients with hematologic and solid organ cancers. In January 2017, Shanghai Fosun Pharmaceutical created a joint venture with Santa Monica-based Kite Pharma Inc. (Gilead) to develop, manufacture and commercialize CAR-T and TCR products in China. In late 2017 Gilead acquired Kite Pharma for $11.9 billion. On January 22, 2018 Celgene announced that it had agreed to buy Juno Therapeutics for approximately $9 billion.

The CFDA has received IND applications for CD19 chimeric antigen receptor T cells cancer therapies from many companies and have granted the initial phase of acceptance to three companies thus far.

Additionally, in the general area of cell-based therapies for knee osteoarthritis ailments, we potentially compete with a variety of companies, from big pharma to specialty medical products or biotechnology companies. Some of these, such as Abbvie, Merck KGaA, Sanofi, Teva, GlaxosmithKline, Baxter, Johnson & Johnson, Sanumed, Medtronic and Miltenyi Biotech, are well-established and have substantial technical and financial resources compared to ours. However, as cell-based products are only just emerging as viable medical therapies, many of our more direct competitors are smaller biotechnology and specialty medical products companies comprised of Vericel Corporation,

Regeneus Ltd., Advanced Cell Technology, Inc., Nuo Therapeutics, Inc., Arteriocyte Medical Systems, Inc., ISTO technologies, Inc., Ember Therapeutics, Athersys, Inc., Bioheart, Inc., Cytori Therapeutics, Inc., Harvest Technologies Corporation, Mesoblast, Pluristem, Inc., TissueGene, Inc. Medipost Co. Ltd. and others. There are also several non-cell-based, small molecule and peptide clinical trials targeting knee osteoarthritis, and several other FDA approved treatments for knee pain.

Certain CBMG competitors also work with adipose-derived stem cells. To the best of our knowledge, none of these companies are currently utilizing the same technologies as ours to treat KOA, nor to our knowledge are any of these companies conducting government-approved clinical trials in China.

Some of our targeted disease applications may compete with drugs from traditional pharmaceutical or Traditional Chinese Medicine companies. We believe that our chosen targeted disease applications are not effectively in competition with the products and therapies offered by traditional pharmaceutical or Traditional Chinese Medicine companies.

We believe we have a strategic advantage over our competitors based on our outstanding quality management system, robust and efficient manufacturing capability which we believe is possessed by few to none of our competitors in China, in an industry in which meeting exacting standards and achieving extremely high purity levels is crucial to success. In addition, in comparison to the broader range of cellar biopharmaceutical firms, we believe we have the advantages of cost and expediency, and a first mover advantage with respect to commercialization of cell therapy products and treatments in the China market.

Additional Information

Since inception and through June 30, 2018, we have recorded accumulated losses totaling approximately $129 million. Our historical operating losses have resulted principally from our research and development activities, including clinical trial activities for our product candidates and general and administrative expenses. Ultimately, if we secure additional approvals from the MOH, CFDA and other regulatory bodies throughout the world for our product candidates, our goal will be to augment our current sources of revenue and, as applicable, deferred revenue (principally licensing fees), with sales of such products or royalties from such sales, on which we may pay royalties or other fees to our licensors and/or third-party collaborators as applicable.

We have based our estimates of development costs, market size estimates, peak annual sales projections and similar matters described or incorporated by reference in this prospectus on our market research, third party reports and publicly available information which we consider reliable. However, readers are advised that the projected dates for filing and approval of our drug applications with the MOH, CFDA or other regulatory authorities, our estimates of development costs, our projected sales and similar metrics regarding our KOA and CD therapies or any other product candidates discussed elsewhere (or incorporated by reference) in this prospectus are merely estimates and subject to many factors, many of which may be beyond our control, which will likely cause us to revise such estimates. Readers are also advised that our projected sales figures do not take into account the royalties and other payments we will need to make to our licensors and strategic partners. Our estimates are based upon our management’s reasonable judgments given the information available and their previous experiences, although such estimates may not prove to be accurate.

Corporate Information

Our principal executive offices are located at 19925 Stevens Creek Blvd., Suite 100 Cupertino, CA 95014. Our telephone number is: (408) 973-7884.

The Offering	
Common stock outstanding prior to the offering	19,093,243 and 18,532,475 shares of common stock issued and outstanding as of September 30, 2018, respectively.
Common stock offered by the selling stockholder	Up to 1,458,257 shares of common stock for sale by the selling stockholder for its own account, which represent the shares issued to Novartis in connection with the Purchase Agreement.
Proceeds	We will not receive any proceeds from the sale of our common stock by the selling stockholder.
Risk Factors	The securities offered hereby involve a high degree of risk. See “Risk Factors.”
NASDAQ Global Market Symbol	CBMG

The number of shares of our common stock that will be outstanding immediately prior this offering as shown above is based on 18,532,475 shares outstanding as of September 30, 2018. The number of shares outstanding as of the date of this prospectus, as used throughout this prospectus, unless otherwise indicated, excludes the following, all as of September 30, 2018:

- 280,847 shares of our common stock issuable upon exercise of stock options outstanding under our 2011 Incentive Stock Option Plan, which had a weighted average exercise price of $6.14 per share;
- 588,750 shares of our common stock issuable upon exercise of stock options outstanding under our 2013 Stock Incentive Plan, which had a weighted average exercise price of $8.67 per share; and
- 956,092 shares of our common stock issuable upon exercise of stock options outstanding under our 2014 Stock Incentive Plan, which had a weighted average exercise price of $16.26 per share, and 863,418 shares of our common stock outstanding under our 2014 Stock Incentive Plan subject to vest before March 27, 2022.

RISK FACTORS

We have included discussions of the risks, uncertainties and assumptions under the heading “Risk Factors” included in our Annual Report on Form 10-K for the year ended December 31, 2017 and in our Quarterly Report on Form 10-Q for the period ended June 30, 2018, which risk factors are incorporated by reference into this prospectus. See “Where You Can Find More Information” for an explanation of how to get a copy of this prospectus. Additional risks related to our securities may also be described in a prospectus supplement and in any related free writing prospectus that we may authorize to be provided to you.

Investing in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should carefully consider the risk factors we describe in any prospectus supplement and in any related free writing prospectus that we may authorize to be provided to you or in any report incorporated by reference into this prospectus or such prospectus supplement, including our Annual Report on Form 10-K for the year ended December 31, 2017, or any Annual Report on Form 10-K or Quarterly Report on Form 10-Q that is incorporated by reference into this prospectus or such prospectus supplement after the date of this prospectus. Although we discuss key risks in those risk factor descriptions, additional risks not currently known to us or that we currently deem immaterial also may impair our business. Our subsequent filings with the SEC may contain amended and updated discussions of significant risks. We cannot predict future risks or estimate the extent to which they may affect our financial performance.

Please also read carefully the section above entitled “Cautionary Note Regarding Forward-Looking Statements.”

USE OF PROCEEDS

We will not receive any proceeds from the sale of shares registered hereunder by the selling stockholder.

DETERMINATION OF OFFERING PRICE

The selling stockholder will offer common stock at the prevailing market prices, fixed prices or privately negotiated price as it may determine from time to time.

The offering price of our common stock to be sold by the selling stockholder does not necessarily bear any relationship to our book value, assets, past operating results, financial condition or any other established criteria of value.

In addition, there is no assurance that our common stock will trade at market prices in excess of the offering price as prices for common stock in any public market will be determined in the marketplace and may be influenced by many factors, including the depth and liquidity.

SELLING STOCKHOLDER

The following table sets forth certain information as of September 30, 2018 regarding the selling stockholder and the shares offered by it in this prospectus. In computing the number of shares owned by a person and the percentage ownership of that person in the table below, securities that are currently convertible or exercisable into shares of our common stock that are being offered in this prospectus are deemed outstanding. Such shares, however, are not deemed outstanding for the purposes of computing the percentage ownership of any other person. Except as indicated in the footnotes to the following table, each stockholder named in the table has sole voting and investment power with respect to the shares set forth opposite the selling stockholder's name.

On September 25, 2018, the selling stockholder entered into a License and Collaboration Agreement with us together with certain of our subsidiaries and controlled entities pursuant to which we will manufacture and supply the selling stockholder the Chimeric Antigen Receptor T cell therapy Kymriah® (tisagenlecleucel) (the "Product"). We also granted the selling stockholder a world-wide license to certain of our intellectual property and technology, including intellectual property and technology related to the Product. Otherwise, the selling stockholder does not have any material relationship of any kind with us or any of our affiliates. The selling stockholder has not held a position as an officer or director of the Company, nor does the selling stockholder have any family relationships with our directors, officers or controlling shareholders with us or any of our affiliates. Furthermore, the selling stockholder is not a registered broker-dealer or an affiliate of a registered broker-dealer.

All information with respect to share ownership has been furnished by the selling stockholder. The common stock being offered is being registered to permit secondary trading of the shares and the selling stockholder may offer all or part of the common stock owned for resale from time to time.

The term "selling stockholder" also includes any transferees, pledges, donees, or other successors in interest to the selling stockholder named in the table below. To our knowledge, subject to applicable community property laws, each person named in the table has sole voting and investment power with respect to the common stock set forth opposite such person's name. We will file a supplement to this prospectus (or a post-effective amendment hereto, if necessary) to name successors to any named selling stockholder who is able to use this prospectus to resell the securities registered hereby.

Name	Total number of shares of common stock owned prior to the offering	Maximum number of shares to be offered pursuant to this prospectus	Number of shares owned after this offering	Percentage to be beneficially owned after this offering
Novartis Pharma AG	1,458,257	1,458,257	0	0

PLAN OF DISTRIBUTION

Selling Stockholder

We are registering the shares of common stock on behalf of the selling stockholder. The selling stockholder and any of its pledgees, assignees and successors-in-interest may, from time to time, on a continuous or delayed basis, sell any or all of their common stock covered hereby directly to one or more purchasers or through brokers, dealers, or underwriters who may act solely as agents at market prices prevailing at the time of sale, at prices related to the prevailing market prices, at negotiated prices, or at fixed prices, which may be changed on any stock exchange, market or trading facility on which the shares are traded or in private transactions. The sale of the selling stockholder's common stock offered by this prospectus may be effected in one or more of the following methods:

ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;

transactions involving cross or block trades;

purchases by a broker-dealer as principal and resale by the broker-dealer for its account;

exchange distributions in accordance with the rules of the applicable exchange;

privately negotiated transactions;

short sales after the registration statement of which this prospectus forms a part becomes effective;

transactions through broker-dealers that agree with the selling stockholder to sell a specified number of such shares at a stipulated price per share;

through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;

"at the market" into an existing market for the common stock;

through the writing of options on the shares;

a combination of any such methods of sale; and

any other method permitted pursuant to applicable law.

In order to comply with the securities laws of certain states, if applicable, the shares of the selling stockholder may be sold only through registered or licensed brokers or dealers. In addition, in certain states, such shares may not be sold unless they have been registered or qualified for sale in the state or an exemption from the registration or qualification requirement is available and complied with.

The selling stockholder may also sell shares of common stock under Rule 144 promulgated under the Securities Act ("Rule 144"), if available, rather than under this prospectus. In addition, the selling stockholder may transfer the shares of common stock by other means not described in this prospectus.

The selling stockholder may also sell the shares directly to market makers acting as principals and/or broker-dealers acting as agents for themselves or their customers. Such broker-dealers may receive compensation in the form of discounts, concessions or commissions from the selling stockholder and/or the purchasers of shares for whom such broker-dealers may act as agents or to whom they sell as principal or both, which compensation as to a particular broker-dealer might be in excess of customary commissions. Market makers and block purchasers purchasing the shares will do so for their own account and at their own risk. It is possible that the selling stockholder will attempt to sell shares of common stock in block transactions to market makers or other purchasers at a price per share which may be below the then market price. The selling stockholder cannot assure that all or any of the shares offered in this prospectus will be issued to, or sold by, such selling stockholder.

Brokers, dealers, underwriters, or agents participating in the distribution of the shares held by the selling stockholder as agents may receive compensation in the form of commissions, discounts, or concessions from the selling stockholder and/or purchasers of the common stock for whom the broker-dealers may act as agent. The selling stockholder may agree to indemnify any agent, dealer or broker-dealer that participates in transactions involving sales of the shares if liabilities are imposed on that person under the Securities Act.

The selling stockholder has advised us that it has not entered into any agreements, understandings or arrangements with any underwriters or broker-dealers regarding the sale of their shares of common stock, nor is there an underwriter or coordinating broker acting in connection with a proposed sale of shares of common stock by the selling stockholder. If we are notified by the selling stockholder that any material arrangement has been entered into with a broker-dealer for the sale of shares of common stock, if required, we will file a supplement to this prospectus.

In connection with the sale of the securities or interests therein, the selling stockholder may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging the positions they assume. The selling stockholder may also sell securities short and deliver these securities to close out their short positions, or loan or pledge the securities to broker-dealers that in turn may sell these securities. The selling stockholder may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

With regard only to the shares it sells for its own behalf, the selling stockholder may be deemed an “underwriter” within the meaning of the Securities Act. This offering as it relates to the selling stockholder will terminate on the date that all shares issued to and issuable to the selling stockholder that are offered by this prospectus have been sold by the selling stockholder.

We may suspend the sale of shares by the selling stockholder pursuant to this prospectus for certain periods of time for certain reasons, including if the prospectus is required to be supplemented or amended to include additional material information.

If the selling stockholder uses this prospectus for any sale of the shares of common stock, the selling stockholder will be subject to the prospectus delivery requirements of the Securities Act.

We are required to pay the expenses in connection with the registration of the shares being registered hereunder. We have agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

We agreed to keep this prospectus effective until the date that (i) the securities constitute 4.9% or less of the outstanding shares of common stock of the Company and may be resold by the selling stockholder without registration and without regard to any volume or manner-of-sale limitations by reason of Rule 144, without the requirement for the Company to be in compliance with the current public information under Rule 144 or any other rule of similar effect or (ii) all of the securities have been sold pursuant to this prospectus or Rule 144 or any other rule of similar effect.

Regulation M

The anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of our common stock and activities of the selling stockholder.

We have advised the selling stockholder that while it is engaged in a distribution of the shares included in this prospectus it is required to comply with Regulation M promulgated under the Exchange Act. With certain exceptions, Regulation M precludes the selling stockholder, any affiliated purchasers, and any broker-dealer or other person who participates in the distribution from bidding for or purchasing, or attempting to induce any person to bid for or purchase any security which is the subject of the distribution until the entire distribution is complete. Regulation M also prohibits any bids or purchases made in order to stabilize the price of a security in connection with the distribution of that security. All of the foregoing may affect the marketability of the shares offered hereby this prospectus.

DESCRIPTION OF SECURITIES TO BE REGISTERED

General

Our authorized capital stock consists of 300,000,000 shares of common stock and 50,000,000 shares of preferred stock. As of the date of this prospectus, our outstanding capital stock consists of 18,532,475 shares of common stock, $0.001 par value, and no shares of preferred stock. These figures do not include securities that may be issued: (i) pursuant to our Amended and Restated 2011 Incentive Plan; (ii) pursuant to our 2013 Stock Incentive Plan; or (iii) pursuant to our 2014 Stock Incentive Plan, as amended.

We are a Delaware corporation and our affairs are governed by our Certificate of Incorporation and By-laws. The following are summaries of material provisions of our Certificate of Incorporation and By-laws insofar as they relate to the material terms of our common shares. Complete copies of our Certificate of Incorporation and By-laws are filed as exhibits to our public filings.

Common Stock

Our common stock is listed on the Nasdaq Global Market under the symbol “CBMG.”

All outstanding shares of common stock are of the same class and have equal rights and attributes. The holders of common stock are entitled to one vote per share on all matters submitted to a vote of stockholders of the Company. All stockholders are entitled to share equally in dividends, if any, as may be declared from time to time by the Board of Directors out of funds legally available. In the event of liquidation, the holders of common stock are entitled to share ratably in all assets remaining after payment of all liabilities. The stockholders do not have cumulative or preemptive rights.
Dividend Rights

Holders of the common stock may receive dividends when, as and if declared by our Board of Directors out of the assets legally available for that purpose and subject to the preferential dividend rights of any other classes or series of stock of our Company. We have never paid, and have no plans to pay, any dividends on our shares of common stock.

Voting Rights

Holders of the common stock are entitled to one vote per share in all matters as to which holders of common stock are entitled to vote. Holders of not less than a majority of the outstanding shares of common stock entitled to vote at any meeting of stockholders constitute a quorum unless otherwise required by law.

Election of Directors

Our Board of Directors is divided into three classes, each of which will generally serve for a term of three years with only one class of directors being elected in each year. The common stock has no cumulative voting rights, including with respect to the election of directors.

Liquidation

In the event of any liquidation, dissolution or winding up of the Company, holders of the common stock have the right to receive ratably and equally all of the assets remaining after payment of liabilities and liquidation preferences of any preferred stock then outstanding.

Redemption

The common stock is not redeemable or convertible and does not have any sinking fund provisions.

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Preemptive Rights

Holders of the common stock do not have preemptive rights.

Other Rights

Our common stock is not liable to calls or to assessment or for liabilities imposed on our stockholders under state statutes.

Our board is divided into three classes, each of which will generally serve for a term of three years with only one class of directors being elected in each year. The common stock has no cumulative voting rights, including with respect to the election of directors.

INTERESTS OF NAMED EXPERTS AND COUNSEL

None.

LEGAL MATTERS

The validity of the securities offered by this prospectus, and any supplement thereto, will be passed upon for us by Ellenoff Grossman & Schole LLP, New York, NY.

EXPERTS

The financial statements for the years ended December 31, 2017, 2016 and 2015 incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2017 have been so incorporated in reliance on the report of BDO China Shu Lun Pan Certified Public Accountants LLP, an independent registered public accounting firm, given on the authority of such firm as an expert in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement with the Securities and Exchange Commission under the Securities Act with respect to the shares of our common stock offered by this prospectus. This prospectus is part of that registration statement and does not contain all the information included in the registration statement.

For further information with respect to our common stock and us, you should refer to the registration statement, its exhibits and the material incorporated by reference therein. Portions of the exhibits have been omitted as permitted by the rules and regulations of the Securities and Exchange Commission. Statements made in this prospectus as to the contents of any contract, agreement or other document referred to are not necessarily complete. In each instance, we refer you to the copy of the contracts or other documents filed as an exhibit to the registration statement, and these statements are hereby qualified in their entirety by reference to the contract or document. The registration statement may be inspected and copied at the public reference facilities maintained by the Securities and Exchange Commission at Room 1024, 100 F Street, N.E., Washington, D.C. 20549. Copies of those filings can be obtained from the Commission’s Public Reference Room, 100 F Street, N.E., Washington, D.C. 20549 at prescribed rates and may also be obtained from the web site that the Securities and Exchange Commission maintains at http://www.sec.gov. You may also call the Commission at 1-800-SEC-0330 for more information. We file annual, quarterly and current reports and other information with the Securities and Exchange Commission. You may read and copy any reports, statements or other information on file at the Commission’s public reference room in Washington, D.C. You can request copies of those documents upon payment of a duplicating fee, by writing to the Securities and Exchange Commission.

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INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

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

- our Annual Report on Form 10-K for the year ended December 31, 2017 as filed with the SEC on March 5, 2018;
- our Quarterly Reports on Form 10-Q for the quarterly period ended March 31, 2018 as filed with the SEC on May 7, 2018 and for the quarterly period ended June 30, 2018 as filed with the SEC on August 7, 2018;
- our Current Reports on Form 8-K and/or their amendments as filed with the SEC on January 31, 2018, February 7, 2018, February 12, 2018, February 15, 2018, April 19, 2018, April 23, 2018, April 30, 2018, September 27, 2018, October 9, 2018 and October 10, 2018;
- the information specifically incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2017 from our definitive proxy statement on Schedule 14A related to our 2018 annual meeting of stockholders, which was filed with the SEC on March 12, 2018;
- the description of our Common Stock contained in our Form 8-A filed with the SEC on June 13, 2014, and as it may be further amended from time to time, under the caption "Item 1. Description of Registrant's Securities to be Registered."

All reports and definitive proxy or information statements filed pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act subsequent to the filing of this Registration Statement and prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which de-registers all securities then remaining unsold shall be deemed to be incorporated by reference into this Registration Statement and to be a part hereof from the date of filing such documents, except as to specific sections of such statements as set forth therein. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained in any subsequently filed document which also is deemed to be incorporated by reference herein modifies or supersedes such statement.

You may request a copy of these filings at no cost (other than exhibits unless such exhibits are specifically incorporated by reference) by writing or telephoning us at the following address and telephone number:

Cellular Biomedicine Group, Inc.
19925 Stevens Creek Blvd., Suite 100
Cupertino, CA 95014
Telephone: (408) 973-7884
Attention: Tony Liu

DISCLOSURE OF COMMISSION POSITION ON
INDEMNIFICATION FOR SECURITIES LAW VIOLATIONS

Our directors and officers are indemnified to the fullest extent permitted under Delaware law. We may also purchase and maintain insurance which protects our officers and directors against any liabilities incurred in connection with their service in such a capacity, and such a policy may be obtained by us in the future.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers and controlling persons pursuant to the foregoing, or otherwise, we have been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by us of expenses incurred or paid by a director, officer or controlling person of ours in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, we will, unless in the opinion of our counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

You should rely only on the information contained in this document. We have not authorized anyone to provide you with information that is different. This document may only be used where it is legal to sell these securities. The information in this document may only be accurate on the date of this document.

Additional risks and uncertainties not presently known or that are currently deemed immaterial may also impair our business operations. The risks and uncertainties described in this document and other risks and uncertainties which we may face in the future will have a greater impact on those who purchase our common stock. These purchasers will purchase our common stock at the market price or at a privately negotiated price and will run the risk of losing their entire investment.

Up to 1,458,257 Shares of
Common Stock

Prospectus

, 2018

You should rely only on the information contained in this prospectus. We have not authorized anyone to provide you with information different from that contained in this prospectus or any prospectus supplement. This prospectus is not an offer of these securities in any jurisdiction where an offer and sale is not permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or any sale of our common stock.

PART II

INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth an estimate of the fees and expenses, other than the underwriting discounts and commissions, payable by the Registrant in connection with the issuance and distribution of the securities being registered. All the amounts shown are estimates, except for the SEC registration fee.

SEC Registration Fee	$3,088
Accounting Fees and Expenses	$29,073
Legal Fees and Expenses	$25,000
Total	$57,161

(1) These fees are calculated based on the securities offered and the number of issuance and accordingly cannot be estimated at this time.

Item 15. Indemnification of Directors and Officers

Our certificate of incorporation provides that all our directors, officers, employees and agents shall be entitled to be indemnified by us to the fullest extent permitted under the Delaware General Corporation Law, provided that they acted in good faith and that they reasoned their conduct or action was in, or not opposed to, the best interest of our company.

Our bylaws provide for indemnification of our officers, directors and others who become a party to an action on our behalf by us to the fullest extent not prohibited under the Delaware General Corporation Law. Further, we maintain officer and director liability insurance.

The underwriting agreement(s) that we may enter into in connection with the securities being offered under this registration statement may provide for indemnification by any underwriters used by us, our directors, our officers who sign the registration statement and our controlling persons for some liabilities, including liabilities arising under the Securities Act.

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

Item 16. Exhibits

The following exhibits are filed with this registration statement.

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

Exhibit Number	Description
2.1	Plan of reorganization and exchange agreement (1)
2.2	Agreement and Plan of Merger, dated November 13, 2012 (2)
2.3	Amendment No. 1 to Agreement and Plan of Merger, dated January 15, 2013 (3)
2.4	Amendment No. 2 to Agreement and Plan of Merger, dated January 31, 2013 (4)
2.5	Amendment No. 3 to Agreement and Plan of Merger, dated February 5, 2013 (5)
4.1	Form of lock-up agreement (1)
4.2	2011 Incentive Stock Option Plan (6)
4.3	Amended and Restated 2011 Incentive Stock Option Plan (7)
4.4	2013 Stock Incentive Plan (8)
4.5	2014 Stock Incentive Plan (9)
4.6	Amendment No. 1 to 2014 Stock Incentive Plan (10)
4.7	Registration Rights Agreement, dated January 30, 2018, by and among the Company, Wealth Map Holdings Limited, Earls Mill Limited, and Bosun S. Hau (11)
4.8	Amendment No. 1 to Registration Rights Agreement, dated February 5, 2018, by and among the Company, Wealth Map Holdings Limited, Earls Mill Limited, Bosun S. Hau and Rui Zhang (12)
4.9	Registration Rights Agreement, dated September 26, 2018, by and between the Company and Novartis Pharma AG. (13)
5.1	Opinion of Ellenoff Grossman & Schole LLP *
23.1	Consent of BDO China Shu Lun Pan Certified Public Accountants LLP *
23.2	Consent of Ellenoff Grossman & Schole LLP (Included in Exhibit 5.1)
24.1	Power of Attorney *

*Filed herewith.

1. Incorporated by reference filed with the Registration Statement on Form 10-SB filed with the Securities and Exchange Commission on October 30, 2006 (File No. 000-52282)
2. Incorporated by reference filed with the Form 8-K filed with the Securities and Exchange Commission on November 20, 2012 (File No. 000-52282)
3. Incorporated by reference filed with the Form 8-K filed with the Securities and Exchange Commission on January 22, 2013 (File No. 000-52282)
4 Incorporated by reference filed with the Form 8-K filed with the Securities and Exchange Commission on February 4, 2013 (File No. 000-52282)
5. Incorporated by reference filed with the Form 8-K filed with the Securities and Exchange Commission on February 12, 2013 (File No. 000-52282)
6. Incorporated by reference filed with the Registration Statement on Form S-8 filed with the Securities and Exchange Commission on March 7, 2012 (File No. 333-179974)
7. Incorporated by reference filed with the Form 10-K filed with the Securities and Exchange Commission on April 4, 2013 (File No. 000-52282)
8. Incorporated by reference filed with Schedule 14A filed with the Securities and Exchange Commission on November 21, 2013 (File No. 000-52282)
9. Incorporated by reference filed with Schedule 14A filed with the Securities and Exchange Commission on September 23, 2014 (File No. 001-36498)
10. Incorporated by reference filed with Schedule 14A/A filed with the Securities and Exchange Commission on March 23, 2017 (File No. 001-36498)
11.

Incorporated by reference filed with the Form 8-K filed with the Securities and Exchange Commission on January 31, 2018 (File No. 000-36498).

12. Incorporated by reference filed with the Form 8-K filed with the Securities and Exchange Commission on February 7, 2018 (File No. 000-36498).

13. Incorporated by reference filed with the Form 8-K filed with the Securities and Exchange Commission on September 27, 2018 (File No. 001-36498)

Item 17. Undertakings

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

Provided, however, that the undertakings set forth in paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) above do not apply if the registration statement is on Form S-3 or Form F-3 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act that are incorporated by reference in the registration statements or is contained in a form of prospectus filed pursuant to Rule 424(b) that is a part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(5) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(1) (i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus

that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(ii) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A (§ 230.430A of this chapter), shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, as amended, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(h) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is therefore unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933, and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cupertino, California, on October 10, 2018.

CELLULAR BIOMEDICINE
GROUP, INC.

By: /s/ Bizuo (Tony) Liu
Name: Bizuo (Tony) Liu
Title: Chief Executive Officer

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Bizuo (Tony) Liu their true and lawful attorney-in-fact, with full power of substitution and resubstitution for them and in their name, place and stead, in any and all capacities to sign any and all amendments including post-effective amendments to this registration statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the SEC, hereby ratifying and confirming all that said attorney-in-fact or their substitute, each acting alone, may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons on behalf of the Registrant in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Terry Belmont Terry Belmont	Chairman of the Board	October 10, 2018
/s/ Bizuo (Tony) Liu Bizuo (Tony) Liu	Chief Executive Officer, Chief Financial Officer, Director (Principal Executive, Financial, and Accounting Officer)	October 10, 2018
/s/ Alan Au Alan Au	Director	October 10, 2018
/s/ Hansheng Zhou Hansheng Zhou	Director	October 10, 2018
/s/ Gang Ji Gang Ji	Director	October 10, 2018
/s/Wen Tao (Steve) Liu Wen Tao (Steve) Liu	Director	October 10, 2018
/s/ Nadir Patel Nadir Patel	Director	October 10, 2018
/s/ Bosun Hau	Director	October 10, 2018

Bosun Hau

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