Cellular Biomedicine Group, Inc. Form 10-Q April 30, 2019

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

FORM 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended March 31, 2019

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission File Number 001-36498

#### CELLULAR BIOMEDICINE GROUP, INC.

(Exact name of registrant as specified in its charter)

Delaware 86-1032927

State of Incorporation IRS Employer Identification No.

1345 Avenue of Americas, 15th Floor New York, New York 10105 (Address of principal executive offices)

(347) 905 5663 (Registrant's telephone number)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period than the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definition of "accelerated filer," and "large accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

As of April 30, 2019, there were 20,284,027 and 19,228,528 shares of common stock, par value \$.001 per share, issued and outstanding, respectively.

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## PART I – FINANCIAL INFORMATION

Item 1. Condensed Consolidated Financial Statements (Unaudited)

# CELLULAR BIOMEDICINE GROUP, INC.

## CONDENSED CONSOLIDATED BALANCE SHEETS

# (UNAUDITED)

	March 31,	December 31,
	2019	2018
Assets		
Cash and cash equivalents Restricted cash Accounts receivable, less allowance for doubtful accounts of nil	\$45,037,517 17,000,000	\$52,812,880 \$-
and \$94,868 as of March 31, 2019 and December 31, 2018, respectively	_	787
Other receivables	263,158	101,909
Prepaid expenses	2,733,614	1,692,135
Total current assets	65,034,289	54,607,711
Investments	240,000	240,000
Property, plant and equipment, net	15,157,707	15,193,761
Right of use	16,017,978	15,938,203
Goodwill	7,678,789	7,678,789
Intangibles, net	8,259,257	7,970,692
Long-term prepaid expenses and other assets	8,951,077	5,952,193
Total assets (1)	\$121,339,097	\$107,581,349
Liabilities and Stockholders' Equity		
Liabilities:		
Short-term debt	\$6,131,723	<b>\$</b> -
Accounts payable	868,590	422,752
Accrued expenses	1,894,470	1,878,926
Taxes payable	28,950	28,950
Other current liabilities	5,762,778	5,710,578
Total current liabilities	14,686,511	8,041,206

Other non-current liabilities	14,141,557	14,321,751
Total liabilities (1)	28,828,068	22,362,957

Commitments and Contingencies (note 12)

## Stockholders' equity:

Preferred stock, par value \$.001, 50,000,000 shares authorized; none issued and outstanding as of March 31, 2019 and December 31, 2018, respectively

Total liabilities and stockholders' equity

Common stock, par value \$.001, 300,000,000 shares authorized; 20,182,654 and 19,120,781 issued; and 19,127,155 and 18,119,282 outstanding, as of March 31, 2019 and December 31, 2018, respectively 20,183 19,121 Treasury stock at cost; 1,055,499 and 1,001,499 shares of common stock (14,992,694)(13,953,666)as of March 31, 2019 and December 31, 2018, respectively Additional paid in capital 267,875,883 250,604,618 Accumulated deficit (149,982,489)(159,319,277)Accumulated other comprehensive loss (1,073,066)(1,469,192)Total stockholders' equity 92,511,029 85,218,392

\$121,339,097

\$107,581,349

The Company's consolidated assets as of March 31, 2019 and December 31, 2018 included \$42,824,454 and \$40,254,691, respectively, of assets of variable interest entities, or VIEs, that can only be used to settle obligations of the VIEs. Each of the following amounts represent the balances as of March 31, 2019 and December 31, 2018, respectively. These assets include cash and cash equivalents of \$698,499 and \$2,376,974; other receivables of \$111,018 and \$61,722; prepaid expenses of \$2,620,981 and \$1,497,072; property, plant and equipment, net, of \$14,371,135 and \$14,280,949; right of use of \$15,520,856 and \$15,431,554; intangibles of \$1,396,799 and \$1,412,375; and long-term prepaid expenses and other assets of \$8,105,166 and \$5,194,045. The Company's consolidated liabilities as of March 31, 2019 and December 31, 2018 included \$27,306,444 and \$20,548,793, respectively, of liabilities of the VIEs whose creditors have no recourse to the Company. These liabilities include short-term debt of \$6,131,723 and nil; accounts payable of \$835,590 and \$359,980; other payables of \$4,921,171 and \$4,937,541; payroll accrual of \$1,708,888 and \$1,367,658, which mainly includes bonus accrual of \$497,350 and \$1,358,709; deferred income of \$1,600 and \$6,280; and other non-current liabilities of \$13,707,472 and \$13,877,334. See further description in Note 3, Variable Interest Entities.

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

# CELLULAR BIOMEDICINE GROUP, INC.

# CONDENSED CONSOLIDATED STATEMENT OF OPERATIONS AND COMPREHENSIVE LOSS

(UNAUDITED)

For the Three Months Ended

March 31,

	2019	2018
Net sales and revenue	\$49,265	\$50,961
Operating expenses:		
Cost of sales	8,087	22,300
General and administrative	3,447,734	3,188,797
Selling and marketing	42,260	74,585
Research and development	5,968,096	5,273,951
Total operating expenses	9,466,177	8,559,633
Operating loss	(9,416,912)	(8,508,672)
Other income		
Interest income, net	97,034	5,449
Other income (expense), net	(14,510)	9,200
Total other income	82,524	14,649
Loss before taxes	(9,334,388)	(8,494,023)
Income taxes provision	(2,400)	(2,400)
Net loss	\$(9,336,788)	\$(8,496,423)
Other comprehensive income:		
Cumulative translation adjustment	396,126	818,361
Total other comprehensive income:	396,126	818,361
Comprehensive loss	\$(8,940,662)	\$(7,678,062)

Net loss per share:

Basic and diluted \$(0.51) \$(0.51)

Weighted average common shares outstanding:

Basic and diluted 18,152,429 16,742,591

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

# CELLULAR BIOMEDICINE GROUP, INC.

# CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

For the	Three 1	Months	Ended
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March 31,

2019 2018

## CASH FLOWS FROM OPERATING ACTIVITIES:

Net loss	\$(9,336,788)	\$(8,496,423)
Adjustments to reconcile net loss to net cash		
used in operating activities:		
Depreciation and amortization	1,329,699	1,175,488
(Gain) loss on disposal of assets	(23)	935
Stock based compensation expense	1,124,562	1,134,881
Interest expense	39,619	-
Interest from pledged bank deposits	(117,370)	-
Changes in operating assets and liabilities:		
Accounts receivable	788	81,633
Other receivables	(43,704)	(4,820)
Prepaid expenses	(1,038,324)	(112,228)
Long-term prepaid expenses and other assets	(378,024)	(436,503)
Accounts payable	426,027	26,596
Accrued expenses	12,704	731,748
Other current liabilities	146,867	276,230
Taxes payable	-	2,400
Other non-current liabilities	(71,221)	8,012
Net cash used in operating activities	(7,905,188)	(5,612,051)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Proceeds from disposal of assets	359	-
Purchases of intangibles	(619,165)	-
Purchases of property, plant and equipment	(3,545,355)	(1,082,635)
Net cash used in investing activities	(4,164,161)	(1,082,635)
The cush used in investing detrition	(1,101,101)	(1,002,000)

## CASH FLOWS FROM FINANCING ACTIVITIES:

Net proceeds from the issuance of common stock	16,038,504	30,508,670
Proceeds from exercise of stock options	109,261	769,723
Proceeds from short-term debt	6,131,723	-
Interest paid	(30,506)	-
Repurchase of treasury stock	(1,039,028)	(715,668)
Net cash provided by financing activities	21,209,954	30,562,725
EFFECT OF EXCHANGE RATE CHANGES ON CASH	84,032	119,430
INCREASE (DECREASE) IN CASH, CASH EQUIVALENTS AND RESTRICTED CASH	9,224,637	23,987,469
CASH, CASH EQUIVALENTS AND RESTRICTED CASH, BEGINNING OF PERIOD	52,812,880	21,568,422
CASH, CASH EQUIVALENTS AND RESTRICTED CASH, END OF PERIOD	\$62,037,517	\$45,555,891
SUPPLEMENTAL CASH FLOW INFORMATION		
Cash paid for income taxes	\$2,400	\$-

March 31, December 31,

2019 2018

Reconciliation of cash, cash equivalents and restricted cash in condensed consolidated statements of cash flows:

Restricted cash \$17,000,000 \$-

Cash and cash equivalents 45,037,517 52,812,880

Cash, cash equivalents and restricted cash \$62,037,517 \$52,812,880

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

# CELLULAR BIOMEDICINE GROUP, INC.

# CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN MEMBERS' EQUITY (UNAUDITED)

	Common Sto	ck	Preferr	ed Stock	Treasury Stoo	ck	Additional	Accumulated	Accumulate Other Comprehens
	Shares	Amount	Shares	Amount	Shares	Amount	Paid in Capital	Deficit	Income (Los
Balance at December 31, 2018	19,120,781	\$19,121	-	\$-	(1,001,499)	\$(13,953,666)	\$250,604,618	\$(149,982,489)	\$(1,469,192
public offering	n 1,029,412	1,029	-	-	-	-	16,037,475	-	-
Restricted stock grants Accrual of	20,053	20	-	-	-	-	341,919	-	-
stock options	-	-	-	-	-	-	782,623	-	-
Exercise of stock options	12,408	13	-	-	-	-	109,248	-	-
Treasury stock purchase	-	-	-	-	(54,000)	(1,039,028)	-	-	-
Foreign currency translation	-	-	-	-	-	-	-	-	396,126
Net loss	-	-	-	-	-	-	-	(9,336,788)	-
Balance at March 31, 2019	20,182,654	\$20,183	-	\$-	(1,055,499)	\$(14,992,694)	\$267,875,883	\$(159,319,277)	\$(1,073,066

Accumulated Other

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	Common Stock		Prefer Stock	Preferred Stock Treasury Stock		ock	Additional	Accumulated	Comprehensive
	Shares	Amount	Shares	sAmoun	tShares	Amount	Paid in Capital	Deficit	Income (Loss)
Balance at December 31, 2017	15,615,558	\$15,616	-	\$-	(426,794)	\$(3,977,929)	\$172,691,339	\$(111,036,997)	\$(389,503)
Common stock issued with PPM	1,719,324	1,719	-	-	-	-	30,506,951	-	-
Restricted stock grants	16,311	16	-	-	-	-	430,322	-	-
Accrual of stock options	- :	-	-	-	-	-	704,543	-	-
Exercise of stock options	102 430	103	-	-	-	-	769,620	-	-
Treasury stock purchase	-	-	-	-	(37,462)	(715,668)		-	-
Unrealized loss on investments, net of tax	-	-	-	-			-	-	-
Foreign currency translation	-	-	-	-	-	-	-	-	818,361
Net loss	-	-	-	-	-	-	-	(8,496,423)	-
Balance at March 31, 2018	17,453,623	\$17,454	-	\$-	(464,256)	\$(4,693,597)	\$205,102,775	\$(119,533,420)	\$428,858

Note: No dividend was declared for the three months ended March 31, 2019 and 2018.

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

CELLULAR BIOMEDICINE GROUP, INC. FOR THE THREE MONTHS ENDED MARCH 31, 2019 AND 2018 NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 1 – DESCRIPTION OF BUSINESS

As used in this quarterly report, "we", "us", "our", "CBMG", "Company" or "our company" refers to Cellular Biomedicine Group, Inc. and, unless the context otherwise requires, all of its subsidiaries and variable interest entities.

#### Overview

We are a clinical-stage biopharmaceutical company committed to using our proprietary cell-based technologies to develop immunotherapies for the treatment of cancer and stem cell therapies for the treatment of degenerative diseases. As a drug developer our focus is to bring our product to market and reduce the aggregate cost and ensure quality products of cell therapies by leveraging our innovative manufacturing and process optimization capabilities for the development of our internal proprietary cell therapy based pipeline and our ability to partner with leading cell therapy companies seeking manufacturing capabilities for global collaborative partnerships.

The manufacturing and delivery of cell therapies involve complex, integrated processes, comprised of harvesting T cells from patients, T cell isolation, activation, viral vector transduction and GMP grade purification. We use a semi-automated, fully closed system and self-made high quality viral vector for our cell therapy manufacturing, which enables us to reduce the aggregate cost of cell therapies. Additionally, this system has the ability to scale for commercial supply at an economical cost. Our technology includes two major cell platforms:

Immune cell therapy for treatment of a broad range of cancer indications using Chimeric Antigen Receptor modified T cells (CAR-T), T cells with genetic modified, tumor antigen-specific T-cell receptors (TCRs), and next generation neoantigen-reactive tumor infiltrating lymphocytes (TILs) for treatment of cancer; and

Human adipose-derived mesenchymal progenitor cells (haMPC) for treatment of joint diseases.

Our primary target market is China, where we believe that our cell-based therapies will be able to help patients with high unmet medical needs. We also plan to submit Investigational New Drug (IND) applications to the United States Food and Drug Administration (FDA) in order to conduct clinical trials in the United States using our T cell products targeting solid tumor indications. We have been approved by the National Medical Products Administration, or NMPA, in China to initiate a Phase II clinical trial of AlloJoin<sup>TM</sup>, our allogenic haMPC therapy for the treatment of knee osteoarthritis, which represents the first stem cell drug application approved by the NMPA for a Phase II clinical trial in knee osteoarthritis since the NMPA clarified its cell therapy regulations in December 2017. We also have initiated patient recruitment in China for our Phase I clinical trial of our B cell maturation antigen, or anti-BCMA, CAR-T therapy for the treatment of multiple myeloma. We continue to develop our preclinical programs and intend to initiate Phase I clinical trials in China in at least seven different programs by the fourth quarter of 2019.

In addition to our own internal pipelines, we have formed, and plan to continue to seek, partnerships with other cell therapy focused companies as it pertains to their technology and platform's access into the Chinese market. We believe that our focus on cell manufacturing process improvement, which offers the benefits of improving product quality and creates cost savings, and our established clinical network will enable us to collaborate with those firms as they enter the Chinese market. In September 2018, we established a license and collaboration agreement with Novartis to manufacture and supply their FDA-approved CAR-T cell therapy product Kymriah® in China. Pursuant to that

agreement, we also granted Novartis a worldwide license to certain of our CAR-T intellectual property for the development, manufacturing and commercialization of CAR-T products. We also have partnered with the National Cancer Institute and Augusta University, USA related to TIL and TCR.

## Corporate History

Headquartered in New York, the Company is a Delaware biopharmaceutical company focused on developing treatment for cancer and orthopedic diseases for patients in China. We also plan to develop our products targeting solid tumor indications in the United States. The Company started its regenerative medicine business in China in 2009 and expanded to CAR-T therapies in 2014.

#### NOTE 2 – BASIS OF PRESENTATION AND SIGNIFICANT ACCOUNTING POLICIES

The accompanying unaudited Condensed Consolidated Financial Statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") for interim financial information and the rules and regulations of the Securities and Exchange Commission ("SEC") for reporting on Form 10-Q. Accordingly, they do not include all the information and footnotes required by U.S. GAAP for complete financial statements herein. The unaudited Condensed Consolidated Financial Statements herein should be read in conjunction with the historical consolidated financial statements of the Company for the years ended December 31, 2018 included in our Annual Report on Form 10-K for the year ended December 31, 2018. Operating results for the three months ended March 31, 2019 are not necessarily indicative of the results that may be expected for the year ending December 31, 2019.

### Principles of Consolidation

Our unaudited condensed consolidated financial statements reflect all adjustments, which are, in the opinion of management, necessary for a fair presentation of our financial position and results of operations. Such adjustments are of a normal recurring nature, unless otherwise noted. The balance sheet as of March 31, 2019 and the results of operations for the three months ended March 31, 2019 are not necessarily indicative of the results to be expected for any future period.

Our unaudited condensed consolidated financial statements are prepared in accordance with U.S. GAAP. These accounting principles require us to make certain estimates, judgments and assumptions that affect the reported amounts if assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. We believe that the estimates, judgments and assumptions are reasonable, based on information available at the time they are made. Actual results could differ materially from those estimates.

#### Lease

We determine if an arrangement is a lease at inception. Operating leases are included in operating lease right-of-use ("ROU") assets, other current liabilities, and operating lease liabilities in our consolidated balance sheets.

ROU assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. As most of our leases do not provide an implicit rate, we use our incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. We use the implicit rate when readily determinable. The operating lease ROU asset also includes any lease payments made and excludes lease incentives. Our lease terms may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

## **Recent Accounting Pronouncements**

Accounting pronouncements adopted during the three months ended March 31, 2019

In June 2018, the Financial Accounting Standards Board ("FASB") issued ASU 2018-07, which simplifies several aspects of the accounting for nonemployee share-based payment transactions resulting from expanding the scope of Topic 718, Compensation-Stock Compensation, to include share-based payment transactions for acquiring goods and services from non-employees. Some of the areas for simplification apply only to nonpublic entities. The amendments

specify that Topic 718 applies to all share-based payment transactions in which a grantor acquires goods or services to be used or consumed in a grantor's own operations by issuing share-based payment awards. The amendments also clarify that Topic 718 does not apply to share-based payments used to effectively provide (1) financing to the issuer or (2) awards granted in conjunction with selling goods or services to customers as part of a contract accounted for under Topic 606, Revenue from Contracts with Customers. The amendments in this Update are effective for public business entities for fiscal years beginning after December 15, 2018, including interim periods within that fiscal year. Early adoption is permitted. The adoption of the ASU 2018-07 did not have a material impact on the Company's consolidated financial statements.

In February 2018, the FASB issued ASU No. 2018-02, "Income Statement—Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income" ("ASU 2018-02"), which provides financial statement preparers with an option to reclassify stranded tax effects within accumulated other comprehensive income to retained earnings in each period in which the effect of the change in the U.S. federal corporate income tax rate in the Tax Cuts and Jobs Act (or portion thereof) is recorded. The amendments in this ASU are effective for all entities for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption of ASU 2018-02 is permitted, including adoption in any interim period for the public business entities for reporting periods for which financial statements have not yet been issued. The amendments in this ASU should be applied either in the period of adoption or retrospectively to each period (or periods) in which the effect of the change in the U.S. federal corporate income tax rate in the Tax Cuts and Jobs Act is recognized. The adoption of the ASU 2018-02 did not have a material impact on the Company's consolidated financial statements.

In July 2017, the FASB issued ASU No. 2017-11, "Earnings Per Share (Topic 260); Distinguishing Liabilities from Equity (Topic 480); Derivatives and Hedging (Topic 815): (Part I) Accounting for Certain Financial Instruments with Down Round Features, (Part II) Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Non-controlling Interests with a Scope Exception" ("ASU 2017-11"), which addresses the complexity of accounting for certain financial instruments with down round features. Down round features are features of certain equity-linked instruments (or embedded features) that result in the strike price being reduced on the basis of the pricing of future equity offerings. Current accounting guidance creates cost and complexity for entities that issue financial instruments (such as warrants and convertible instruments) with down round features that require fair value measurement of the entire instrument or conversion option. The amendments in Part I of this ASU are effective for public business entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The adoption of the ASU 2018-07 did not have a material impact on the Company's consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, "Leases (Topic 842)" ("ASU 2016-02"). The amendments in this update create Topic 842, Leases, and supersede the leases requirements in Topic 840, Leases. Topic 842 specifies the accounting for leases. The objective of Topic 842 is to establish the principles that lessees and lessors shall apply to report useful information to users of financial statements about the amount, timing, and uncertainty of cash flows arising from a lease. The main difference between Topic 842 and Topic 840 is the recognition of lease assets and lease liabilities for those leases classified as operating leases under Topic 840. Topic 842 retains a distinction between finance leases and operating leases are substantially similar to the classification criteria for distinguishing between finance leases and operating leases in the previous leases guidance. The result of retaining a distinction between finance leases and operating leases is that under the lessee accounting model in Topic 842, the effect of leases in the statement of comprehensive income and the statement of cash flows is largely unchanged from previous GAAP. The amendments in ASU 2016-02 are effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years for public business entities. Early application of the amendments in ASU 2016-02 is permitted. The adoption impact of the ASU 2016-02 on the Company's consolidated financial statements is illustrated in Note 9.

## Accounting pronouncements not yet effective to adopt

In August 2018, the FASB issued Accounting Standards Update ("ASU") No. 2018-13, Fair Value Measurement (Topic 820), which eliminates, adds and modifies certain disclosure requirements for fair value measurements. The modified standard eliminates the requirement to disclose changes in unrealized gains and losses included in earnings for recurring Level 3 fair value measurements and requires changes in unrealized gains and losses be included in other comprehensive income for recurring Level 3 fair value measurements of instruments. The standard also requires the disclosure of the range and weighted average used to develop significant unobservable inputs and how weighted average is calculate for recurring and nonrecurring Level 3 fair value measurements. The amendment is effective for fiscal years beginning after December 15, 2019 and interim periods within that fiscal year with early adoption permitted. We do not expect the standard to have a material impact on our consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-04, "Intangibles—Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment" ("ASU 2017-04"), which removes Step 2 from the goodwill impairment test. An entity will apply a one-step quantitative test and record the amount of goodwill impairment as the excess of a reporting unit's carrying amount over its fair value, not to exceed the total amount of goodwill allocated to the reporting unit. The new guidance does not amend the optional qualitative assessment of goodwill impairment. Public business entity that is a U.S. Securities and Exchange Commission filer should adopt the amendments in this ASU for its annual or any interim goodwill impairment test in fiscal years beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. We are currently evaluating the impact of the adoption of ASU 2017-04 on our consolidated financial statements.

In June 2016, the FASB issued ASU No. 2016-13, "Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments" ("ASU 2016-13"). Financial Instruments—Credit Losses (Topic 326) amends guideline on reporting credit losses for assets held at amortized cost basis and available-for-sale debt securities. For assets held at amortized cost basis, Topic 326 eliminates the probable initial recognition threshold in current GAAP and, instead, requires an entity to reflect its current estimate of all expected credit losses. The allowance for credit losses is a valuation account that is deducted from the amortized cost basis of the financial assets to present the net amount expected to be collected. For available-for-sale debt securities, credit losses should be measured in a manner similar to current GAAP, however Topic 326 will require that credit losses be presented as an allowance rather than as a write-down. ASU 2016-13 affects entities holding financial assets and net investment in leases that are not accounted for at fair value through net income. The amendments affect loans, debt securities, trade receivables, net investments in leases, off balance sheet credit exposures, reinsurance receivables, and any other financial assets not excluded from the scope that have the contractual right to receive cash. The amendments in this ASU will be effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. We are currently evaluating the impact of the adoption of ASU 2016-13 on our consolidated financial statements.

#### NOTE 3 – VARIABLE INTEREST ENTITIES

VIEs are those entities in which a company, through contractual arrangements, bears the risk of, and enjoys the rewards normally associated with ownership of the entity, and therefore the Company is the primary beneficiary of the entity. Cellular Biomedicine Group Ltd (Shanghai) ("CBMG Shanghai") and all of its subsidiaries are variable interest entities (VIEs), through which the Company conducts stem cell and immune therapy research and clinical trials in China. The registered shareholders of CBMG Shanghai are Lu Junfeng and Chen Mingzhe, who together own 100% of the equity interests in CBMG Shanghai. The initial capitalization and operating expenses of CBMG Shanghai are funded by our wholly foreign-owned enterprise ("WFOE"), Cellular Biomedicine Group Ltd. (Wuxi) ("CBMG Wuxi"). The registered capital of CBMG Shanghai is ten million RMB and was incorporated on October 19, 2011. Agreen Biotech Co. Ltd. ("AG") was 100% acquired by CBMG Shanghai in September 2014. AG was incorporated on April 27, 2011 and its registered capital is five million RMB. In January 2017, CBMG Shanghai established two fully owned subsidiaries - Wuxi Cellular Biopharmaceutical Group Ltd. and Shanghai Cellular Biopharmaceutical Group Ltd, which are located in Wuxi and Shanghai respectively. For the period ended March 31, 2019 and 2018, 32% and 52% of the Company revenue is derived from VIEs respectively.

In February 2012, CBMG Wuxi provided financing to CBMG Shanghai in the amount of \$1,587,075 for working capital purposes. In conjunction with the provided financing, exclusive option agreements were executed granting CBMG Wuxi the irrevocable and exclusive right to convert the unpaid portion of the provided financing into equity interest of CBMG Shanghai at CBMG Wuxi's sole and absolute discretion. CBMG Wuxi and CBMG Shanghai additionally executed a business cooperation agreement whereby CBMG Wuxi is to provide CBMG Shanghai with technical and business support, consulting services, and other commercial services. The shareholders of CBMG Shanghai pledged their equity interest in CBMG Shanghai as collateral in the event CBMG Shanghai does not perform its obligations under the business cooperation agreement.

The Company has determined it is the primary beneficiary of CBMG Shanghai by reference to the power and benefits criterion under ASC Topic 810, Consolidation. This determination was reached after considering the financing provided by CBMG Wuxi to CBMG Shanghai is convertible into equity interest of CBMG Shanghai and the business cooperation agreement grants the Company and its officers the power to manage and make decisions that affect the operation of CBMG Shanghai.

There are substantial uncertainties regarding the interpretation, application and enforcement of PRC laws and regulations, including but not limited to the laws and regulations governing our business or the enforcement and performance of our contractual arrangements. See Risk Factors below regarding "Risks Related to Our Structure". The Company has not provided any guarantees related to VIEs and no creditors of VIEs have recourse to the general credit of the Company.

As the primary beneficiary of CBMG Shanghai and its subsidiaries, the Company consolidates in its financial statements the financial position, results of operations, and cash flows of CBMG Shanghai and its subsidiaries, and all intercompany balances and transactions between the Company and CBMG Shanghai and its subsidiaries are eliminated in the consolidated financial statements.

The Company has aggregated the financial information of CBMG Shanghai and its subsidiaries in the table below. The aggregate carrying value of assets and liabilities of CBMG Shanghai and its subsidiaries (after elimination of intercompany transactions and balances) in the Company's condensed consolidated balance sheets as of March 31, 2019 and December 31, 2018 are as follows:

2	2019	2018
Assets		
Cash	\$698,499	\$2,376,974
Other receivables	111,018	61,722
Prepaid expenses	2,620,981	1,497,072
	3,430,498	3,935,768
Property, plant and equipment, net	14,371,135	14,280,949
Right of use	15,520,856	15,431,554
Intangibles	1,396,799	1,412,375
	8,105,166	
Total assets	\$42,824,454	\$40,254,691
Liabilities		
Short-term debt	\$6,131,723	\$-
Accounts payable	835,590	359,980
Other payables	4,921,171	4,937,541
Accrued payroll *	1,708,888	1,367,658
Deferred income	1,600	6,280
Total current liabilities	\$13,598,972	\$6,671,459
Other non-current liabilities	13,707,472	13,877,334
	\$27,306,444	\$20,548,793

<sup>\*</sup> Accrued payroll mainly includes bonus accrual of \$497,350 and \$1,358,709.

#### NOTE 4 – RESTRICTED CASH AND SHORT-TERM DEBT

On January 19, 2019, Shanghai Cellular Biopharmaceutical Group Ltd., a wholly owned subsidiary of the Company ("SH SBM") entered into a credit agreement (the "Credit Agreement") with China Merchants Bank, Shanghai Branch (the "Merchants Bank"). Pursuant to the Credit Agreement, the Merchants Bank agreed to extend credit of up to RMB 100 million (approximately \$14.7 million) to SH SBM via revolving and/or one-time credit lines. The types of credit available under the Credit Agreement, include, but not limited to, working capital loans, trade financing, commercial draft acceptance, letters of guarantee and derivative transactions. The credit period under the Credit Agreement runs until December 30, 2019. As of March 31, 2019, \$6.1 million had been drawn down under the Credit Agreement.

Pursuant to the Credit Agreement, SH SBM will enter into a supplemental agreement with the Merchants Bank prior to the applicable drawdown that will set forth the terms of each borrowing thereunder (except for working capital loans), including principal, interest rate, term of loan and use of borrowing proceeds. With regard to working capital loans to be provided pursuant to the Credit Agreement, SH SBM shall submit a withdrawal application that includes the principal amount needed, purposes of the loan and a proposed quarterly interest rate and term of the loan for the Merchants Bank's review and approval. The terms approved by the bank will govern such working capital loans. The bank has the right to adjust the interest rate for working capital loans from time to time based on changes in national policy, changes in interest rate published by the People's Bank of China, credit market conditions and the bank's credit policies. Upon SH SBM's non-compliance with the agreed use of loan proceeds, the interest rate for the amount of loan proceeds improperly used will be the original rate plus 100% starting on the first day of such use. If SH SBM fails to pay a working capital loan on time, an extra 50% interest will be charged on the outstanding balances starting on the first day of such default.

Pursuant to a pledge agreement which became enforceable upon execution of the Credit Agreement, Cellular Biomedicine Group Ltd. (HK), a wholly owned subsidiary of the Company ("CBMG HK"), provided a guarantee of SH SBM's obligations under the Credit Agreement. In connection with such guarantee, CBMG HK deposited \$17,000,000 into its account at the Merchants Bank for a 12-month period starting January 7, 2019 and also granted Merchants Bank a security interest in the cash deposited.

The details of the bank borrowings as of March 31, 2019 and December 31, 2018 are as follows:

				As of March 31, 2019	As of December 31, 2018
Lender	Inception date	Maturity date	Interest rate	USD	USD
Merchants Bank	January 21, 2019 ~ February 1, 2019	January 20, 2020 ~ January 31, 2020	4.785%	3,622,383	-
Merchants Bank	February 22, 2019 ~ March 12, 2019	February 21, 2020 ~ March 11, 2020	4.35%	2,509,340	-
				6,131,723	-

## NOTE 5 – PROPERTY, PLANT AND EQUIPMENT

As of March 31, 2019 and December 31, 2018, property, plant and equipment, carried at cost, consisted of the following:

March 31, 2019 December 31, 2018

Office equipment	\$141,070	\$101,608
Manufacturing equipment	7,954,944	7,636,905
Computer equipment	439,473	426,507
Leasehold improvements	13,148,851	12,861,186
Construction work in process	1,435,745	1,030,760
	23,120,083	22,056,966
Less: accumulated depreciation	(7,962,376)	(6,863,205)
	\$15,157,707	\$15,193,761

For the three months ended March 31, 2019 and 2018, depreciation expense was \$971,856 and \$726,618, respectively.

#### **NOTE 6 – INVESTMENTS**

The Company's investments represent the investment in equity securities listed in Over-The-Counter ("OTC") markets of the United States of America:

March 31, 2019 and December 31, 2018	Cost	Gross Unrealized Gains/(losses)	Gross Unrealized Losses more than 12 months	Gross Unrealized Losses less than 12 months	Market or Fair Value
Equity position in Arem Pacific Corporation	\$480,000	\$-	\$(240,000)	\$-	\$240,000

There were no unrealized holding gains or losses for the investments that were recognized in other comprehensive income for the three months ended March 31, 2019 and 2018.

The Company tracks each investment with an unrealized loss and evaluate them on an individual basis for other-than-temporary impairments, including obtaining corroborating opinions from third party sources, performing trend analysis and reviewing management's future plans. When investments have declines determined by management to be other-than-temporary the Company recognizes write downs through earnings. There is no other-than-temporary impairment of investments for the three months ended March 31, 2019 and 2018.

## NOTE 7 - FAIR VALUE ACCOUNTING

The Company has adopted ASC Topic 820, Fair Value Measurement and Disclosure, which defines fair value, establishes a framework for measuring fair value in GAAP, and expands disclosures about fair value measurements. It does not require any new fair value measurements, but provides guidance on how to measure fair value by providing a fair value hierarchy used to classify the source of the information. It establishes a three-level valuation hierarchy of valuation techniques based on observable and unobservable inputs, which may be used to measure fair value and include the following:

Level 1 – Quoted prices in active markets for identical assets or liabilities.

Level 2 – Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

Classification within the hierarchy is determined based on the lowest level of input that is significant to the fair value measurement.

The carrying value of financial items of the Company including cash and cash equivalents, accounts receivable, other receivables, accounts payable and accrued liabilities, approximate their fair values due to their short-term nature and are classified within Level 1 of the fair value hierarchy. The Company's investments are classified within Level 2 of the fair value hierarchy because of the limited trading of the three stocks traded in OTC market.

Assets measured at fair value within Level 2 on a recurring basis as of March 31, 2019 and December 31, 2018 are summarized as follows:

	As of March 31, 2019 and December 31, 2018				
	Fair Value Measurements at Reporting Date Using:				
		Quoted Prices in	Significant Other	Significant	
		Active Markets for	Observable	Unobservable	
		Identical Assets	Inputs	Inputs	
	Total	(Level 1)	(Level 2)	(Level 3)	
Assets:					
Equity position in Arem Pacific Corporation	\$ 240,000	\$ -	\$ 240,000	\$ -	

No shares were acquired in the three months ended March 31, 2019 and 2018.

As of March 31, 2019 and December 31, 2018, the Company holds 8,000,000 shares in Arem Pacific Corporation ("ARPC"), 2,942,350 shares in Alpha Lujo, Inc. ("ALEV") and 2,057,131 shares in Wonder International Education and Investment Group Corporation ("Wonder"), respectively. Full impairment has been provided for shares of ALEV and Wonder. All available-for-sale investments held by the Company at March 31, 2019 and December 31, 2018 have been valued based on level 2 inputs due to the limited trading of these companies.

### NOTE 8 – INTANGIBLE ASSETS

Intangible assets that are subject to amortization are reviewed for potential impairment whenever events or circumstances indicate that carrying amounts may not be recoverable. Assets not subject to amortization are tested for impairment at least annually. The Company evaluates the continuing value of the intangibles at each balance sheet date and records write-downs if the continuing value has become impaired. An impairment is determined to exist if the anticipated undiscounted future cash flow attributable to the asset is less than its carrying value. The asset is then reduced to the net present value of the anticipated future cash flow.

As of March 31, 2019 and December 31, 2018, intangible assets, net consisted of the following:

### Patents & knowhow & license

	March 31, 2019	December 31, 2018
Cost basis	\$18,216,353	\$17,580,368
Less: accumulated amortization	(7,305,780)	(6,950,656)
Less: impairment	(2,884,896)	(2,884,896)
	\$8,025,677	\$7,744,816

### Software

	March 31, 2019	December 31, 2018
Cost basis Less: accumulated amortization	\$366,580 (133,000) \$233,580	\$340,918 (115,042) \$225,876

Total intangibles, net \$8,259,257 \$7,970,692

All software is provided by a third party vendor, is not internally developed, and has an estimated useful life of five years. Patents and knowhow are amortized using an estimated useful life of three to ten years. Amortization expense for the three months ended March 31, 2019 and 2018 was \$357,843 and \$448,870, respectively.

Estimated amortization expense for each of the ensuing years are as follows for the years ending March 31:

# Years ending March 31, Amount

2020	\$1,451,165
2021	1,446,498
2022	1,439,290
2023	1,429,993
2024 and thereafter	2,492,311
	\$8,259,257

### **NOTE 9 – LEASES**

Other information

The Company leases facilities and equipment under non-cancellable operating lease agreements. These facilities and equipment are located in the United States, Hong Kong and China. The Company recognizes rental expense on a straight-line basis over the life of the lease period. Aggregate rent expense under operating leases for the three months ended March 31, 2019 and 2018 was approximately \$762,690 and \$967,432, respectively.

The Company has elected to apply the short-term lease exception to all leases of one year or less. As such, the Company applied the guidance in ASC 842 to its corporate office and equipment leases and has determined that these should be classified as operating leases. Consequently, as a result of the adoption of ASC 842, the Company recognized an operating liability with a corresponding Right-Of-Use ("ROU") asset of the same amounts based on the present value of the minimum rental payments of such leases. As of December 31, 2018, the ROU asset has a balance of \$15,938,203 which is included in other non-current assets in the consolidated balance sheets and current liabilities and non-current liabilities relating to the ROU asset were \$1,874,270, and \$14,063,933, respectively which are included in accrued liabilities and other non-current liabilities in the consolidated balance sheets, respectively. The discount rate used for leases accounted under ASC 842 is the Company's estimated borrowing rate of 5%.

Quantitative information regarding the Company's leases is as follows:

	March 31, 2019	December 31, 2018		
Operating lease right-of-use assets Other current liabilities Other non-current liabilities	16,017,978 2,063,545 13,954,433	15,938,203 1,874,270 14,063,933		
			For the Th Ended	ree Months
			March 31,	
			2019	2018
Lease cost				
Operating lease cost Short-term lease cost Total lease cost			707,180 55,510 762,690	666,739 300,693 967,432

Cash paid for the amounts included in the measurement of lease liabilities for operating leases:

Operating cashflows	1,268,993	1,171,461
Weighted Average Remaining Lease Term (in years): Operating leases	7.4	7.7
Weighted Average Discount Rate: Operating leases	5%	5%

As of March 31, 2019, the Company has the following future minimum lease payments due under the foregoing lease agreements:

Years ending March 31, Amount

\$3,235,061
2,753,212
2,466,557
2,551,030
8,973,488

\$19,979,348

### NOTE 10 - RELATED PARTY TRANSACTIONS

The Company advanced petty cash to officers for business travel purpose. As of March 31, 2019 and December 31, 2018, other receivables due from officers for business travel purpose was nil.

### NOTE 11 - EQUITY

ASC Topic 505 Equity paragraph 505-50-30-6 establishes that share-based payment transactions with nonemployees shall be measured at the fair value of the consideration received or the fair value of the equity instruments issued, whichever is more reliably measurable.

On January 30, 2018 and February 5, 2018, the Company 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 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.

On September 25, 2018, the Company entered into a share purchase agreement with Novartis Pharma AG ("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, par value \$0.001 per share, at a purchase price of \$27.43 per share, for total gross proceeds of approximately \$40 million. The transaction closed on September 26, 2018.

On March 21, 2019, the Company entered into an underwriting agreement with Cantor Fitzgerald & Co. and Robert W. Baird & Co. Incorporated, as representatives of the several underwriters set forth therein (collectively, the "Underwriters"), relating to an underwritten public offering of 1,029,412 shares of the Company's common stock, par value \$0.001 per share, at an offering price to the public of \$17.00 per share. Under the terms of the Underwriting Agreement, the Company granted the Underwriters a 30-day option to purchase up to an additional 154,411 shares of Common Stock. The offering was closed on March 25, 2019 and the Company received net proceeds of approximately \$16 million.

During the three months ended March 31, 2019 and 2018, the Company expensed \$782,623 and \$704,543 associate with unvested options awards, \$341,939 and \$430,338 associated with restricted common stock, respectively.

During the three months ended March 31, 2019 and 2018, options for 12,408 and 102,430 underlying shares were exercised, 12,408 and 102,430 shares of the Company's common stock were issued accordingly.

During the three months ended March 31, 2019 and 2018, 20,053 and 16,311 shares of the Company's restricted common stock were issued to directors, employees and advisors respectively.

As previously disclosed on a Current Report on Form 8-K filed on June 1, 2017, the Company authorized a share repurchase program (the "2017 Share Repurchase Program"), pursuant to which the Company may, from time to time, purchase shares of its common stock for an aggregate purchase price not to exceed \$10 million under which approximately \$6.52 million in shares of common stock were repurchased. On October 10, 2018, the Company commenced a share repurchase program (the "2018 Share Repurchase Program"), pursuant to which the Company may, from time to time, purchase shares of its common stock for an aggregate purchase price not to exceed approximately \$8.48 million.

For the three months ended March 31, 2019 and 2018, the Company repurchased 54,000 and 37,462 shares of the Company's common stock with the total cost of \$1,039,028 and \$715,668, respectively. Details are as follows:

Total number of shares purchased Average price paid per share

Treasury stock as of December 31, 2018	1,001,499	\$13.93
Repurchased from January 1, 2019 to March 31, 2019	54,000	\$19.24
Treasury stock as of March 31, 2019	1,055,499	\$14.20

### NOTE 12 – COMMITMENTS AND CONTINGENCIES

# Capital commitments

As of March 31, 2019, the capital commitments of the Company are summarized as follows:

March 31, 2019

Contracts for acquisition of plant and equipment being or to be executed \$2,111,643

### NOTE 13 - STOCK BASED COMPENSATION

Our stock-based compensation arrangements include grants of stock options and restricted stock awards under the Stock Option Plan (the "2009 Plan", "2011 Plan", "2013 Plan" and the "2014 Plan"), and certain awards granted outside of these plans. The compensation cost that has been charged against income related to stock options for the three months ended March 31, 2019 and 2018 was \$782,623 and \$704,543, respectively. The compensation cost that has been charged against income related to restricted stock awards for the three months ended March 31, 2019 and 2018 was \$341,939 and \$430,338, respectively.

As of March 31, 2019, there was \$3,360,581 all unrecognized compensation cost related to an aggregate of 419,132 of non-vested stock option awards and \$2,926,206 related to an aggregate of 227,398 of non-vested restricted stock awards. These costs are expected to be recognized over a weighted-average period of 1.5 years for the stock options awards and 1.2 years for the restricted stock awards.

During the three months ended March 31, 2019, no option was issued under the 2011 Plan, 2013 Plan and 2014 Plan.

During the three months ended March 31, 2018, the Company issued options under the 2011 Plan, 2013 Plan and 2014 Plan of an aggregate of 30,593 shares of the Company's common stock. The grant date fair value of these options was \$420,679 using Black-Scholes option valuation models with the following assumptions: exercise price equal to the grant date stock price of \$14.5 to \$21.8, volatility 90.06% to 90.43%, expected life 6.0 years, and risk-free rate of 2.33% to 2.71%. The Company is expensing these options on a straight-line basis over the requisite service period.

The following table summarizes stock option activity as of March 31, 2019 and December 31, 2018 and for the three months ended March 31, 2019:

	Number of Options	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Outstanding at December 31, 2018 Grants Forfeitures Exercises Outstanding at March	1,828,866 - (9,745) (12,408)	\$12.41	6.5	\$11,496,058
31, 2019	1,806,713	\$12.43	6.2	\$10,873,931
Vested and exercisab at March 31, 2019	le 1,387,581	\$11.53	5.4	\$9,719,050
Exercise	Number of Options			
Price	Outstanding	Exercisable		

The aggregate intrinsic value for stock options outstanding is defined as the positive difference between the fair market value of our common stock and the exercise price of the stock options.

185,547

423,008

358,081

285,945

135,000

1,387,581

Cash received from option exercises under all share-based payment arrangements for the three months ended March 31, 2019 and 2018 was \$109,261 and \$769,723.

\$3.00 - \$4.95

\$5.00 - \$9.19

\$9.20 - \$15.00

\$20.10+

\$15.01 - \$20.00

185,547

455,104

518,290

485,272

162,500

1,806,713

### NOTE 14 – NET LOSS PER SHARE

Basic and diluted net loss per common share is computed on the basis of our weighted average number of common shares outstanding, as determined by using the calculations outlined below:

For the Three Months Ended

March 31,

2019 2018

Net loss \$(9,336,788) \$(8,496,423)

Weighted average shares of common stock 18,152,429 16,742,591

Dilutive effect of stock options - -

Restricted stock vested not issued - - - - Common stock and common stock equivalents 18,152,429 16,742,591

Net loss per basic and diluted share \$(0.51) \$(0.51)

For the three months ended March 31, 2019 and 2018, the effect of conversion and exercise of the Company's outstanding options are excluded from the calculations of dilutive net income (loss) per share as their effects would have been anti-dilutive since the Company had generated losses for the three months ended March 31, 2019 and 2018.

### NOTE 15 - INCOME TAXES

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carry-forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period during which such rates are enacted.

The Company considers all available evidence to determine whether it is more likely than not that some portion or all of the deferred tax assets will be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become realizable. Management considers the scheduled reversal of deferred tax liabilities (including the impact of available carryback and carry-forward periods), and projected taxable income in assessing the realizability of deferred tax assets. In making such judgments, significant weight is given to evidence that can be objectively verified. Based on all available evidence, in particular our three-year historical cumulative losses, recent operating losses and U.S. pre-tax loss for the three months ended March 31, 2019, we recorded a valuation allowance against our U.S. and China net deferred tax assets.

In each period since inception, the Company has recorded a valuation allowance for the full amount of net deferred tax assets, as the realization of deferred tax assets is uncertain. As a result, the Company has not recorded any federal or state income tax benefit in the consolidated statements of operations and comprehensive income (loss).

On December 22, 2017, US President signed tax reform bill (Tax Cut and Jobs Act (H.R.1)). Pursuant to this new Act, non-operating loss carry back period is eliminated and an indefinite carry forward period is permitted.

The Company's effective tax rate differs from statutory rates of 21% for U.S. federal income tax purposes, 15% ~ 25% for Chinese income tax purpose and 16.5% for Hong Kong income tax purposes due to the effects of the valuation allowance and certain permanent differences as it pertains to book-tax differences in the value of client shares received for services.

Pursuant to the Corporate Income Tax Law of the PRC, all of the Company's PRC subsidiaries are liable to PRC Corporate Income Taxes ("CIT") at a rate of 25% except for CBMG Shanghai and Shanghai SBM.

According to Guoshuihan 2009 No. 203, if an entity is certified as an "advanced and new technology enterprise", it is entitled to a preferential income tax rate of 15%. CBMG Shanghai obtained the certificate of "advanced and new technology enterprise" dated October 30, 2015 with an effective period of three years and the provision for PRC corporate income tax for CBMG Shanghai is calculated by applying the income tax rate of 15% from 2015. CBMG Shanghai re-applied and Shanghai SBM applied for the certificate of "advanced and new technology enterprise" in 2018. Both of them received approval on November 27, 2018. On August 23, 2018, State Administration of Taxation ("SAT") issued a Bulletin on Enterprise Income Tax Issues Related to the Extension of Loss Carry-forward Period for Advanced and New Technology Enterprises and Small and Medium-sized Technology Enterprises ("Bulletin 45"). According to the Bulletin 45, an enterprise that obtains the two type of qualification in 2018, is allowed to carry forward all its prior year loss incurred between 2013 and 2017 to up to ten years instead of five years. The same requirement applies to the enterprise obtaining the qualification after 2018.

As of March 31, 2019, all the deferred income tax expense is offset by changes in the valuation allowance pertaining to the Company's existing net operating loss carryforwards due to the unpredictability of future profit streams prior to the expiration of the tax losses.

### NOTE 16 - SEGMENT INFORMATION

The Company is engaged in the development of new treatments for cancerous and degenerative diseases utilizing proprietary cell-based technologies, which have been organized as one reporting segment as they have substantially similar economic characteristic since they have similar nature and economic characteristics. The Company's principle operating decision maker, the Chief Executive Officer, receives and reviews the result of the operation for all major cell platforms as a whole when making decisions about allocating resources and assessing performance of the Company. In accordance with FASB ASC 280-10, the Company is not required to report the segment information.

### NOTE 17 – SUBSEQUENT EVENTS

On March 21, 2019, the Company entered into an underwriting agreement with Cantor Fitzgerald & Co. and Robert W. Baird & Co. Incorporated, as representatives of the several underwriters, in connection with an underwritten public offering of 1,029,412 shares of the Company's common stock at an offering price to the public of \$17.00 per share. Under the terms of the underwriting agreement, the Company granted the underwriters a 30-day option to purchase up to an additional 154,411 shares of Common Stock. The offering closed on March 25, 2019 and the Company received net proceeds of approximately \$16 million. On April 2, 2019, the underwriters partially exercised their option and purchased an additional 77,549 shares of Common Stock for a net proceeds of approximately \$1.2 million.

Effective with the opening of business on April 23, 2019, the Company's common stock commenced trading on the NASDAQ Global Select Market.

# ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis summarizes the significant factors affecting our results of operations, financial condition and liquidity position for the three months ended March 31, 2019 and 2018, and should be read in conjunction with our unaudited condensed consolidated financial statements and related notes included elsewhere in this filing.

This report contains forward-looking statements. These statements relate to future events or to our future financial performance and involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

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

our anticipated cash needs and our estimates regarding our anticipated expenses, capital requirements and our needs for additional financings;

the success, cost and timing of our product development activities and clinical trials;

our ability and the potential to successfully advance our technology platform to improve the safety and effectiveness of our existing product candidates; the potential for our identified research priorities to advance our cancer and degenerative disease technologies;

our ability to obtain drug designation or breakthrough status for our product candidates and any other product candidates, or to obtain and maintain regulatory approval of our product candidates, and any related restrictions, limitations and/or warnings in the label of an approved product candidate;

the ability to generate or license additional intellectual property relating to our product candidates;

regulatory developments in China, United States and other foreign countries;

the potential of the technologies we are developing;

fluctuations in the exchange rate between the U.S. dollars and the Chinese Yuan;

the changes associated with our move to the new Zhangjiang building in Shanghai;

our plans to continue to develop our manufacturing facilities; and

the additional risks, uncertainties and other factors described under the caption "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2018

In some cases, you can identify forward-looking statements by terms such as "may", "will", "should", "could", "would", "experiments", "anticipates", "believes", "estimates", "projects", "predicts", "potential" and similar expressions. These statements refrour current views with respect to future events and are based on assumptions and are subject to risks and uncertainties. Given these uncertainties, you should not place undue reliance on these forward-looking statements. We discuss many of these risks in greater detail under the heading "Risk Factors" included in other reports we file with the Securities and Exchange Commission. Also, these forward-looking statements represent our estimates and assumptions only as of the date of the document containing the applicable statement.

Unless required by law, we undertake no obligation to update or revise any forward-looking statements to reflect new information or future events or developments. Thus, you should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements.

### **OVERVIEW**

The "Company", "CBMG", "we", "us", "our" and similar terms refer to Cellular Biomedicine Group, Inc. (a Delaware corporation) as a combined entity including each of its subsidiaries and controlled companies, unless the context otherwise requires.

### Recent Developments

On January 8, 2019, we initiated patient recruitment to support the study of B Cell Maturation Antigen (Anti-BCMA) Chimeric Antigen Receptor T-Cell (CAR-T) therapy targeting Multiple Myeloma in China.

On January 17, 2019, we were approved to conduct a Phase II clinical trial in China for its AlloJoin® Therapy for Knee Osteoarthritis (KOA).

On January 19, 2019, Shanghai Cellular Biopharmaceutical Group Ltd., a controlled entity of the Company, entered into a credit agreement with China Merchants Bank, Shanghai Branch. Pursuant to the Credit Agreement, the Merchants Bank agreed to extend credit of up to RMB 100 million (approximately \$14.7 million) to CBMG Shanghai via revolving and/or one-time credit lines. The types of credit available under the Credit Agreement, include, but not limited to, working capital loans, trade financing, commercial draft acceptance, letters of guarantee and derivative transactions. The credit period under the Credit Agreement runs until December 30, 2019.

On March 21, 2019, we entered into an underwriting agreement with Cantor Fitzgerald & Co. and Robert W. Baird & Co. Incorporated, as representatives of the several underwriters, relating to an underwritten public offering of 1,029,412 shares of the Company's common stock at an offering price to the public of \$17.00 per share. Under the terms of the underwriting agreement, the Company granted the underwriters a 30-day option to purchase up to an additional 154,411 shares of Common Stock. On April 2, 2019, the underwriters partially exercised their option and purchased an additional 77,549 shares of Common Stock for a net proceeds of approximately \$1.2 million.

On April 23, 2019, upon approval of our uplisting application by the Nasdaq Stock Market, our common stock commenced trading on the NASDAQ Global Select Market.

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

Advance Rejoin<sup>TM</sup> KOA IND applications with the NMPA's CDE and initiate clinical studies to support the BLA submission in China;

Explore and introduce gene therapy technology platform, product development and manufacturing for our current business to create synergy with our cell therapy pipelines;

Initiate investigator sponsored and/or CBMG sponsored clinical trials and obtain early preclinical or clinical proof of concept results for the following clinical assets:

Anti-BCMA CAR-T for Multiple Myeloma (MM)

Anti-CD22 CAR-T for anti-CD19 CAR-T relapsing ALL

NKG2D CAR-T for acute myeloid leukemia (AML)

Alpha Fetoprotein Specific TCR-T for HCC

anti-CD 20 CAR-T for anti-CD19 CAR-T relapsing NHL

TIL for solid tumors

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

Leverage our quality system and our strong scientific expertise in both US and China and collaborate with multinational pharmaceutical companies to co-develop cell therapy products in China;

Evaluate and implement digital data tracking and storage technology platform system for research and development, material management, GMP product production and clinical data management;

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

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

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

Evaluate the addition of gene therapy technology platform or products to our portfolio; and

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

Our operating expenses for the three months ended March 31, 2019 were in line with management's plans and expectations. We have an increase in total operating expenses of approximately \$0.9 million for three months period ended March 31, 2019, as compared to the same period ended March 31, 2018, which was primarily attributable to increased R&D expenses in 2019.

Corporate History

Please refer to Note 1 of unaudited condensed consolidated financial statements for the corporate history.

### **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 Manufacture 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.

Cancer. We are focusing our clinical development efforts on CD20-, CD22- and B-cell maturation antigen (BCMA)-specific CAR-T therapies, T cells with genetically engineered T-cell receptor (TCR-Ts) and tumor infiltrating lymphocytes (TILs) technologies. 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 NMPA. On the research and development side we will endeavor to bring our CD22 CAR-T for hairy cell leukemia (HCL) and CD19 CAR-T relapsing ALL, CD 20 CAR-T for CD19 CAR-T Relapsing NHL, BCMA CAR-T for Multiple Myeloma (MM), NKG2D CAR-T for acute myeloid leukemia (AML), AFP TCR-T for Hepatocellular carcinoma (HCC) and neoantigen reactive TIL on solid tumors, respectively, in First-in- Human trial as soon as possible. We plan to continue to leverage our manufacturing Quality Management system and our strong scientific expertise in the U.S and in China to collaborate with multinational pharmaceutical companies to co-develop cell therapies in China

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 a homogenous population expressing multiple biomarkers such as CD73+, CD90+, CD105+, HLA-DR-, 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<sup>TM</sup>, 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<sup>TM</sup> 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<sup>TM</sup> Phase I data in China, which demonstrated good safety and early efficacy for the slowing of cartilage deterioration. China has finalized its cell therapy regulatory pathway in December, 2017. Our AlloJoinTM Phase II IND application with the NMPA has been approved and we plan to implement our Phase II clinical trial soon. We plan to advance the KOA IND application for Rejoin<sup>TM</sup> with NMPA in the near future.

CBMG established adult adipose-derived progenitor cell and Immunology/Oncology cellular therapy platforms in treating specific medical conditions and diseases. The Quality Management Systems (QMS) of CBMG have been assessed and certified as meeting the requirements of ISO 9001: 2015, and a quality manual based on Good Manufacturing Practice (GMP) guidelines is being drafted. The facilities, utilities and equipment in both Zhangjiang and Wuxi Sites have been calibrated and/or qualified and in compliance with requirement of local Health Authorities. An Enterprise Quality Management System (EQMS) is installed and being qualified to facilitate the quality activities.

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

Recent Developments in Adoptive Immune Cell Therapy (ACT)

The immune system plays an essential role in cancer development and growth. In the past decade, immune checkpoint blockade has demonstrated a major breakthrough in cancer treatment and has currently been approved for the treatment of multiple tumor types. Adoptive immune cell therapy (ACT) with tumor-infiltrating lymphocytes (TIL) or gene-modified T cells expressing engineered T cell receptors (TCR) or chimeric antigen receptors (CAR) is another strategy to modify the immune system to recognize tumor cells and thus carry out an anti-tumor effector function.

The TILs consist tumor-resident T cells which are isolated and expanded ex vivo after surgical resection of the tumor. Thereafter, the TILs are further expanded in a rapid expansion protocol (REP). Before intravenous adoptive transfer into the patient, the patient is treated with a lymphodepleting conditioning regimen. TCR gene therapy and CAR gene therapy are ACT with genetically modified peripheral blood T cells. For both treatment modalities, peripheral blood T cells are isolated via leukapheresis. These T cells are then transduced by viral vectors to either express a specific TCR or CAR, respectively. These treatments have shown promising results in various tumor types.

# CAR-Ts

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 the number reaches dose level. 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 NCI (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 attributed the cause of patient deaths to the use of Fludarabine preconditioning and they switched to use only cyclophosphamide pre-conditioning in subsequent enrollment. However, the JCAR015 clinical trial was terminated in 2018 due to safety reasons.

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-T, anti-BCMA CAR-T has shown promising clinical efficacy in treatment of multiple myeloma. For example, bb2121, a CAR-T therapy targeting BCMA, has been developed by Bluebird bio, Inc. and Celgene for multiple myeloma patients who have failed standard therapy options. 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. We plan to initiate our anti-BCMA CAR-T investigator initiated trial in the near future.

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.

### **TILs**

While CAR-T cell therapy has been proven successful in treatment of several hematological malignancies, other cell therapy approaches, including TIL 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 several 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. Iovance recently reported the pharmacokinetics of lifileucel TIL in metastatic melanoma patients in AACR 2019. The excellent long-term persistence of lifileucel post-infusion in responders and the uniqueness of the clonal profiles associated with response highlight the challenge of identifying a few T cell receptors as mediators of activity and support using a polyclonal product such as the Iovance bulk TIL to treat high mutational load solid tumors.

### **TCRs**

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. Adaptimmune presented initial safety data from two patients with advanced HCC from the first dose cohort of the AFP SPEAR T-cell study AACR 2019. There was no evidence of clinically significant hepatotoxicity, off-target toxicity, or alloreactivity, and no protocol-defined dose limiting toxicities were observed. Based on these initial safety data, the Safety Review Committee (SRC) endorsed advancing to Cohort 2.

### CBMG's Adoptive Immune Cell Therapy (ACT) Programs

In December 2017, the Chinese government issued pilot guidelines concerning the development and testing of cell therapy products in China. Although these pilot 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. On September 25, 2018 we entered into a strategic licensing and collaboration agreement with Novartis to manufacture and supply Kymriah® in China. As part of the deal, Novartis took approximately a 9% equity stake in CBMG, and CBMG is discontinuing development of its own anti-CD19 CAR-T cell therapy. This collaboration with Novartis reflects our shared commitment to bringing the first marketed CAR-T cell therapy, Kymriah®, a transformative treatment option currently approved in the US, EU and Canada for two difficult-to-treat cancers, to China where the number of patients in need remains the highest in the world. Together with Novartis, we plan to bring the first CAR-T cell therapy to patients in China as soon as possible. We continue to develop CAR-T therapies other than CD 19 on our own and Novartis has the first right of negotiation on these CAR-T developments. The CBMG oncology pipeline includes CAR-T targeting CD20-, CD22- and B-cell maturation antigen (BCMA), AFP TCR-T, which could specifically eradicate AFP positive HCC tumors and TIL technologies. Our current priority is to collaborate with Novartis to bring Kymriah® to China. At the same time, we remain committed to developing our existing pipeline of immunotherapy candidates for hematologic and solid tumor cancers to help deliver potential new treatment options for patients in China. We are striving to build a competitive research and development function, a translational medicine unit, along with a well-established cellular manufacturing capability and ample capacity, to support Kymriah® in China and our development of multiple assets in multiple indications. We believe that these efforts will allow us to boost the Company's Immuno-Oncology presence. We have initiated a clinical trial to evaluate anti-BCMA CAR-T therapy in Multiple Myeloma ("MM") in Jiangsu People's Hospital and expect to initiate first in-human studies for multiple CAR-T and TCR-T programs in 2019.

### 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 a paper published by Dillon CF, Rasch EK, Gu Q et al. entitled 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. According to an article published by the Journal of the American Medical Association, approximately 505,000 hip replacements and 723,000 knee replacements were performed in the United States in 2014 and they cost more than \$20 billion. 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. According to a nationwide population-based longitudinal survey among the Chinese retired population, approximately 8.1% of participants were found to suffer from symptomatic knee OA. Currently no treatment exists that can effectively preserve knee joint cartilage or slow the progression of KOA.

According to the Alternative and Integrative Medicine, 2017, 53% of KOA patients will degenerate to the point of disability. Conventional treatment usually involves invasive surgery with painful recovery and physical therapy and replacement surgeries are typically only suggested and performed on patients in the late stage of KOA.

### Our Strategy

CBMG is a drug development company focusing on developing cell therapies first in China, and seeking opportunity globally when appropriate. Our goal is to develop safe and effective cellular therapies for indications that represent a large unmet need in China. 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 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.

The key issues with cell therapy as a modality are drug therapeutic index, institutionalized, scalable manufacturing and an affordable price for the patients. Our continuous improvement approach in our manufacturing platform is unique as we utilize a semi-automatic, fully closed system, which is expected to lead to economies of scale. Additionally, our focus on being a fully integrated, cell therapy company has enabled us to be one of only a few companies that are able to manufacture clinical grade viral vectors in China.

In China, the Good Clinical Practice ("GCP") compliant Investigator Initialized Trial ("IIT") only requires IRB approval from hospital and local approval. IITs can provide early evidences of proof of concept for novel drugs which are time and cost efficient. IITs are also good ways to identify and develop novel platforms. Currently, we have our own drug development pipeline in CAR-T, AFP TCR-T, TIL and KOA. Our R&D team continues to identify additional platform cell therapy technologies to develop internally or acquire established technologies.

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, TCR-T and TIL. We plan to advance our KOA Allojoin<sup>TM</sup> to Phase II clinical trial and IND applications for Rejoin<sup>TM</sup> with the NMPA in the near future.

In addition to our drug development efforts, we also actively seek co-development opportunities with multinational partners. Such partnership will enable us to take advantage of the technologies of our partners while leveraging our quality control and manufacturing infrastructure and further expand our pipelines in a relatively rapid fashion.

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 world-wide exclusive license to the AFP TCR-T patent rights owned by the Augusta University 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 infusion methodologies including dosage, frequency and the use of adjunct therapies, handling 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 have a total of approximately 70,000 square feet of manufacturing space in three locations, the majority of which is in the new Shanghai facility. We operate our manufacturing facilities under the design of the standard GMP conditions as well ISO standards. We employ institutionalized and proprietary process and quality management system to optimize reproducibility and to hone our efficiency. Our Shanghai and Wuxi facilities are designed and built

to meet international GMP standards. With our integrated Plasmid, Viral Vectors platforms, our T cells manufacturing capacities are highly distinguishable from other companies in the cellular therapy industry.

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

Our clinical and preclinical pipeline, including stage of clinical development in China, is set forth below:

- \*\* In December 2017, the NMPA issued trial guidelines concerning development and testing of cell therapy products in China. The NMPA has approved our Phase I IND application under the new regulation. We plan to start our Phase II clinical trial as soon as practicable.
- \* Although we completed our Phase IIb study prior to the NMPA's new cell therapy regulations, we have not yet filed a new IND under the new regulation. We plan to apply for IND under the new regulation as soon as practicable.

### 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 select the patient population for each asset and indication to allow the optimal path forward for potential regulatory approval. We 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 attempt to identify the optimal targeting patient population. We plan to continue to grow our translational medicine team and engage key opinion leaders to support our development efforts.

We have developed a serial of CAR-Ts to treat hematological malignancies including CD20, CD22, and BCMA CAR-Ts, which have been proved to be potent and effective in treating hematology tumors in early phase of clinical studies.

### CD20 CAR

CD20 is broadly overexpressed in a serial of B cell malignant tumors. In the patients relapsed after CD19 CAR-T treatment, the expression of CD20 on target tumor cells is relatively stable. It is proven to be an optimal target for treating CD19 CAR-T relapsing patients. We have developed a novel CD20 CARs clinical lead, which demonstrated strong anti-tumor activity in both in vitro assays and in vivo animal studies. We have filed patent in China and plan to initiate first in human investigator initiated trial with CD19 CAR-T relapsed NHL patients in 2019.

### CD22 CAR

CD22 is another surface maker highly expressed in B cell malignancies especially in Hairy cell leukemia. It also expresses in the patients relapsed after CD19 CAR-T treatment. We have developed a novel CD22 CARs clinical lead, which displayed effective anti-tumor activity in in vitro cytotoxicity assays. We plan to initiate investigator initiated trial with CD19 CAR-T relapsing ALL patients and Hairy cell leukemia in the first half of 2019.

### **BCMA CAR**

BCMA is a member of the TNF receptor superfamily, universally expressed in multiple myeloma (MM) cells. It is not detectable in normal tissues except plasma and mature B cells. It is proven to be an effective and safer target for treating refractory MM patients in several clinical trials. We have developed unique BCMA CARs. Our BCMA CAR clinical lead exhibits potent anti-tumor activity both in vitro and in vivo. We have filed patent for BCMA CAR in China and initiated investigator initiated trial in refractory MM patients in January, 2019.

### NKG2D CAR

Early studies on CAR-T therapy targeting NK cell signaling has shown promising clinical benefits. We are developing novel second 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 second half of 2019.

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.

#### AFP TCR

We license the technology from Augusta University. We are continuing our evaluation on the efficacy and specificity of the AFP TCRs to identity the most appropriate candidate for first time in human (FTIH) study. We plan to redirect Human T cells with the AFP TCRs and evaluate their anti-tumor activity on in vitro cytokine release and cytotoxicity assays; and potential on/off-target toxicity including allo-reactivity as well as in vivo efficacy tests in animal models.

### TIL

Augmented by the U.S. National Cancer Institute ("NCI") technology license, CBMG is developing neoantigen reactive TIL therapies to treat immunogenic cancers. In the early stages of cancer, lymphocytes infiltrate into the tumor, specifically recognizing the tumor targets and mediating anti-tumor response. These cells are known as TIL. TIL based therapies have shown encouraging clinical results 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 in 2019, and eventually expand into other cancer indications.

### Knee Osteoarthritis (KOA)

We are currently pursuing two primary therapies for the treatment of KOA: Re-Join® therapy and AlloJoin<sup>TM</sup> 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<sup>TM</sup>, 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<sup>TM</sup> in the three doses tested, and no SAEs have been observed. On March 16, 2018, we announced the positive 48-week Allojoin<sup>TM</sup> Phase I data in China, which demonstrated good safety and early efficacy for the prevention of cartilage deterioration. In January 2019, the NMPA approved the Company's Phase I AlloJoin<sup>TM</sup> IND application. We plan to initiate our Phase II AlloJoin<sup>TM</sup> clinical trial as soon as practicable.

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 multipotent 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, 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 autologous haMPCs may be used in the treatment of disease. Numerous studies have provided preclinical data that support the safety and efficacy of allogeneic and autologous haMPC, offering a choice for those where factors such as donor age and health are an issue.

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 that meet Chinese regulatory approval; and (b) submit to the NMPA an IND package for Allojoin<sup>TM</sup> 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 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.

Based on current estimates, we expect to generate collaboration payment and revenues through our sale of Kymriah® products to Novartis within the next two to three years. We plan to systematically advance our own cell therapy pipeline and timely seek BLA opportunities to commercialize our products within the next three to four years although we cannot assure you that we will be successful at all or within the foregoing timeframe.

### 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 stem 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 NMPA-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 Jing Yuan Bio in Taian, Shandong Province, who planned to initiate clinical trial in China in 2016. Presently our adipose derived progenitor cell drug (Allojoin®) for treatment of knee osteoarthritis has been approved to perform the phase II clinical trial as the first in class biologics in China NMPA, which is the first clinical trial permission for the stem cell IND in China. So far there is not the second type of cell or stem cell IND for treatment of osteoarthritis in registration in China. Our autologous adipose stem cell therapy (Rejoin®) for the treatment of KOA will be progressing for registration with the NMPA.

Our primary competitors in the field of cancer immune cell therapies include pharmaceutical, biotechnology companies such as Eureka Therapeutics, Inc., Iovance Biotherapeutics Inc., Juno Therapeutics, Inc. (BMS), 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 Cooperated with Johnson-Johnson, Galaxy Biomed, Persongen and Anke Biotechnology, Shanghai Minju Biotechnology, Unicar Therapy (Cooperated with Terumo BCT), Wuxi Biologics, Junshi Pharma, BeiGene, 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 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 March 6, 2018 Celgene completed its acquisition of Juno Therapeutics for approximately \$9 billion. On January 3, 2019, Bristol-Myers Squibb announced it will acquire Celgene in a cash and stock transaction with an equity value of approximately \$74 billion.

The NMPA 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 several 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.

### **Critical Accounting Policies**

The discussion and analysis of our financial condition and results of operations are based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. On an ongoing basis, our management evaluates the estimates, including those related to revenue recognition, accounts receivable, long-lived assets, goodwill and other intangibles, investments, stock-based compensation, and income taxes. Of the accounting estimates we routinely make relating to our critical accounting policies, those estimates made in the process of determining the valuation of accounts receivable, long-lived assets, and goodwill and other intangibles, measuring share-based compensation expense, preparing investment valuations, and establishing income tax valuation allowances and liabilities are the estimates most likely to have a material impact on our financial position and results of operations. The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances. However, because these estimates inherently involve judgments and uncertainties, there can be no assurance that actual results will not differ materially from those estimates.

In February 2016, the FASB issued ASU No. 2016-02, "Leases (Topic 842)" ("ASU 2016-02"). The amendments in this update create Topic 842, Leases, and supersede the leases requirements in Topic 840, Leases. Topic 842 specifies the accounting for leases. The objective of Topic 842 is to establish the principles that lessees and lessors shall apply to report useful information to users of financial statements about the amount, timing, and uncertainty of cash flows arising from a lease. The main difference between Topic 842 and Topic 840 is the recognition of lease assets and lease liabilities for those leases classified as operating leases under Topic 840. Topic 842 retains a distinction between finance leases and operating leases are substantially similar to the classification criteria for distinguishing between finance leases and operating leases in the previous leases guidance. The result of retaining a distinction between finance leases and operating leases is that under the lessee accounting model in Topic 842, the effect of leases in the statement of comprehensive income and the statement of cash flows is largely unchanged from previous GAAP. The amendments in ASU 2016-02 are effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years for public business entities. The adoption impact of the ASU 2016-02 is illustrated in accompanying consolidated financial statements Note 9.

Other than as discussed above, during the three months ended March 31, 2019, we believe that there have been no significant changes to the items that we disclosed as our critical accounting policies and estimates in the "Critical Accounting Policies and Estimates" section of Item 7 - Management's Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018.

# **Results of Operations**

Below is a discussion of the results of our operations for the three months ended March 31, 2019 and 2018. These results are not necessarily indicative of result that may be expected in any future period. Our prospects should be considered in light of the risks, expenses

and difficulties that we may encounter. We may not be successful in addressing these risks and difficulties.

Comparison of Three Months Ended March 31, 2019 to Three Months Ended March 31, 2018

The descriptions in the results of operations below reflect our operating results as set forth in our Condensed Consolidated Statement of Operations filed herewith.

	Three Months Ended March 31, 2019	Three Months Ended March 31, 2018	
Net sales and revenue	\$49,265	\$50,961	
Operating expenses:			
Cost of sales	8,087	22,300	
General and administrative	3,447,734	3,188,797	
Selling and marketing	42,260	74,585	
Research and development	5,968,096	5,273,951	
Total operating expenses	9,466,177	8,559,633	
Operating loss	(9,416,912)	(8,508,672)	
Other income			
Interest income, net	97,034	5,449	
Other income (expense), net	(14,510)	9,200	
Total other income	82,524	14,649	
Loss before taxes	(9,334,388)	(8,494,023)	
Income taxes provision	(2,400)	(2,400)	
Net loss	\$(9,336,788)	\$(8,496,423)	
Other comprehensive income:			
Cumulative translation adjustment	396,126	818,361	
Total other comprehensive income:	396,126	818,361	
Comprehensive loss	\$(8,940,662)	\$(7,678,062)	
Net loss per share:			
Basic and diluted	\$(0.51)	\$(0.51)	
Weighted average common shares			
outstanding: Basic and diluted	18,152,429	16,742,591	

\* These line items include the following amounts of non-cash, stock-based compensation expense for the periods indicated:

Three Months Ended March 31, 2019 Three Months Ended March 31, 2018

General and administrative	566,592	562,321
Selling and marketing	9,816	20,992
Research and development	548,154	551,568
	1,124,562	1,134,881

**Results of Operations** 

Net sales and revenue

2019 2018 Change Percent

For the three months ended March 31, \$49,265 \$50,961 \$(1,696) (3)%

We are a clinical stage company, and currently have no material revenues or other income with similar effect.

Cost of Sales

2019 2018 Change Percent

For the three months ended March 31, \$8,087 \$22,300 \$(14,213) (64)%

The gross margin change was immaterial as currently we have no material revenues.

General and Administrative Expenses

2019 2018 Change Percent

For the three months ended March 31, \$3,447,734 \$3,188,797 \$258,937 8%

No material change as compared with the period ended March 31, 2018.

Selling and Marketing Expenses

2019 2018 Change Percent

For the three months ended March 31, \$42,260 \$74,585 \$(32,325) (43)%

No material change as compared with the period ended March 31, 2018.

## Research and Development Expenses

2019 2018 Change Percent

For the three months ended March 31, \$5,968,096 \$5,273,951 \$694,145 13%

Research and development costs increased by approximately \$694,000 in the three months ended March 31, 2019 as compared to the three months ended March 31, 2018. The increase was primarily attributed to the increased spending in the growth of our pipeline in both liquid tumor and solid tumor development and expanding the U.S. R&D operations at Gaithersburg, Maryland.

### Operating Loss

2019 2018 Change Percent

For the three months ended March 31, \$(9,416,912) \$(8,508,672) \$(908,240) 11%

The increase in the operating loss for the three months ended March 31, 2019 as compared to the same period in 2018 is primarily due to changes in general and administration expenses and research and development expenses, each of which is described above.

### **Total Other Income**

2019 2018 Change Percent

For the three months ended March 31, \$82,524 \$14,649 \$67,875 463%

Other income for the three months ended March 31, 2019 was primarily net interest income of \$97,000, netting of foreign currency exchange loss of \$14,000. Other income for the three months ended March 31, 2018 was primarily interest income of \$5,000 and subsidy income of \$15,000, netting of foreign currency exchange loss of \$4,000 and equipment disposal loss of \$1,000.

### **Income Taxes Provision**

2019 2018 Change Percent

For the three months ended March 31, \$(2,400) \$(2,400) \$-

While we have optimistic plans for our business strategy, we determined that a valuation allowance was necessary given the current and expected near term losses and the uncertainty with respect to our ability to generate sufficient profits from our business model. Therefore, we established a valuation allowance for deferred tax assets other than the extent of the benefit from other comprehensive income. Income tax expense for three months ended March 31, 2019 and 2018 all represent US state tax.

Net Loss

2019 2018 Change Percent

For the three months ended March 31, \$(9,336,788) \$(8,496,423) \$(840,365) 10%

Changes in net loss are primarily attributable to changes in operations which are described above.

Comprehensive Loss

2019 2018 Change Percent

For the three months ended March 31, \$(8,940,662) \$(7,678,062) \$(1,262,600) 16%

Comprehensive loss for the three months ended March 31, 2019 and 2018 includes a currency translation net gain of approximately \$396,000 and \$818,000 combined with the changes in net loss, respectively.

### Liquidity and Capital Resources

We had working capital of \$50,347,778 as of March 31, 2019 compared to \$46,566,505 as of December 31, 2018. Our cash position increased to \$62,037,517 at March 31, 2019 compared to \$52,812,880 at December 31, 2018, primarily due to an increase in cash provided by financing activities, offset by cash used in operating and investment activities, as further described below.

Net cash provided by or used in operating, investing and financing activities from continuing operations was as follows:

Net cash used in operating activities was approximately \$7,905,000 and \$5,612,000 for the three months ended March 31, 2019 and 2018, respectively. The following table reconciles net loss to net cash used in operating activities:

For the three months ended March 31, 2019 2018 Change

Net loss	\$(9,336,788)	\$(8,496,423)	\$(840,365)
Non cash transactions	2,376,487	2,311,304	65,183
Changes in operating assets, net	(944,887)	573,068	(1,517,955)
Net cash used in operating activities	\$(7,905,188)	\$(5,612,051)	\$(2,293,137)

There is no material change in non-cash transaction in the three months ended March 31, 2019 compared with same period in 2018.

Net cash used in investing activities was approximately \$4,164,000 and \$1,083,000 in the three months ended March 31, 2019 and 2018, respectively. The increase was primarily the result of additional new equipment and facility improvement.

Cash provided by financing activities was approximately \$21,210,000 and \$30,563,000 in the three months ended March 31, 2019 and 2018, respectively. Net cash inflow in the financing activities in 2019 was mainly attributed to the proceeds of \$16 million received from the issuance of common stock and debt borrowings of \$6 million. Net cash inflow in the financing activities in 2018 was mainly attributed to the proceeds received from the issuance of common stock.

## Liquidity and Capital Requirements Outlook

We anticipate that the Company will require approximately \$48 million in cash to operate as planned in the coming 12 months. Of this amount, approximately \$35 million will be used in daily operation and approximately \$13 million will be used as capital expenditure, although we may revise these plans depending on the changing circumstances of our biopharmaceutical business.

We expect to rely on current cash balances that we hold to provide for these capital requirements. We do not intend to use, and will not rely on our holdings in securities to fund our operations. One of our stocks held, Arem Pacific Corporation, has a declared effective S-1 prospectus which relates to the resale of up to 13,694,711 shares of common stock, inclusive of the 8,000,000 shares held by the Company. However, the shares offered by this filing may only be sold by the selling stockholders at \$0.05 per share until the shares are quoted on the OTCQB® tier of OTC Markets or an exchange. Another one of our stocks held, Wonder International Education & Investment Group Corporation ("Wonder"), is no longer traded on any stock market. We do not know whether we can liquidate our 8,000,000 shares of Arem Pacific stock or the 2,057,131 shares of Wonder stock or any of our other portfolio securities, or if liquidated,

whether the realized amount will be meaningful at all. As a result, we have written down above stocks to their fair value.

On April 15, 2016, the Company completed the second and final closing of a financing transaction with Wuhan Dangdai Science & Technology Industries Group Inc., pursuant to which the Company sold to the Investor 2,006,842 shares of the Company's common stock, par value \$0.001 per share, for approximately \$38,130,000 in gross proceeds. As previously disclosed in a Current Report on Form 8-K filed on February 10, 2016, the Company conducted the initial closing of the financing on February 4, 2016. The aggregate gross proceeds from both closings in the financing totaled approximately \$43,130,000. In the aggregate, 2,270,000 shares of Common Stock were issued in the financing. On March 22, 2016, the Company filed a registration statement on Form S-3 to offer and sell from time to time, in one or more series, any of the securities of the Company, for total gross proceeds up to \$150,000,000. On June 17, 2016, the SEC declared the S-3 effective; we have yet to utilize any of the \$150,000,000 registered under the S-3. On December 26, 2017, the Company entered into a Share Purchase Agreement with two investors, pursuant to which the Company agreed to sell and the two investors agreed to purchase from the Company, an aggregate of 1,166,667 shares of the Company's common stock, par value \$0.001 per share, at \$12.00 per share, for total gross proceeds of approximately \$14,000,000. The transaction closed on December 28, 2017. Together with a private placement with three of its executive officers on December 22, 2017, the Company raised an aggregate of approximately \$14.5 million in the two private placements in December 2017. On January 30, 2018 and February 5, 2018, the Company 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 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 February 2018 Private Placement closed on February 5, 2018. On March 5, 2018, the Company filed a registration statement on Form S-3 for resale of up to 2,927,658 shares acquired on three private placement financing on December, 2017 and on February 2018. On April 9, 2018, the SEC declared the S-3 effective; and on April 11, 2018 we filed the requisite resale prospectus. On March 21, 2019, the Company entered into an underwriting agreement with the Underwriters, relating to an underwritten public offering of 1,029,412 shares of the Company's common stock, par value \$0.001 per share, at an offering price to the public of \$17.00 per share. Under the terms of the Underwriting Agreement, the Company granted the Underwriters a 30-day option to purchase up to an additional 154,411 shares of Common Stock. Till April 2, 2019, 1,106,961 shares of the Company's common stock has been issued and the Company received approximately \$17 million proceeds. As we continue to incur losses, achieving profitability is dependent upon the successful development of our cell therapy business and commercialization of our technology in research and development phase, which is a number of years in the future. Once that occurs, we will have to achieve a level of revenues adequate to support our cost structure. We may never achieve profitability, and unless and until we do, we will continue to need to raise additional capital. Management intends to fund future operations through additional private or public debt or equity offerings, and may seek additional capital through arrangements with strategic partners or from other sources.

Our medium to long term capital needs involve the further development of our biopharmaceutical business, and may include, at management's discretion, new clinical trials for other indications, strategic partnerships, joint ventures, acquisition of licensing rights from new or current partners and/or expansion of our research and development programs. Furthermore, as our therapies pass through the clinical trial process and if they gain regulatory approval, we expect to expend significant resources on sales and marketing of our future products, services and therapies.

In order to finance our medium to long-term plans, we intend to rely upon external financing. This financing may be in the form of equity and or debt, in private placements and/or public offerings, or arrangements with private lenders. Due to our short operating history and our early stage of development, particularly in our biopharmaceutical business, we may find it challenging to raise capital on terms that are acceptable to us, or at all. Furthermore, our negotiating position in the capital raising process may worsen as we consume our existing resources. Investor interest in a company such as ours is dependent on a wide array of factors, including the state of regulation of our industry in China (e.g. the policies of MOH and the NMPA), the U.S. and other countries, political headwinds affecting our industry, the investment climate for issuers involved in businesses located or conducted within China, the risks associated with our corporate structure, risks relating to our partners, licensed intellectual property, as well as the

condition of the global economy and financial markets in general. Additional equity financing may be dilutive to our stockholders; debt financing, if available, may involve significant cash payment obligations and covenants that restrict our ability to operate as a business; our stock price may not reach levels necessary to induce option or warrant exercises; and asset sales may not be possible on terms we consider acceptable. If we are unable to raise the capital necessary to meet our medium- and long-term liquidity needs, we may have to delay or discontinue certain clinical trials, the licensing, acquisition and/or development of cell therapy technologies, and/or the expansion of our biopharmaceutical business; or we may have to raise funds on terms that we consider unfavorable.

# Off Balance Sheet Transactions

CBMG does not have any off-balance sheet arrangements except the lease and capital commitment disclosed in the unaudited condensed consolidated financial statements.

# **Contractual Obligations**

We have various contractual obligations that will affect our liquidity. The following table sets forth our contractual obligations as of March 31, 2019.

# Payments due by period

Contractual Obligations	Total	Less than	2-3	4-5	More than
		1 year	years	years	5 years
Capital Commitment	\$2,111,643	\$2,111,643	\$-	\$-	\$-
Operating Lease Obligations	19,979,348	3,235,061	5,219,769	5,034,674	6,489,844
Total	\$22,090,991	\$5,346,704	\$5,219,769	\$5,034,674	\$6,489,844

## ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Exposure to credit, liquidity, interest rate and currency risks arises in the normal course of the Company's business. The Company's exposure to these risks and the financial risk management policies and practices used by the Company to manage these risks are described below.

#### Credit Risk

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. The Company's credit risk is primarily attributable to cash at bank and receivables etc. Exposure to these credit risks are monitored by management on an ongoing basis.

The Company's cash is mainly held with well-known or state owned financial institutions, such as HSBC, Bank of China, China CITIC Bank and China Merchant Bank. Management does not foresee any significant credit risks from these deposits and does not expect that these financial institutions may default and cause losses to the Company.

The maximum exposure to credit risk is represented by the carrying amount of each financial asset in the balance sheet.

## Liquidity Risk

Financial assets

Cash and cash

equivalents

Liquidity risk is the risk that an enterprise may encounter deficiency of funds in meeting obligations associated with financial liabilities. The Company and its individual subsidiaries are responsible for their own cash management, including short term investment of cash surpluses and the raising of loans to cover expected cash demands. The Company's policy is to regularly monitor its liquidity requirements and its compliance with lending covenants, to ensure that it maintains sufficient reserves of cash, readily realisable marketable investments and adequate committed lines of funding from major financial institutions to meet its liquidity requirements in the short and longer term.

The following tables show the remaining contractual maturities at the balance sheet date of the Company's financial assets and financial liabilities, which are based on contractual cash flows (including interest payments computed using contractual rates or, if floating, based on rates current at the balance sheet date) and the earliest date the Group can be required to pay:

As of March 31, 2019

Contractual undiscounted cash flow

Within 1 year on demand	More than 1 year but less than 2 years	r More than 2 yea but less than 5years	More than 5 years	Total	Carrying amount	
45,037,517	-	-	_	45,037,517	45,037,517	7

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Restricted cash Other receivables	17,000,000 263,158	-	-	-	17,000,000 263,158	17,000,000 263,158
Sub-total	62,300,675	-	-	-	62,300,675	62,300,675
Financial liabilities						
Short-term debt	6,131,723	-	-	-	6,131,723	6,131,723
Accounts payable	868,590	-	-	-	868,590	868,590
Accrued expenses Other current	1,894,470	-	-	-	1,894,470	1,894,470
liabilities excluding operating lease liabilities and deferred	3,697,633	-	-	-	3,697,633	3,697,633
Operating lease liabilities (lease terms over 12 months)	2,875,519	2,753,212	7,501,231	6,489,844	19,619,806	16,017,978
Sub-total	15,467,935	2,753,212	7,501,231	6,489,844	32,212,222	28,610,394
Net amount	46,832,740	(2,753,212)	(7,501,231)	(6,489,844)	30,088,453	33,690,281

#### **Interest Rate Risk**

Interest-bearing financial instruments at variable rates and at fixed rates expose the Company to cash flow interest rate risk and fair value interest risk, respectively. The Company's interest rate risk arises primarily from cash deposited at banks and short-term debt. The Company doesn't have any interest-bearing long-term payable/ borrowing, therefore its exposure to interest rate risk is limited.

As at March 31, 2019, the Company held the following interest-bearing financial instruments:

As of March 31, 2019

Annual interest rate USD

### Fixed rate instruments

### Financial assets

- Restricted cash 3% 17,000,000

Financial liabilities

- Short-term debt  $4.35\% \sim 4.785\%$  6,131,723

10,868,277

## Currency Risk

The Company is exposed to currency risk primarily from sales and purchases which give rise to receivables, payables that are denominated in a foreign currency (mainly RMB). The Company has adopted USD as its functional currency, thus the fluctuation of exchange rates between RMB and USD exposes the Company to currency risk.

The following table details the Company's exposure as of March 31, 2019 to currency risk arising from recognised assets or liabilities denominated in a currency other than the functional currency of the entity to which they relate. For presentation purposes, the amounts of the exposure are shown in USD translated using the spot rate as of March 31, 2019. Differences resulting from the translation of the financial statements of entities into the Company's presentation currency are excluded.

Exposure to foreign currencies (Expressed in USD)

As of March 31, 2019

RMB USD

Cash and cash equivalents

8,362 943,228

Net exposure arising from recognised assets and liabilities

8,362 943,228

The following table indicates the instantaneous change in the Company's net loss that would arise if foreign exchange rates to which the Company has significant exposure at the end of the reporting period had changed at that date, assuming all other risk variables remained constant.

As of March 31, 2019

RMB (against USD) 5% (46,743)

-5% 46,743

Results of the analysis as presented in the above table represent an aggregation of the instantaneous effects on each of the Company's subsidiaries' net loss measured in the respective functional currencies, translated into USD at the exchange rate ruling at the end of the reporting period for presentation purposes.

The sensitivity analysis assumes that the change in foreign exchange rates had been applied to re-measure those financial instruments held by the Company which expose the Company to foreign currency risk at the end of the reporting period, including inter-company payables and receivables within the Company which are denominated in a currency other than the functional currencies of the lender or the borrower. The analysis excludes differences that would result from the translation of the financial statements of subsidiaries into the Company's presentation currency.

#### ITEM 4. CONTROLS AND PROCEDURES

#### Disclosure Controls and Procedures

Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Securities Exchange Act of 1934, as amended (the "Exchange Act") is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms. It should be noted that the design of any system of controls is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions, regardless of how remote.

We carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)). Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of the end of the period covered in this report, our disclosure controls and procedures were effective to ensure that information required to be disclosed in reports filed under the Exchange Act is recorded, processed, summarized and reported within the required time periods and is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

## Changes in Internal Control over Financial Reporting

During the three months ended March 31, 2019, there was no change in our internal control over financial reporting (as such term is defined in Rule 13a-15(f) under the Exchange Act) that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

#### PART II - OTHER INFORMATION

### ITEM 1. LEGAL PROCEEDINGS

We are currently not involved in any litigation that we believe could have a materially adverse effect on our financial condition or results of operations.

### ITEM 1A. RISK FACTORS

Changes and new proposed rulemaking in China regarding foreign investment may affect our operations in China.

The PRC government has imposed regulations that limit foreign investors' equity ownership or prohibit foreign investments altogether in companies that operate in such industries. We are currently structured as a U.S. corporation (Delaware) with subsidiaries and controlled entities in China. As a result of these changes and regulations and the manner in which they may be applied or enforced, our operations in China may be limited or restricted.

China's legal framework surrounding foreign investment will enter into a new era after the new Foreign Investment Law goes into effect on 1 January 1, 2020. The Foreign Investment Law is positioned as the foundational law in the field of foreign investment and will apply uniformly across all foreign investment in China. It will replace the Law of the People's Republic of China on Wholly Foreign-Owned Enterprises, the Law of the People's Republic of China on Sino-Foreign Equity Joint Ventures, and the Law of the People's Republic of China on Sino-Foreign Cooperative Joint Ventures (the three previous foreign investment laws). It is expected that the relevant authorities will take this opportunity to systematically evaluate and revise the current foreign investment system and rules in order to form a unified legal system for foreign investment, which comprised of:

Pre-establishment national treatment and negative list system. Foreign investors and their investments will be granted treatment no less favorable than that granted to Chinese domestic investors and their investments at the entrance stage of the investment. Foreign investors may not invest in fields where a "negative list" prohibits foreign investment, unless the investor meets certain conditions stipulated in the list.

Foreign investment information reporting system. Foreign investors or foreign-invested enterprises must submit investment information to the competent department of commerce through the enterprise registration system and the enterprise credit information publicity system.

Foreign investment national security review system. This system is adopted to determine whether a foreign investment may affect national security. Subsequent legislation may clarify the scope, content, procedure, time limit and legal consequences of the review process.

The Foreign Investment Law is expected to affect foreign investors with regard to organizational structure and governance structure, transfer of monetary funds, and intellectual property protection and technology transfer. If the relevant Chinese authorities find us or any business combination to be in violation of the Foreign Investment Law and its implementation rules, our current corporate governance practices and business operations may be materially affected and our compliance costs may increase significantly.

The pharmaceutical industry in China is highly regulated, and such regulations are subject to change, which may affect approval and commercialization of our drugs.

The pharmaceutical industry in China is subject to comprehensive government regulation and supervision, encompassing the approval, registration, manufacturing, packaging, licensing and marketing of new drugs. In recent years, The NMPA and other regulatory authorities in China have implemented a series of new laws and regulations regarding the pharmaceuticals industry, including medical research and the stem cell industry, and we expect such significant changes will continue. In addition, there are uncertainties regarding the interpretation and enforcement of PRC laws, rules and regulations. For example, under the trial guidelines concerning development and testing of cell therapy products issued in December 2017, there remain uncertainties regarding the interpretation and application of PRC Laws on our clinical studies and these factors could adversely affect the timing of the clinical studies, the timing of receipt and reporting of clinical data, the timing of Company-sponsored IND filings, and our ability to conduct future planned clinical studies, and any of the above could have a material adverse effect on our business.

The NMPA's recent reform of the drug and approval system may face implementation challenges. The timing and full impact of such reforms is uncertain and could prevent us from commercializing our drug candidates in a timely manner. The Drug Administrative Law has been under proposed revision for the past few years and the timeline for its publish and promulgation has been postponed for a few times due to a variety of factors such as legislation priorities of the National People's Congress, ad hoc events in the pharmaceutical industry, and internal reforms of the Chinese government. The Drug Administrative Law is positioned as the foundational law in the field of drug regulation and may also materially impact commercialization of Kymriah® and our pipeline drugs and increase our compliance costs.

While we believe our strategies regarding pharmaceutical research, development, manufacturing and commercialization in China are aligned with the Chinese government's policies, they may in the future diverge, requiring a change in our strategies. Any such change may result in increased compliance costs on our business or cause delays in or prevent the successful research, development, manufacturing or commercialization of our drug candidates or drugs in China and reduce the current benefits we believe are available to us from developing and manufacturing drugs in China.

Certain of our clinical studies are not registered with relevant authorities.

Under the trial guidelines concerning development and testing of cell therapy products issued in December 2017, an applicant of the clinical trial of the said cell therapy products can be divided into early clinical trials and confirmatory clinical trials, instead of the application of the traditional phases I, II and III of a clinical trial. Certain of our clinical studies initiated or sponsored or being initiated or being sponsored by our PRC subsidiaries have not been duly registered or filed by our clinical trial partners with, or have been issued the approval by, the NMPA the lack or the National Health Commission of the PRC, or the NHC, in accordance with then-applicable PRC Law because of the lack of the relevant implementing regulations. All clinical studies on trials conducted in China will be required to be approved, registered or filed and conducted at hospitals accredited by the NMPA or by the NHC after the relevant implementing regulations are implemented within the allotted time and any failure of the hospitals to register or file the clinical studies with the NMPA may result in delays or interruptions to such clinical studies or trials. There remain uncertainties regarding the interpretation and application of PRC Laws on our clinical studies and these factors could adversely affect the timing of the clinical studies, the timing of receipt and reporting of clinical data, the timing of Company-sponsored IND filings, and our ability to conduct future planned clinical studies, and any of the above could have a material adverse effect on our business.

# ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

As previously disclosed on a Current Report on Form 8-K filed on June 1, 2017, the Company authorized a share repurchase program (the "2017 Share Repurchase Program"), pursuant to which the Company may, from time to time, purchase shares of its common stock for an aggregate purchase price not to exceed \$10 million under which approximately \$6.52 million in shares of common stock were repurchased. On October 10, 2018, the Company commenced a share repurchase program (the "2018 Share Repurchase Program"), pursuant to which the Company may, from time to time, purchase shares of its common stock for an aggregate purchase price not to exceed approximately \$8.48 million. 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. The table below summarizes purchases made by or on behalf of the Company or affiliated purchasers as defined in Regulation S-K under the 2017 and 2018 Share Purchase Program during the three months ended March 31, 2019. We terminated the 2018 repurchase program on March 31, 2019.

Period

Total number of Average price Total number of shares shares purchased paid per share purchased as part of publicly announced plans or programs that may yet be purchased under the plans or programs

Prior to 2019	1,001,499	\$13.93	1,001,499	
January 1, 2019 ~ January 31, 2019	54,000	\$19.24	54,000	
February 1, 2019				
~ February 28,	-	\$-	-	
2019				
March 1, 2019 ~		\$-		
March 31, 2019	-	φ-	-	
Total	1,055,499	\$14.20	1,055,499	7,307

# ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

# ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

### ITEM 5. OTHER INFORMATION

On April 29, 2019, upon the initiation of the new term of our board of directors following our annual meeting of stockholders, we terminated our consulting agreement entered into on February 7th, 2016 with our director Mr. Wentao (Steve) Liu. Following such termination, Mr. Liu will be compensated solely in his capacity and on the same terms as the Company's other independent directors under the director compensation plan approved on September 19, 2015. The terms of Mr. Liu's existing stock options remain unchanged and will expire 3 months after Mr. Liu ceases to serve on the Board.

On April 23, 2019, after moving from Moffitt Cancer Center to Duke University, Dr. Scott Antonia resigned from the CBMG Scientific Advisory Board (SAB). Dr. Antonia will transition from an SAB member to an academic collaborator of CBMG.

## ITEM 6. EXHIBITS

#### **Exhibits**

Exhibit Number	Description
31.1	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 - Chief Executive Officer and Chief Financial Officer.
<u>32.1</u>	Certifications Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Linkbase
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase

## **SIGNATURES**

In accordance with Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

# CELLULAR BIOMEDICINE GROUP, INC.

April 30, 2019 By: /s/ Bizuo (Tony) Liu

Bizuo (Tony) Liu

Chief Executive Officer and Chief Financial Officer

(Principal Executive Officer and Principal Financial and Accounting Officer)