Cellular Biomedicine Group, Inc.
Form 10-Q
November 06, 2018

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 September 30, 2018

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, 11th Floor
New York, New York 10105
(Address of principal executive offices)

(408) 973-7884
(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 electronically, 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, or a non-accelerated filer. See definition of “accelerated filer,” and “large accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	Accelerated filer

Non-accelerated filer Smaller reporting company
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 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 October 31, 2018, there were 19,101,309 and 18,396,503 shares of common stock, par value $.001 per share, issued and outstanding, respectively.

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Item 1. Condensed Consolidated Financial Statements (Unaudited)

CELLULAR BIOMEDICINE GROUP, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS (UNAUDITED)
AS OF SEPTEMBER 30, 2018 AND DECEMBER 31, 2017

	September 30, 2018	December 31, 2017 (note 16)
Assets		
Cash and cash equivalents	$57,925,198	$21,568,422
Short-term investment	10,000,000	-
Accounts receivable, less allowance for doubtful amounts of $94,648 and $10,789 as of September 30, 2018 and December 31, 2017, respectively	37,592	202,887
Other receivables	249,771	170,842
Prepaid expenses	2,132,910	1,852,695
Total current assets	70,345,471	23,794,846
Long-term investments	240,000	269,424
Property, plant and equipment, net	14,313,801	12,973,342
Goodwill	7,678,789	7,678,789
Intangibles, net	8,153,428	12,419,692
Long-term prepaid expenses and other assets	5,683,464	4,026,203
Total assets (1)	$106,414,953	$61,162,296
Liabilities and Stockholders' Equity		
Liabilities:		
Accounts payable	$483,986	$225,287
Accrued expenses	1,456,911	1,097,327
Taxes payable	28,875	28,875
Other current liabilities	3,960,765	2,324,632
Total current liabilities	5,930,537	3,676,121
Other non-current liabilities	441,093	183,649
Total liabilities (1)	6,371,630	3,859,770
Commitments and Contingencies (note 11)		
Stockholders' equity:		

Preferred stock, par value $.001, 50,000,000 shares authorized; none issued and outstanding as of September 30, 2018 and December 31, 2017, respectively	-	-
Common stock, par value $.001, 300,000,000 shares authorized; 19,093,243 and 15,615,558 issued; and 18,532,475 and 15,188,764 outstanding, as of September 30, 2018 and December 31, 2017, respectively	19,093	15,616
Treasury stock at cost; 560,768 and 426,794 shares of common stock as of September 30, 2018 and December 31, 2017, respectively	(6,513,993)	(3,977,929)
Additional paid in capital	249,527,729	172,691,339
Accumulated deficit	(141,463,260)	(111,036,997)
Accumulated other comprehensive loss	(1,526,246)	(389,503)
Total stockholders' equity	100,043,323	57,302,526
Total liabilities and stockholders' equity	$106,414,953	$61,162,296

(1) The Company's consolidated assets as of September 30, 2018 and December 31, 2017 included $25,103,395 and $21,775,087, 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 September 30, 2018 and December 31, 2017, respectively. These assets include cash and cash equivalents of $3,444,121 and $2,337,173; other receivables of $65,530 and $61,735; prepaid expenses of $1,997,163 and $1,750,509; property, plant and equipment, net, of $13,407,165 and $12,477,315; intangibles of $1,314,833 and $1,516,449; and long-term prepaid expenses and other assets of $4,874,583 and $3,631,906 as of September 30, 2018 and December 31, 2017, respectively. The Company's consolidated liabilities as of September 30, 2018 and December 31, 2017 included $4,961,475 and $2,688,520, respectively, of liabilities of the VIEs whose creditors have no recourse to the Company. These liabilities include accounts payable of $311,348 and $181,231; other payables of $3,105,400 and $1,631,582; accrued payroll of $1,092,669 and $682,248, which mainly includes bonus accrual of $1,025,917 and $673,443; deferred income of $10,965 and $9,810; and other non-current liabilities of $441,093 and $183,649. 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 STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(UNAUDITED)
FOR THE THREE MONTHS AND NINE MONTHS ENDED SEPTEMBER 30, 2018 AND 2017

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2018	2017	2018	2017
Net sales and revenue	$70,431	$106,787	$198,705	$268,126
Operating expenses:				
Cost of sales	37,483	55,294	114,176	130,793
General and administrative	3,315,614	3,023,390	9,626,106	9,527,730
Selling and marketing	84,782	85,742	252,247	280,011
Research and development	6,545,490	4,076,186	17,985,997	10,469,820
Impairment on non-current assets	2,884,896	-	2,914,320	-
Total operating expenses	12,868,265	7,240,612	30,892,846	20,408,354
Operating loss	(12,797,834)	(7,133,825)	(30,694,141)	(20,140,228)
Other income :				
Interest income	18,173	23,933	140,457	113,688
Other income	38,376	907,678	132,300	1,461,265
Total other income	56,549	931,611	272,757	1,574,953
Loss before taxes	(12,741,285)	(6,202,214)	(30,421,384)	(18,565,275)
Income taxes provision	(2,479)	-	(4,879)	(2,450)
Net loss	$(12,743,764)	$(6,202,214)	$(30,426,263)	$(18,567,725)
Other comprehensive income (loss):				
Cumulative translation adjustment	(834,382)	291,665	(1,136,743)	637,786
Unrealized loss on investments, net of tax	-	-	-	(240,000)
Total other comprehensive income (loss):	(834,382)	291,665	(1,136,743)	397,786
Comprehensive loss	$(13,578,146)	$(5,910,549)	$(31,563,006)	$(18,169,939)
Net loss per share :				

Basic and diluted	$(0.72)	$(0.43)	$(1.76)	$(1.30)

Weighted average common shares outstanding:

Basic and diluted	17,604,473	14,349,569	17,281,240	14,310,344

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 NINE MONTHS ENDED SEPTEMBER 30, 2018 AND 2017

	For the Nine Months Ended September 30,	
	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$(30,426,263)	$(18,567,725)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	3,790,436	2,125,391
Loss on disposal of assets	4,593	317
Stock based compensation expense	3,748,082	4,240,822
Other than temporary impairment on investments	29,424	-
Impairment on intangible assets	2,884,896	-
Allowance for doubtful account	83,992	-
Changes in operating assets and liabilities:		
Accounts receivable	70,155	(103,701)
Other receivables	(81,892)	(496,229)
Prepaid expenses	(376,821)	(669,592)
Long-term prepaid expenses and other assets	(333,647)	(936,168)
Accounts payable	41,791	1,012,693
Accrued expenses	396,639	(475,274)
Deferred income	(12,114)	510,419
Other current liabilities	541,074	(206,196)
Other non-current liabilities	280,319	(386,504)
Net cash used in operating activities	(19,359,336)	(13,951,747)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Proceeds from disposal of assets	292	286
Putting six-month deposits with the banks	(10,000,000)	-
Purchases of intangibles	(33,495)	(23,562)
Purchases of assets	(4,438,135)	(6,978,348)
Net cash used in investing activities	(14,471,338)	(7,001,624)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Net proceeds from the issuance of common stock	70,383,181	-
Proceeds from exercise of stock options	2,708,603	232,910

Repurchase of treasury stock	(2,536,064)	(2,443,122)
Net cash provided by financing activities	70,555,720	(2,210,212)
EFFECT OF EXCHANGE RATE CHANGES ON CASH	(368,270)	203,182
INCREASE IN CASH AND CASH EQUIVALENTS	36,356,776	(22,960,401)
CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD	21,568,422	39,252,432
CASH AND CASH EQUIVALENTS, END OF PERIOD	$57,925,198	$16,292,031
SUPPLEMENTAL CASH FLOW INFORMATION		
Cash paid for income taxes	$4,879	$-

Note: Six-month bank deposits of $10,000,000 was recorded as short-term investment and excluded from cash and cash equivalents as of September 30, 2018.

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

CELLULAR BIOMEDICINE GROUP, INC.
FOR THE THREE MONTHS ENDED SEPTEMBER 30, 2018 AND 2017
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

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

We are focused on developing and marketing safe and effective cell-based therapies based on our cellular platforms, to treat cancer and orthopedic diseases. We have developed proprietary technologies and know-how in our cell therapy platforms. We are conducting clinical studies in China with our stem cell based therapies to treat knee osteoarthritis (“KOA”). Prior to China’s December 2017 revised regulation we have completed a Phase IIb autologous haMPC KOA clinical study and published its promising results. Led by Shanghai Renji Hospital, one of the largest teaching hospitals in China, we have completed a Phase I clinical trial of our off-the-shelf allogeneic haMPC (AlloJoin™) therapy for treating KOA patients. We have completed and presented the Allojoin™ Phase I 48-week data in China and have met with the National Medical Products Administration (NMPA, renamed from China Food and Drug Administration (“CFDA”)) in a pre-IND meeting to discuss methods to potentially enhance development.

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

CBMG was developing its own anti-CD19 CAR-T cell therapy in B-cell non-Hodgkin lymphoma ("NHL")and adult acute lymphoblastic leukemia (“ALL”) and had already initiated IND applications in China. On September 25, 2018, we entered into a strategic licensing and collaboration agreement with Novartis to manufacture and supply their CAR-T cell therapy Kymriah (tisagenlecleucel) 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 product, Kymriah, currently approved in the US, EU and Canada for two difficult-to-treat cancers, to China where the number of patients remains the highest in the world. We continue to develop cell therapies other than CD19 on our own and Novartis has the first right of negotiation on these developments. The CBMG oncology pipeline includes CAR-T targeting CD20-, CD22- and B-cell maturation antigen (BCMA), AFP TCR-T and TIL. We are striving to build competitive research capabilities, a cutting edge translational medicine unit, along with a well-established cellular manufacturing capability and ample capacity, to support Kymriah in China and our development of cell therapy products. We expect to initiate first in-human multiple CAR-T and TCR-T therapies in coming quarters.

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. 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, 2017 included in our Annual Report on Form 10-K for the year ended December 31, 2017. Operating results for the three and nine months ended September 30, 2018 are not necessarily indicative of the results that may be expected for the year ending December 31, 2018.

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 September 30, 2018 and the results of operations for the three and nine months ended September 30, 2018 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.

Recent Accounting Pronouncements

Accounting pronouncements adopted during the nine months ended September 30, 2018

In May 2017, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2017-09, “Compensation—Stock Compensation (Topic 718): Scope of Modification Accounting” (“ASU 2017-09”), which provides guidance on determining which changes to the terms and conditions of share-based payment awards require an entity to apply modification accounting under Topic 718. The amendments in this ASU are effective for all entities for annual periods, and interim periods within those annual periods, beginning after December 15, 2017. Early adoption is permitted, including adoption in any interim period, for (1) public business entities for reporting periods for which financial statements have not yet been issued and (2) all other entities for reporting periods for which financial statements have not yet been made available for issuance. The amendments in this ASU should be applied prospectively to an award modified on or after the adoption date. The adoption of the ASU 2017-09 did not have a material impact on the Company’s consolidated financial statements.

In February 2017, the FASB issued ASU No. 2017-05, “Other Income—Gains and Losses from the Derecognition of Nonfinancial Assets (Subtopic 610-20): Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets” (“ASU 2017-05”), which clarifies the scope of the nonfinancial asset guidance in Subtopic 610-20. This ASU also clarifies that the derecognition of all businesses and nonprofit activities (except those related to conveyances of oil and gas mineral rights or contracts with customers) should be accounted for in accordance with the derecognition and deconsolidation guidance in Subtopic 810-10. The amendments in this ASU also provide guidance on the accounting for what often are referred to as partial sales of nonfinancial assets within the scope of Subtopic 610-20 and contributions of nonfinancial assets to a joint venture or other non-controlled investee. The amendments in this ASU are effective for annual reporting reports beginning after December 15, 2017, including interim reporting periods within that reporting period. Public entities may apply the guidance earlier but only as of annual reporting periods beginning after December 15, 2016, including interim reporting periods within that reporting period. The adoption of the ASU 2017-05 did not have a material impact on the Company’s consolidated financial statements.

In November 2016, the FASB issued ASU No. 2016-18, “Statement of Cash Flows (Topic 230): Restricted Cash” (“ASU 2016-18”), which requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash

flows. The amendments in this ASU do not provide a definition of restricted cash or restricted cash equivalents. The amendments in this ASU are effective for public business entities for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early adoption is permitted, including adoption in an interim period. The adoption of the ASU 2016-18 did not have a material impact on the Company's consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-15, "Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments" ("ASU 2016-15"), which addresses the following eight specific cash flow issues: debt prepayment or debt extinguishment costs; settlement of zero-coupon debt instruments or other debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the borrowing; contingent consideration payments made after a business combination; proceeds from the settlement of insurance claims; proceeds from the settlement of corporate-owned life insurance policies (including bank-owned life insurance policies; distributions received from equity method investees; beneficial interests in securitization transactions; and separately identifiable cash flows and application of the predominance principle. The amendments in this ASU are effective for public business entities for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early adoption is permitted, including adoption in an interim period. The adoption of the ASU 2016-15 did not have a material impact on the Company's consolidated financial statements.

In January 2016, the FASB issued ASU No. 2016-01, "Financial Instruments – Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities" ("ASU 2016-01"). The amendments in this update require all equity investments to be measured at fair value with changes in the fair value recognized through net income (other than those accounted for under equity method of accounting or those that result in consolidation of the investee). The amendments in this update also require an entity to present separately in other comprehensive income the portion of the total change in the fair value of a liability resulting from a change in the instrument-specific credit risk when the entity has elected to measure the liability at fair value in accordance with the fair value option for financial instruments. In addition, the amendments in this update eliminate the requirement for to disclose the method(s) and significant assumptions used to estimate the fair value that is required to be disclosed for financial instruments measured at amortized cost on the balance sheet for public entities. For public business entities, the amendments in ASU 2016-01 are effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. Except for the early application guidance discussed in ASU 2016-01, early adoption of the amendments in this update is not permitted. The adoption of the ASU 2016-01 did not have a material impact on the Company's consolidated financial statements.

In May 2014, the FASB issued ASU No. 2014-09, "Revenue from Contracts with Customers (Topic 606)" ("ASU 2014-09"), which amended the existing accounting standards for revenue recognition. ASU 2014-09 establishes principles for recognizing revenue upon the transfer of promised goods or services to customers, in an amount that reflects the expected consideration received in exchange for those goods or services. ASU 2014-09 and its related clarifying ASUs are effective for annual reporting periods beginning after December 15, 2017 and interim periods within those annual periods. The Company adopted ASC Topic 606, Revenue from Contracts with Customers, in the first quarter of 2018 using the modified retrospective transition approach. Because the Company's primary source of revenues for the nine-month period ended September 30, 2018 was only from cell banking services as well as cell therapy technology services, and the service revenues are recognized when cell banking and cell therapy technology services are rendered (i.e., the two performance obligations that arise from its contracts with customers are satisfied), the impact on its consolidated financial statements from adoption of ASC Topic 606 is not material.

Accounting pronouncements not yet effective to adopt

In June 2018, the 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. We do not plan to early adopt this ASU. We are currently evaluating the potential impacts of this updated guidance, and do not expect the adoption of this guidance to have a material impact on our consolidated financial statements and related disclosures.

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. We do not expect the adoption of ASU 2018-02 to have a material impact on our 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 Company is currently evaluating the impact of the adoption of ASU 2017-11 on its 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.

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. The classification criteria for distinguishing between finance leases and operating leases are substantially similar to the classification criteria for distinguishing between capital 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. We are currently evaluating the impact of the adoption of ASU 2016-02 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 its subsidiaries are variable interest entities (VIEs), through which the Company conducts immune therapy and stem cell 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. Lu Junfeng and Chen Mingzhe are not Board members and do not participate in management of the Company. 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"). CBMG Shanghai was incorporated on October 19, 2011. Agreen Biotech Co. Ltd. ("AG") was acquired by CBMG Shanghai in September 2014. AG was incorporated on April 27, 2011. 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 September 30, 2018 and 2017, 31% and 2% of the Company revenue is derived from VIEs respectively.

As of September 30, 2018, CBMG Wuxi provided financing to CBMG Shanghai and its subsidiaries in the amount of $25,693,120 for working capital purposes. As of the same date CBMG Shanghai and its subsidiary provided technology services of $22,443,550 to CBMG Wuxi and CBMG Hong Kong and CBMG Wuxi purchased $27,407,693 of intellectual property from CBMG Shanghai. 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 100% of 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”.

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 September 30, 2018 and December 31, 2017 are as follows:

	September 30, 2018	December 31, 2017 (note 16)
Assets		
Cash	$3,444,121	$2,337,173
Other receivables	65,530	61,735
Prepaid expenses	1,997,163	1,750,509
Total current assets	5,506,814	4,149,417
Property, plant and equipment, net	13,407,165	12,477,315
Intangibles	1,314,833	1,516,449
Long-term prepaid expenses and other assets	4,874,583	3,631,906
Total assets	$25,103,395	$21,775,087
Liabilities		
Accounts payable	$311,348	$181,231
Other payables	3,105,400	1,631,582
Accrued payroll *	1,092,669	682,248
Deferred income	10,965	9,810
Total current liabilities	$4,520,382	$2,504,871
Other non-current liabilities	441,093	183,649
Total liabilities	$4,961,475	$2,688,520

* Accrued payroll mainly includes bonus accrual of $1,025,917 and $673,443.

NOTE 4 – PROPERTY, PLANT AND EQUIPMENT

As of September 30, 2018 and December 31, 2017, property, plant and equipment, carried at cost, consisted of the following:

	September 30, 2018	December 31, 2017
Office equipment	$101,876	$105,114
Manufacturing equipment	6,364,024	4,781,936
Computer equipment	402,831	233,539
Leasehold improvements	12,381,971	4,196,589
Construction work in process	1,006,753	7,498,272
	20,257,455	16,815,450
Less: accumulated depreciation	(5,943,654)	(3,842,108)
	$14,313,801	$12,973,342

For the three and nine months ended September 30, 2018, depreciation expense was $857,768 and $2,445,470, respectively, as compared to $342,562 and $817,987 for the three and nine months ended September 30, 2017, respectively.

NOTE 5 – INVESTMENTS

Short-term Investment

The Company’s short-term investments are held in several six-month bank deposits.

Long-term Investments

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

September 30, 2018	Cost	Gross Unrealized Gains	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
Total	$480,000	$-	$-	$(240,000)	$240,000

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December 31, 2017	Cost	Gross Unrealized Gains	Gross Unrealized Losses more than 12 months	Gross Unrealized Losses less than 12 months	Market or Fair Value
Equity position in Alpha Lujo, Inc.	$251,388	$-	$(221,964)	$-	$29,424
Equity position in Arem Pacific Corporation	480,000	-	-	(240,000)	240,000
Total	$731,388	$-	$(221,964.00)	$(240,000)	$269,424

The unrealized holding loss for the investments, net of tax that were recognized in other comprehensive income (loss) for the three and nine months ended September 30, 2018 was nil, as compared to nil and $(240,000) for the three and nine months ended September 30, 2017, respectively.

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. Other-than-temporary impairment of investments for the three and nine months ended September 30, 2018 was nil and $29,424, as compared to nil for the three and nine months ended September 30, 2017. The Company provided full impairment of $29,424 for shares of Alpha Lujo, Inc. ("ALEV") for the nine months ended September 30, 2018 as ALEV filed Form 15 (Certification and Notice of Termination of Registration under Section 12(g) of the Securities Exchange Act of 1934 or Suspension of Duty to File Reports) with the SEC and is no longer traded in the market in 2018.

NOTE 6 – 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 such stocks, which are traded solely in OTC market.

Assets measured at fair value within Level 2 on a recurring basis as of September 30, 2018 and December 31, 2017 are summarized as follows:

	As of September 30, 2018 Fair Value Measurements at Reporting Date Using:			
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Equity position in Arem Pacific Corporation	240,000	-	240,000	-
	$240,000	$-	$240,000	$-

	As of December 31, 2017 Fair Vaue Measurements at Reporting Date Using:			
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Equity position in Alpha Lujo, Inc.	$29,424	$-	$29,424	$-
Equity position in Arem Pacific Corporation	240,000	-	240,000	-
	$269,424	$-	$269,424	$-

No shares were acquired in the nine months ended September 30, 2018 and 2017.

As of September 30, 2018 and December 31, 2017, the Company holds 8,000,000 shares in Arem Pacific Corporation (“ARPC”), 2,942,350 shares in ALEV and 2,057,131 shares in Wonder International Education and Investment Group Corporation (“Wonder”), respectively. Full impairment has been provided for shares of Wonder and ALEV as of September 30, 2018. All available-for-sale investments held by the Company at September 30, 2018 and December 31, 2017 have been valued based on level 2 inputs due to the illiquid nature of these non-reporting securities that

cannot easily be sold or exchanged for cash.

NOTE 7 – 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 September 30, 2018 and December 31, 2017, intangible assets, net consisted of the following:

Patents & knowhow & license

	September 30, 2018	December 31, 2017
Cost basis	$17,576,023	$17,674,431
Less: accumulated amortization	(6,617,882)	(5,325,113)
Less: impairment	(2,884,896)	-
	$8,073,245	$12,349,318

Software

	September 30, 2017	December 31, 2016
Cost basis	$182,167	$158,273
Less: accumulated amortization	(101,984)	(87,899)
	$80,183	$70,374

Total intangibles, net	$8,153,428	$12,419,692

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 and nine months ended September 30, 2018 was $446,523 and $1,344,966, respectively, and amortization expense for the three and nine months ended September 30, 2017 was $413,661 and $1,307,404, respectively.

During the three months ended September 30, 2018, the Company reassessed its return on investment to develop GVAX for cancer therapies in the current competitive market and decided to terminate its GVAX program and its license agreements with the University of South Florida (“USF”) and the Moffitt Cancer Center (“Moffitt”). As a result the Company made a full impairment of $2,884,896 for the USF and Moffitt licenses. CD40LGVAX was licensed in 2015 with the intention of providing alternative treatment options for late stage non-small cell lung cancer (NSCLC) patients. Since then, the landscape of NSCLC has changed dramatically. Pembrolizumab has been approved as first-line treatment for patients with metastatic NSCLC with high PD-L1 expression, and for patients with metastatic NSCLC following disease progression on chemotherapy. Recently, the FDA has accepted a supplemental biologics license application (sBLA) for the combination of nivolumab plus ipilimumab for the frontline treatment of patients with advanced NSCLC with tumor mutational burden (TMB) ≥10 mutations per megabase (mut/Mb). In addition, the Company has recently licensed TIL patents from NIH/NCI for multiple indications in solid tumors and decided that TIL technology platform has a higher potential to capture a broader solid tumors market. Hence we decided to terminate the development of CD40LGVAX and focus our clinical development effort based on the TCR-T and TIL technologies for solid tumors.

Estimated amortization expense for each of the ensuing years are as follows for the years ending September 30:

Years ending September 30,

	Amount
2019	$1,351,076
2020	1,348,817
2021	1,343,661
2022	1,332,328
2023 and thereafter	2,777,546
	$8,153,428

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NOTE 8 – LEASES

The Company leases facilities under non-cancellable operating lease agreements. These facilities 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. Rent expense under operating leases for the three and nine months ended September 30, 2018 was approximately $679,585 and $2,628,440, respectively, as compared to $1,264,995 and $3,049,940 for the three and nine months ended September 30, 2017, respectively.

As of September 30, 2018, the Company has the following future minimum lease payments due under the foregoing lease agreements:

Years ending September 30,	Amount
2019	$2,856,546
2020	2,630,350
2021	2,498,662
2022	2,498,662
2023 and thereafter	10,033,593
	$20,517,813

NOTE 9 – RELATED PARTY TRANSACTIONS

As of September 30, 2018 and December 31, 2017, accrued expenses included unpaid director fees of nil and $25,882.

From time to time, cash advance is offered to employees for business travel purposes. No interest is charged on the outstanding balances. As of September 30, 2018 and December 31, 2017, other receivables due from officers for business travel purposes was nil and $8,531, respectively.

NOTE 10 – 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 December 15, 2017, the Company entered into a Share Purchase Agreement with three of its executive officers, pursuant to which the Company agreed to sell, and the three executive officers agreed to purchase an aggregate of 41,667 shares of the Company’s common stock, par value $0.001 per share at $12.00 per share, for total gross proceeds of approximately $500,000. The transaction closed on December 22, 2017.

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 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.

During the three and nine months ended September 30, 2018, the Company expensed $844,181 and $2,439,887 associated with unvested option awards and $426,287 and $1,308,195 associated with restricted common stock issuances, respectively. During the three and nine months ended September 30, 2017, the Company expensed $1,067,778 and $3,702,748 associated with unvested options awards and $270,931 and $538,074 associated with restricted common stock issuances, respectively.

During the three and nine months ended September 30, 2018, options for 101,210 and 233,484 underlying shares were exercised on a cash basis, 101,210 and 233,484 shares of the Company's common stock were issued accordingly. During the three and nine months ended September 30, 2017, options for 12,000 and 45,000 underlying shares were exercised on a cash basis, 12,000 and 45,000 shares of the Company's common stock were issued accordingly.

During the three and nine months ended September 30, 2018, 30,538 and 66,620 of the Company's restricted common stock were issued respectively. During the three and nine months ended September 30, 2017, 27,032 and 49,128 shares of the Company's restricted common stock were issued respectively.

The Company's Board of Directors approved a stock repurchase program granting the company authority to repurchase up to $10 million in common shares through open market purchases pursuant to a plan adopted in accordance with Rule 10b5-1 and 10b-18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and was announced on June 1, 2017.

For the three and nine months ended September 30, 2018, the Company repurchased nil and 133,974 shares of its common stock with the total cost of nil and $2,536,064, respectively. Details are as follows:

	Total number of shares purchased	Average price paid per share
Treasury stock as of December 31, 2017	426,794	$9.32
Repurchased from January 1, 2018 to March 31, 2018	37,462	$19.10
Repurchased from April 1, 2018 to June 30, 2018	96,512	$18.86
Repurchased from July 1, 2018 to September 30, 2018	-	$-
Treasury stock as of September 30, 2018	560,768	$11.62

NOTE 11 – COMMITMENTS AND CONTINGENCIES

Capital commitments

As of September 30, 2018, the capital commitments of the Company are summarized as follows:

	September 30, 2018
Contracts for acquisition of plant and equipment being or to be executed	$1,452,986

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NOTE 12 – STOCK BASED COMPENSATION

Our stock-based compensation arrangements include grants of stock options and restricted stock awards under its equity incentive plans (collectively, the "Plans"), and certain awards granted outside of these plans. The compensation cost that has been charged against income related to stock options for the three and nine months ended September 30, 2018 was $844,181 and $2,439,887, respectively, and for the three and nine months ended September 30, 2017 was $1,067,778 and $3,702,748, respectively. The compensation cost that has been charged against income related to restricted stock awards for the three and nine months ended September 30, 2018 was $426,287 and $1,308,195, respectively, and for the three and nine months ended September 30, 2017 was $270,931 and $538,074, respectively.

As of September 30, 2018, there was $4,418,388 all unrecognized compensation cost related to an aggregate of 498,239 of non-vested stock option awards and $3,456,690 related to an aggregate of 265,918 of non-vested restricted stock awards. These costs are expected to be recognized over a weighted-average period of 1.86 years for the stock options awards and 1.49 years for the restricted stock awards.

During the three months ended September 30, 2018, the Company issued options to purchase an aggregate of 16,000 shares of the Company's common stock under the Plans. The grant date fair value of these options was $208,940 using Black-Scholes option valuation models with the following assumptions: exercise price equal to the grant date stock price or average selling prices over the 30-business day period preceding the date of grant ranging from $20.6 to $23.55, volatility ranging from 65.15% to 66.34%, expected life of 6.0 years, and risk-free rate ranging from 2.86% to 3.00%. The Company is expensing these options on a straight-line basis over the requisite service period.

During the nine months ended September 30, 2018, the Company issued options to purchase an aggregate of 206,682 shares of the Company's common stock to officers, directors and employees under the Plans. The grant date fair value of these options was $2,809,655 using Black-Scholes option valuation models with the following assumptions: exercise price equal to the grant date stock price or average selling prices over the 30-business day period preceding the date of grant ranging from $14.5 to $23.55, volatility ranging from 65.15% to 90.43%, expected life of 6.0 years, and risk-free rate ranging from 2.33% to 3.00%. The Company is expensing these options on a straight-line basis over the requisite service period.

During the three months ended September 30, 2017, the Company issued options to purchase an aggregate of 12,000 shares of the Company's common stock to officers, directors, employees and advisors under the Plans. The grant date fair value of these options was $76,655 using Black-Scholes option valuation models with the following assumptions: exercise price equal to the grant date stock price ranging from $8.55 to $8.75, volatility ranging from 87.77% to 88.68%, expected life 6.0 years, and risk-free rate ranging from 1.94% to 2.07%. The Company is expensing these options on a straight-line basis over the requisite service period.

During the nine months ended September 30, 2017, the Company issued options to purchase an aggregate of 523,738 shares of the Company's common stock to officers, directors, employees and advisors under the Plans. The grant date fair value of these options was $4,425,913 using Black-Scholes option valuation models with the following assumptions: exercise price equal to the grant date stock price ranging from $5.3 to $13.2, volatility ranging from 87.77% to 89.62%, expected life 6.0 years, and risk-free rate ranging from 1.86% to 2.29%. 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 September 30, 2018 and December 31, 2017 and for the nine months ended September 30, 2018:

	Number of Options	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Outstanding as of December 31, 2017	1,892,189	$11.54	7.0	$4,909,194
Grants	206,682			
Forfeitures	(57,324)			
Exercises	(233,484)			
Outstanding as of September 30, 2018	1,808,063	$12.32	6.7	$12,194,007
Vested and exercisable as of September 30, 2018	1,309,824	$11.29	5.9	$9,412,456

Exercise Price	Number of Options Outstanding	Exercisable
$3.00 - $4.95	185,547	185,547
$5.00 - $9.19	465,124	428,176
$9.20 - $15.00	525,070	303,467
$15.01 - $20.00	468,822	261,534
$20.10+	163,500	131,100
	1,808,063	1,309,824

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.

Cash received from option exercises under all share-based compensation arrangements for the three and nine months ended September 30, 2018 was $1,542,840 and $2,708,603, respectively, as compared to $159,131 and $232,910 for the three and nine months ended September 30, 2017, respectively. The proceeds were from non-executives.

NOTE 13 – 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 September 30,		For the Nine Months Ended September 30,	
	2018	2017	2018	2017
Net loss	$(12,743,764)	$(6,202,214)	$(30,426,263)	$(18,567,725)
Weighted average shares of common stock	17,604,473	14,349,569	17,281,240	14,310,344
Dilutive effect of stock options	-	-	-	-
Restricted stock vested not issued	-	-	-	-
Common stock and common stock equivalents	17,604,473	14,349,569	17,281,240	14,310,344
Net loss per basic and diluted share	$(0.72)	$(0.43)	$(1.76)	$(1.30)

Basic and diluted net loss per share is calculated by dividing net loss by the weighted average number of common shares outstanding during the period, without consideration for common stock equivalents. The Company's potentially dilutive shares, which include unvested restricted stock and options to purchase common stock, are considered to be common stock equivalents and are only included in the calculation of diluted net loss per share when their effect is dilutive.

NOTE 14 – 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 September 30, 2018, we recorded a valuation allowance against our U.S. net deferred tax assets. In order to fully realize the U.S. deferred tax assets, we will need to generate sufficient taxable income in future periods before the expiration of the deferred tax assets governed by the tax code.

In each of the reporting 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).

Under the December 22, 2017 tax reform bill (Tax Cut and Jobs Act (H.R.1)), top corporate tax rate was reduced from 35% to 21% effective from January 1, 2018. Pursuant to this new Act, non-operating loss (“NOL”) carry back period is eliminated and an indefinite carry forward period is permitted. As of September 30, 2018, U.S. federal and California state NOL was $21.3 million and $15.6 million respectively. As of September 30, 2018, the Company had net operating loss carryforwards of $5 million and $19 million for Chinese income tax purposes, such losses are set to expire in 2028 (for advanced and new technology enterprises and small and middle technology enterprises) and 2023 (for other Chinese enterprises) for Chinese income tax purposes, respectively. All 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. The Company's effective tax rate differs from statutory rates of 21% for U.S. federal income tax purposes, 15%, 20% and 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 PRC Corporate Income Tax Law, 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 AG. 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. The October 2015 issued certificate expires in October, 2018 and the Company is in the process of renewing the certificate for another three years. CBMG Shanghai is re-applying for the certificate of “advanced and new technology enterprise”. AG was certified as a “small and micro enterprise” in its 2017 annual tax filing and enjoys the preferential income tax rate of 20%. AG’s eligibility for the reduced tax rate will need to be verified annually.

NOTE 15 – 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 16 – COMPARATIVE FIGURES

Lease deposits of $690,870 might be recovered over one year considering the lease term, the Company recorded it in other long-term assets. Comparative figures of $732,098 have been reclassified to conform with the current period's presentation to facilitate comparison.

NOTE 17 – SUBSEQUENT EVENTS

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

On October 10, 2018, 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. As previously reported on a Current Report on Form 8-K filed with the Securities and Exchange Commission on June 1, 2017, the Company authorized a stock repurchase program ("2017 Share Repurchase Program"), under which approximately $6.52 million in shares of common stock were repurchased. 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.

On October 17, 2018, the Company received a grant of $872,194 from Shanghai Zhangjiang government for the Company's research and development establishment in Zhangjiang Hi-Tech Park.

On October 29, 2018, after reassessing the return of investment to develop GVAX for cancer therapies in the current competitive market the Company notified USF and Moffitt to terminate its GVAX license agreements.

On November 2, 2018 we relocated our principal executive offices from Cupertino, California to New York, New York.

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 and nine months ended September 30, 2018 and 2017, 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.

Factors that might affect our forward-looking statements include, among other things:

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

In some cases, you can identify forward-looking statements by terms such as "may", "will", "should", "could", "would", "expe "plans", "anticipates", "believes", "estimates", "projects", "predicts", "potential" and similar expressions. These statements ref our 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 3, 2017, we announced the signing of a ten-year lease of an 113,038-square foot building located in the “Pharma Valley” in Shanghai Zhangjiang High-Tech Park. The new facility designed and built to GMP standards has approximately 40,000 square feet dedicated to advanced cell manufacturing. We invested approximately $10 million to transform the Zhangjiang GMP facility and leasehold improvement. At the end of 2017, the combination of new Zhangjiang facility, an expanded Wuxi, and Beijing facilities, have an aggregate of approximately 70,000 square feet for cell manufacturing.

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

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

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

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

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

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

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

On January 30, 2018 and February 5, 2018, we entered into securities purchase agreements with certain investors pursuant to which the Company agreed to sell, and the investors agreed to purchase from the Company, an aggregate of 1,719,324 shares (the "February 2018 Private Placement") of the Company's common stock, par value $0.001 per share, at $17.80 per share, for total gross proceeds of approximately $30.6 million. The transaction closed on February 5, 2018. Pursuant to the purchase agreement, the Investors have the right to nominate one director to the board of directors of the Company to stand for election at the 2018 Annual Meeting of Stockholders. Effective as of the closing of the February 2018 Private Placement, Bosun S. Hau was appointed as a non-executive Class III director of the Company and his appointment was subsequent ratified by the shareholders during the Annual Shareholders Meeting on April 27, 2018,

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

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

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

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

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

Also, on September 25, 2018, we entered into a Share Purchase Agreement with Novartis pursuant to which the Company agreed to sell, and Novartis agreed to purchase from the Company, an aggregate of 1,458,257 shares of the Company's common stock, at a purchase price of $27.43 per share, which was the equivalent of 130% of the volume-weighted average price of the Common Stock for the prior 20 consecutive trading days, for total gross proceeds of approximately $40 million (the "Private Placement"). In connection with the Private Placement, the Company filed a Form S-3 with the SEC on October 10, 2018 to satisfy the registration requirement. The SEC declared the registration effective on October 22 and the Company filed the Private Placement Prospectus on October 23, 2018.

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

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

On October 29, 2018, after reassessing the return of investment to develop GVAX for cancer therapies in the current competitive market the Company notified USF and Moffitt to terminate its GVAX license agreements.

On November 2, 2018, we relocated our principal executive offices from Cupertino, California to New York, New York.

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

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

Advance Allojoin™ and Rejoin™ KOA IND applications with the NMPA's CDE and initiate clinical studies to support the BLA submissions in China;

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;

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

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

Evaluate and implement digital platform system for research, material management, production and clinical data tracking;

Evaluate new 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 quality assurance automation;

Initiate investigator sponsored studies and/or CBMG sponsored clinical trials of:

- Anti-BCMA CAR-T in Multiple Myeloma (MM)
- Anti-CD22 CAR-T in hairy cell leukemia (HCL) and anti-CD19 CAR-T relapsing ALL
- NKG2D CAR-T in 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;

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

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

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 Manufature Practice (GMP) standards in Wuxi, China and in 2012 we established a U.S. Food and Drug Administration (FDA) GMP standard protocol-compliant manufacturing facility in Shanghai. In October 2015, we opened a facility designed and built to GMP standards in Beijing. In November 2017, we opened our Zhangjiang facility in Shanghai, of which 40,000 square feet was designed and built to GMP standards and dedicated to advanced cell manufacturing. Our focus has

been to serve the rapidly growing health care market in China by marketing and commercializing immune cell and stem cell therapeutics, related tools and products from our patent-protected homegrown and acquired cell technology, as well as by utilizing in-licensed and other acquired intellectual properties.

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

Cancer. We are focusing our clinical development efforts on CD20-, CD22- and B-cell maturation antigen (BCMA)-specific CAR-T therapies, T-cell receptor (TCR) and tumor infiltrating lymphocyte (TIL) 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 National Medical Products Administration (NMPA). On the research and development side we will endeavor to bring our CD22 HCL and CD19 CAR-T relapsing ALL, CD 20 for CD19 CAR-T Relapsing NHL, BCMA in Multiple Myeloma (MM), NKG2D in acute myeloid leukemia (AML), AFP TCR-T in Hepatocellular carcinoma (HCC) and neoantigen reactive TIL on solid tumors, respectively, in first in human trial as soon as possible. We plan to continue to leverage our quality system and our strong scientific expertise to develop a platform as preferred parties for international pharmaceutical companies to co-develop cell therapies with the Company in China by implementing our quality strategies and leveraging the experience and expertise of our strong scientific team in the U.S and 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 multiple biomarkers such as CD29+, CD73+, CD90+, CD49d+, HLA-I+, HLA-DR-, Actin-, CD14-, CD34-, and CD45-. In contrast, SVF is merely a heterogeneous fraction including preadipocytes, endothelial cells, smooth muscle cells, pericytes, macrophages, fibroblasts, and adipose-derived stem cells.

In January 2016, we launched the Allogeneic KOA Phase I Trial in China to evaluate the safety and efficacy of AlloJoin™, an off-the shelf allogeneic adipose derived progenitor cell (haMPC) therapy for the treatment of KOA. On August 5, 2016 we completed patient treatment for the Allogeneic KOA Phase I trial, and on December 9, 2016 we announced interim 3-month safety data from the Allogenic KOA Phase I Trial in China. The interim analysis of the trial has preliminarily demonstrated a safety and tolerability profile of AlloJoin™ in the three doses tested, and no serious adverse events (SAE) have been observed. On March 16, 2018, we announced the positive 48-week Allojoin™ Phase I data in China, which demonstrated good safety and early efficacy for the prevention of cartilage deterioration. China has finalized its cell therapy policy in December, 2017. We plan to advance the KOA IND application for AlloJoin™ with NMPA in the near future.

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

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

Recent Developments in Cancer Cell Therapy

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

One approach to immunotherapy involves engineering patients' own immune cells to recognize and attack their tumors. This approach is called adoptive cell transfer (ACT). ACT's building blocks are T cells, a type of immune cell collected from the patient's own blood. One of the well-established ACT approaches is CAR-T cancer therapy. After collection, the T cells are genetically engineered to produce special receptors on their surface called chimeric antigen receptors (CARs). CARs are proteins that allow the T cells to recognize a specific protein (antigen) on tumor cells. These engineered CAR-T cells are then grown until they number in the billions. The expanded population

of CAR-T cells is then infused into the patient. After the infusion, if all goes as planned, the T cells multiply in the patient's body and, with guidance from their engineered receptor, recognize and kill cancer cells that harbor the antigen on their surfaces. This process builds on a similar form of ACT pioneered from NCI's Surgery Branch for patients with advanced melanoma. According to www.cancer.gov/.../research-updates/2013/CAR-T-Cells, in 2013 NCI's Pediatric Oncology Branch commented that the CAR-T cells are much more potent than anything they can achieve with other immune-based treatments being studied. Although investigators working in this field caution that there is still much to learn about CAR T-cell therapy, the early results from trials like these have generated considerable optimism.

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

In August 2017, the U.S. FDA approved Novartis' Kymriah (tisagenlecleucel), a CD19-targeted CAR-T therapy, for the treatment of patients up to 25 years old for relapsed or refractory (r/r) acute lymphoblastic leukemia (ALL), the most common cancer in children. Current treatments show a rate of 80% remission using intensive chemotherapy. However, there are almost no conventional treatments to help patients who have relapsed or are refractory to traditional treatment. Kymriah has shown results of complete and long lasting remission, and was the first FDA-approved CAR-T therapy. In October 2017, the U.S. FDA approved Kite Pharmaceuticals' (Gilead) CAR-T therapy for diffuse large B-cell lymphoma (DLBCL), the most common type of NHL in adults. The initial results of axicabtagene ciloleucel (Yescarta), the prognosis of high-grade chemo refractory NHL is dismal with a medium survival time of a few weeks. Yescarta is a therapy for patients who have not responded to or who have relapsed after at least two other kinds of treatment.

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

Besides anti-CD19 CAR-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 previously treated patients with multiple myeloma. Based on preliminary clinical data from the ongoing phase 1 study CRB-401, bb2121 has been granted Breakthrough Therapy Designation by the U.S. FDA and PRIME eligibility by the European Medicines Agency (EMA) in November 2017. We plan to initiate our anti-BCMA CAR-T investigator initiated trial in late 2018.

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

While CAR-T cell therapy has been proven successful in treatment of several hematological malignancies, other cell therapy approaches, including Tumor Infiltrating Lymphocytes (TIL) and T Cell Receptor engineered T cells (TCR-Ts) are being developed to treat solid tumors. For example, Iovance Biotherapeutics is focused on the development of autologous tumor-directed TILs for treatments of patients with various solid tumor indications. Iovance is conducting 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.

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

In December 2017, the Chinese government issued trial guidelines concerning the development and testing of cell therapy products in China. Although these trial guidelines are not yet codified as mandatory regulation, we believe they provide a measure of clarity and a preliminary regulatory pathway for our cell therapy operations in a still uncertain regulatory environment. On April 18 and April 21, 2018, the CDE posted on its website acceptance of the IND application for CAR-T cancer therapies in treating patients with NHL and adult ALL submitted by the Company's wholly-owned subsidiaries Cellular Biomedicine Group (Shanghai) Ltd. and Shanghai Cellular Biopharmaceutical Group Ltd. 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 preclinical compounds targeting CD20-, CD22- and B-cell maturation antigen (BCMA)-specific CAR-T compounds, TCR 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 expect to initiate first in-human multiple CAR-T and TCR-T therapies in coming quarters.

Market for Stem Cell-Based Therapies

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

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

Our Strategy

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

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

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

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

Our proprietary and patent-protected production processes enable us to produce raw material, manufacture cells, and conduct cell banking and distribution. Our clinical protocols include medical assessment to qualify each patient for treatment, evaluation of each patient before and after a specific therapy, cell transplantation methodologies including dosage, frequency and the use of adjunct therapies, 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 four locations, the majority of which is in the new Shanghai facility. We operate our manufacturing facilities under the design of the standard (GMP) conditions in the ISO accredited laboratories standard. We employ institutionalized and proprietary process and

quality management system to optimize reproducibility and to hone our efficiency. Our Beijing, Shanghai and Wuxi facilities are designed and built to meet international GMP standards. With our integrated Plasmid, Viral Vectors, and CAR-T cells Chemistry, Manufacturing, and Controls processes and expanding capacity, we are highly distinguishable from other companies in the cellular medicine space.

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

Our Targeted Indications and Potential Therapies

The chart below illustrates CBMG's pipelines:

CBMG Immuno-Oncology pipeline

Our Stem Cell KOA Pipeline

Regulatory path for stem cell therapy in China now clarified

Rejoin® phase llb met primary and secondary end points *

Safe, and provide both symptom relief and cartilage regeneration

AlloJoin™ phase l interim data showed safety and tolerance *

*Note: December 2017, Chinese government issued trial guidelines concerning development and testing of cell therapy products in China. Plan to file anew in Q4, 2018 under the new regulation

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 pipelines to treat hematological malignancies including CD20, CD22, and BCMA CAR-Ts, which have been approved 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 number of novel CD20 CARs, 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 Kymriah relapsing NHL patients in the second half of 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 novel CD22 CARs, which displayed effective anti-tumor activity in in vitro cytotoxicity assays. We plan to initiate investigator initiated trial with Kymriah 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 plan to initiate investigator initiated trial in refractory MM patients in Q4 2018.

NKG2D CAR

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

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AFP TCR-T

We are evaluating the efficacy and specificity of the AFP TCRs to identity the most appropriate candidate for first time in human (FTIH) study. Human CD8+ T cells will be redirected with the AFP TCRs and their anti-tumor activity will be evaluated by in vitro cytokine release and cytotoxicity assays. Concurrently, potential on/off-target toxicity including allo-reactivity will be also evaluated. The best candidate TCRs for clinical use will be further tested in vivo efficacy in animal models. We plan to exercise our exclusive right to license the technology from Augusta University if and when the FTIH proof of mechanism study shows promising clinical efficacy signal and manageable safety profile.

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 as soon as practicable, and eventually expand into other cancer indications.

Knee Osteoarthritis (KOA)

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

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

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

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

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

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

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

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

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

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

In order to bring haMPC-based KOA therapy to market, our market strategy is to: (a) establish regional laboratories that comply with cGMP standards in Shanghai and Beijing that meet Chinese regulatory approval; and (b) submit to the NMPA an IND package for Allojoin™ to treat patients with donor haMPC cells, and (c) file joint applications with Class AAA hospitals to use Re-Join® to treat patients with their own haMPC cells.

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

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

Based on current estimates, we expect our biopharmaceutical business to generate collaboration payment and revenues through our sale of Kymriah products to Novartis within the next two to three years and through the development of therapies for the treatment of CD22 HCL and CD19 CAR-T for relapsing ALL, BCMA MM, NKG2D on AML, and KOA within the next three to four years although we cannot assure you that we will be successful at all or within the foregoing timeframe.

Competition

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

The PRC central government has a focused strategy to enable China to compete effectively in certain designated areas of biotechnology and the health sciences. Because of the aging population in China, China's Ministry of Science and Technology (MOST) has targeted stem cell development as high priority field, and development in this field has been intense in the agencies under MOST. For example, the 973 Program has funded a number of stem cell research projects such as differentiation of human embryonic germ cells and the plasticity of adult stem cells. To the best of our knowledge, none of the companies in China are utilizing our proposed international manufacturing protocol and our unique technologies in conducting what we believe will be fully compliant 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 JingYuan Bio in Taian, Shandong Province, who planned to initiate clinical trial in China in 2016. To our knowledge, none of the aforementioned companies have made any progress or advancement in the clinical development in China.

Our primary competitors in the field of cancer immune cell therapies include pharmaceutical, biotechnology companies such as Eureka Therapeutics, Inc., Iovance Biotherapeutics,Inc., Juno Therapeutics, Inc. (Celgene), Kite Pharma, Inc. (Gilead), CARSgen, Sorrento Therapeutics, Inc. and others. Among our competitors, the ones based in

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

The 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.

ASC Topic 606, Revenue from Contracts with Customers, was effective during the three months ended March 31, 2018. ASC Topic 606 amended the existing accounting standards for revenue recognition (ASC Topic 605, Revenue Recognition) and established principles for recognizing revenue upon the transfer of promised goods or services to customers, in an amount that reflects the expected consideration received in exchange for those goods or services. The Company adopted ASC Topic 606 in the first quarter of 2018 using the modified retrospective transition approach. Because the Company's primary source of revenues for the three-month period ended September 30, 2018 was only from cell banking services as well as cell therapy technology services, and the service revenues are recognized when the cell banking and cell therapy technology services are rendered (i.e., the two performance obligations that arise from its contracts with customers are satisfied), the impact on its consolidated financial statements from adoption of ASC Topic 606 is not material.

Other than as discussed above, during the three months ended September 30, 2018, 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, 2017.

Results of Operations

Below is a discussion of the results of our operations for the three and nine months ended September 30, 2018 and 2017. 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 September 30, 2018 to Three Months Ended September 30, 2017

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

	Three Months Ended September 30, 2018	Three Months Ended September 30, 2017
Net sales and revenue	$70,431	$106,787
Operating expenses:		
Cost of sales *	37,483	55,294
General and administrative *	3,315,614	3,023,390
Selling and marketing *	84,782	85,742
Research and development *	6,545,490	4,076,186
Impairment on non-current assets	2,884,896	-
Total operating expenses	12,868,265	7,240,612
Operating loss	(12,797,834)	(7,133,825)
Other income		
Interest income	18,173	23,933
Other income	38,376	907,678
Total other income	56,549	931,611
Loss before taxes	(12,741,285)	(6,202,214)
Income taxes provision	(2,479)	-
Net loss	$(12,743,764)	$(6,202,214)
Other comprehensive income (loss):		
Cumulative translation adjustment	(834,382)	291,665
Total other comprehensive income (loss):	(834,382)	291,665
Comprehensive loss	$(13,578,146)	$(5,910,549)
Net loss per share:		
Basic and diluted	$(0.72)	$(0.43)
Weighted average common shares outstanding:		
Basic and diluted	17,604,473	14,349,569

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

	Three Months Ended September 30, 2018	Three Months Ended September 30, 2017
Cost of sales	-	26,150
General and administrative	673,624	618,877
Selling and marketing	25,047	20,907
Research and development	571,797	672,775
	1,270,468	1,338,709

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Results of Operations

Net sales and revenue

	2018	2017	Change	Percent
For the three months ended September 30,	$70,431	$106,787	$(36,356)	(34)%

Revenue for the three months period ended September 30, 2018 was mainly derived from both cell banking services and cell therapy technology service whereas revenue for the three months period ended September 30, 2017 was mainly derived from cell therapy technology service.

Cost of Sales

	2018	2017	Change	Percent
For the three months ended September 30,	$37,483	$55,294	$(17,811)	(32)%

The gross margin change was a result of the revenue mix change towards adipose cell banking services.

General and Administrative Expenses

	2018	2017	Change	Percent
For the three months ended September 30,	$3,315,614	$3,023,390	$292,224	10%

The growth of G&A expenses was primarily attributed to the additional headcount and depreciation of new facility.

Selling and Marketing Expenses

	2018	2017	Change	Percent

For the three months ended September 30,	$84,782	$85,742	$(960)	(1)%

No material change as compared with the three months ended September 30, 2017.

Research and Development Expenses

	2018	2017	Change	Percent
For the three months ended September 30,	$6,545,490	$4,076,186	$2,469,304	61%

Research and development costs increased by approximately $2,469,000 in the three months ended September 30, 2018 as compared to the three months ended September 30, 2017. The increase was primarily attributed to increased spending in the growth of our pipeline in both liquid tumor and solid tumor development and establishing U.S. R&D center at Gaithersburg, Maryland.

Impairment of Non-current Assets

	2018	2017	Change	Percent
For the three months ended September 30,	$2,884,896	$-	$2,884,896	N/A

The impairment of non-current assets for the three months ended September 30, 2018 is a full provision of $2,884,896 provided against the net book value of GVAX license. No such expense existed in the same period in 2017.

The Company reassessed its return on investment to develop GVAX for cancer therapies in the current competitive market and decided to terminate its GVAX program and its license agreements with the University of South Florida (“USF”) and the Moffitt Cancer Center (“Moffitt”). As a result the Company made a full impairment of $2,884,896 for the USF and Moffitt licenses. CD40LGVAX was licensed in 2015 with the intention of providing alternative treatment options for late stage non-small cell lung cancer (NSCLC) patients. Since then, the landscape of NSCLC has changed dramatically. Pembrolizumab has been approved as first-line treatment for patients with metastatic NSCLC with high PD-L1 expression, and for patients with metastatic NSCLC following disease progression on chemotherapy. Recently, the FDA has accepted a supplemental biologics license application (sBLA) for the combination of nivolumab plus ipilimumab for the frontline treatment of patients with advanced NSCLC with tumor mutational burden (TMB) ≥10 mutations per megabase (mut/Mb). In addition, the Company has recently licensed TIL patents from NIH/NCI for multiple indications in solid tumors and decided that TIL technology platform has a higher potential to capture a broader solid tumors market. Hence we decided to terminate the development of CD40LGVAX and focus our clinical development effort based on the TCR-T and TIL technologies for solid tumors. On October 29, 2018 the Company notified Moffit of such termination.

Operating Loss

	2018	2017	Change	Percent

For the three months ended September 30,	$(12,797,834)	$(7,133,825)	$(5,664,009)	79%

The increase in the operating loss for the three months ended September 30, 2018 as compared to the same period in 2017 was primarily due to changes in research and development expenses of $2,469,000 and impairment of non-current assets of $2,885,000.

Total Other Income

	2018	2017	Change	Percent
For the three months ended September 30,	$56,549	$931,611	$(875,062)	(94)%

Other income for the three months ended September 30, 2018 and September 30, 2017 was primarily interest income, government grants and gain/loss from currency exchange fluctuation; bolstered in 2017 by $0.99 million government grants.

Income Taxes Provision

	2018	2017	Change	Percent
For the three months ended September 30,	$(2,479)	$-	$(2,479)	N/A

While we have plans for growing and developing our business, 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 September 30, 2018 represents the withholding corporation income tax of Hong Kong subsidiary for its royalty income derived from China.

Net Loss

	2018	2017	Change	Percent
For the three months ended September 30,	$(12,743,764)	$(6,202,214)	$(6,541,550)	105%

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

Comprehensive Loss

	2018	2017	Change	Percent
For the three months ended September 30,	$(13,578,146)	$(5,910,549)	$(7,667,597)	130%

Comprehensive loss for three months ended September 30, 2018 includes a currency exchange loss of approximately $834,000 combined with the changes in net income. Comprehensive loss for three months ended September 30, 2017 includes a currency exchange gain of approximately $292,000 combined with the changes in net income.

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Comparison of Nine Months Ended September 30, 2018 to Nine Months Ended September 30, 2017

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

	Nine Months Ended September 30, 2018	Nine Months Ended September 30, 2017
Net sales and revenue	$198,705	$268,126
Operating expenses:		
Cost of sales *	114,176	130,793
General and administrative *	9,626,106	9,527,730
Selling and marketing *	252,247	280,011
Research and development *	17,985,997	10,469,820
Impairment on non-current assets	2,914,320	-
Total operating expenses	30,892,846	20,408,354
Operating loss	(30,694,141)	(20,140,228)
Other income		
Interest income	140,457	113,688
Other income	132,300	1,461,265
Total other income	272,757	1,574,953
Loss before taxes	(30,421,384)	(18,565,275)
Income taxes provision	(4,879)	(2,450)
Net loss	$(30,426,263)	$(18,567,725)
Other comprehensive income (loss):		
Cumulative translation adjustment	(1,136,743)	637,786
Unrealized loss on investments, net of tax	-	(240,000)
Total other comprehensive income:	(1,136,743)	397,786
Comprehensive loss	$(31,563,006)	$(18,169,939)
Net loss per share:		
Basic and diluted	$(1.76)	$(1.30)
Weighted average common shares outstanding:		
Basic and diluted	17,281,240	14,310,344

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

	Nine Months Ended September 30, 2018	Nine Months Ended September 30, 2017
Cost of sales	-	49,066
General and administrative	1,774,527	2,314,990
Selling and marketing	68,827	34,604
Research and development	1,904,728	1,842,162
	3,748,082	4,240,822

Results of Operations

Net sales and revenue

	2018	2017	Change	Percent
For the nine months ended September 30,	$198,705	$268,126	$(69,421)	(26)%

Revenue for the nine months period ended September 30, 2018 was mainly derived from both cell banking services and cell therapy technology service whereas revenue for the nine months period ended September 30, 2017 was mainly derived from cell therapy technology service.

Cost of Sales

	2018	2017	Change	Percent
For the nine months ended September 30,	$114,176	$130,793	$(16,617)	(13)%

The gross margin change was a result of the revenue mix change towards adipose cell banking services.

General and Administrative Expenses

	2018	2017	Change	Percent
For the nine months ended September 30,	$9,626,106	$9,527,730	$98,376	1%

The growth of G&A expenses was primarily attributed to the additional headcount and depreciation of new facility.

Selling and Marketing Expenses

	2018	2017	Change	Percent

For the nine months ended September 30,	$252,247	$280,011	$(27,764)	(10)%

The selling and marketing expenses decreased by approximately $27,000 in the nine months ended September 30, 2018 as compared to the nine months ended September 30, 2017, primarily as a result of a severance payment in 2017 to a member of our sales force.

Research and Development Expenses

	2018	2017	Change	Percent
For the nine months ended September 30,	$17,985,997	$10,469,820	$7,516,177	72%

Research and development costs increased by approximately $7,516,000 in the nine months ended September 30, 2018 as compared to the nine months ended September 30, 2017. The increase was primarily attributed to the growth of our pipeline in both liquid tumor and solid tumor development and establishing U.S. R&D center at Gaithersburg, Maryland.

Impairment of Non-current Assets

	2018	2017	Change	Percent
For the nine months ended September 30,	$2,914,320	$-	$2,914,320	N/A

The impairment of investments for the nine months ended September 30, 2018 is comprised of the recognition of other than temporary impairment on the value of shares in investments of $29,423 and impairment of $2,884,896 provided against the net book value of GVAX license. No such expense existed in the same period in 2017.

The Company provided full impairment of $29,424 for shares of ALEV for the nine months ended September 30, 2018 as ALEV filed Form 15 in SEC and was no longer traded in the market in recent quarter.

The Company reassessed its return on investment to develop GVAX for cancer therapies in the current competitive market and decided to terminate its GVAX program and its license agreements with the University of South Florida (“USF”) and the Moffitt Cancer Center (“Moffitt”). As a result the Company made a full impairment of $2,884,896 for the USF and Moffitt licenses. CD40LGVAX was licensed in 2015 with the intention of providing alternative treatment options for late stage non-small cell lung cancer (NSCLC) patients. Since then, the landscape of NSCLC has changed dramatically. Pembrolizumab has been approved as first-line treatment for patients with metastatic NSCLC with high PD-L1 expression, and for patients with metastatic NSCLC following disease progression on chemotherapy. Recently, the FDA has accepted a supplemental biologics license application (sBLA) for the combination of nivolumab plus ipilimumab for the frontline treatment of patients with advanced NSCLC with tumor mutational burden (TMB) ≥10 mutations per megabase (mut/Mb). In addition, the Company has recently licensed TIL patents from NIH/NCI for multiple indications in solid tumors and decided that TIL technology platform has a higher potential to capture a broader solid tumors market. Hence we decided to terminate the development of CD40LGVAX and focus our clinical development effort based on the TCR-T and TIL technologies for solid tumors. On October 29, 2018 the Company notified Moffit of such termination.

Operating Loss

	2018	2017	Change	Percent
For the nine months ended September 30,	$(30,694,141)	$(20,140,228)	$(10,553,913)	52%

The increase in the operating loss for the nine months ended September 30, 2018 as compared to the same period in 2017 was primarily due to changes in research and development expenses of $7,516,000 and impairment of non-current assets of $2,914,000.

Total Other Income

	2018	2017	Change	Percent
For the nine months ended September 30,	$272,757	$1,574,953	$(1,302,196)	(83)%

Other income for the nine months ended September 30, 2018 and September 30, 2017 was primarily interest income, government grants and gain/loss from currency exchange fluctuation; bolstered in 2017 by $1.58 million government grants.

Income Taxes Provision

	2018	2017	Change	Percent
For the nine months ended September 30,	$(4,879)	$(2,450)	$(2,429)	99%

While we have plans for growing and developing our business, 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 nine months ended September 30, 2018 was comprised of US state tax of $2,400 and the withholding corporation income tax of $2,479 of Hong Kong subsidiary for its royalty income derived from China. Income tax expense for nine months ended September 30, 2017 all represent US state tax.

Net Loss

	2018	2017	Change	Percent
For the nine months ended September 30,	$(30,426,263)	$(18,567,725)	$(11,858,538)	64%

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

Comprehensive Loss

	2018	2017	Change	Percent

For the nine months ended September 30,	$(31,563,006)	$(18,169,939)	$(13,393,067) 74%

Comprehensive net loss for nine months ended September 30, 2018 includes a currency translation net loss of approximately $1,137,000 combined with the changes in net income. Comprehensive net loss for nine months ended September 30, 2017 includes unrealized net loss on investments of approximately $240,000 and a currency translation net gain of approximately $638,000 combined with the changes in net income.

Liquidity and Capital Resources

We had working capital of $64,414,934 as of September 30, 2018 compared to $20,118,725 as of December 31, 2017. Our cash position increased to $57,925,198 (excluding six-month deposits of $10,000,000 recorded in short-term investment) at September 30, 2018 compared to $21,568,422 at December 31, 2017 for the cash used in operating and investment activities.

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 $19,359,000 and $13,952,000 for the nine months ended September 30, 2018 and 2017, respectively. The following table reconciles net loss to net cash used in operating activities:

For the nine months ended September 30,	2018	2017	Change
Net loss	$(30,426,263)	$(18,567,725)	$(11,858,538)
Non cash transactions	10,541,423	6,366,530	4,174,893
Changes in operating assets, net	525,504	(1,750,552)	2,276,056
Net cash used in operating activities	$(19,359,336)	$(13,951,747)	$(5,407,589)

The 2018 change in non-cash transaction was primarily due to the increase in impairment on intangible assets of $2,885,000 as well as the increase in depreciation and amortization of $1,665,000 compared with same period in 2017.

Net cash used in investing activities was approximately $14,471,000 and $7,002,000 in the nine months ended September 30, 2018 and 2017, respectively. The $14,471,000 includes a $10,000,000 short-term deposits and the $4,438,000 is capital expenditures for new equipment and facility improvement.
Net cash (used in) provided by financing activities was approximately $70,556,000 and $(2,210,000) in the nine months ended September 30, 2018 and 2017, respectively. Net cash inflow in the financing activities in 2018 was mainly attributed to the proceeds received from the issuance of common stock and exercise of options, net of the repurchase of the Company’s common stock. Net cash used in the financing activities in 2017 was mainly attributed to repurchase of the Company’s common stock.

Liquidity and Capital Requirements Outlook

We anticipate that the Company will require approximately $46 million in cash to operate as planned in the coming 12 months. Of this amount, approximately $33 million will be used in 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 on hand and additional equity financing to provide for these capital requirements. We do not intend to use, and will not rely on our holdings in these illiquid 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. Other two of our stocks held, Alpha Lujo, Inc. (“ALEV”) and Wonder International Education & Investment Group Corporation (“Wonder”), are no longer traded on any stock market. We do not know whether we can liquidate any of our 8,000,000 shares of Arem Pacific stock or the 2,942,350 shares of ALEV stock and the 2,057,131 shares of Wonder stock, or if liquidated, whether the realized amount will be meaningful at all. As a result, we have written down these stocks to their fair value.

In February and April of 2016, the Company completed two closings of a financing transaction with Wuhan Dangdai Science & Technology Industries Group Inc., pursuant to which the Company sold to the Investor an aggregate of 2,270,000 shares of the Company’s common stock, par value $0.001 per share, for approximately $43,130,000 in gross proceeds. 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 September 25, 2018, the Company entered into a Securities Purchase Agreement with Novartis Pharma AG, pursuant to which the Company agreed to sell, and the Investors 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 (the "Novartis Shares"), at $27.43 per share, for total gross proceeds of approximately $40 million. On October 10, 2018, the Company filed a registration statement on Form S-3 for resale of the Novartis Shares. On October 22, 2018, the SEC declared the S-3 effective. On October 23, 2018, we filed the requisite resale prospectus.

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 debt or equity offerings, and may seek additional capital through arrangements with strategic partners or from other sources.

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. 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.

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 September 30, 2018.

	Payments due by period			
Contractual Obligations	Less than	2-3	4-5	More than

	Total	1 year	years	years	5 years
Capital Commitment	$1,452,986	$1,452,986	-	-	-
Operating Lease Obligations	20,517,813	2,856,546	5,129,012	4,997,323	7,534,932
Total	$21,970,799	$4,309,532	$5,129,012	$4,997,323	$7,534,932

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, current investment and receivables etc. Exposure to these credit risks are monitored by management on an ongoing basis.

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

In respect of receivables, the Company does not obtain collateral from customers. The Company's exposure to credit risk is influenced mainly by the individual characteristics of each customer rather than the industry, country or area in which the customers operate and therefore significant concentrations of credit risk arise primarily when the Group has significant exposure to individual customers. As of September 30, 2018, 100% of the total accounts receivable was due from the largest customer group of the Company.

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

Interest Rate Risk

The Company's interest rate risk arises primarily from cash deposited at banks and the Company doesn't have any interest-bearing long-term payable/ borrowing, therefore its exposure to interest rate risk is limited.

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 September 30, 2018 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 September 30, 2018. 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 September 30, 2018	
	RMB	USD
Cash and cash equivalents	1,303	185,302
Net exposure arising from recognised assets and liabilities	1,303	185,302

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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 September 30, 2018	
	increase/(decrease) in foreign exchange rates	Effect on net loss (Expressed in USD)
RMB (against USD)	5%	(9,200)
	-5%	9,200

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 September 30, 2018, 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

None.

ITEM 1A. RISK FACTORS

During the three months ended September 30, 2018, there were no material changes to the risk factors disclosed in Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2017 except the risks set forth below.

Litigation and other proceedings relating to intellectual property is expensive, time consuming and uncertain, and we may be unsuccessful in our efforts to protect against infringement by third parties or defend ourselves against claims of infringement or otherwise.

To protect our intellectual property, we may initiate litigation or other proceedings. Third parties may also initiate proceedings to challenge our intellectual property rights. For instance, in April 2018, a company based in Hangzhou, China, submitted a petition with the PRC Trademark Office to challenge our Rejoin™ trademark on the basis of a lack of use. Upon such petition, the PRC Trademark Office has issued a notice, requesting us to provide evidence of use by August 30, 2018. We collected evidence in response to such notice and timely submitted a response to refute the claim. Although we are dedicated to protecting our intellectual property in such proceedings and believe that we have resources to do so, there is no assurance that we will succeed or defend such notice in each of these matters. The loss or narrowing of our intellectual property protection, the inability to secure or enforce our intellectual property rights or a finding that we have infringed the intellectual property rights of a third party could limit our ability to develop or market our products and services in the future or adversely affect our revenues. In addition, intellectual property litigation and other adverse proceedings are costly and time-consuming in general, divert the attention of management and technical personnel and could result in substantial uncertainty regarding our future viability, even if we ultimately prevail. Furthermore, any public announcements related to such litigation or regulatory proceedings could adversely affect the price of our common stock.

Third parties may allege that the research, development and commercialization activities we conduct infringe patents or other proprietary rights owned by such parties. This may turn out to be the case even though we have conducted a search and analysis of third-party intellectual property rights and have determined that certain aspects of our research and development and proposed products activities apparently do not infringe on any third-party Chinese intellectual property rights. If we are found to have infringed the intellectual property of a third party, we may be required to pay substantial damages; we also may be required to seek from such party a license, which may not be available on acceptable terms, if at all, to continue our activities. A judicial finding or infringement or the failure to obtain necessary licenses could prevent us from commercializing our products, which would have a material adverse effect on our business, operating results and financial condition.

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 Share Purchase Program during the nine months ended September 30, 2018.

Period	Total number of shares purchased	Average price paid per share	Total number of shares purchased as part of publicly announced plans or programs	Maximum dollar value of shares that may yet be purchased under the plans or programs
Prior to 2018	426,794	$9.32	426,794	
January 1, 2018 ~ January 31, 2018	-	$-	-	
February 1, 2018 ~ February 28, 2018	-	$-	-	
March 1, 2018 ~ March 31, 2018	37,462	$19.10	37,462	
April 1, 2018 ~ April 30, 2018	17,984	$19.84	17,984	
May 1, 2018 ~ May 31, 2018	47,006	$18.97	47,006	
June 1, 2018 ~ June 30, 2018	31,522	$18.14	31,522	
July 1, 2018 ~ July 31, 2018	-	$-	-	
August 1, 2018 ~ August 31, 2018	-	$-	-	
September 1, 2018 ~ September 30, 2018	-	$-	-	
Total	560,768	$11.62	560,768	8,486,007

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

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.
32.1	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.
(Registrant)

Date: November 6, 2018 By: /s/ Bizuo (Tony) Liu
Bizuo (Tony) Liu
Chief Executive Officer and Chief Financial Officer
(Principal Executive Officer and Principal Financial and Accounting Officer)