

NanoSphere Health Sciences Inc.

Management Discussion & Analysis

March 31, 2019

Management Discussion and Analysis For the Period Ended March 31, 2019

The following Management Discussion and Analysis ("MD&A") of NanoSphere Health Sciences Inc. (the "Company" or "NanoSphere Health Sciences" or "NanoSphere") should be read in conjunction with the condensed consolidated interim financial statements of the Company for the period ended March 31, 2019 which have been prepared in accordance with the International Financial Reporting Standards ("IFRS"). This MD&A includes certain statements that may be deemed "forward looking statements". All statements in this MD&A, other than statements of historical fact, that address future exploration activities and events or developments that the Company expects, are forward looking statements. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in the forward-looking statements. Additional information can be found on SEDAR at www.sedar.com. This MD&A is dated as of May 28, 2019.

#### **DESCRIPTION OF THE COMPANY**

NanoSphere Health Sciences is a biotechnology firm that created a patented NanoSphere Deliver System, a revolutionary platform using nanotechnology in the biodelivery of supplements, nutraceuticals and over-the-counter medications for the cannabis, pharmaceutical and animal health industries, and beyond. NanoSphere Delivery System represents one of the most important developments for advancing the non-invasive and user-friendly delivery of biological agents in over 25 years. The Company trades on the Canadian Securities Exchange under the symbol 'NSHS'.

### **Company Updates and Highlights**

Subsequent to year-end 2017 the Company was formally granted its Master patent on the NanoSphere Delivery System, protecting the Company's core technology of nanoencapsulation and delivery of bioactive compounds. This patent is a significant milestone for the Company and protects our novel bioactive delivery technology. for Nutraceuticals, Cosmeceuticals, Pharmaceuticals, Animal health and others. These are all areas of opportunity for the Company to expand and develop ground breaking products. The Company was further granted it's second Patent which provides our exclusivity for Cannabinoid delivery utilizing our NanoSphere Delivery System. This patented technology is first being utilized to produce our flagship product, Evolve, NanoSerum, which is branded under Evolve Formulas name. Evolve NanoSerum, our thriving cannabis brand, was developed as the Company saw a unique opportunity for our patented delivery platform. The Company has also developed a new CBD version of the NanoSerum. which formulation is intended to have therapeutic benefits that may help with inflammation, anxiety, pain, sleep, and mood. The CBD product contains the restorative ingredient resveratrol, which, utilizing our NanoSphere Delivery System, will allow increased bioavailability of this restorative agent. Additionally, the Company has developed an Intra-Oral cannabis product, utilizing the NanoSphere Deliver System. The intra-Oral products are expected to be released into the market in the second quarter 2019.

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The cannabis industry is growing rapidly, and this technology has the ability to help by solving its most inhibiting problems, i.e. the delivery of cannabis and cannabinoids into the blood stream. Our technology offers rapid action, high bioavailability, precise doses and low adverse reactions. The marijuana industry, both medical and recreational, has historically had issues with certain delivery methods. The Company's NanoSphere Delivery system solves the delivery issue through its technology and creates bioavailability enhancements. The Company currently has Evolve products in Colorado and California dispensaries. With expansion, through License agreements, into Oregon and Canada expected in the second quarter 2019.

The Company during 2018 focused extensively on the research and development of the core technology and ground work for commercializing this technology in our home state of Colorado. A significant financial investment was made in the Intellectual Property rights resulting in the grants of the two U.S. Patents. In addition, the Company has invested significantly throughout the year in the establishment of our Manufacturing Process and in the related Equipment, as well as the support of our Colorado licensee, which will then be the prototype utilized by all Licensees. This ensures consistency of our products wherever they are manufactured. We expect the investment in the operations of the Company and in the process to result in increased revenue recognition in 2019 through current and expected additional Licensees.

To further the company's growth, additional capital was raised in February 2019, wherein the Company issued 6,666,394 units at CAD\$0.30 per unit for gross proceeds of \$1,505,237 (CAD\$1,999,918). Each unit consisted of one common share and one half of one share purchase warrant entitling the holder to purchase one common share at a price of CAD\$0.50. In connection with the financing, 106,050 finder warrants with a fair value of \$12,871 and cash of \$31,545 (CAD\$41,931) was recorded as share issuance costs.

On November 17, 2017, the Company and Nanosphere Health Sciences LLC ("Nano LLC"), entered in to a Share Exchange Agreement ("SEA") whereby the Company acquired all of the outstanding shares of Nano LLC in consideration for 60,000,000 common shares of the Company. After completion of the SEA, the shareholders of Nano LLC held approximately 71.21% of the Company. Accordingly, Nano LLC is considered to have acquired the Company with the SEA being accounted as a reverse takeover of the Company by Nano LLC shareholders (the "RTO").

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#### **SUMMARY OF QUARTERLY RESULTS**

	2019	2018				2017			
	Q1	Q4	Q3	Q2	Q1	Q4	Q3	Q2	
Sales, net of provision	265,060	37,881	-	-	-	-	-	-	
Net loss	728,958	2,058,539	651,692	809,285	995,189	9,285,808	254,595	151,270	
Basic and diluted net loss per share *less than 0.01	0.01	0.02	0.01	0.02	0.01	0.90	NA	NA	

### Results of Operations for the three-month period ended March 31, 2019 compared to 2018

The net loss for the three-month period ended March 31, 2019 decreased by \$266,231 to \$728,958 as compared to \$995,189 for the three-month period ended March 31, 2018. The significant decrease in net loss was due to investor relation and marketing decreased to \$141,144 as compared to \$324,653 for the three months periods ended March 31, 2019 and 2018, respectively, due to the Company entered into multiple investor relations contracts in advance of its rights offering for a largescale short-term investor relations campaign. The Company does not expect these costs to persist and is focusing on reducing its investor relations expenditures. Additionally, during the three months ended March 31, 2019, the Company recognized a license revenue of \$265,060 (2018 - \$Nil).

### LIQUIDITY AND CAPITAL RESOURCES

The Company has no significant revenues to date. In order to manage risk, the Company closely monitors its cash requirements and expenditures. At March 31, 2019 and December 31, 2018, the Company's working capital and deficit were as follows:

	March 31, 2019	December 31, 2018
Working capital (deficit) Deficit	\$ 577,907 (17,349,680)	\$ (168,153) (16,620,722)

As at March 31, 2019, the Company has a working capital of \$577,907. Management is actively reviewing financing opportunities in order to meet working capital requirements for the current fiscal year.

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BASIS OF PRESENTATION - INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS)

The annual consolidated financial statements of the Company comply with IFRS as issued by the International Accounting

Standards Board ("IASB") and interpretations of the International Financial Reporting Interpretations Committee ("IFRIC").

The consolidated financial statements of the Company have been prepared on an accrual basis and are based on historical

costs, modified where applicable. The consolidated financial statements are presented in US dollars unless otherwise noted.

RELATED PARTY TRANSACTIONS

The consolidated financial statements include the financial statements of NanoSphere Health Sciences Inc. and its 100%

owned subsidiaries.

Key management compensation

During the period ended March 31, 2018, the Company paid or accrued:

a) Salaries and consulting fees of \$37,500 (2018 - \$37,500) to the CEO of the Company, \$36,450 (2018 -

\$40,000) to the Chief Science Officer of the Company, \$19,500 (2018 - \$9,750) to the Chief Marketing Officer of

the Company, \$41,490 (2018 - \$37,500) to the President and COO of the Company, \$27,081 (2018 - \$28,800)

to Vice President of Finance of the Company, and \$5,642 (2018 - \$5,788) to the CFO of the Company.

b) Share-based compensation of \$70,686 (2018 - \$Nil) to the officers and directors of the Company was recorded.

Included in accounts payable and accrued liabilities is \$38,119 (2018 - \$4,089) due to directors, officers, and companies

controlled by directors and officers of the Company that is non-interest bearing and due on demand.

During the year ended December 31, 2015, the Company received advances of \$60,000 for Canosphere, LLC a company

controlled by the directors of the Company. The advances were unsecured, non-interest bearing and have been forgiven by

Canosphere, LLC during the period ended December 31, 2017.

On April 2, 2018, the Company entered into a license agreement with Evergreen Biosciences, LLC to sub-license the

Company's patented NanoSphere Delivery technology. Evergreen Biosciences is partially owned by Chief Operating Officer

of the Company. On April 2, 2018, Evergreen Biosciences, LLC (a related party) sub-licenced the Company's NanoSphere

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Delivery technology to CCBA LLC. Additionally, on April 20, 2018, the Company entered into agreements to license the

NanoSphere delivery technology to certain companies in the states of California and Nevada.

**CRITICAL ACCOUNTING ESTIMATES** 

Critical accounting estimates

Management is required to make certain estimates, judgments and assumptions that affect the reported amounts of assets

and liabilities at the date of the financial statements and the reported expenses during the period. Actual results could differ

from these estimates.

Significant assumptions about the future and other sources of estimation and judgement uncertainty that management has

made at the end of the reporting period, that could result in a material adjustment to the carrying amounts of assets and

liabilities in the event that actual results differ from assumptions made, relate to:

I. Going concern

The assessment of the Company's ability to continue as a going concern involves critical judgement based on

historical experience. Significant judgements are used in the Company's assessment of its ability to continue as a

going concern. Management anticipates the need to raise additional funds within the next 12 months to pay

operational costs and fund any investing activities. To the extent financing is not available, lease payments, rental

payments, and other payments may not be satisfied and could result in a loss of earning opportunities for the

Company. These material uncertainties may cast significant doubt upon the Company's ability to continue as a

going concern which is further described in Note 1 and Note 2 in the financial statements.

II. Licensing agreement

During the year of December 31, 2018, the Company entered into two licensing arrangements for the use of

proprietary technology. Management concluded that licensing arrangements do not result in control of the licensee,

in accordance with IFRS.

III. Loans and receivables

Loans and receivables are financial assets with fixed or determinable payments that are not quoted in an active

market. After initial recognition, loans and receivables are measured at amortized cost using the effective interest

rate method, less any impairment losses. The carrying amount is reduced through the use of an allowance

account. When an amount receivable is considered uncollectible, it is written off against the allowance account.

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Subsequent recoveries of amounts previously written off are credited against the allowance account. Changes in

the carrying amount of the allowance are recognized in profit or loss.

**RISKS AND UNCERTAINTIES** 

This section discusses factors relating to the business of Company that should be considered by both existing and potential

investors. The information in this section is intended to serve as an overview and should not be considered comprehensive

and the Company may face risks and uncertainties not discussed in this section, or not currently known to us, or that we

deem to be immaterial. All risks to the Company's business have the potential to influence its operations in a materially

adverse manner

The following sets out the principal risks (non-inclusive) faced by the Company.

Financing risks. The Company will be dependent upon the capital markets to raise additional financing in the future, while

it establishes a user base for its products. As such, the Company is subject to liquidity risks in meeting its development and

future operating cost requirements in instances where cash positions are unable to be maintained or appropriate financing is

unavailable. These factors may impact the Company's ability to raise equity or obtain loans and other credit facilities in the

future and on terms favorable to the Company and its management. If uncertain market conditions persist, the Company's

ability to raise capital could be jeopardized, which could have an adverse impact on the Company's operations and the

trading price of the Company's shares on the Exchange.

Share Price Volatility and Price Fluctuations. The market price for the Common Shares of the Company could be subject

to wide fluctuations. Factors such as commodity prices, government regulation, interest rates, share price movements of

peer companies and competitors, as well as overall market movements, may have a significant impact on the market price of

the Company. The stock market has from time to time experienced extreme price and volume fluctuations, which have often

been unrelated to the operating performance of particular companies.

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Key personnel risks. The Company's business development efforts are dependent to a large degree on the skills and

experience of certain of its key personnel. The Company does not maintain "key man" insurance policies on these

individuals. Should the availability of these persons' skills and experience be in any way reduced or curtailed, this could have

a material adverse outcome on the Company and its securities.

Collection of revenue risk. The Company records licensing revenue but to date has not received payment. The Company

has assessed the collectability of revenue and determined that it can reasonably expect collection and has accounted for

revenue in accounts receivable. Should revenue not be collected, it could be reserved in subsequent filings.

History of Net Losses; Accumulated Deficit; Lack of Revenue from Operations. The Company has incurred net losses

to date. Its deficit as of March 31, 2019 was \$17,349,680. The Company does not have a history of sales operations and

there is no assurance that it will produce revenue, operate profitably or provide a return on investment in the future.

Uninsurable risks. The Company may be subject to liability for risks against which it cannot insure or against which the

Company may elect not to insure due to the high cost of insurance premiums or other factors. The payment of any such

liabilities would reduce the funds available for the Company's normal business activities. Payment of liabilities for which the

Company does not carry insurance may have a material adverse effect on the Company's financial position and operations.

Change in Law, Regulations and Guidelines. The Company's business is subject to a variety of laws, regulations and

quidelines relating to marketing, acquisition, manufacture, management, transportation, storage, sale and disposal of

medical marijuana but also laws and regulations relating to health and safety, the conduct of operations and the protection of

the environment. Changes to such laws, regulations and guidelines may cause adverse effects to the Company's operations.

On February 24, 2016, the Federal Court released its decision in the case of Allard et al v. Canada, declaring that the

Marijuana for Medical Purposes Regulations ("MMPR"), as it was drafted, was unconstitutional in violation of the plaintiffs'

rights under section 7 of the Charter of Rights and Freedoms. On August 24, 2016, the Access to Cannabis for Medical

Purposes Regulations ("ACMPR") came into force, replacing the MMPR as the regulations governing Canada's medical

cannabis regime which permits patients to produce a limited amount of cannabis for their own medical purposes or to

designate a person to produce a limited amount of cannabis. The ACMPR could potentially decrease the size of the market

for the Company's business, and potentially materially and adversely affect the Company's business, its results of operations

and financial condition.

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Unfavourable Publicity or Consumer Perception. The success of the medical marijuana industry may be significantly

influenced by the public's perception of marijuana's medicinal applications. Medical marijuana is a controversial topic, and

there is no guarantee that future scientific research, publicity, regulations, medical opinion and public opinion relating to

medical marijuana will be favourable. The medical marijuana industry is an early-stage business that is constantly evolving

with no guarantee of viability. The market for medical marijuana is uncertain, and any adverse or negative publicity, scientific

research, limiting regulations, medical opinion and public opinion relating to the consumption of medical marijuana may have

a material adverse effect on our operational results, consumer base and financial results.

Political and Economic Instability. The Company may be affected by possible political or economic instability. The risks

include, but are not limited to, terrorism, military repression, extreme fluctuations in currency exchange rates and high rates

of inflation. Changes in medicine and agriculture development or investment policies or shifts in political attitude in certain

countries may adversely affect the Company's business. Operations may be affected in varying degrees by government

regulations with respect to restrictions on production, distribution, price controls, export controls, income taxes, expropriation

of property, maintenance of assets, environmental legislation, land use, land claims of local people and water use. The effect

of these factors cannot be accurately predicted.

FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

Financial instruments measured at fair value are classified into one of three levels in the fair value hierarchy according to the

relative reliability of the inputs used to estimate the fair values. The three levels of the fair value hierarchy are:

Level 1: Unadjusted quoted prices in active markets for identical assets or liabilities;

Level 2: Inputs other than quoted prices that are observable for the asset or liability either directly or indirectly; and

Level 3: Inputs that are not based on observable market data.

The fair value of the Company's receivables, accounts payable and accrued liabilities, approximate carrying value, which is

the amount recorded on the consolidated statement of financial position. Cash and receivables, under the fair value

hierarchy are based on level one quoted prices in active markets for identical assets or liabilities.

The Company is exposed in varying degrees to a variety of financial instrument related risks. The Board of Directors

approves and monitors the risk management processes, inclusive of documented investment policies, counterparty limits,

and controlling and reporting structures. The type of risk exposure and the way in which such exposure is managed is

provided as follows:

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Credit risk

Credit risk is the risk that one party to a financial instrument will fail to discharge an obligation and cause the other party to

incur a financial loss. The Company's primary exposure to credit risk is on its cash held in bank accounts. The majority of

cash is deposited in bank accounts held with major banks in Canada. This risk is managed by using major banks that are

high credit quality financial institutions as determined by rating agencies. The Company's secondary exposure to risk is on

its other receivables. This includes GST receivable of \$36,329 from the Government of Canada. Management believes that

the credit risk concentration with respect to receivables is minimal.

Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company has

a planning and budgeting process in place to help determine the funds required to support the Company's normal operating

requirements on an ongoing basis. The Company ensures that there are sufficient funds to meet its short-term business

requirements, taking into account its anticipated cash flows from operations and its holdings of cash.

Historically, the Company's sole source of funding has been the issuance of equity securities for cash, primarily through

private placements. The Company's access to financing is always uncertain. There can be no assurance of continued

access to significant equity funding.

All of the contractual maturities of the Company's non-derivative financial liabilities are within one year of the financial

statement end date.

Market risk

Market risk is the risk of loss that may arise from changes in market factors such as interest rates, foreign exchange rates,

and commodity and equity prices.

a) Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes

in market interest rates.

The risk that the Company will realize a loss as a result of a decline in the fair value of the short-term investments included in

cash is minimal.

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b) Foreign currency risk

The Company is exposed to foreign currency risk on fluctuations related to cash, accounts receivable and accounts payable

and accrued liabilities that are denominated in Canadian Dollars (CAD). Based on management's knowledge and experience

of the financial markets, the Company believes that 10% fluctuation in the CAD against the US Dollars would have a nominal

affect on net loss for the period.

c) Price risk

The Company is exposed to price risk with respect to commodity and equity prices. Equity price risk is defined as the

potential adverse impact on the Company's earnings due to movements in individual equity prices or general movements in

the level of the stock market. Commodity price risk is defined as the potential adverse impact on earnings and economic

value due to commodity price movements and volatilities. The Company closely monitors commodity prices of gold,

individual equity movements, and the stock market to determine the appropriate course of action to be taken by the

Company.

Sensitivity Analysis

The carrying amount of cash, receivables, and accounts payable and accrued liabilities approximates their fair value due to

their short-term nature. The Company does not have significant exposure to changing interest rates.

Based on management's knowledge and experience of the financial markets, the Company believes the following movement

is "reasonably possible".

Capital management

The Company's primary objectives in capital management are to safeguard the Company's ability to continue as a going

concern in order to provide returns for shareholders and to maintain sufficient funds to finance current production of the

Company's patented NanoSphere Delivery System and development of future products utility system. Capital is comprised

of the Company's shareholders' equity. The Company manages its capital structure to maximize its financial flexibility

making adjustments to it in response to changes in economic conditions and the risk characteristics of the underlying assets

and business opportunities.

The Board of Directors does not establish quantitative return on capital criteria for management, but rather relies on

management to sustain future development and commercialization of the business. The Company will continue to assess

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sources of financing available and to assess the potential for collaboration with interested partners with a view to managing its current financial resources in the interest of sustaining the long-term viability of the Company's operations.

Management reviews its capital management approach on an on-going basis and believes that this approach, given the stage of the Company, is reasonable.

### **OUTSTANDING SHARE DATA**

Common shares, options, warrants and convertible securities outstanding as at the date of this report:

Security	Outstanding		
Common Shares	108,355,051		
Options	4,715,555		
Warrants	17,638,869		

#### SUBSEQUENT EVENT

Subsequent to March 31, 2019, the Company:

a) Received formal Notice of Allowance from the Canadian Intellectual Property Office for Patent Application 2,970,91, covering "The Method of Treating Inflammatory Disorders and Global Inflammation with Phospholipid Nanoparticle Encapsulations of NSAIDs." NSAIDs being non-steroidal anti-inflammatory drugs, which include ibuprofen, aspirin, and naproxen among others.

### PROPOSED TRANSACTIONS

The Company has no proposed transactions other than already disclosed.

#### OFF BALANCE SHEET ARRANGEMENTS

The Company has no off-balance sheet arrangements.

# OTHER INFORMATION

Additional information on the Company is available on SEDAR at www.SEDAR.COM