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 April 30, 2019

Commission file number 0-11254

ANIXA BIOSCIENCES, INC	C.
(Exact name of registrant as specified in its charter)	

	(Exact name	of registrant as specified in	n its charter)	
Delaware				11-2622630
(State or other jurisdiction of				(I.R.S. Employer
incorporation or				I I and Conding NI
organization)				Identification No.)
3150 Almaden Expressway, Su	ita 250			
San Jose, CA	ne 250			95118
(Address of principal executive	offices)			(Zip Code)
(radiess of principal executive	offices)			(Zip code)
		(408) 708-9808		
	(Registrant's to	elephone number, includir	g area code)	
Securities registered pursuant to Section	12/h) of the Act			
Securities registered pursuant to Section	12(0) of the Act.			
	Title of each class	Trading symbol	Name of exchange on which registered	1
	Common Stock, par value \$.01 per share	ANIX	NASDAQ Capital Market	
Indicate by check mark whether the regis	strant has submitted electronically every Interactive ter period that the registrant was required to subm	ive Data File required to	. , —	o on S-T (§232.405 of this chapter) during
	strant is a large accelerated filer, an accelerated f r," "smaller reporting company," and "emerging			growth company. See the definitions of
	Large accelerated filer []	F	ccelerated filer []	
	Non-accelerated filer [X]	S	maller reporting company [X]	
	Emerging growth company []			
If an emerging growth company, indicat provided pursuant to Section 13(a) of the	e by check mark if the registrant has elected no Exchange Act. []	ot to use the extended to	ansition period for complying with any new or	r revised financial accounting standards
Indicate by check mark whether the regis	trant is a shell company (as defined in Rule 12b-2	2 of the Exchange Act).	Yes No_X	
Indicate the number of shares outstanding	g of each of the issuer's classes of common stock,	as of the latest practical	ole date.	
On June 11, 2019 the registrant had outsta	anding 20,096,743 shares of Common Stock, par	value \$.01 per share, w	nich is the registrant's only class of common sto	ck.

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements.

ANIXA BIOSCIENCES, INC. AND SUBSIDIARIES CONDENSED CONSOLIDATED BALANCE SHEETS

	(Unaudited)		
	 April 30,		October 31,
<u>ASSETS</u>	2019		2018
Current assets:			
Cash and cash equivalents	\$ 3,822,306	\$	3,055,890
Short-term investments in certificates of deposit	2,750,000		2,000,000
Receivables	796,954		306,991
Prepaid expenses and other current assets	 124,272		175,491
Total current assets	7,493,532		5,538,372
Patents, net of impairment of \$1,001,729 and \$582,979, respectively, and accumulated amortization of \$1,992,507 and \$1,615,632, respectively	41,875		837,500
Property and equipment, net of accumulated depreciation of \$71,907 and \$53,799, respectively	230,019		72,670
Total assets	\$ 7,765,426	\$	6,448,542
<u>LIABILITIES AND EQUITY</u>			
Current liabilities:			
Accounts payable	\$ 717,920	\$	582,012
Accrued expenses	877,841		683,099
Total current liabilities	 1,595,761		1,265,111
Commitments and contingencies (Note 8)			
Equity:			
Shareholders' equity:			
Preferred stock, par value \$100 per share; 19,860 shares authorized; no			
shares issued or outstanding	-		-
Series A convertible preferred stock, par value \$100 per share; 140 shares			
authorized; no shares issued or outstanding	-		-
Common stock, par value \$.01 per share; 48,000,000 shares authorized; 20,005,075 and 18,908,632 shares issued and outstanding, respectively	200,050		189,086
Additional paid-in capital	183,932,744		175,415,931
Accumulated deficit	(177,589,742)		(170,170,209)
Total shareholders' equity	6,543,052	_	5,434,808
Noncontrolling interest (Note 1)	(373,387)		(251,377)
Total equity	6,169,665		5,183,431
Total liabilities and equity	\$ 7,765,426	\$	6,448,542

ANIXA BIOSCIENCES, INC. AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)

For the Six Months Ended

		April 30,			
		2019		2018	
Revenue	\$	250,000	\$	750,000	
Operating costs and expenses:					
Inventor royalties, contingent legal fees, litigation and licensing		166.250		526,022	
expenses related to patent assertion Amortization of patents		166,250 376,875		526,023 162,648	
•		370,873		102,048	
Research and development expenses (including non-cash share-based compensation expenses of \$2,228,845 and \$195,826, respectively)		3,516,665		1,438,066	
General and administrative expenses (including non-cash share-based compensation expenses of \$1,842,769 and \$402,857, respectively)		3,348,422		1,898,803	
Impairment in carrying amount of patent asset (Note 1)		418,750		1,070,005	
Total operating costs and expenses		7,826,962		4,025,540	
Loss from operations		(7,576,962)		(3,275,540)	
Interest income		35,419		17,552	
Loss before income taxes		(7,541,543)		(3,257,988)	
Provision for income taxes		-		-	
Net loss		(7,541,543)		(3,257,988)	
Less: Net loss attributable to noncontrolling interest		(122,010)		(41,382)	
Net loss attributable to common shareholders	\$	(7,419,533)	\$	(3,216,606)	
	<u></u>	(1)		(2) 2,222/	
Net loss per common share attributable to common shareholders:					
Basic and diluted	\$	(0.38)	\$	(0.19)	
Weighted average common shares outstanding:					
Basic and diluted		19,403,933		16,661,083	

ANIXA BIOSCIENCES, INC. AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)

For the Three Months Ended

	April 30,			
	 2019			
Revenue	\$ 250,000	\$	750,000	
Operating costs and expenses:				
Inventor royalties, contingent legal fees, litigation and licensing				
expenses related to patent assertion	166,250		500,670	
Amortization of patents	125,625		81,324	
Research and development expenses (including non-cash share-based	,		,	
compensation expenses of \$655,066 and \$155,769, respectively)	1,269,393		660,193	
General and administrative expenses (including non-cash share-based				
compensation expenses of \$666,384 and \$175,941 respectively)	1,281,966		908,767	
Total operating costs and expenses	2,843,234		2,150,954	
·				
Loss from operations	(2,593,234)		(1,400,954)	
Interest income	18,300		8,440	
Loss before income taxes	(2,574,934)		(1,392,514)	
Provision for income taxes	-		-	
Net loss	(2,574,934)		(1,392,514)	
Less: Net loss attributable to noncontrolling interest	(37,242)		(13,980)	
Net loss attributable to common shareholders	\$ (2,537,692)	\$	(1,378,534)	
Net loss per common share attributable to common shareholders:				
Basic and diluted	\$ (0.13)	\$	(0.08)	
	. ,			
Weighted average common shares outstanding:				
Basic and diluted	19,645,140		16,713,091	

ANIXA BIOSCIENCES, INC. AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENT OF SHAREHOLDERS' EQUITY FOR THE SIX MONTHS ENDED APRIL 30, 2019 (UNAUDITED)

	Commo	on Sto	.ck	Additional Paid-in	Accumulated	Total Shareholders'	Non- controlling	Total
	Shares		Value	Capital	Deficit	Equity	Interest	Equity
Balance, October 31, 2018	18,908,632	\$ 1	189,086	\$ 175,415,931	\$ (170,170,209)	\$ 5,434,808	\$ (251,377)	\$ 5,183,431
Stock option compensation to employees and								
directors	-		-	2,024,664	-	2,024,664	-	2,024,664
Stock options and warrants issued to consultants	-		-	92,509	-	92,509	-	92,509
·				·		·		·
Common stock issued upon exercise of stock options	30,000		300	79,500	_	79,800	_	79,800
•	,			,		,		ĺ
Restricted stock award compensation to employee pursuant to stock incentive plan	-		-	1,954,441	-	1,954,441	-	1,954,441
Common stock issued pursuant to employee stock purchase plan	5,411		54	18,506	-	18,560	-	18,560
Common stock issued in at-the-market offering, net of offering expenses of \$152,911	1,061,032		10,610	4,347,193	-	4,357,803	-	4,357,803
Net loss					(7,419,533)	(7,419,533)	(122,010)	(7,541,543)
Balance, April 30, 2019	20,005,075	\$ 2	200,050	\$ 183,932,744	\$ (177,589,742)	\$ 6,543,052	\$ (373,387)	\$ 6,169,665

ANIXA BIOSCIENCES, INC. AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENT OF SHAREHOLDERS' EQUITY FOR THE SIX MONTHS ENDED APRIL 30, 2018 (UNAUDITED)

	Commo	on Stock Par Value	Additional Paid-in Capital	Accumulated Deficit	Total Shareholders' Equity	Non- controlling Interest	Total Equity
Balance, October 31, 2017	16,602,759	\$ 166,028	\$ 163,931,079	\$ (156,174,184)	\$ 7,922,923	\$ -	\$ 7,922,923
Stock option compensation to employees and directors	-	-	472,532	-	472,532	-	472,532
Stock option compensation to consultants	-	-	126,151	-	126,151	-	126,151
Common stock issued upon exercise of stock options	39,816	398	(398)	_	_	_	_
Common stock issued to consultants	5,347	53	14,949	-	15,002	-	15,002
Common stock issued in at-the-market offering, net of offering expenses of \$82,942	202,523	2,025	675,345	-	677,370	-	677,370
Issuance of noncontrolling interest in Certainty Therapeutics, Inc	-	-	68,974	-	68,974	(4,318)	64,656
Net loss				(3,216,606)	(3,216,606)	(41,382)	(3,257,988)
Balance, April 30, 2018	16,850,445	\$ 168,504	\$ 165,288,632	\$ (159,390,790)	\$ 6,066,346	\$ (45,700)	\$ 6,020,646

ANIXA BIOSCIENCES, INC. AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

For the six months ended April 30. 2019 2018 Cash flows from operating activities: Reconciliation of net loss to net cash used in operating activities: (7,541,543)(3,257,988)Net loss Stock option compensation to employees and directors 472,532 2,024,664 92,509 126,151 Stock options and warrants issued to consultants Restricted stock award compensation to employee pursuant to stock incentive plan 1,954,441 Common stock issued to consultants 15,002 Depreciation of property and equipment 18,108 7,369 Amortization of patents 376,875 162,648 Impairment in carrying amount of patent assets 418,750 Issuance of noncontrolling interest in Certainty Therapeutics, Inc. expensed as a license fee 64,656 Change in operating assets and liabilities: (489,963)Receivables (41,889)Prepaid expenses and other current assets 51,219 (81,726)Accounts payable 135,908 (28,218)Accrued expenses 194,742 478,982 (2,764,290)(2,082,481) Net cash used in operating activities Cash flows from investing activities: Disbursements to acquire short-term investments in certificates of deposit (1,000,000)(1,250,000)Proceeds from maturities of short-term investments in certificates of deposit 250,000 3,500,000 Purchase of property and equipment (175,457)(11,813)Net cash (used in) provided by investing activities (925,457) 2,238,187 Cash flows from financing activities: 677,370 Net proceeds from sale of common stock in at-the-market offering 4,357,803 Proceeds from sale of common stock pursuant to employee stock purchase 18,560 plan <u>79</u>,800 Proceeds from exercise of employee stock options Net cash provided by financing activities 4,456,163 677,370 Net increase in cash and cash equivalents 766,416 833,076 Cash and cash equivalents at beginning of period 3,055,890 3,339,374 3,822,306 4,172,450 Cash and cash equivalents at end of period

ANIXA BIOSCIENCES, INC. AND SUBSIDIARIES NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(UNAUDITED)

1. BUSINESS AND FUNDING

Description of Business

As used herein, "we," "us," "our," the "Company" or "Anixa" means Anixa Biosciences, Inc. and its consolidated subsidiaries.

Our primary operations involve research and development of cancer therapeutics and diagnostics. Our cancer therapeutics program consists of development of chimeric endocrine receptor T-cell ("CER-T") technology, a novel form of CAR-T technology, initially focused on treating ovarian cancer. Our cancer diagnostics program consists of development of the artificial intelligence (AI) driven CchekTM liquid biopsy platform for early cancer detection.

Our subsidiary, Certainty Therapeutics, Inc. ("Certainty"), is developing immuno-therapy drugs against cancer. Certainty holds an exclusive worldwide, royalty-bearing license to use certain intellectual property owned or controlled by The Wistar Institute ("Wistar") relating to Wistar's CER-T technology. We have initially focused on the development of a treatment for ovarian cancer, but we may also pursue applications of the technology for the development of treatments for additional solid tumors. The license agreement requires Certainty to make certain cash and equity payments to Wistar. With respect to Certainty's equity obligations to Wistar, Certainty issued to Wistar shares of its common stock equal to five percent (5%) of the common stock of Certainty.

Certainty, in collaboration with the H. Lee Moffitt Cancer Center and Research Institute, Inc. ("Moffitt"), is advancing toward human clinical testing its CER-T technology for treating ovarian cancer. Certainty is working with researchers at Moffitt to complete studies necessary to submit an Investigational New Drug ("IND") application with the U.S. Food and Drug Administration ("FDA"). We anticipate filing the IND with the FDA in the fall of 2019, with human clinical trials commencing thereafter, by late 2019 or early 2020.

Our subsidiary, Anixa Diagnostics Corporation ("Anixa Diagnostics"), is developing CchekTM, an AI driven platform of non-invasive blood tests for the early detection of cancer which is based on the body's immune response to the presence of a malignancy. We have demonstrated the efficacy of CchekTM with 20 different types of cancer, including: breast, lung, colon, melanoma, ovarian, liver, thyroid, pancreatic, appendiceal, uterine, osteosarcoma, leiomyosarcoma, liposarcoma, vulvar, prostate, bladder, cervical, head and neck, gastric and testicular cancers. Breast, lung, colon and prostate cancers represent the four largest categories of cancer worldwide.

We are currently developing tests for the detection of multiple types of cancer and are working with our development and commercialization partner, ResearchDx, a CLIA-certified laboratory, to launch CchekTM Prostate Cancer Confirmation as a Laboratory Developed Test by the end of the third calendar quarter of 2019.

Over the next several quarters, we expect the development of Certainty's CER-T technology and Anixa Diagnostic's CchekTM to be the primary focus of the Company. As part of our legacy operations, the Company remains engaged in limited patent licensing activities in the area of encrypted audio/video conference calling. We do not expect these activities to be a significant part of the Company's ongoing operations nor do we expect these activities to require material financial resources or attention of senior management.

Over the past several quarters, our revenue was derived from technology licensing and the sale of patented technologies, including revenue from the settlement of litigation. In addition to Certainty and Anixa Diagnostics, the Company may make investments in and form new companies to develop additional emerging technologies.

Funding and Management's Plans

Based on currently available information as of June 11, 2019, we believe that our existing cash, cash equivalents, short-term investments and expected cash flows will be sufficient to fund our activities for the next twelve months. However, our projections of future cash needs and cash flows may differ from actual results. If current cash on hand, cash equivalents, short term investments and cash that may be generated from our business operations are insufficient to continue to operate our business (including for the defense of a putative shareholder derivative complaint filed in the Court of Chancery of the State of Delaware, captioned Howland v. Kumar et al.), or if we elect to invest in or acquire a company or companies or new technology or technologies that are synergistic with or complimentary to our technologies, we may be required to obtain more working capital. During the six months ended April 30, 2019, we raised approximately \$4,358,000 through our at-the-market equity offering of 1,061,032 shares of common stock which is currently effective (we can sell an additional 415,078 shares under our current at-the-market equity program) and may remain available for us to use in the future. We may seek to obtain working capital during our fiscal year 2019 or thereafter through sales of our equity securities (including through the commencement of another at-the-market offering) or through bank credit facilities or public or private debt from various financial institutions where possible. We cannot be certain that additional funding will be available on acceptable terms, or at all. If we do identify sources for additional funding, the sale of additional equity securities or convertible debt could result in dilution to our stockholders. Additionally, the sale of equity securities or issuance of debt securities may be subject to certain security holder approvals or may result in the downward adjustment of the exercise or conversion price of our outstanding securities. We can give no assurance that we will generate sufficient cash flows in the future to satisfy our liquidity requirements or sustain future operations, or that other sources of funding, such as sales of equity or debt, would be available or would be approved by our security holders, if needed, on favorable terms or at all. If we fail to obtain additional working capital as and when needed, such failure could have a material adverse impact on our business, results of operations and financial condition. Furthermore, such lack of funds may inhibit our ability to respond to competitive pressures or unanticipated capital needs, or may force us to reduce operating expenses, which would significantly harm the business and development of operations.

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with generally accepted accounting principles for interim financial information and with the instructions to Form 10-Q and Rule 8-03 of Regulation S-X. Accordingly, certain information and disclosures required by generally accepted accounting principles in annual financial statements have been omitted or condensed. These interim condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and related disclosures included in our Annual Report on Form 10-K for the year ended October 31, 2018. The accompanying October 31, 2018 consolidated balance sheet data was derived from the audited financial statements but does not include all disclosures required by accounting principles generally accepted in the United States of America ("US GAAP"). The condensed consolidated financial statements include all adjustments of a normal recurring nature which, in the opinion of management, are necessary for a fair statement of our financial position as of April 30, 2019, and results of operations and cash flows for the interim periods represented. The results of operations for the six months ended April 30, 2019 are not necessarily indicative of the results to be expected for the entire year.

Noncontrolling Interest

Noncontrolling interest represents Wistar's equity ownership in Certainty and is presented as a component of equity. The following table sets forth the changes in noncontrolling interest for the six months ended April 30, 2019:

Balance at October 31, 2018	\$ (251,377)
Net loss attributable to noncontrolling interest	(122,010)
Balance at April 30, 2019	\$ (373,387)

Revenue Recognition

Since fiscal 2016 our revenue has been derived solely from technology licensing and the sale of patented technologies. Revenue is recognized upon transfer of control of intellectual property rights and satisfaction of other contractual performance obligations to licensees in an amount that reflects the consideration we expect to receive.

On November 1, 2018 we adopted Accounting Standards Update 2014-09 ("ASU 2014-09"), Revenue from Contracts with Customers. Upon adoption of ASU 2014-09 we are required to make certain judgments and estimates in connection with the accounting for revenue. Such areas may include determining the existence of a contract and identifying each party's rights and obligations to transfer goods and services, identifying the performance obligations in the contract, determining the transaction price and allocating the transaction price to separate performance obligations, estimating the timing of satisfaction of performance obligations, determining whether a promise to grant a license is distinct from other promised goods or services and evaluating whether a license transfers to a customer at a point in time or over time.

Our revenue arrangements provide for the payment of contractually determined, one-time, paid-up license fees in settlement of litigation and in consideration for the grant of certain intellectual property rights for patented technologies owned or controlled by the Company. These arrangements typically include some combination of the following: (i) the grant of a non-exclusive, retroactive and future license to manufacture and/or sell products covered by patented technologies owned or controlled by the Company, (ii) a covenant-not-to-sue, (iii) the release of the licensee from certain claims, and (iv) the dismissal of any pending litigation. In such instances, the intellectual property rights granted have been perpetual in nature, extending until the expiration of the related patents. Pursuant to the terms of these agreements, we have no further obligations with respect to the granted intellectual property rights, including no obligation to maintain or upgrade the technology, or provide future support or services. Licensees obtained control of the intellectual property rights they have acquired upon execution of the agreement. As such, the earnings process is complete and revenue is recognized upon the execution of the agreement, when collectability is probable and all other revenue recognition criteria have been met.

Cost of Revenues

Cost of revenues include the costs and expenses incurred in connection with our patent licensing and enforcement activities, including inventor royalties paid to original patent owners, contingent legal fees paid to external counsel, other patent-related legal expenses paid to external counsel, licensing and enforcement related research, consulting and other expenses paid to third-parties and the amortization of patent-related investment costs. These costs are included under the caption "Operating costs and expenses" in the accompanying condensed consolidated statements of operations.

Patents

Our only identifiable intangible assets are patents and patent rights. We capitalize patent and patent rights acquisition costs and amortize the cost over the estimated economic useful life. No patent acquisition costs were capitalized during the six months ended April 30, 2019 and 2018. We recorded patent amortization expense of approximately \$377,000 and \$163,000 during the six-month periods ended April 30, 2019 and 2018, respectively. In evaluating the carrying amount of capitalized patents at January 31, 2019, we determined that based on estimated undiscounted future cash flows a write-down of the carrying amount of approximately \$419,000 should be recorded as of January 31, 2019. Our estimates of future cash flows are based on our most recent assessment of the market for potential licensees, as well as the status of ongoing negotiations with potential licensees.

2. STOCK BASED COMPENSATION

The Company maintains stock equity incentive plans under which the Company grants incentive stock options, non-qualified stock options, stock appreciation rights, stock awards, performance awards, or stock units to employees, directors and consultants.

Stock Option Compensation Expense

The compensation cost for service-based stock options granted to employees and directors is measured at the grant date, based on the fair value of the award using the Black-Scholes pricing model, and is expensed on a straight-line basis over the requisite service period (the vesting period of the stock option). We recorded stock-based compensation expense related to service-based stock options granted to employees and directors of approximately \$1,649,000 and \$473,000 during the six months ended April 30, 2019 and 2018, respectively, and approximately \$805,000 and \$258,000 during the three months ended April 30, 2019 and 2018, respectively.

For stock options granted to employees and directors that vest based on market conditions, such as the trading price of the Company's common stock exceeding certain price targets, we use a Monte Carlo Simulation in estimating the fair value at grant date and recognize compensation cost over the implied service period (median time to vest). On May 8, 2018, we issued market condition options to purchase 1,500,000 shares of common stock, to our Chairman, President and Chief Executive Officer, vesting at target trading prices of \$5.00 to \$8.00 per share before May 31, 2021, with implied service periods of three to seven months. In October 2018, the first tranche of 500,000 shares of market condition options became exercisable upon achieving an average closing price above \$5.00 per share for twenty consecutive trading days. We recorded stock-based compensation expense related to market condition stock options granted to employees of approximately \$376,000 during both the six months and three months ended April 30, 2019. We did not have any market condition stock options during the six months ended April 30, 2018.

On November 1, 2018 we adopted Accounting Standards Update 2018-07 ("ASU 2018-07") for stock options granted to consultants. Upon adoption of ASU 2018-07 we estimated the fair value of unvested service-based and performance-based stock options at the date of adoption, using the Black-Scholes pricing model. Subsequent to adoption of ASU 2018-07, future grants to consultants are measured at the grant date, based on the fair value of the award using the Black-Scholes pricing model, consistent with our policy for grants to employees and directors. In prior periods, in accordance with US GAAP, we estimated the fair value of service-based and performance-based stock options granted to consultants at each reporting period using the Black-Scholes pricing model. We recognize the fair value of stock options granted to consultants as consulting expense over the requisite or implied service period of the grant. We recorded stock-based consulting expense related to stock options granted to consultants of approximately \$50,000 and \$148,000 during the six months ended April 30, 2019 and 2018, respectively, and approximately \$25,000 and \$96,000 during the three months ended April 30, 2019 and 2018, respectively.

Stock Option Activity

During the six months ended April 30, 2018, we granted options to purchase 497,000 shares of common stock to employees, directors and consultants, with exercise prices ranging from \$2.30 to \$3.84 per share, pursuant to the Anixa Biosciences, Inc. 2010 Share Incentive Plan (the "2010 Share Plan") and the Anixa Biosciences, Inc. 2018 Share Plan (the "2018 Share Plan"). We did not grant any options during the six months ended April 30, 2019. During the six months ended April 30, 2019 and 2018, stock options to purchase 30,000 and 48,600 shares of common stock, respectively, were exercised with aggregate proceeds of approximately \$80,000 and \$-0-, respectively. Under certain circumstances, stock options may be exercised on a cashless basis. During the six months ended April 30, 2019 and 2018, -0- and 8,784 shares of common stock, respectively, were withheld in connection with cashless exercises of stock options.

Stock Option Plans

As of April 30, 2019, we have three stock option plans: the Anixa Biosciences, Inc. 2003 Share Incentive Plan (the "2003 Share Plan"), the 2010 Share Plan and the 2018 Share Plan, which were adopted by our Board of Directors on April 21, 2003, July 14, 2010 and January 25, 2018, respectively. The 2018 Share Plan was approved by our shareholders on March 29, 2018.

2003 Plan

The 2003 Share Plan provided for the grant of nonqualified stock options, stock appreciation rights, stock awards, performance awards and stock units to employees, directors and consultants. In accordance with the provisions of the 2003 Share Plan, the plan terminated with respect to the ability to grant future options on April 21, 2013. Information regarding the 2003 Share Plan for the six months ended April 30, 2019 is as follows:

		Weighted	Aggregate
		Average Exercise	Intrinsic
	Shares	Price Per Share	Value
Options outstanding at October 31, 2018	12,000	\$ 2.77	
Exercised	(4,000)	\$ 3.63	
Options outstanding and exercisable at			
April 30, 2019	8,000	\$ 2.34	\$ 19,666

The following table summarizes information about stock options outstanding and exercisable under the 2003 Share Plan as of April 30, 2019:

	Number	Weighted Average	Weighted
	Outstanding	Remaining	Average
Range of	and	Contractual Life	Exercise
Exercise Prices	Exercisable	(in years)	Price
\$ 0.67 - \$17.00	8,000	0.45	\$ 2.34

Information regarding the 2003 Share Plan for the six months ended April 30, 2018 is as follows:

	Shares	Weighted Average Exercise Price Per Share	Ir	ggregate ntrinsic Value
Options outstanding at October 31, 2017	30,600	\$ 3.16		
Exercised	(10,600)	\$ 0.67		
Forfeited	(5,600)	\$ 3.63		
Options outstanding and exercisable at April 30, 2018	14,400	\$ 4.81	\$	17,280

The following table summarizes information about stock options outstanding and exercisable under the 2003 Share Plan as of April 30, 2018:

	Number	Weighted Average	
	Outstanding	Remaining	Weighted
Range of	and	Contractual Life	Average
Exercise Prices	Exercisable	(in years)	Exercise Price
\$ 0.67 - \$17.50	14.400	1.06	\$ 4.81

2010 Plan

The 2010 Share Plan provides for the grant of nonqualified stock options, stock appreciation rights, stock awards, performance awards and stock units to employees, directors and consultants. As of April 30, 2019, the 2010 Share Plan had 887,200 shares available for future grants. Information regarding the 2010 Share Plan for the six months ended April 30, 2019 is as follows:

	Shares	Weighted Average Exercise Price Per Share	1	Aggregate Intrinsic Value
Options outstanding at October 31, 2018	2,131,868	\$ 2.11		
Exercised	(22,000)	\$ 2.27		
Forfeited	(87,200)	\$ 3.34		
Options outstanding at April 30, 2019	2,022,668	\$ 2.06	\$	4,452,704
Options exercisable at April 30, 2019	1,580,168	\$ 1.88	\$	3,732,441

The following table summarizes information about stock options outstanding and exercisable under the 2010 Share Plan as of April 30, 2019:

		Options Outstanding		(Options Exercisable	2
		Weighted			Weighted	
		Average			Average	Weighted
		Remaining	Weighted		Remaining	Average
Range of	Number	Contractual Life	Average	Number	Contractual Life	Exercise
Exercise Prices	Outstanding	(in years)	Exercise Price	Exercisable	(in years)	Price
\$ 0.67	938,000	6.19	\$ 0.67	776,750	5.78	\$ 0.67
\$ 2.27 -\$ 3.01	610,134	4.07	\$ 2.58	610,134	4.07	\$ 2.58
\$ 3.46 -\$ 7.00	474,534	8.62	\$ 4.13	193,284	7.64	\$ 4.57

Information regarding the 2010 Share Plan for the six months ended April 30, 2018 is as follows:

		Weighted	I	Aggregate
		Average Exercise		Intrinsic
	Shares	Price Per Share		Value
Options outstanding at October 31, 2017	1,637,246	\$ 1.50		
Granted	175,000	\$ 2.81		
Exercised	(38,000)	\$ 0.67		
Forfeited	(49,800)	\$ 2.15		
Options outstanding at April 30, 2018	1,724,446	\$ 1.63	\$	3,702,296
Options exercisable at April 30, 2018	1,122,259	\$ 1.77	\$	2,276,255

The following table summarizes information about stock options outstanding and exercisable under the 2010 Share Plan as of April 30, 2018:

<u>-</u>	Options Outstanding				Options Exercisable	:
		Weighted Average Remaining	Weighted		Weighted Average Remaining	Weighted
Range of	Number	Contractual Life	Average	Number	Contractual Life	Average
Exercise Prices	Outstanding	(in years)	Exercise Price	Exercisable	(in years)	Exercise Price
\$ 0.67	943,000	7.09	\$ 0.67	556,059	5.96	\$ 0.67
\$ 2.27-\$ 7.00	781,446	5.13	\$ 2.79	556,200	4.78	\$ 2.90

2018 Plan

The 2018 Share Plan provides for the grant of incentive stock options, nonqualified stock options, stock appreciation rights, stock awards, performance awards and stock units to employees, directors and consultants. As of April 30, 2019, the 2018 Share Plan had 2,008,000 shares available for future grants. Information regarding options outstanding under the 2018 Share Plan for the six months ended April 30, 2019 is as follows:

	Shares	Weighted Average Exercise Price Per Share	Aggregate Intrinsic Value
Options outstanding at October 31, 2018	3,482,000	\$ 3.73	
Exercised	(4,000)	\$ 3.84	
Forfeited	(8,000)	\$ 3.84	
Options outstanding at April 30, 2019	3,470,000	\$ 3.73	\$ 1,525,200
Options exercisable at April 30, 2019	1,156,947	\$ 3.72	\$ 511,156

The following table summarizes information about stock options outstanding and exercisable under the 2018 Share Plan as of April 30, 2019:

_	Options Outstanding			Options Exercisable			
		Weighted			Weighted		
		Average			Average		
		Remaining	Weighted		Remaining	Weighted	
Range of	Number	Contractual Life	Average	Number	Contractual Life	Average	
Exercise Prices	Outstanding	(in years)	Exercise Price	Exercisable	(in years)	Exercise Price	
\$ 3.70 -\$ 4.61	3,470,000	9.03	\$ 3.73	1,156,947	9.02	\$ 3.72	

Information regarding the 2018 Share Plan for the six months ended April 30, 2018 is as follows:

	Shares	Weighted Average Exercise Price Per Share	Intr	regate rinsic alue
Options outstanding at October 31, 2017	-0-			
Granted	322,000	\$ 3.84		
Options outstanding at April 30 2018	322,000	\$ 3.84	\$	-0-
Options exercisable at April 30, 2018	8,608	\$ 3.84	\$	-0-

The following table summarizes information about stock options outstanding and exercisable under the 2018 Share Plan as of April 30, 2018:

_	Options Outstanding			Options Exercisable			
		Weighted			Weighted		
		Average			Average		
		Remaining	Weighted		Remaining	Weighted	
Range of	Number	Contractual Life	Average	Number	Contractual Life	Average	
Exercise Prices	Outstanding	(in years)	Exercise Price	Exercisable	(in years)	Exercise Price	
\$ 3.84	322,000	9.92	\$ 3.84	8,608	9.92	\$ 3.84	

Outside of Share Plans

In addition to options granted under the 2003 Share Plan, the 2010 Share Plan and the 2018 Share Plan, the Board of Directors approved the grant of stock options to purchase 1,780,000 shares to employees and directors outside of Share Plans. Information regarding stock options outstanding that were granted outside of Share Plans for the six months ended April, 2019 is as follows:

		Weighted	A	Aggregate
		Average Exercise		Intrinsic
	Shares	Price Per Share		Value
Options outstanding at October 31, 2018	1,780,000	\$1.58		
Options outstanding and exercisable at April 30, 2019	1,780,000	\$1.58	\$	4,683,960

The following table summarizes information about stock options outstanding and exercisable that were granted outside of Share Plans as of April 30, 2019:

	Number	Weighted Average	
	Outstanding	Remaining	Weighted
Range of	and	Contractual Life	Average
Exercise Prices	Exercisable	(in years)	Exercise Price
\$ 0.67	1,046,000	3.30	\$ 0.67
\$ 2.58-\$ 5.56	734.000	2.85	\$ 2.88

Information regarding stock options outstanding that were granted outside of Share Plans for the six months ended April 30, 2018 is as follows:

		Weighted Average Exercise	-	Aggregate Intrinsic
	Shares	Price Per Share		Value
Options outstanding at October 31, 2017	1,780,000	\$ 1.58		
Options outstanding and exercisable at				
April 30, 2018	1,780,000	\$ 1.58	\$	3,953,820

The following table summarizes information about stock options outstanding and exercisable that were granted outside of Share Plans as of April 30 31, 2018:

	Number	Weighted Average	
	Outstanding	Remaining	Weighted
Range of	and	Contractual Life	Average
Exercise Prices	Exercisable	(in years)	Exercise Price
\$ 0.67	1,046,000	4.41	\$ 0.67
\$ 2.58-\$ 5.56	734,000	3.87	\$ 2.88

Stock Awards

For stock awards granted to employees, directors and consultants that vest upon grant we recognize expense at the date of grant based on the grant date market price of the underlying common stock. During the six months ended April 30, 2018, we issued 5,347 shares of common stock that vested upon grant to consultants for services rendered. We recorded consulting expense for the shares of common stock issued to consultants of \$15,000 for the six months ended April 30, 2018 and \$-0- for the three months ended April 30, 2018. We did not grant any stock awards that vested upon grant during the six months ended April 30, 2019.

On May 8, 2018, a restricted stock award of 1,500,000 shares of common stock was granted under the 2018 Share Plan to our Chairman, President and Chief Executive Officer. The restricted stock award vests in its entirety upon achievement of a target trading price of \$11.00 per share of the Company's common stock before May 31, 2021. For restricted stock awards vesting upon achievement of a price target of our common stock we use a Monte Carlo Simulation in estimating the fair value at grant date and recognize compensation cost over the implied service period (median time to vest). During the six-month and three-month periods ended April 30, 2019, we recorded compensation expense related to the restricted stock award of approximately \$1,954,000 and \$470,000, respectively.

Employee Stock Purchase Plan

The Company maintains the Anixa Biosciences, Inc. Employee Stock Purchase Plan which permits eligible employees to purchase shares at not less than 85% of the market value of the Company's common stock on the offering date or the purchase date of the applicable offering period, whichever is lower. The plan was adopted by our Board of Directors on August 13, 2018 and approved by our shareholders on September 27, 2018. During the six months ended April 30, 2019, employees purchased 5,411 shares at a purchase price of \$3.43 per share pursuant to the plan.

Warrants

During the six months ended April 30, 2019 we issued a warrant, expiring on November 1, 2023, to purchase 25,000 shares of common stock at \$4.04 per share, vesting over 12 months, to a consultant for investor relations services. We recorded consulting expense of approximately \$43,000 during the six months ended April 30, 2019 and approximately \$21,000 during the three months ended April 30, 2019, based on the fair value of the warrant recognized on a straight-line basis over the vesting period. No warrants were issued during the six months ended April 30, 2018.

As of April 30, 2019, we also had warrants outstanding to purchase 10,000 shares and 10,000 shares of common stock at \$9.25 and \$13.875 per share, respectively, expiring on August 19, 2019, warrants to purchase 309,400 shares of common stock at \$10.00 per share expiring on July 15, 2019 and warrants to purchase 500,000 shares of common stock at \$5.03 per share expiring on November 30, 2021.

3. FAIR VALUE MEASUREMENTS

US GAAP defines fair value and establishes a framework for measuring fair value. We have categorized our financial assets, based on the priority of the inputs to the valuation technique, into a three-level fair value hierarchy as set forth below. If the inputs used to measure the financial instruments fall within different levels of the hierarchy, the categorization is based on the lowest level input that is significant to the fair value measurement of the instrument.

Financial assets and liabilities recorded in the accompanying condensed consolidated balance sheets are categorized based on the inputs to the valuation techniques as follows:

Level 1 - Financial assets and liabilities whose values are based on unadjusted quoted prices for identical assets or liabilities in an active market which we have the ability to access at the measurement date.

Level 2 - Financial assets and liabilities whose values are based on quoted market prices in markets where trading occurs infrequently or whose values are based on quoted prices of instruments with similar attributes in active markets.

Level 3 – Financial assets and liabilities whose values are based on prices or valuation techniques that require inputs that are both unobservable and significant to the overall fair value measurement. These inputs reflect management's own assumptions about the assumptions a market participant would use in pricing the asset and liabilities.

The following table presents the hierarchy for our financial assets measured at fair value on a recurring basis as of April 30, 2019:

	Level 1 Level 2		Level 3	Total	
Money market funds –					
Cash and cash equivalents	\$ 3,545,842	\$ -	\$ -	\$ 3,545,842	
Certificates of deposit –					
Short-term investments		2,750,000	=	2,750,000	
Total financial assets	\$ 3,545,842	\$ 2,750,000	\$ -	\$ 6,295,842	

The following table presents the hierarchy for our financial assets measured at fair value on a recurring basis as of October 31, 2018:

		Level 1		Level 2		Level 3		Total
Money market funds – Cash and cash equivalents	\$	2,031,331	2		\$		\$	2,031,331
Certificates of deposit –	φ	2,031,331	φ	-	φ	_	Φ	2,031,331
Cash and cash equivalents		750,000		-		-		750,000
Short-term investments		<u>-</u>		2,000,000		<u>-</u>		2,000,000
Total financial assets	\$	2,781,331	\$	2,000,000	\$	-	\$	4,781,331

Our non-financial assets that are measured on a non-recurring basis include our patents and property and equipment which are measured using fair value techniques whenever events or changes in circumstances indicate a condition of impairment exists. The estimated fair value of prepaid expenses, accounts payable and accrued expenses approximates their individual carrying amounts due to the short-term nature of these measurements. Cash and cash equivalents are stated at carrying value which approximates fair value.

4. <u>ACCRUED EXPENSES</u>

Accrued expenses consist of the following as of:

	A	April 30, 2019				ctober 31, 2018
Payroll and related expenses	\$	64,627	\$	62,965		
Accrued royalty and contingent legal fees		532,920		366,670		
Accrued collaborative research and license expenses		262,604		187,500		
Accrued other		17,690		65,964		
	\$	877,841	\$	683,099		

5. <u>NET LOSS PER SHARE OF COMMON STOCK</u>

Basic net loss per common share ("Basic EPS") is computed by dividing net loss by the weighted average number of common shares outstanding. Diluted net loss per common share ("Diluted EPS") is computed by dividing net loss by the weighted average number of common shares and dilutive common share equivalents and convertible securities then outstanding. Diluted EPS for all periods presented is the same as Basic EPS, as the inclusion of the effect of common share equivalents then outstanding would be anti-dilutive. For this reason, excluded from the calculation of Diluted EPS for the six and three months ended April 30, 2019 and 2018, were stock options to purchase 7,280,668 and 3,840,846 shares, respectively, and warrants to purchase 854,400 and 829,400 shares, respectively.

6. <u>EFFECT OF RECENTLY ADOPTED AND ISSUED PRONOUNCEMENTS</u>

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update 2014-09 ("ASU 2014-09"), Revenue from Contracts with Customers. This amendment updates addressing revenue from contracts with customers, which clarifies existing accounting literature relating to how and when a company recognizes revenue. Under the standard, a company will recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods and services. The Company adopted ASU 2014-09 on November 1, 2018. The adoption of ASU 2014-09 did not have a material impact on our consolidated financial statements, other than required additional disclosure of accounting policies. See Note 1 regarding our revenue recognition policy.

In February 2016, the FASB issued Accounting Standards Update 2016-02 ("ASU 2016-02") which requires lessees to recognize most leases on the balance sheet. This is expected to increase both reported assets and liabilities. The new lease standard does not substantially change lessor accounting. For public companies, the standard will be effective for the first interim reporting period within annual periods beginning after December 15, 2018, although early adoption is permitted. Lessees and lessors will be required to apply the new standard at the beginning of the earliest period presented in the financial statements in which they first apply the new guidance, using a modified retrospective transition method. The requirements of this standard include a significant increase in required disclosures. We began a detailed assessment of the impact that this guidance will have on our consolidated financial statements and related disclosures, and our analysis is currently ongoing.

In May 2017, the FASB issued Accounting Standards Update 2017-09 ("ASU 2017-09") that provides guidance on determining which changes to the terms and conditions of share-based payment awards require an entity to apply modification accounting. The Company adopted ASU 2017-09 on November 1, 2018. The adoption of this guidance did not have a material impact on our consolidated financial statements and related disclosures

In June 2018, the FASB issued Accounting Standards Update 2018-07 ("ASU 2018-07"), Compensation - Stock Compensation (Topic 718), Improvements to Nonemployee Share-Based Payment Accounting. This amendment expands the scope of Topic 718 to include share-based payment transactions for acquiring goods and services from nonemployees. The Company adopted ASU 2018-07 on November 1, 2018. The adoption of ASU 2018-07 did not have a material impact on our consolidated financial statements and related disclosures. See Note 2 for a discussion of our stock-based compensation policies.

7. INCOME TAXES

We file Federal, New York and California state income tax returns. Due to net operating losses, the statute of limitations for Federal and New York State income tax returns remains open to examination by taxing authorities since the fiscal year ended October 31, 1999. We account for interest and penalties related to income tax matters, if any, in general and administrative expenses. There are no unrecognized income tax benefits as of April 30, 2019 and October 31, 2018.

We recognize deferred tax assets and liabilities for the estimated future tax effects of events that have been recognized in our financial statements or tax returns. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect in the years in which the differences are expected to reverse. A valuation allowance is established, when necessary, to reduce deferred tax assets to the amount expected to be realized. We have substantial net operating loss carryforwards for Federal, New York State and California income tax returns. These net operating loss carryforwards could be subject to limitations under Internal Revenue Code section 382. We have provided a full valuation allowance against our deferred tax asset due to our historical pre-tax losses and the uncertainty regarding the realizability of these deferred tax assets.

8. <u>COMMITMENT AND CONTINGENCES</u>

Litigation Matters

Other than below and lawsuits we have historically brought to enforce our patent rights, we are not a party to any material pending legal proceedings other than that which arise in the ordinary course of business. We believe that any liability that may ultimately result from the resolution of these matters will not, individually or in the aggregate, have a material adverse effect on our financial position or results of operations.

On November 5, 2018, a putative shareholder derivative complaint was filed in the Court of Chancery of the State of Delaware, captioned Howland v. Kumar et al., C.A. No. 2018-0804-KSJM, that alleges claims for breach of fiduciary duty and unjust enrichment. The complaint named as defendants certain of the Company's current and former officers and directors, and the Company is named solely as a nominal defendant. The Company has certain indemnification obligations to the current and former officers and directors named as defendants in the suit, and the attorney fees incurred for this matter are currently being funded by the Company and through available D&O insurance. The complaint seeks, on behalf of the Company, a declaration that the defendant officers and directors breached their fiduciary duties, unspecified damages, certain changes to the Company's internal procedures, and an award of the plaintiff's attorneys' fees and costs. The defendants moved to dismiss the complaint on November 29, 2018, which motion is still pending before the Court of Chancery. Due to the early nature of the complaint and that the complaint does not specify a dollar amount of damages, we cannot make a reasonable estimate of potential losses at this time.

9. <u>SEGMENT INFORMATION</u>

We follow the accounting guidance of ASC 280 "Segment Reporting" ("ASC 280"). Reportable operating segments are determined based on the management approach. The management approach, as defined by ASC 280, is based on the way that the chief operating decision-maker organizes the segments within an enterprise for making operating decisions and assessing performance. While our results of operations are primarily reviewed on a consolidated basis, the chief operating decision-maker manages the enterprise in three reportable segments, each with different operating and potential revenue generating characteristics: (i) Cancer Diagnostics, (ii) Cancer Therapeutics and (iii) our legacy patent licensing activities. The following represents selected financial information for our segments for the six and three months ended April 30, 2019 and 2018 and as of April 30, 2019 and October 31, 2018:

Net loss: 2019 2018 Cancer Diagnostics \$ (3,052,355) \$ (1,362,451) Cancer Therapeutics (3,517,219) (3,447,47) Total \$ (7,541,543) \$ (3,052,355) Operating costs and expenses excluding non-cash share based compensation expenses: \$ (1,417,967) \$ (1,075,48) Cancer Diagnostics \$ (1,417,967) \$ (1,075,48) Cancer Therapeutics \$ (1,011,001) \$ (1,002,87) Cancer Therapeutics \$ (1,001,001) \$ (1,002,87) Total \$ (3,055,348) \$ (3,426,88) Operating costs and expenses excluding non-cash share-based compensation expense \$ (3,755,348) \$ (3,426,88) Plus non-cash share-based compensation expense \$ (3,755,348) \$ (3,426,88) Total operating costs and expenses excluding non-cash share-based compensation expense \$ (3,027,936) \$ (402,534) Net loss: \$ (1,029,393) \$ (42,048) \$ (42,048) \$ (42,048) \$ (42,048) \$ (42,048) \$ (42,048) \$ (42,048) \$ (42,048) \$ (42,048) \$ (42,048) \$ (42,048) \$ (42,048) \$ (42,048) \$ (42,048) \$ (42,048)			For the Six Months Ended April 30.			
Cancer Diagnostics \$ (3,052,355) \$ (1,362,451) Cancer Therapeutics (3,517,219) (1,519,067) Pattent licensing (70,740) (34,474) Total \$ (7,541,543) \$ (3,257,988) Operating costs and expenses excluding non-cash share based compensation expense: \$ 1,417,967 \$ 1,075,48 Cancer Diagnostics \$ 1,417,967 \$ 1,075,48 \$ 1,048,49 Cancer Interapeutics \$ 1,017,00 1,002,87 \$ 1,002,87 Total \$ 3,755,348 \$ 3,426,85 Operating costs and expenses excluding non-cash share based compensation expense \$ 3,755,348 \$ 3,426,85 Plus non-cash share-based compensation expense \$ 3,755,348 \$ 3,426,85 Puts non-cash share-based compensation expense \$ 7,226,962 \$ 4,025,54 Cancer Diagnostics \$ 1,248,001 \$ (739,200 Cancer Diagnostics \$ 1,248,001 \$ (739,200 Cancer Therapeutics \$ 1,029,304 \$ (412,048) Patent licensing \$ 2,2574,934 \$ 1,339,234 Operating costs and expenses excluding non-cash share based compensation expense \$ 658,433 <th< th=""><th></th><th></th><th></th><th>,</th><th>2018</th></th<>				,	2018	
Cancer Therapeutics (3,51/219) (1,551,050) Pattent licensing (971,969) 344,477 Total (7,541,543) 3,2257,988 Operating costs and expenses excluding non-cash share based compensation expenses: \$ 1,417,967 \$ 1,075,48 Cancer Therapeutics 1,245,681 1,348,49 Pattent licensing 1,091,700 1,002,87 Total \$ 3,755,348 3,426,85 Operating costs and expenses excluding non-cash share based compensation expense \$ 3,755,348 3,426,85 Plus non-cash share-based compensation expense \$ 1,011,614 598,68 Total operating costs and expenses \$ 7,826,962 \$ 4,025,54 Net loss: 2019 2018 Cancer Diagnostics \$ (1,248,001) \$ (739,202) Cancer Therapeutics \$ (1,228,001) \$ (739,202) Operating costs and expenses excluding non-cash share based compensation expense \$ (1,228,001)	Net loss:					
Patent licensing Total (971,969) (344,470 (57,541,543) (3.257,988 (57,541,543) (3.257,988 (57,541,543) (3.257,988 (57,541,543) (3.257,988 (57,541,543) (3.257,988 (57,541,543) (3.257,988 (57,548) (3.257,988 (57,548) (3.257,988 (57,548) (3.257,988 (57,548) (3.257,988 (57,548) (3.175,488 (57,548) (3.175,488 (57,548) (3.175,488 (57,548) (3.175,488 (57,548) (3.175,548 (57,548)	Cancer Diagnostics	\$	(3,052,355)	\$	(1,362,451)	
Total \$ (7,541,543) \$ (3,257,988) Operating costs and expenses excluding non-cash share based compensation expense: \$ 1,417,967 \$ 1,075,48 Cancer Therapeutics 1,245,681 1,348,49 Patent licensing 1,091,700 1,002,87 Total \$ 3,755,348 \$ 3,426,85 Operating costs and expenses excluding non-cash share based compensation expense \$ 3,755,348 \$ 3,426,85 Plus non-cash share-based compensation expense \$ 4,071,614 598,88 Total operating costs and expenses \$ 7,826,962 \$ 4,025,54 Plus non-cash share-based compensation expense \$ (1,248,001) \$ (739,202) Cancer Therapeutics \$ (1,248,001) \$ (739,202) Cancer Therapeutics <td< td=""><td></td><td></td><td>(3,517,219)</td><td></td><td>(1,551,067)</td></td<>			(3,517,219)		(1,551,067)	
Share based compensation expense: Cancer Diagnostics \$ 1,417.967 \$ 1,075.48 Cancer Therapeutics 1,245.681 1,348.49 Patent Ricensing 1,091,700 1,002.87 Total \$ 3,755.348 \$ 3,426.85 Operating costs and expenses excluding non-cash share based compensation expense \$ 3,755.348 \$ 3,426.85 Operating costs and expenses excluding non-cash share based compensation expense \$ 3,755.348 \$ 3,426.85 Plus non-cash share-based compensation expense \$ 4,071,614 \$ 598.68 Total operating costs and expenses \$ 3,782.6962 \$ 4,025.54 For the Three Months Ended April 30.	Patent licensing		(971,969)		(344,470)	
Salare based compensation expense: Cancer Diagnostics \$1,417,967 \$1,075,48 Cancer Therapeuties 1,245,681 1,348,49 Patent licensing 1,091,700 1,002,87 Total \$3,755,348 \$3,426,85 Operating costs and expenses excluding non-eash share based compensation expense \$3,755,348 \$3,426,85 Operating costs and expenses excluding non-eash share-based compensation expense \$4,071,614 \$98,68 Total operating costs and expenses \$7,826,962 \$4,025,54 For the Three Months Ended April 30 \$2,019 \$2,018 Net loss:	Total	<u>\$</u>	(7,541,543)	\$	(3,257,988)	
Cancer Diagnostics \$ 1,417,967 \$ 1,075,48 Cancer Therapeutics 1,245,681 1,348,69 Patent licensing 1,001,700 1,002,87 Total \$ 3,755,348 \$ 3,426,85 Operating costs and expenses excluding non-cash share based compensation expense \$ 3,755,348 \$ 3,426,85 Plus non-cash share-based compensation expense \$ 4,071,614 \$ 598,88 Total operating costs and expenses \$ 7,826,962 \$ 4,025,54 Net loss: Cancer Diagnostics \$ 1,248,001 \$ (739,202) Cancer Therapeutics \$ (1,248,001) \$ (739,202) Cancer Therapeutics \$ (1,029,934) \$ (42,045) Patent licensing \$ (20,599) \$ (211,262) Total \$ (2,574,934) \$ (1,392,514) Operating costs and expenses excluding non-cash share based compensation expense: \$ 658,433 \$ 549,86 Cancer Diagnostics \$ 658,433 \$ 549,86 Cancer Therapeutics \$ 1,521,784 \$ 1,819,24 Plus non-cash share-based compensation expense \$ 1,521,784 \$ 1,819,24						
Cancer Therapeutics 1,245,681 1,348,49 Patent licensing 1,091,700 1,002,87 Total \$3,755,348 \$3,426,85 Operating costs and expense excluding non-cash share based compensation expense \$3,755,348 \$3,426,85 Plus non-cash share-based compensation expense 4,071,614 598,68 Total operating costs and expenses \$7,826,962 \$4,025,54 Net loss: Cancer Diagnostics \$1,248,001 \$7,392,00 Cancer Diagnostics \$1,248,001 \$7,392,00 Cancer Therapeutics \$1,249,001 \$1,392,514 Patent licensing \$2,2574,334 \$1,392,514 Operating costs and expenses excluding non-cash share-based compensation expenses: \$1,248,601 \$1,392,514 Cancer Diagnostics \$6,843 \$5,49,86 Cancer Diagnostics \$6,843 \$5,49,86 Cancer Diagnostics \$6,843 \$5,49,86 Cancer Therapeutics \$1,521,784 \$1,819,24 Plus non-cash share-based compensation expense \$1,521,784 \$1,819,24 Plus non-cash share-based compensation expense		\$	1 417 967	\$	1.075.480	
Patent licensing 1,091,700 1,002,87 Total \$ 3,755,348 \$ 3,426,85 Operating costs and expenses excluding non-cash share-based compensation expense \$ 3,755,348 \$ 3,426,85 Plus non-cash share-based compensation expense \$ 7,826,962 \$ 4,025,54 Total operating costs and expenses Ero the Three Worths Ended April 30 Total operating costs and expenses Ero the Three Worths Ended April 30 Cancer Diagnostics Cancer Diagnostics Cancer Diagnostics (1,229,934) (40,20,40) Cancer Therapeutics (1,029,934) (442,045) Patent licensing (296,999) (211,262) Operating costs and expenses excluding non-cash share-based compensation expense: Cancer Diagnostics \$ 658,433 \$ 549,86 Cancer Therapeutics \$ 444,890 393,64 Patent licensing \$ 1,521,784 \$ 1,819,24 Operating costs and expenses excluding non-cash share-based compensation expense \$ 1,521,784 \$ 1,819,24 Plus non-cash share-based compensation expense \$ 1,521,784 \$ 1,819,24		Ψ		Ψ.		
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Total \$ 1,521,784 \$ 1,819,24 Operating costs and expenses excluding non-cash share based compensation expense \$ 1,521,784 \$ 1,819,24 Plus non-cash share-based compensation expense \$ 1,321,450 \$ 331,710 Total operating costs and expenses \$ 2,843,234 \$ 2,150,950 April 30, 2019 October 31, 2018 Total assets: Cancer Diagnostics \$ 3,605,773 \$ 2,545,800 Cancer Therapeutics 2,939,717 2,157,350 Patent licensing 1,219,936 1,745,380	Cancer Therapeutics		444,890		393,645	
Operating costs and expenses excluding non-cash share based compensation expense \$ 1,521,784 \$ 1,819,24 Plus non-cash share-based compensation expense \$ 1,321,450 \$ 331,710 Total operating costs and expenses \$ 2,843,234 \$ 2,150,950 April 30, 2019 October 31, 2018 Total assets: Cancer Diagnostics \$ 3,605,773 \$ 2,545,800 Cancer Therapeutics 2,939,717 2,157,350 Patent licensing 1,219,936 1,745,380	Patent licensing		418,461		875,733	
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Cancer Therapeutics 2,939,717 2,157,350 Patent licensing 1,219,936 1,745,380						
Patent licensing 1,219,936 1,745,380		\$		\$	2,545,803	
					2,157,359	
Total <u>\$ 7,765,426</u> <u>\$ 6,448,548</u>					1,745,380	
_	Total	\$	7,765,426	\$	6,448,542	

Operating costs and expenses excluding non-cash share-based compensation expense is the measurement the chief operating decision-maker uses in managing the enterprise.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

GENERAL

We discuss the description of our business in the Notes to our Condensed Consolidated Financial Statements.

RESULTS OF OPERATIONS

Six months ended April 30, 2019 compared with six months ended April 30, 2018

Revenue

For the six months ended April 30, 2019, we recorded revenue of \$250,000 from one license agreement. For the six months ended April 30, 2018, we recorded revenue of \$750,000 from one license agreement. These license agreements each provided for a one-time, non-recurring, lump sum payment in exchange for non-exclusive retroactive and future licenses, and covenants not to sue. Pursuant to the terms of these agreements, we have no further obligations with respect to the granted intellectual property rights, including no obligation to maintain or upgrade the technology, or provide future support or services. Accordingly, the earnings process from these licenses was complete and 100% of the revenue was recognized upon execution of the license agreement. As discussed in Note 1 to our consolidated financial statements, as part of our legacy operations, the Company remains engaged in limited patent licensing activities which we do not expect to be a significant part of our ongoing operations or revenue.

Inventor Royalties, Contingent Legal Fees and Litigation and Licensing Expenses Related to Patent Assertion

Inventor royalties, contingent legal fees, litigation and licensing expenses related to patent assertion activities decreased by approximately \$360,000 to approximately \$166,000 in the six months ended April 30, 2019, compared to approximately \$526,000 in the comparable prior year. The decrease was primarily due to the decrease in related revenues. Inventor royalties and contingent legal fees are expensed in the period that the related revenues are recognized. Litigation and licensing expenses related to patent assertion, other than contingent legal fees, are expensed in the period incurred.

Amortization of Patents

Amortization of patents increased by approximately \$214,000 to approximately \$377,000 in the six months ended April 30, 2019, from approximately \$163,000 in the six months ended April 30, 2018. We capitalize patent and patent rights acquisition costs and amortize the cost over the estimated economic useful life. The increase in amortization of patents was due to a reduction in the estimated economic useful life of capitalized patents.

Research and Development Expenses

Research and development expenses are related to the development of our cancer diagnostics and therapeutics programs and increased by approximately \$2,079,000 to approximately \$3,517,000 in the six months ended April 30, 2019, from approximately \$1,438,000 in the six months ended April 30, 2018. The increase in research and development expenses was primarily due to an increase in employee stock award compensation expense of approximately \$1,251,000, an increase in employee stock option compensation expense, excluding license expense, of approximately \$207,000 and an increase in employee compensation and related costs, other than stock option compensation expense and stock award compensation expense, of approximately \$81,000, offset by a decrease of approximately \$290,000 in costs associated with our license from Wistar for our CER-T technology, that we entered into during the six months ended April 30, 2018. In addition to the initial license fee of \$290,000 recorded during the six months ended April 30, 2018, Wistar will receive payments based on the achievement of certain product development milestones and royalties based on sales of licensed products.

General and Administrative Expenses

General and administrative expenses increased by approximately \$1,449,000 to approximately \$3,348,000 in the six months ended April 30, 2019, from approximately \$1,899,000 in the six months ended April 30, 2018. The increase in general and administrative expenses was principally due to an increase in employee stock option compensation expense of approximately \$752,000, an increase in employee stock award compensation expense of approximately \$704,000 and an increase in legal and accounting fees of approximately \$187,000 primarily related to a putative shareholder derivative complaint (see Note 8 to our condensed consolidated financial statements), a portion of which may be covered by our directors and officers insurance policy, offset by a decrease in consultant expense of approximately \$123,000 and a decrease in employee compensation and related costs, other than stock option compensation expense and stock award compensation expense, of approximately \$37,000.

Impairment in Carrying Amount of Patent Assets

The impairment in carrying amount of patent assets related to our legacy patent licensing activities of approximately \$419,000 in the six months ended April 30, 2019 resulted from the write down of the value of our patent assets to the estimated undiscounted future cash flows we anticipate receiving from the patent assets as of January 31, 2019. Our estimates of future cash flows are based on our most recent assessment of the market for potential licensees, as well as the status of ongoing negotiations with potential licensees.

Interest Income

Interest income increased by approximately \$17,000 to approximately \$35,000 in the six months ended April 30, 2019, from approximately \$18,000 in the comparable prior year period as a result of additional cash on hand and an increase in interest rates.

Net Loss Attributable to Noncontrolling Interest

The net loss attributable to noncontrolling interest, representing Wistar's 5% ownership interest in Certainty's net loss, increased by approximately \$81,000 to approximately \$122,000 in the six months ended April 30, 2019, from approximately \$41,000 in the six months ended April 30, 2018, as Certainty's net loss increased. The increase in Certainty's net loss was primarily due to increases in employee stock option compensation expense and employee stock award compensation expense.

Three months ended April 30, 2019 compared with three months ended April 30, 2018

Revenue

For the three months ended April 30, 2019, we recorded revenue of \$250,000 from one license agreement. For the three months ended April 30, 2018, we recorded revenue of \$750,000 from one license agreement. These license agreements each provided for a one-time, non-recurring, lump sum payment in exchange for non-exclusive retroactive and future licenses, and covenants not to sue. Pursuant to the terms of these agreements, we have no further obligations with respect to the granted intellectual property rights, including no obligation to maintain or upgrade the technology, or provide future support or services. Accordingly, the earnings process from these licenses was complete and 100% of the revenue was recognized upon execution of the license agreement. As discussed in Note 1 to our consolidated financial statements, as part of our legacy operations, the Company remains engaged in limited patent licensing activities which we do not expect to be a significant part of our ongoing operations or revenue.

Inventor Royalties, Contingent Legal Fees and Litigation and Licensing Expenses Related to Patent Assertion

Inventor royalties, contingent legal fees, litigation and licensing expenses related to patent assertion activities decreased by approximately \$335,000 to approximately \$166,000 in the three months ended April 30, 2019, compared to approximately \$501,000 in the comparable prior year. The decrease was primarily due to the decrease in related revenues. Inventor royalties and contingent legal fees are expensed in the period that the related revenues are recognized. Litigation and licensing expenses related to patent assertion, other than contingent legal fees, are expensed in the period incurred.

Amortization of Patents

Amortization of patents increased by approximately \$45,000 to approximately \$126,000 in the three months ended April 30, 2019, from approximately \$81,000 in the three months ended April 30, 2018. We capitalize patent and patent rights acquisition costs and amortize the cost over the estimated economic useful life. The increase in amortization of patents was due to a reduction in the estimated economic useful life of capitalized patents.

Research and Development Expenses

Research and development expenses are related to the development of our cancer diagnostics and therapeutics programs and increased by approximately \$609,000 to approximately \$1,269,000 in the three months ended April 30, 2019, from approximately \$660,000 in the three months ended April 30, 2018. The increase in research and development expenses was primarily due to an increase in employee stock award compensation expense of approximately \$301,000, an increase in employee stock option compensation expense of approximately \$143,000, offset by a decrease in employee compensation and related costs, other than stock option compensation expense and stock award compensation expense of approximately \$111,000.

General and Administrative Expenses

General and administrative expenses increased by approximately \$373,000 to approximately \$1,282,000 in the three months ended April 30, 2019, from approximately \$909,000 in the three months ended April 30, 2018. The increase in general and administrative expenses was principally due to an increase in employee stock award compensation expense of approximately \$305,000 and an increase in employee stock option compensation expense of approximately \$169,000, offset by a decrease in employee compensation and related costs, other than stock option compensation expense and stock award compensation expense, of approximately \$89,000.

Interest Income

Interest income increased by approximately \$10,000 to approximately \$18,000 in the three months ended April 30, 2019, from approximately \$8,000 in the comparable prior year period as a result of additional cash on hand and an increase in interest rates.

Net Loss Attributable to Noncontrolling Interest

The net loss attributable to noncontrolling interest, representing Wistar's 5% ownership interest in Certainty's net loss, increased by approximately \$23,000 to approximately \$37,000 in the three months ended April 30, 2019, from approximately \$14,000 in the three months ended April 30, 2018, as Certainty's net loss increased. The increase in Certainty's net loss was primarily due to increases in employee stock option compensation expense and employee stock award compensation expense.

LIQUIDITY AND CAPITAL RESOURCES

Our primary sources of liquidity are cash, cash equivalents and short-term investments.

Based on currently available information as of June 11, 2019, we believe that our existing cash, cash equivalents, short-term investments and expected cash flows will be sufficient to fund our activities for the next twelve months. However, our projections of future cash needs and cash flows may differ from actual results. If current cash on hand, cash equivalents, short term investments and cash that may be generated from our business operations are insufficient to continue to operate our business (including for the defense of a putative shareholder derivative complaint filed in the Court of Chancery of the State of Delaware, captioned Howland v. Kumar et al.), or if we elect to invest in or acquire a company or companies or new technology or technologies that are synergistic with or complimentary to our technologies, we may be required to obtain more working capital. During the six months ended April 30, 2019, we raised approximately \$4,358,000 through our at-the-market equity offering of 1,061,032 shares of common stock which is currently effective (we can sell an additional 415,078 shares under our current at-the-market equity program) and may remain available for us to use in the future. We may seek to obtain working capital during our fiscal year 2019 or thereafter through sales of our equity securities (including through the commencement of another at-the-market equity offering) or through bank credit facilities or public or private debt from various financial institutions where possible. We cannot be certain that additional funding will be available on acceptable terms, or at all. If we do identify sources for additional funding, the sale of additional equity securities or convertible debt could result in dilution to our stockholders. Additionally, the sale of equity securities or issuance of debt securities may be subject to certain security holder approvals or may result in the downward adjustment of the exercise or conversion price of our outstanding securities. We can give no assurance that we will generate sufficient cash flows in the future to satisfy our liquidity requirements or sustain future operations, or that other sources of funding, such as sales of equity or debt, would be available or would be approved by our security holders, if needed, on favorable terms or at all. If we fail to obtain additional working capital as and when needed, such failure could have a material adverse impact on our business, results of operations and financial condition. Furthermore, such lack of funds may inhibit our ability to respond to competitive pressures or unanticipated capital needs, or may force us to reduce operating expenses, which would significantly harm the business and development of operations

During the six months ended April 30, 2019, cash used in operating activities was approximately \$2,764,000. Cash used in investing activities was approximately \$925,000, resulting from the purchased of certificates of deposit totaling \$1,000,000 and the purchase of property and equipment of approximately \$175,000, which was offset by the proceeds on maturities of certificates of deposit totaling \$250,000. Cash provided by financing activities was approximately \$4,456,000, resulting from the sale of 1,061,032 shares of common stock in our at-the-market equity offering over the past six months of approximately \$4,358,000 (which is ongoing), the proceeds from sale of common stock pursuant to employee stock purchase plan of approximately \$19,000 and the proceeds from exercise of stock options of approximately \$80,000. As a result, our cash, cash equivalents, and short-term investments at April 30, 2019 increased approximately \$1,516,000 to approximately \$6,572,000 from approximately \$5,056,000 at the end of fiscal year 2018.

CRITICAL ACCOUNTING POLICIES

The Company's condensed consolidated financial statements are prepared in conformity with accounting principles generally accepted in the United States of America. In preparing these financial statements, we make assumptions, judgments and estimates that can have a significant impact on amounts reported in our condensed consolidated financial statements. We base our assumptions, judgments and estimates on historical experience and various other factors that we believe to be reasonable under the circumstances. Actual results could differ materially from these estimates under different assumptions or conditions. On a regular basis, we evaluate our assumptions, judgments and estimates and make changes accordingly.

We believe that, of the significant accounting policies discussed in Note 2 to our consolidated financial statements in our Annual Report on Form 10-K for the fiscal year ended October 31, 2018, the following accounting policies require our most difficult, subjective or complex judgments:

Revenue Recognition; and

Stock-Based Compensation.

Revenue Recognition

Our revenue has been derived solely from technology licensing and the sale of patented technologies. Revenue is recognized upon transfer of control of intellectual property rights and satisfaction of other contractual performance obligations to licensees in an amount that reflects the consideration we expect to receive.

On November 1, 2018 we adopted Accounting Standards Update 2014-09 ("ASU 2014-09"), Revenue from Contracts with Customers. Upon adoption of ASU 2014-09 we are required to make certain judgments and estimates in connection with the accounting for revenue. Such areas may include determining the existence of a contract and identifying each party's rights and obligations to transfer goods and services, identifying the performance obligations in the contract, determining the transaction price and allocating the transaction price to separate performance obligations, estimating the timing of satisfaction of performance obligations, determining whether a promise to grant a license is distinct from other promised goods or services and evaluating whether a license transfers to a customer at a point in time or over time.

Our revenue arrangements provide for the payment of contractually determined, one-time, paid-up license fees in settlement of litigation and in consideration for the grant of certain intellectual property rights for patented technologies owned or controlled by the Company. These arrangements typically include some combination of the following: (i) the grant of a non-exclusive, retroactive and future license to manufacture and/or sell products covered by patented technologies owned or controlled by the Company, (ii) a covenant-not-to-sue, (iii) the release of the licensee from certain claims, and (iv) the dismissal of any pending litigation. In such instances, the intellectual property rights granted have been perpetual in nature, extending until the expiration of the related patents. Pursuant to the terms of these agreements, we have no further obligations with respect to the granted intellectual property rights, including no obligation to maintain or upgrade the technology, or provide future support or services. Licensees obtained control of the intellectual property rights they have acquired upon execution of the agreement. As such, the earnings process is complete and revenue is recognized upon the execution of the agreement, when collectability is probable and all other revenue recognition criteria have been met.

Stock-Based Compensation

The compensation cost for service-based stock options granted to employees and directors is measured at the grant date, based on the fair value of the award using the Black-Scholes pricing model, and is expensed on a straight-line basis over the requisite service period (the vesting period of the stock option) which is one to four years. For employee options vesting if the trading price of the Company's common stock exceeds certain price targets we use a Monte Carlo Simulation in estimating the fair value at grant date and recognize compensation cost over the implied service period.

For stock awards granted to employees and directors that vest at date of grant we recognize expense based on the grant date market price of the underlying common stock. For restricted stock awards vesting upon achievement of a price target of our common stock we use a Monte Carlo Simulation in estimating the fair value at grant date and recognize compensation cost over the implied service period (median time to vest).

On November 1, 2018 we adopted Accounting Standards Update 2018-07 ("ASU 2018-027") for stock-based compensation to non-employees. Upon adoption of ASU 2018-07 we estimated the fair value of unvested awards at the date of adoption, using the Black-Scholes pricing model. Future grants to consultants will be measured at the grant date, based on the fair value of the award using the Black-Scholes pricing model, consistent with our policy for grants to employees and directors.

The Black-Scholes pricing model and the Monte Carlo Simulation we use to estimate fair values requires valuation assumptions of expected term, expected volatility, risk-free interest rates and expected dividend yield. The expected term of stock options represents the weighted average period the stock options are expected to remain outstanding. For employees we use the simplified method, which is a weighted average of the vesting term and contractual term, to determine expected term. The simplified method was adopted since we do not believe that historical experience is representative of future performance because of the impact of the changes in our operations and the change in terms from historical options. For consultants we use the contract term for expected term. We estimate the expected volatility of our shares of common stock based upon the historical volatility of our share price over a period of time equal to the expected term of the grants. We estimate the risk-free interest rate based on the implied yield available on the applicable grant date of a U.S. Treasury note with a term equal to the expected term of the underlying grants. We made the dividend yield assumption based on our history of not paying dividends and our expectation not to pay dividends in the future.

We will reconsider use of the Black-Scholes pricing model and Monte Carlo Simulation if additional information becomes available in the future that indicates other models would be more appropriate. If factors change and we employ different assumptions in future periods, the compensation expense that we record may differ significantly from what we have recorded in the current period.

EFFECT OF RECENTLY ISSUED PRONOUNCEMENTS

We discuss the effect of recently issued pronouncements in the Notes to our Condensed Consolidated Financial Statements.

FORWARD-LOOKING STATEMENTS

Information included in this Quarterly Report on Form 10-Q (this "Report") contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Forward-looking statements are not statements of historical facts, but rather reflect our current expectations concerning future events and results. We generally use the words "believes," "expects," "intends," "plans," "anticipates," "likely," "will" and similar expressions to identify forward-looking statements. Such forward-looking statements, including those concerning our expectations, involve risks, uncertainties and other factors, some of which are beyond our control, which may cause our actual results, performance or achievements, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. These risks, uncertainties and factors include, but are not limited to, those factors set forth in our Annual Report on Form 10-K for the fiscal year ended October 31, 2018 and the condensed consolidated financial statements included in this Report. Except as required by applicable law, including the securities laws of the United States, we undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. You are cautioned not to unduly rely on such forward-looking statements when evaluating the information presented in this Report.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

As of April 30, 2019, we had investments in short-term, fixed rate and highly liquid instruments that have historically been reinvested when they mature throughout the year. Although our existing instruments are not considered at risk with respect to changes in interest rates or markets for these instruments, our rate of return on these securities could be affected at the time of reinvestment, if any.

Item 4. Controls and Procedures.

We carried out an evaluation, under the supervision and with the participation of our management including our President and Chief Executive Officer and our Chief Operating Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures pursuant to Rule 13-15(b) of the Exchange Act. Based upon that evaluation, our President and Chief Executive Officer and our Chief Operating Officer and Chief Financial Officer concluded that our disclosure controls and procedures are effective as of the end of the period covered by this report.

There was no change in our internal control over financial reporting during the second quarter of fiscal year 2019 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.

Other than as described below and lawsuits we have historically brought to enforce our patent rights we are not a party to any material pending legal proceedings other than that which arise in the ordinary course of business. We believe that any liability that may ultimately result from the resolution of these matters will not, individually or in the aggregate, have a material adverse effect on our financial position or results of operations.

On November 5, 2018, a putative shareholder derivative complaint was filed in the Court of Chancery of the State of Delaware, captioned Howland v. Kumar et al., C.A. No. 2018-0804-KSJM, that alleges claims for breach of fiduciary duty and unjust enrichment. The complaint named as defendants certain of the Company's current and former officers and directors, and the Company is named solely as a nominal defendant. The Company has certain indemnification obligations to the current and former officers and directors named as defendants in the suit, and the attorney fees incurred for this matter are currently being funded by the Company and through available D&O insurance. The complaint seeks, on behalf of the Company, a declaration that the defendant officers and directors breached their fiduciary duties, unspecified damages, certain changes to the Company's internal procedures, and an award of the plaintiff's attorneys' fees and costs. The defendants moved to dismiss the complaint on November 29, 2018, which motion is still pending before the Court of Chancery. Due to the early nature of the complaint and that the complaint does not specify a dollar amount of damages, we cannot make a reasonable estimate of potential losses at this time.

Item 1A. Risk Factors.

There have been no material changes in our risk factors from those disclosed in our Annual Report on Form 10-K for the fiscal year ended October 31, 2018.

- Item 2. <u>Unregistered Sales of Equity Securities and Use of Proceeds</u>. None.
- Item 3. <u>Defaults Upon Senior Securities</u>. None.
- Item 4. <u>Mine Safety Disclosures</u>. Not Applicable.
- Item 5. Other Information. None.
- Item 6. Exhibits.
 - 31.1 Certification of Chief Executive Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, dated June 11, 2019.
 - 31.2 Certification of Chief Financial Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, dated June 11, 2019.
 - 32.1 Statement of Chief Executive Officer, pursuant to Section 1350 of Title 18 of the United States Code, dated June 11, 2019.
 - 32.2 Statement of Chief Financial Officer, pursuant to Section 1350 of Title 18 of the United States Code, dated June 11, 2019.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ANIXA BIOSCIENCES, INC.

By: /s/ Dr. Amit Kumar

Dr. Amit Kumar Chairman, President and Chief Executive Officer (Principal Executive Officer)

June 11, 2019

By: /s/ Michael J. Catelani

Michael J. Catelani Chief Operating Officer and Chief Financial Officer (Principal Financial and Accounting Officer)

CERTIFICATION

I, Dr. Amit Kumar, certify that:

- 1. I have reviewed this quarterly report on Form 10-Q of Anixa Biosciences, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

- 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Dr. Amit Kumar

Dr. Amit Kumar Chairman, President and Chief Executive Officer (Principal Executive Officer)

CERTIFICATION

I, Michael J. Catelani, certify that:

- 1. I have reviewed this quarterly report on Form 10-Q of Anixa Biosciences, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

- 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Michael J. Catelani

Michael J. Catelani Chief Operating Officer and Chief Financial Officer (Principal Financial and Accounting Officer)

Statement of Chief Executive Officer Pursuant to Section 1350 of Title 18 of the United States Code

Pursuant to Section 1350 of Title 18 of the United States Code, the undersigned, Dr. Amit Kumar, the Chairman, President and Chief Executive Officer of Anixa Biosciences, Inc., hereby certifies that:

- 1. The Company's Form 10-Q Quarterly Report for the period ended April 30, 2019 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Dr. Amit Kumar

Dr. Amit Kumar Chairman, President and Chief Executive Officer (Principal Executive Officer)

Statement of Chief Financial Officer Pursuant to Section 1350 of Title 18 of the United States Code

Pursuant to Section 1350 of Title 18 of the United States Code, the undersigned, Michael J. Catelani, the Chief Operating Officer and Chief Financial Officer of Anixa Biosciences, Inc., hereby certifies that:

- 1. The Company's Form 10-Q Quarterly Report for the period ended April 30, 2019 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Michael J. Catelani

Michael J. Catelani Chief Operating Officer and Chief Financial Officer (Principal Financial and Accounting Officer)