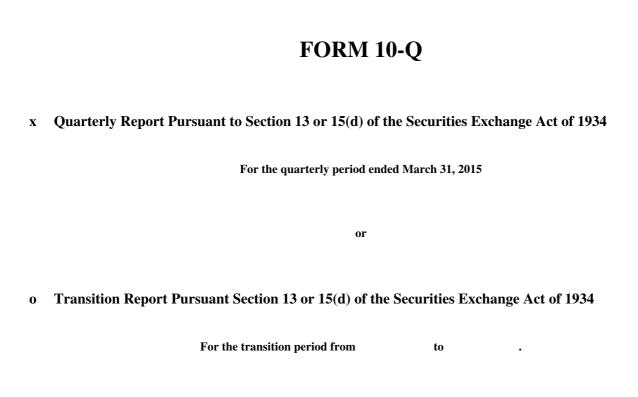
Resonant Inc Form 10-Q May 06, 2015 Table of Contents

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549



Commission file number 001-36467

# RESONANT INC.

(Exact name of registrant as specified in its charter)

**Delaware** (State or other jurisdiction of

**45-4320930** (I.R.S. Employer

incorporation or organization)

Identification No.)

#### 110 Castilian Drive, Suite 100

#### Santa Barbara, California 93117

(Address of principal executive offices, zip code)

#### (805) 308-9803

(Registrant s telephone number, including area code)

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer, and smaller reporting company in Rule 12b-2 of the Exchange Act (Check one):

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

As of May 4, 2015, the issuer had 7,160,869 shares of common stock issued and outstanding.

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# PART I: FINANCIAL INFORMATION

# Item 1. Financial Statements

# RESONANT INC.

# **Condensed Consolidated Balance Sheets**

# (Unaudited)

	December	r 31, 2014	March 31, 2015
ASSETS			
CURRENT ASSETS			
Cash and cash equivalents	\$	5,803,000	\$ 2,925,000
Prepaid expenses and other current assets		106,000	106,000
Investments held-to-maturity		7,999,000	8,994,000
TOTAL CURRENT ASSETS		13,908,000	12,025,000
PROPERTY AND EQUIPMENT			
Fixed assets		1,249,000	1,312,000
Less: Accumulated depreciation and amortization		(208,000)	(313,000)
PROPERTY AND EQUIPMENT, NET		1,041,000	999,000
NONCURRENT ASSETS			
Patents and domain names, net		500,000	616,000
Restricted cash		500,000	100,000
Other assets		15,000	15,000
TOTAL NONCURRENT ASSETS		515,000	731,000
		ĺ	,
TOTAL ASSETS	\$	15,464,000	\$ 13,755,000
LIABILITIES AND STOCKHOLDERS EQUITY			
CURRENT LIABILITIES			
	\$	223,000	\$ 408,000
Accrued expenses		146,000	21,000
Accrued salaries and payroll related expenses		315,000	374,000
Deferred rent, current portion		36,000	36,000
TOTAL CURRENT LIABILITIES		720,000	839,000
LONG-TERM LIABILITIES			
Deferred rent		54,000	45,000
TOTAL LIABILITIES		774,000	884,000
Commitments and contingencies (Note 7)			
STOCKHOLDERS EQUITY			
DIOCEMIOLDERO EQUITI			

Common stock, \$0.001 par value, 47,000,000 authorized and 6,931,984 outstanding as of December 31, 2014, and 7,158,276 outstanding as of March 31, 2015		7,000	7,000			
Preferred stock, \$0.001 par value, 3,000,000 authorized and none outstanding as of						
December 31, 2014 and March 31, 2015						
Additional paid-in capital		35,880,000	36,289,000			
Accumulated deficit		(21,197,000)	(23,425,000)			
TOTAL STOCKHOLDERS EQUITY		14,690,000	12,871,000			
TOTAL LIABILITIES AND STOCKHOLDERS EQUITY	\$	15,464,000 \$	13,755,000			

# RESONANT INC.

# **Condensed Consolidated Statements of Operations**

# (Unaudited)

	Three Months Ended March 31,		
	2014		2015
REVENUES	\$	\$	
OPERATING EXPENSES			
Research and development expenses	435,000		997,000
General and administrative expenses	522,000		1,127,000
Depreciation and amortization	13,000		111,000
TOTAL OPERATING EXPENSES	970,000		2,235,000
OPERATING LOSS	(970,000)		(2,235,000)
OTHER INCOME (EXPENSE)			
Interest and investment income			8,000
Interest expense	(709,000)		
Fair value adjustments to warrant and derivative liabilities	(2,267,000)		
TOTAL OTHER INCOME (EXPENSE)	(2,976,000)		8,000
LOSS BEFORE INCOME TAXES	(3,946,000)		(2,227,000)
Provision for income taxes	(1,000)		(1,000)
NET LOSS	\$ (3,947,000)	\$	(2,228,000)
NET LOSS PER SHARE - BASIC AND DILUTED	\$ (3.95)	\$	(0.31)
Weighted average shares outstanding basic and diluted	999,999		7,077,789

#### RESONANT INC.

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# For The Three Months Ended March 31, 2015

# (Unaudited)

	Comm	ion Stoc	ek	Additional Paid-in	Accumulated	S	Total Stockholders
	Shares		Amount	Capital	Deficit		Equity
Balance, December 31, 2014	6,931,984	\$	7,000	\$ 35,880,000	\$ (21,197,000)	\$	14,690,000
Issuance of common stock for							
compensation	18,108						
Stock-based compensation				440,000			440,000
Exercise of warrants, cashless	208,184						
Tax withholding on net issuance							
of common stock for-compensation				(31,000)			(31,000)
Net loss					(2,228,000)		(2,228,000)
Balance, March 31, 2015	7,158,276	\$	7,000	\$ 36,289,000	\$ (23,425,000)	\$	12,871,000

# RESONANT INC.

# **Condensed Consolidated Statements of Cash Flows**

# (Unaudited)

		Three Months Ended March 31,		
		2014		2015
CASH FLOWS FROM OPERATING ACTIVITIES	Φ.	(2.045.000)	Φ.	(2.222.000)
Net Loss	\$	(3,947,000)	\$	(2,228,000)
Adjustments to reconcile net loss to net cash used in operating activities:		12.000		444.000
Depreciation and amortization		13,000		111,000
Amortization of deferred finance costs		709,000		440.000
Stock-based compensation				440,000
Non-cash investment income		2.247.000		(6,000)
Fair value adjustments to warrant and derivative liabilities		2,267,000		
Changes in assets and liabilities:				
Prepaids and other current assets		45,000		
Accounts payable		99,000		185,000
Accrued expenses		(57,000)		(125,000)
Accrued compensation		62,000		59,000
Deferred rent				(9,000)
Net cash used in operating activities		(809,000)		(1,573,000)
CASH FLOWS FROM INVESTING ACTIVITIES				
Capital expenditures		(150,000)		(64,000)
Expenditures for patents and domain names		(47,000)		(121,000)
Purchase of restricted cash investment				(100,000)
Sale of investment held-to-maturity				8,000,000
Purchase of investments held-to-maturity				(8,989,000)
Net cash used in investing activities		(197,000)		(1,274,000)
CASH FLOWS FROM FINANCING ACTIVITIES				
Deferred IPO cost		(218,000)		
Payment of tax withholdings on net issuance of common stock for compensation				(31,000)
Net cash used in financing activities		(218,000)		(31,000)
NET DECREASE IN CASH		(1,224,000)		(2,878,000)
CASH Beginning of period		3,339,000		5,803,000
CASH End of period	\$	2,115,000	\$	2,925,000
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION				
Taxes	\$	1,000	\$	

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#### RESONANT INC.

#### **Notes to Condensed Consolidated Financial Statements**

#### NOTE 1 ORGANIZATION AND DESCRIPTION OF BUSINESS

#### Overview

Resonant Inc. is a late-stage development company located in Santa Barbara, California. The condensed consolidated statements of operations presented in our condensed consolidated financial statements represent the activities of Resonant Inc. for the three months ended March 31, 2014 and March 31, 2015. The condensed consolidated balance sheets presented in the consolidated financial statements represent the activities of Resonant Inc. as of December 31, 2014 and March 31, 2015.

We are creating innovative filter designs for radio frequency, or RF, front-ends for the mobile device industry. The RF front-end is the circuitry in a mobile device responsible for analog signal processing and is located between the device s antenna and its digital baseband. We use a fundamentally new technology called Infinite Synthesized Networks®, or ISN®, to configure and connect resonators, the building blocks of RF filters. Filters are a critical component of the RF front-end used to select desired radio frequency signals and reject unwanted signals. We are using ISN to develop new classes of filter designs.

We believe licensing our designs is the most direct and effective means of delivering our solutions to the market. Our target customers make part or all of the RF front-end. We intend to retain ownership of our designs, and we expect to be compensated through license fees and royalties based on sales of RF front-end modules that incorporate our designs. We do not intend to manufacture or sell any physical products or operate as a contract design company developing designs for a fee.

We completed our first single-band filter design (a duplexer) in the first quarter of 2015. This project has been our principal focus since inception. We developed the duplexer using commercial product specifications provided under a development agreement with a prospective customer. The customer terminated the formal development agreement in the first quarter of 2015 and informed us that our design did not meet all the specifications. We are continuing work on this project, but the customer has advised us to work through the filter manufacturer. We are collaborating with the filter manufacturer to submit improved designs for consideration by this customer. We are also presenting our design to other prospective customers and providing them with manufactured parts for testing.

In the first quarter of 2015, we started a development project with a second customer for the design of our next single-band RF filter, another duplexer. This duplexer is for a different band than our first duplexer. The goal of the project is to develop a new duplexer design for our customer to market to RF front-end manufacturers and mobile device OEMs. The customer has not committed to use the resulting design and terms of a license have not been finalized.

We are developing a series of tunable filter designs that can be electronically programmed in real time for different RF frequency bands. We began development in the fourth quarter of 2014 of a prototype tunable filter to demonstrate our value proposition to prospective customers. We are in discussions with several prospective customers for the design of tunable filters with the goal of securing a lead customer.

We were founded as Resonant LLC on May 29, 2012 (our inception date). We commenced business on July 6, 2012 with initial contributions from our founders and Superconductor Technologies Inc., or STI. The founders contributed \$200,000 and agreed to work full-time without pay until we secured adequate funding. STI contributed a patent portfolio, software, equipment, temporary office space and an early version of the development agreement with our first customer.

The founders loaned us an aggregate of \$200,000 during the first quarter of 2013, and we issued a series of warrants to the founders in connection with these loans. We refer to the founder loans as Bridge Loans and the founder warrants as Bridge Loan Warrants. We repaid the Bridge Loans in the second quarter of 2013.

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We changed our form of ownership from a limited liability company to a corporation in an exchange transaction on June 17, 2013. The founders exchanged all of their units and warrants of Resonant LLC for common stock and warrants of Resonant Inc. STI exchanged all of its units of Resonant LLC for a \$2.4 million subordinated convertible note of Resonant Inc., or Subordinated Convertible Note. The Subordinated Convertible Note was scheduled to mature on September 17, 2014, was interest free, was secured by all of our assets and was subordinated to our senior convertible notes. This note was converted into common stock in our initial public offering, or IPO.

We closed our first financing on June 17, 2013. We issued \$7.0 million of Senior Convertible Notes in a private placement. The notes were to mature on September 17, 2014, bore interest at 6.0% per annum, were secured by all of our assets and would automatically convert into 2,087,667 shares of our common stock upon consummation of a qualified offering. Interest was payable in cash or shares of common stock. We paid a placement agent a commission of \$700,000 and issued the agent warrants to purchase 208,763 shares of our common stock at an exercise price of \$3.35 per share. We also issued the placement agent a warrant to purchase 222,222 shares of our common stock for business consulting services at an exercise price of \$0.01 per share. These notes were converted into common stock in our IPO.

#### **Initial Public Offering**

We closed our IPO, of 3,105,000 shares of common stock (which includes the exercise in full by the underwriter of its over-allotment option) at a price of \$6.00 per share on June 3, 2014. We received aggregate net proceeds, after deducting underwriting discounts and commissions and estimated offering expenses, of approximately \$16.2 million. Our common stock commenced trading on the Nasdaq Capital Market under the symbol RESN on May 29, 2014, or IPO Date. The Securities and Exchange Commission declared effective a registration statement relating to these securities on May 28, 2014.

MDB Capital Group, LLC, or MDB, acted as the sole underwriter for our IPO. Simultaneous with the funding of the IPO, we issued the underwriter a 5-year warrant to purchase 310,500 shares of common stock at an exercise price of \$7.50 per share, which we refer to as the Underwriting Warrant. The warrant was not exercisable until November 24, 2014 (180-days from the date of the underwriting agreement).

Our Senior Convertible Notes automatically converted into 2,087,667 shares of common stock effective upon the completion of the IPO. We paid in cash the accrued interest of \$404,000. Similarly, our Subordinated Convertible Note automatically converted into 700,000 shares of common stock. There was no accrued interest on this note. The shares issued on conversion of the Senior Convertible Notes were subject to a 180-day lockup which expired November 24, 2014, and the shares issued on conversion of the Subordinated Convertible Note are subject to a 12-month lockup expiring May 28, 2015.

#### **Capital Resources and Liquidity**

We have earned no revenue since inception, and our operations have been funded with initial capital contributions, proceeds from the sale of equity securities and debt. We have incurred accumulated losses totaling \$23.4 million through March 31, 2015. These losses are primarily the result of research and development costs associated with commercializing our technology, combined with start-up and financing costs. We expect to continue to incur substantial costs for commercialization of our technology on a continuous basis because our business model involves developing and licensing custom filter designs.

Our condensed consolidated financial statements contemplate the continuation of our business as a going concern. However, we are subject to the risks and uncertainties associated with a new business. We do not yet have the ability to earn revenue and have incurred significant losses from operations since inception. At December 31, 2014 and March 31, 2015, we had an accumulated deficit of \$21.2 million and \$23.4 million, respectively, and cash and cash equivalents of \$5.8 million and \$2.9 million, respectively. Additionally, as of December 31, 2014 and March 31, 2015, we had \$8.0 million and \$9.0 million in short-term investments, respectively.

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We completed an IPO in the second quarter of 2014 to raise additional capital. Our principal sources of liquidity consist of existing cash balances and investments of \$11.9 million. We believe our current resources will provide sufficient funding for planned operations into the first half of 2016. If we do not generate adequate cash from revenues in 2016 in order to reach positive cash flows, we likely will be required to obtain additional financing to continue with our plan of commercialization. There is no assurance that additional financing will be available on acceptable terms or at all. If we issue additional equity securities to raise funds, the ownership percentage of our existing stockholders would be reduced. New investors may demand rights, preferences or privileges senior to those of existing holders of common stock. If we cannot raise any needed funds, we might be forced to make substantial reductions in our operating expenses, which could adversely affect our ability to implement our business plan and ultimately our viability as a company.

The accompanying condensed consolidated financial statements at March 31, 2015 and for the three months ended March 31, 2014 and 2015 are unaudited, but include all adjustments, consisting of normal recurring entries, that management believes to be necessary for a fair presentation of the periods presented. Prior period figures have been reclassified, wherever necessary, to conform to current presentation. Interim results are not necessarily indicative of results for a full year. Balance sheet amounts as of December 31, 2014 have been derived from our audited consolidated financial statements as of that date.

The condensed consolidated financial statements included herein have been prepared by us pursuant to the rules and regulations of the Securities and Exchange Commission, or SEC. Certain information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America, or U.S. GAAP, have been condensed or omitted pursuant to such rules and regulations. The financial statements should be read in conjunction with our audited consolidated financial statements contained in our Annual Report on Form 10-K for the year ended December 31, 2014. Our operating results will fluctuate for the foreseeable future. Therefore, period-to-period comparisons should not be relied upon as predictive of the results in future periods.

#### NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation and Use of Estimates The accompanying financial statements have been prepared in accordance with U.S. GAAP. In the opinion of management, all adjustments (consisting of normal accruals) considered for a fair presentation have been included. Significant estimates made in preparing these financial statements include (a) assumptions to calculate the fair values of financial instruments, derivative, warrants and equity instruments and other liabilities and the deferred tax asset valuation allowance and (b) the useful lives for depreciable and amortizable assets. Actual results could differ from those estimates. In the opinion of management, all adjustments, including normal recurring accruals considered necessary for a fair presentation, have been included.

Reclassifications Certain amounts in the condensed consolidated statement of operations for the three months ended March 31, 2014 have been reclassified to conform to the current year presentation.

Restricted Cash Restricted cash at March 31, 2015 represents cash held within a certificate of deposit with a financial institution which serves as collateral for our corporate credit cards. The restriction on the cash will lapse in conjunction with the expiration of the use of the corporate credit cards. There was no restricted cash as of December 31, 2014.

Investments Securities held-to-maturity: Management determines the appropriate classification of debt securities at the time of purchase and reevaluates such designation as of each statement of financial position date. Investment/Debt securities are classified as held-to-maturity when we have the positive intent and ability to hold the securities to maturity. Held-to-maturity securities are stated at amortized cost, adjusted for amortization of premiums and accretion of discounts to maturity computed under the effective interest method. Such amortization is included in investment income. Interest on securities classified as held-to-maturity is included in investment income.

With respect to debt securities, when the fair value of a debt security classified as held-to-maturity or available for sale is less than its amortized cost, management assesses whether or not: (i) we have the intent to sell the security or (ii) it is more likely than not that we will be required to sell the security before its anticipated recovery. If either of these conditions is met, we must recognize an other-than-temporary impairment earnings for the difference between the debt security s amortized cost basis and its fair value, and includes such amounts in net securities gains (losses).

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For debt securities that do not meet the above criteria and are not expected to be recovered at the amortized cost basis, the security is considered other-than-temporarily impaired. For these debt securities, we separate the total impairment into the credit loss component and the amount of the loss related to other factors. In order to determine the amount of the credit loss for a debt security, we calculate the recovery value by performing a discounted cash flow analysis based on the current cash flows and future cash flows management expects to recover. The discount rate is the effective interest rate implicit in the underlying debt security. The amount of the total other-than-temporary impairment related to credit loss is recognized in earnings and is included in net securities gains (losses). The amount of the total other-than-temporary impairment related to other factors is recognized in other comprehensive income. For debt securities that have recognized as other-than-temporary impairment through earnings, if through subsequent evaluation there is a significant increase in the cash flow expected, the difference between the amortized cost basis and the cash flows expected to be collected is accreted as interest income.

During January and February 2015, we invested in debt securities and federally insured certificates of deposit that we have classified as held-to-maturity as we currently meet the criteria for this investment classification. As of March 31, 2015, the amortized cost value is \$9.0 million with an unrealized loss of \$4,000 and a fair value of \$9.0 million. The investments mature in various increments beginning in May 5, 2015 through February 26, 2016. Investments representing \$6 million are foreign debt securities of which \$2 million each mature on May 5, 2015, August 3, 2015 and October 22, 2015, respectively. The remaining \$3 million in held-to-maturity investments are in federally insured certificates of deposit that mature at various amounts from February 5, 2016 through February 25, 2016. We have not recognized an other-than-temporary impairment gain or loss or a comprehensive gain or loss to-date. We have recorded investment income of \$6,000 for the three months ended March 31, 2015 associated with these investments. There were no investment securities as of March 31, 2014.

Fair Value of Financial Instruments We measure certain financial assets and liabilities at fair value based on the exchange price that would be received for an asset or paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants. The carrying amounts of our financial instruments, including cash equivalents, accounts payable, and accrued liabilities, approximate fair value due to their short maturities.

The carrying amount of our warrant liabilities and our derivative liability related to the Senior Convertible Notes were marked to market each reporting date until the warrants and derivative liability were settled. Prior to the IPO Date, the fair value of the financing warrant liability and derivative liability (see Note 3 and Note 4) were estimated using a Monte Carlo option-pricing model, which takes into consideration the market values of comparable public companies, considering among other factors, the use of multiples of earnings, and adjusted to reflect the restrictions on the ability of our securities to trade in an active market. As of the IPO Date, the fair value of the remaining warrants and the financing warrant liability and derivative liability, were estimated using a Black-Scholes option valuation technique as it embodies all of the requisite assumptions (including trading volatility, remaining term to maturity, market price, strike price, and risk free rates) necessary to fair value these instruments. Estimates of expected term were based on the estimated time to expiration. The risk-free interest rate was based on the U.S. Treasury yield for a term consistent with the estimated expected term. We have never declared or paid any cash dividends and do not presently plan to pay cash dividends in the foreseeable future. Consequently, we use an expected dividend yield of zero. Our expected volatility was derived from the historical volatilities of several public companies in similar industries because we have limited information on the volatility of the price of our common stock because we have no trading history. When making the selections of our industry peer companies to be used in the volatility calculation, we consider operational area, size, business model, industry and the business of potential comparable companies. These historical volatilities are weighted based on certain qualitative factors and combined to produce a single volatility factor. All of the warrant liabilities and the derivativ

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Prior to the IPO Date, the determination of the value of our common stock, and for purposes of establishing the value of the warrants and derivatives related to the bridge financing, the senior convertible notes, the subordinated convertible notes and the consulting warrants, management considered several factors and the probability of achieving each one of them. The significant factors were (1) securing adequate funding to complete the single-band commercial surface acoustic wave, or SAW, duplexer design under the terms of the development agreement with our first customer; (2) developing a working duplexer product that meets the specifications of our first customer; and (3) our first customer exercising its licensing option if the duplexer product met its specifications. The probabilities for achieving each of these factors changed during the periods from January 31, 2013 to June 16, 2013 and December 31, 2013. These probabilities were affected by our ability to hire technical personnel to develop the technology and design the product, establish a management team to develop a business plan, secure financing, execute the business plan, and interact with our first customer to achieve the milestones contained in the development agreement with them. As we made progress in each of these areas over the period from January 31, 2013 through December 31, 2013 the probability elements in each of these factors changed and increased. These increases resulted in higher valuations of our common stock and accordingly the values of the warrants and derivatives at each of these periods. Following the IPO Date, we used the current market value of our common stock to assist in determining the value of the warrants and stock options using the Black-Scholes option valuation model.

Cash and Cash Equivalents We consider all liquid debt instruments purchased with a maturity of three months or less to be cash equivalents.

Concentration of Credit Risk We maintain checking accounts at one financial institution. These accounts are insured by the Federal Deposit Insurance Corporation (FDIC) for up to \$250,000 per account. Management believes we are not exposed to significant credit risk due to the financial position of the depository institution in which these deposits are held.

*Property and Equipment* Property and equipment consists of leasehold improvements associated with our new corporate office, software purchased during the normal course of business, computer equipment and office furniture and fixtures, all of which are recorded at cost. Depreciation and amortization is recorded using the straight-line method over the respective useful lives of the assets ranging from three to five years. Long-lived assets, including software are reviewed for impairment whenever events or circumstances indicate that the carrying amount of these assets may not be recoverable.

*Intangible Assets Subject to Amortization* At December 31, 2014 and March 31, 2015, intangible assets subject to amortization include patents and a domain name purchased for use in operations. Intangible assets are reviewed for impairment whenever events or circumstances indicate that the carrying amount of these assets may not be recoverable.

Deferred Finance Costs Costs relating to our senior convertible note and subordinated convertible note financings were capitalized and amortized over the term of the related debt using the effective interest method. Due to the conversion of these notes to common stock in connection with the IPO, the unamortized deferred finance costs of \$358,000 were fully expensed as of the IPO Date. Amortization of deferred financing costs, including the write-off due to the conversion, were charged to interest expense and totaled \$51,000 for the three months ended March 31, 2014. There were no deferred financing costs for the three months ended March 31, 2015.

Research and Development Costs and expenses that can be clearly identified as research and development are charged to expense as incurred in accordance with Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, Topic 730-10, Research and Development.

Stock-Based Compensation We account for employee stock options in accordance with ASC Topic 718, Compensation-Stock Compensation. For stock options issued to employees and directors we use the Black-Scholes option valuation model for estimating fair value at the date of grant. For stock options issued for services rendered by non-employees, we recognize compensation expense in accordance with the requirements of ASC 505-50, Equity, or ASC 505-50, as amended. Non-employee option grants that do not vest immediately upon grant are recorded as an expense over the vesting period. At the end of each financial reporting period prior to performance, the value of these options, as calculated using the Black-Scholes option valuation model, is determined, and compensation expense recognized or recovered during the period is adjusted accordingly. Since the fair market value of options granted to non-employees is subject to change in the future, the amount of the future compensation expense is subject to adjustment until the common stock options or warrants are fully vested.

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We account for restricted stock units issued to employees at fair value, based on the market price of our stock on the date of grant, net of estimated forfeitures. Compensation expense is recognized for the portion of the award that is ultimately expected to vest over the period during which the recipient renders the required services to the Company generally using the straight-line single option method. The fair value of non-employee restricted stock units awarded are remeasured as the awards vest, and the resulting increase in fair value, if any, is recognized as compensation expense in the period the related services are rendered.

Earnings Per Share, or EPS EPS is computed in accordance with ASC Topic 260, Earnings per Share, and is calculated using the weighted average number of common shares outstanding during each period. Diluted EPS assumes the conversion, exercise or issuance of all potential common stock equivalents unless the effect is to reduce a loss or increase the income per share. Potential common shares consist of the incremental common shares issuable upon the exercise of stock options (using the treasury stock method), the exercise and/or conversion of our convertible notes and warrants (using the if-converted method).

The following table presents the number of anti-dilutive shares excluded from the calculation of diluted net loss per share attributable to common stockholders for the periods below:

	Three Months Ende	ed March 31,
	2014	2015
Common stock warrants	680,984	804,436
Common stock options		546,200
Convertible debt	2,787,667	
Total shares excluded from net loss per share attributable to common stockholders	3,468,651	1,350,636

Derivative Instruments We account for free-standing derivative instruments and hybrid instruments that contain embedded derivative features in accordance with ASC Topic 815, Accounting for Derivative Instruments and Hedging Activities, or ASC 815, as well as related interpretations of this topic. In accordance with this topic, derivative instruments and hybrid instruments are recognized as either assets or liabilities in the balance sheet and are measured at fair values with gains or losses recognized in earnings. Embedded derivatives that are not clearly and closely related to the host contract are bifurcated and are recognized at fair value with changes in fair value recognized as either a gain or loss in earnings. We determined the fair value of derivative instruments and hybrid instruments based on available market data using appropriate valuation models, giving consideration to all of the rights and obligations of each instrument.

We estimated the fair values of derivative instruments and hybrid instruments using various techniques (and combinations thereof) that are considered to be consistent with the objective of measuring fair values. In selecting the appropriate technique, we considered, among other factors, the nature of the instrument, the market risks that it embodies and the expected means of settlement. For less complex instruments, such as free-standing warrants, we generally used the Black-Scholes option valuation model, adjusted for the effect of dilution, because it embodies all of the requisite assumptions (including trading volatility, estimated terms, dilution and risk free rates) necessary to fair value these instruments. Estimating fair values of derivative financial instruments requires the development of significant and subjective estimates that may, and are likely to, change over the duration of the instrument with related changes in internal and external market factors. Under ASC 815, increases in the trading price of our common stock and increases in fair value during a given financial quarter result in the application of non-cash derivative expense. Conversely, decreases in the trading price of our common stock and decreases in fair value during a given financial quarter would result in the application of non-cash derivative income. In situations where the Black-Scholes option valuation model was not deemed appropriate, we used a Monte Carlo option-pricing model to determine the fair value of derivative instruments.

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Income Taxes We account for income taxes in accordance with ASC Topic 740, Income Taxes, or ASC 740, which requires the recognition of deferred tax assets and liabilities for the future consequences of events that have been recognized in our condensed consolidated financial statements or tax returns. The measurement of the deferred items is based on enacted tax laws. In the event the future consequences of differences between financial reporting bases and the tax bases of our assets and liabilities result in a deferred tax asset, ASC 740 requires an evaluation of the probability of being able to realize the future benefits indicated by such asset. A valuation allowance related to a deferred tax asset is recorded when it is more likely than not that some portion or the entire deferred tax asset will not be realized. As part of the process of preparing our consolidated financial statements, we are required to estimate our income tax expense in each of the jurisdictions in which we operate. We also assess temporary differences resulting from differing treatment of items for tax and accounting differences. We record a valuation allowance to reduce the deferred tax assets to the amount of future tax benefit that is more likely than not to be realized. For the period when we were organized as a limited liability company, we were treated as a partnership for federal and state income tax purposes under the entity classification domestic default rules. As of December 31, 2014 and March 31, 2015, no liability for unrecognized tax benefits was required to be reported. We recognize interest and penalties related to income tax matters in income taxes, and there were none for the three months ended March 31, 2014 and March 31, 2015, respectively.

We have filed, or are in the process of filing, tax returns that are subject to audit by the respective tax authorities. Although the ultimate outcome would be unknown, we believe that any adjustments that may result from tax return audits are not likely to have a material, adverse effect on our consolidated results of operations, financial position or cash flows.

#### **Recent Accounting Pronouncements**

We have reviewed all of the recent accounting pronouncements and have determined that they have not or will not have a material impact on our condensed consolidated financial statements, or do not apply to our operations.

#### NOTE 3 BRIDGE LOANS, MEMBER LOAN AND CONVERTIBLE DEBT

#### Senior Convertible Note

We entered into a securities purchase agreement on June 17, 2013 for the sale to multiple investors of \$7.0 million in principal amount of senior secured convertible promissory notes, which we refer to as Senior Convertible Notes. MDB served as placement agent in this financing. We closed the sale on the same day and issued \$7.0 million in principal amount of Senior Convertible Notes. We also paid \$700,000 to MDB as a placement agent fee. The net cash proceeds were \$6.3 million. We also issued to MDB a warrant to purchase shares of our common stock as consideration for its financing services, and another warrant to purchase shares of our common stock as consideration for business consulting services. The Senior Convertible Notes bore interest at a 6% per annum and were scheduled to mature on September 17, 2014 unless earlier converted.

The conversion feature included in the terms of the Senior Convertible Notes was determined to be a derivative liability that we bifurcated for accounting purposes. We measured the derivative liability at fair value at the issue date of Senior Convertible Notes based on a Monte Carlo option-pricing model and determined the value to be \$1.9 million. The derivative liability was recorded with a corresponding debit to debt discount that was amortized as interest expense using the effective interest method over the life of the instrument. At the time of issuance, the

Senior Convertible Notes and derivative liability were recorded on the balance sheet as a long-term note because the notes mature on September 17, 2014 (greater than one year). Upon a Qualified IPO, or other event that results in the conversion of the notes into common stock, a portion of the carrying value of the derivative liability would be accounted for as an extinguishment of debt and any remaining unamortized debt discount would be expensed at such date. At December 31, 2013, the Monte Carlo option-pricing model used the following assumptions to estimate fair value: equity value of \$20.0 million, different conversion prices for different scenarios, time to maturity of 9-15 months under the scenarios based on the expected date of a Qualified IPO, volatility of 102.1% and risk free rate of 0.19%. As noted above, in connection with the Senior Convertible Notes and as a result of the warrants issued to MDB as consideration for its placement agent services, we determined that an additional discount to the debt should be recorded in the amount of \$300,000, and we were amortizing this amount using the effective interest method over the life of the instrument. The Senior Convertible Notes did not include any financial covenants.

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Upon the completion of the IPO, which was considered a Qualified IPO under the Senior Convertible Note agreement, the Senior Convertible Notes were converted into 2,087,667 shares of common stock as of the date of the IPO and unpaid interest of \$404,000 was paid from the proceeds of the IPO. Interest expense, excluding the unamortized debt discount write-off, was \$377,000 for the three months ended March 31, 2014. Due to the completion of the IPO and no debt taken out by us, there was no interest expense for the three months ended March 31, 2015.

#### **Subordinated Convertible Note**

On June 17, 2013, we issued to STI a subordinated senior secured convertible note in the principal amount \$2.4 million, which we refer to as the Subordinated Convertible Note, as consideration for our acquisition from STI of its 300,000 Class C units of Resonant LLC and 100 shares of our common stock. The Subordinated Convertible Note did not bear interest and was scheduled to mature on September 17, 2014 unless earlier converted.

The Subordinated Convertible Note was non-interest bearing. We considered the effective interest rate of the Subordinated Convertible Note to be at least 11.8% per annum as the Subordinated Convertible Note was subordinated to the Senior Convertible Notes and had greater inherent risk, and, therefore, it should carry a higher interest rate than that of the Senior Convertible Notes. We calculated a discount to the face value of the Subordinated Convertible Note of \$300,000, which we recorded as debt discount and were amortizing as interest expense over the life of the Subordinated Convertible Note using the effective interest rate method. The Subordinated Convertible Note did not include any financial covenants.

Upon the completion of the IPO, which was considered a Qualified IPO under the Subordinated Convertible Note agreement, the Subordinated Convertible Note was converted into 700,000 shares of common stock as of the date of the IPO and there was no unpaid interest. Interest expense, excluding the unamortized debt discount write-off, was \$53,000 for the three months ended March 31, 2014. Due to the completion of the IPO, there was no interest expense for the three months ended March 31, 2015.

#### NOTE 4 WARRANT LIABILITIES

From time to time, we and Resonant LLC have issued warrants to purchase shares of common stock and units of membership interest, respectively. These warrants have been issued in connection with the financing transactions and consulting services. Our warrants are subject to standard anti-dilution provisions applicable to shares of our common stock.

#### **Bridge Warrants**

In connection with and as an inducement to make the bridge loans in January and March 2013, Resonant LLC issued to each of our three founders five-year warrants to purchase Class B units of Resonant LLC at an exercise price of \$0.40 per unit, which we refer to as the Bridge Warrants. The Bridge Warrants were issued in two tranches, at the same time the bridge loan was funded, with each founder receiving warrants for 20,833 Class B units on each of January 31, 2013 (for a total of 62,499 Class B units) and March 19, 2013 (for a total of 62,499 Class B units). The founders paid an aggregate of \$1,000 in cash for the Bridge Warrants.

We estimated the initial fair value of the Bridge Warrants issued in January 2013 to be \$200,000 using the Black-Scholes option valuation model and the following assumptions: exercise price of \$0.40 per unit; implied unit price of \$3.75; expected volatility of 60%; expected dividend rate of 0%; risk free interest rate of 0.88%; and expiration date of 5 years. We estimated the initial fair value of the Bridge Warrants issued in March 2013 to be \$200,000 using the Black-Scholes option valuation model and the following assumptions: exercise price of \$0.40 per unit; implied unit price of \$3.60; expected volatility of 60%; expected dividend rate of 0%; risk free interest rate of 0.80%; and expiration date of 5 years. (See Note 2).

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On June 17, 2013, in connection with our acquisition of all of the outstanding membership interests of Resonant LLC in an exchange transaction, the founders exchanged their Bridge Warrants to purchase an aggregate of 124,998 Class B units of Resonant LLC for Bridge Warrants to purchase an aggregate of 249,999 shares of our common stock at an exercise price of \$0.20 per share. All other terms of the Bridge Warrants remained the same. We revalued the Bridge Warrants on June 17, 2013 to \$400,000 using the Black-Scholes option valuation model with the following assumptions: exercise price of \$0.20 per share; implied stock price of \$3.23; expected volatility of 60%; expected dividend rate of 0%; risk free interest rate of 1.06%; and expiration date of 5 years. At each reporting period up through the IPO Date, any changes to the fair value of the Bridge Warrants were recorded in the condensed consolidated statements of operations.

#### Consulting Warrant, Financing Warrant and Underwriting Warrant

Upon consummation of our Senior Convertible Note financing, (*see Note 3*), for business consulting services provided by MDB, we issued to MDB a seven-year warrant to purchase 222,222 shares of our common stock at an exercise price of \$0.01 per share, which we refer to as the Consulting Warrant. The Consulting Warrant is exercisable six months after the completion of our initial public offering and prior to June 15, 2020. We estimated the initial fair value of the Consulting Warrant to be \$700,000 using the Black-Scholes option valuation model with the following assumptions: exercise price of \$0.01 per share; implied stock price of \$3.23; expected volatility of 68.8%; expected dividend rate of 0%; risk free interest rate of 1.57%; and expiration date of 7 years. (*See Note 2*).

In addition, for placement agent services provided by MDB in connection with our Senior Convertible Note financing, we issued to MDB a seven-year warrant to purchase shares of our common stock, which we refer to as the Financing Warrant. The Financing Warrant is exercisable six months after the completion of our IPO and prior to June 15, 2020. The Financing Warrant is exercisable for a number of shares of our common stock equal to \$700,000 divided by the Financing Warrant s exercise price. Prior to consummation of our Qualified IPO, the exercise price is equal to \$6,000,000 divided by the Fully Diluted Shares. Upon consummation of our Qualified IPO, the exercise price is adjusted to be equal to the conversion price of our Senior Convertible Notes. As the value of the Financing Warrant depended on future price movements of our equity, we estimated the fair value of the Financing Warrant at December 31, 2013 to be \$700,000 using a Monte Carlo option-pricing model with the following assumptions: equity value of \$20 million, different conversion prices for different scenarios, time to maturity of 6.5 years, volatility of 65.3% and risk free rate of 2.28%. (See Note 2).

In connection with the closing of our IPO, we also issued a third warrant to MDB related to their role as the sole underwriter for our IPO, we refer to this as the Underwriting Warrant. We issued them a 5-year warrant to purchase 310,500 shares of common stock at an exercise price of \$7.50 per share. The warrant was not exercisable until November 24, 2014 (180-days from the date of the underwriting agreement) and expires May 28, 2019. We estimated the fair value of the Underwriting Warrant at issuance date to be \$901,185 using the Black-Scholes option valuation model with the following assumptions: market price of the stock of \$6.00 per share, time to maturity of 5 years, volatility of 63.1%, zero expected dividend rate and risk free rate of 1.5%. (See Note 2).

In August 2014 and October 2014, we entered into agreements with our investor relations firm, or IR Firm, and an IR consultant to provide us with investor relations services. Pursuant to the IR Firm agreement, in addition to monthly cash compensation of \$8,500 per month, we issued to the IR Firm a 3-year consulting warrant, or IR Consulting Warrant, for the purchase of 42,000 shares of common stock. The IR Consulting Warrant has an exercise price of \$8.31 and expires on July 17, 2017. We estimated the fair value of the IR Consulting Warrant at issuance date to be \$119,000 using the Black-Scholes option valuation model with the following assumptions: market price of the stock of \$6.91 per share, time to maturity of 3 years, volatility of 69.7%, zero expected dividend rate and risk free rate of 0.88%. Pursuant to the IR consultant agreement, in addition to monthly cash compensation of \$5,000 per month, we issued to the IR consultant a 4-year consulting warrant, or IR Warrant, for the purchase of 6,000 shares of common stock that vests monthly over twelve months. The IR Warrant has an exercise price of \$6.50 and expires on September 30, 2018. We estimated the fair value of the IR Warrant over the three monthly periods of vesting to be \$9,000 using the Black-Scholes option valuation model with the following assumptions: market prices of the stock of \$6.00 - \$11.62 per share, time to maturity of

3.8 to 3.5 years, volatility of ranges of 60.0% to 81.8%, zero expected dividend rate and risk free rate range of 0.95% to 1.5%. We recorded \$39,000 of stock-based compensation related to the IR warrants during the three months ended March 31, 2015 which was included in general and administration expense.

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A roll-forward of warrant share activity from January 1, 2014 to December 31, 2014 is shown in the following table:

	Issued and Outstanding Warrants as of January 1, 2014	Warrants Issued	Warrants Exercised/ Expired	Issued and Outstanding Warrants as of December 31, 2014
Bridge Warrants	249,999		_	249,999
Consulting Warrant	222,222			222,222
Financing Warrant(1)	208,763			208,763
Underwriting Warrant		310,500		310,500
IR consulting warrants		48,000		48,000
	680,984	358,500		1,039,484

A roll-forward of warrant share activity from January 1, 2015 to March 31, 2015 is shown in the following table:

	Issued and Outstanding Warrants as of January 1, 2015	Warrants Issued	Warrants Exercised/ Expired	Issued and Outstanding Warrants as of March 31, 2015
Bridge Warrants	249,999		_	249,999
Consulting Warrant	222,222		(104,444)(2)	117,778
Financing Warrant(1)	208,763		(130,604)(2)	78,159
Underwriting Warrant	310,500			310,500
IR consulting warrants	48,000			48,000
	1,039,484		(235,048)	804,436

<sup>(1)</sup> The number of shares of common stock underlying the Financing Warrant was determined using an exercise price of \$3.35 per share, assuming the IPO price of our common stock in a Qualified IPO would be at least \$5.59 per share. Upon completion of the IPO with a price of \$6.00 per share, the number of shares was considered unchanged and final.

The fair value of the Bridge, Consulting, Financing and Underwriting warrant liabilities was \$3.9 million at March 31, 2014. Due to the expiration of the redemption and put option features included in these warrants, the warrants are no longer included as liabilities after the IPO Date. During the three months ended March 31, 2014, we recorded a loss of \$600,000 for the change in fair value of the warrants. There was no expense for the three months ended March 31, 2015.

For periods prior to the IPO Date, we used the Monte-Carlo option pricing model which takes into consideration the historical volatilities of comparable public companies using data from Capital IQ and implied volatiles from Bloomberg considering the differences in size among the public companies and us, and the warrant s time to expiration. Estimates of expected term were based on the estimated time to expiration. The risk-free interest rate was based on the U.S. Treasury yield for a term consistent with the estimated expected term. The Monte-Carlo model used daily steps, assuming 252 trading days per year, which was based on 52 weeks of 5 trading days less 8 holidays, a standard assumption in the industry.

<sup>(2)</sup> During the three months ended March 31, 2015, there were 235,048 common stock warrants were exercised through a cashless exercise which netted 208,184 shares being issued.

# NOTE 5 STOCK-BASED COMPENSATION

#### 2014 Omnibus Incentive Plan

In January 2014, our board of directors approved the 2014 Omnibus Incentive Plan and amended and restated the plan in March 2014. Our stockholders approved the Amended and Restated 2014 Omnibus Incentive Plan, or the 2014 Plan, in March 2014. Our 2014 Plan permits for the issuance of equity based instruments covering up to an initial total of 1,400,000 shares of common stock.

#### **Option Valuation**

We have computed the fair value of options granted to employees and non-employees using the Black-Scholes option valuation model. The compensation costs of non-employee arrangements are subject to re-measurement at each reporting period over the vesting terms as earned. Option forfeitures are estimated at the time of valuation and reduce expense ratably over the vesting period. This estimate will be adjusted periodically based on the extent to which actual option forfeitures differ, or are expected to differ, from the previous estimate, when it is material. The expected term used for options issued to non-employees is the contractual life and the expected term used for options issued to employees is the estimated period of time that options granted are expected to be outstanding. We have estimated the expected life of our employee stock options using the simplified method, whereby, the expected life equals the arithmetic average of the vesting term and the original contractual term of the option due to our lack of sufficient historical data. Since our stock has not been publicly traded for a sufficiently long period of time, we are utilizing an expected volatility figure based on a review of the historical volatilities, over a period of time, equivalent to the expected life of the instrument being valued, of similarly positioned public companies within our industry. The risk-free interest rate was determined from the implied yields from U.S. Treasury zero-coupon bonds with a remaining term consistent with the expected term of the instrument being valued.

#### Stock Options to Employees and Consultants

During the three months ended March 31, 2015, we granted incentive stock options for the purchase of 55,000 shares of our common stock to our employees. The options have an exercise price range of \$7.54 per share to \$12.98 per share with a term of ten years. The options vest quarterly over sixteen quarters. The options granted had an aggregate grant date fair value of \$328,000 utilizing the Black-Scholes option valuation model.

We estimated the fair value of stock options awarded during the three months ended March 31, 2015 using the Black-Scholes option valuation model. There were no stock options granted as of March 31, 2014. The fair values of stock options granted for the period were estimated using the following assumptions:

	Option Grants Awarded During the Three Months Ended March 31, 2015
Stock Price	\$7.54 to \$12.98
Dividend Yield	0%
Expected Volatility	60%
Risk-free interest rate	1.44% - 1.77%
Expected Life	7 years

Stock-based compensation expense related to stock options for employees and consultants was \$108,000 and \$19,000, respectively, for the three months ended March 31, 2015 and there was no stock-based compensation expense for the three months ended March 31, 2014 since no stock options or restricted share units had been issued during the period. We are also required to estimate forfeitures at the time of grant, and revise those estimates in subsequent periods if actual forfeitures differ from our estimates. We use historical data to estimate pre-vesting option forfeitures and record stock-based compensation expense only for those awards that are expected to vest. To the extent that actual forfeitures differ from our estimates, the difference is recorded as a cumulative adjustment in the period the estimates were revised. For the three months ended March 31, 2015, there was no forfeiture rate applied as there have not been any forfeitures since the grant of awards nor currently do we expect to incur any for those shares currently awarded.

For stock options paid in consideration of services rendered by non-employees, we recognize compensation expense in accordance with the requirements of ASC 505-50.

Non-employee option grants that do not vest immediately upon grant are recorded as an expense over the vesting period. At the end of each financial reporting period prior to performance, the value of these options, as calculated using the Black-Scholes option valuation model, is determined, and compensation expense recognized or recovered during the period is adjusted accordingly. Since the fair market value of options granted to non-employees is subject to change in the future, the amount of the future compensation expense is subject to adjustment until the common stock options are fully vested.

#### Stock Option Award Activity

There were no stock options issued as of March 31, 2014. The following is a summary of our stock option activity during the three months ended March 31, 2015:

	Number of Options	Weighted Average Exercise Price	Weighted Average Grant Date Fair Value	Weighted Average Remaining Life In Years	Total Grant Date Fair Value
Outstanding, January 1, 2015	491,200	\$ 6.29	\$ 4.14	9.17	\$ 2,034,000
Granted	55,000	10.10	5.97	10.00	328,000
Exercised					
Forfeited					
Outstanding, March 31, 2015	546,200	\$ 6.68	\$ 4.42	9.24	\$ 2,362,000
Exercisable, January 1, 2015	142,895	\$ 6.02	\$ 4.01	9.16	\$ 574,000
Vested	23,554	6.39	4.15	8.90	97,000
Exercised					
Forfeited					
Exercisable, March 31, 2015	166,449	\$ 6.07	\$ 4.03	9.12	\$ 671,000

The following table presents information related to stock options outstanding and exercisable at March 31, 2015:

	Options O	Ü	Weighted Average	ons Exercisable
Exer		Outstanding Number of	Remaining Life In	Exercisable Number
Pri	ce	Options	Years	of Options
\$5.79	\$6.00	369,000	9.12	155,180
\$6.49	\$6.97	47,500	9.44	5,783
\$7.20	\$8.06	99,700	8.77	5,486
\$11.44	\$12.98	30,000	)	
		546,200	9.12	166,449

As of March 31, 2015, there was \$1.4 million of unrecognized compensation expense related to unvested employee stock option agreements, which is expected to be recognized over a weighted-average period of approximately 3.2 years. The aggregate intrinsic value of outstanding options and options vested as of March 31, 2015 were \$418,000 and \$169,000, respectively, which represent options whose exercise price was less than the closing fair market value of our common stock on March 31, 2015 of \$7.07 per share.

#### Restricted Stock Units Activity

We account for restricted stock units issued to employees at fair value, based on the market price of our stock on the date of grant, net of estimated forfeitures. The fair value of non-employee restricted stock units awarded are remeasured as the awards vest, and the resulting increase in fair value, if any, is recognized as expense in the period the related services are rendered. During the three months ended March 31, 2015, we recorded \$246,000 of stock-based compensation related to the restricted stock unit shares that have been issued to-date. Shares vested during the three months ended March 31, 2015 were 20,508 shares of which 2,400 shares were surrendered by the employees for payment of payroll tax withholding liabilities.

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A summary of restricted stock unit activity for the three months ended March 31, 2015 is as follows:

	Number of Restricted Share Units	Weighted- Average Grant-Date Fair Value
Outstanding at January 1, 2015	131,267	\$ 6.00
Granted	174,621	8.14
Vested	(20,508)	6.55
Cancelled		
Outstanding at March 31, 2015	285,380	\$ 7.27

As of March 31, 2015, there was \$1.6 million of unrecognized compensation expense related to unvested employee restricted stock unit agreements which is expected to be recognized over a weighted-average period of approximately 3.3 years. For restricted stock unit awards subject to graded vesting, we recognize compensation cost on a straight-line basis over the service period for the entire award.

#### Performance Awards

For 2015 we have put in place a performance based bonus program which identifies five specific performance objectives to be accomplished during 2015 for all employees. The awards contain a combination of service conditions and performance conditions based on the achievement of specified performance thresholds approved by the board.

The performance bonus amounts will be based on each individual s salary paid during the year multiplied by the bonus multiplier percentage (ranging from 6.67% to 20% per objective) plus an additional 10% bonus for non-executive employees. The performance bonus will be paid in the form of restricted stock units which will vest half on the issuance date and the remaining half on January 1, 2017. The number of shares granted to each employee will be determined based on the performance bonus amount divided by the 10-day average stock price prior December 31, 2015. The grant date is expected to be in the first quarter of 2016. We recognize stock-based compensation expense for restricted stock units with performance conditions based on the probability of the performance condition being met, net of estimated pre-vesting forfeitures. For the three months ended March 31, 2015, we recorded \$97,000 of stock-based compensation which represents one quarter of one-half of the estimated performance bonus amount. The estimated performance bonus amount has been recorded, as the achievement of a portion of the performance conditions were considered probable.

Total equity-based compensation cost recorded in the condensed consolidated statements of operations, which includes the value of stock options and restricted stock units issued to employees, directors and non-employees for services and excludes the performance bonus accrual and warrant consultant cost, is allocated as follows:

Research and development	Three Months Ended March 31, 2015	
Research and development		
Employees	\$	177,000

Non-employees	16,000
General and administrative	
Employees and directors	160,000
Non-employees	20,000
	\$ 373,000

#### NOTE 6 FAIR VALUE MEASUREMENTS AND DERIVATIVE INSTRUMENTS

We measure our financial assets and liabilities at fair value. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (i.e., exit price) in an orderly transaction between market participants at the measurement date. Additionally, we are required to provide disclosure and categorize assets and liabilities measured at fair value into one of three different levels depending on the assumptions (i.e., inputs) used in the valuation. Level 1 provides the most reliable measure of fair value while Level 3 generally requires significant management judgment. Financial assets and liabilities are classified in their entirety based on the lowest level of input significant to the fair value measurement. The fair value hierarchy is defined as follows:

Level 1 Valuations are based on unadjusted quoted prices in active markets for identical assets or liabilities.

Level 2 Valuations are based on quoted prices for similar assets or liabilities in active markets, or quoted prices in markets that are not active for which significant inputs are observable, either directly or indirectly.

Level 3 Valuations are based on prices or valuation techniques that require inputs that are both unobservable and significant to the overall fair value measurement. Inputs reflect management s best estimate of what market participants would use in valuing the asset or liability at the measurement date.

Our common stock purchase warrants issued in conjunction with debt and consulting services are detachable, or free standing, instruments. In addition, we have recorded a derivative liability associated with the conversion feature in our Senior Convertible Note. We estimate fair values of these warrants and derivative liabilities utilizing Level 3 inputs for all classes of warrants and derivative liabilities issued. Other than the Financing Warrant and Senior Convertible Note derivative liability, we used the Black-Scholes option valuation technique as it embodies all of the requisite assumptions (including trading volatility, remaining term to maturity, market price, strike price, and risk free rates) necessary to fair value these instruments. To determine the value of the Financing Warrant and Senior Convertible Note derivative liability, we used a Monte Carlo option-pricing model, which takes into consideration the market values of comparable public companies, considering among other factors, the use of multiples of earnings, and adjusted to reflect the restrictions on the ability of our shares to trade in an active market. We determined that as the Financing Warrant and debt conversion can only be exercised upon the probability of satisfying a performance condition such as a Qualifying IPO or Fundamental Transaction, as provided for in the applicable instrument, and thus a closed-form model such as the Black-Scholes option valuation model would not be appropriate. (See Note 4).

The following assumptions were used in the Monte Carlo option-valuation model to determine the fair value of the Financing Warrant and Senior Convertible Note derivative liability during the three months ended March 31, 2014:

	Expected Life (Years)	Risk Free Rate	Volatility	Probability of a Capital Raise
Financing Warrant	6.25	2.09%	69.9%	
Senior Convertible Note Derivative Liability	0.5	0.13%	96.3%	80% - 95%

The following assumptions were used in the Black-Scholes option valuation model to determine the fair value of the warrant liabilities:

	March 31, 2014	IPO Date
Assumptions:		
Risk-free interest rate	1.32% - 2.02%	1.25% - 2.31%
Expected dividend yield	0%	0%
Expected volatility	64.3% - 69.8%	64.0% - 69.6%
Expected term (in years)	3.83 6.25	3.58 5.95

We used a fair value per share of our common stock of \$6.32 and \$6.00 as of March 31, 2014 and the IPO Date, respectively, to determine the fair value of derivative and warrant liabilities.

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We estimated the fair value of our warrants and Senior Convertible Note derivative at the time of issuance and subsequently remeasured the fair value using the Black-Scholes option valuation model or Monte Carlo option-pricing model as discussed above, at each reporting date through the IPO Date, using the following inputs: the risk-free interest rates; the expected dividend rates; the remaining expected life of the warrants; and the expected volatility of the price of the underlying common stock. Under the Monte Carlo option-pricing model we estimated the fair value of the Senior Convertible Note derivative liability and Financing Warrant liability at the time of issuance and subsequent remeasurement dates considering the probability of achieving a milestone, the cost of capital, and the estimated time period the right would be outstanding. The estimates were based, in part, on subjective assumptions and could differ materially following the measurement date (*see Note 4*). Changes to these assumptions as well as our stock price on the reporting date could have had a significant impact on the fair value of the warrant liabilities until the IPO Date.

As a result of the expiration of the redemption and put option features included in the Bridge Warrants, Consulting Warrant and Financing Warrant as of the IPO Date, under accounting rules, these warrant liabilities are no longer classified as liabilities. There are no warrant liabilities or other liabilities to be measured at fair value on a recurring basis as of March 31, 2015.

The following table provides a reconciliation of all liabilities measured at fair value using Level 3 significant unobservable inputs as of March 31, 2014:

	Warrant Liabilities(1)	Senior Convertible Note Derivative Liability(2)
Balance at January 1, 2014	\$ 3,276,000	\$ 5,057,000
Change in fair value	634,000	1,633,000
Balance at March 31, 2014	\$ 3,910,000	\$ 6,690,000

<sup>(1)</sup> The change in the fair value of the warrants was recorded as a reduction to other income in the condensed consolidated statement of operations of \$634,000 for the three months ended March 31, 2014, respectively. Due to the expiration of the redemption and put option features included in the Bridge Warrants, Consulting Warrant and Financing Warrant as of the IPO Date, these warrant liabilities were recorded as an increase of \$3.7 million to additional paid-in capital in the consolidated balance sheet as of December 31, 2014. There were no warrant liabilities as of March 31, 2015.

#### NOTE 7 COMMITMENT AND CONTINGENCIES

The change in the fair value of the senior convertible note derivative liability was recorded as a reduction to other income (expense) in the condensed consolidated statement of operations of \$1.6 million for the three months ended March 31, 2014. The extinguishment of the senior convertible note derivative liability was recorded as an increase of \$5.5 million to additional paid-in capital and a gain of \$1.6 million to other income in the condensed consolidated statement of operations for the year ended December 31, 2014. There were no derivative liabilities as of March 31, 2015.

Commitments In October 2013, we signed a lease for new office space for our corporate headquarters, and moved into the new location in the first quarter of 2014. The lease had a term of 38 months and a rental cost of approximately \$5,412 per month, increasing 3% annually after the first fourteen months. In addition, our share of building operating costs were estimated to be \$2,101 per month. In April 2014, we amended the lease to add additional space which increased our rent to \$8,286 per month beginning August 1, 2014 plus estimated monthly operating costs of \$3,154 and extended the lease term through July, 2017. We have a renewal option for an additional 3 year term. The original lease included a tenant improvement allowance of \$72,000 and the amended lease included an additional tenant improvement allowance of \$38,000. The allowances were used to construct our office build-out and have been capitalized as leasehold improvements and construction-in-process as of December 31, 2014 and as leasehold improvements as of March 31, 2015 as construction has been completed. The capitalized costs are being amortized over the amended lease term through July 2017.

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In November 2013, we signed a lease for our satellite development office in Burlingame, CA. The lease has a two-year term, and rental costs of approximately \$4,169 per month. We have a renewal option to extend the lease for two additional years.

Rent expense related to our facilities and equipment for the three months ended March 31, 2014 and March 31, 2015 was \$25,000 and \$38,000, respectively.

Legal Proceedings We are occasionally involved in legal proceedings and other matters arising from the normal course of business. Beginning on March 17, 2015, three putative class action lawsuits were commenced against the Company, Terry Lingren and John Philpott, in the United States District Court for the Central District of California. The three lawsuits, which are described below, each purport to assert claims under the federal securities laws based on similar allegations.

On March 17, 2015, a putative class action lawsuit was commenced against the Company, Terry Lingren and John Philpott, in the United States District Court for the Central District of California, captioned *John Paggos v. Resonant Inc., et al.*, No. 2:15-cv-01970-SJO-VBK. The plaintiff alleges that the Company and the individual defendants violated Section 10(b) of the Securities Exchange Act of 1934 (the Exchange Act ) and Rule 10b-5 promulgated thereunder, and that the individual defendants violated Section 20(a) of the Exchange Act. The plaintiff purports to be acting on behalf of a class consisting of purchasers or acquirers of our common stock between August 14, 2014 and February 26, 2015 (the Paggos Class Period ). The plaintiff alleges that, as a result of the defendants allegedly false and/or misleading statements and/or omissions concerning our business, operations, prospects and performance, our common stock traded at artificially inflated prices throughout the Paggos Class Period. The plaintiff seeks compensatory damages and fees and costs, among other relief, but has not specified the amount of damages being sought in the action.

On March 19, 2015, a putative class action lawsuit was commenced against the Company, Terry Lingren and John Philpott, in the United States District Court for the Central District of California, captioned *John DeVouassoux v. Resonant Inc., et al.*, No. 2:15-cv-02054-JFW-VBK. The plaintiff alleges that the Company and the individual defendants violated Section 10(b) of the Exchange Act and Rule 10b-5 promulgated thereunder, and that the individual defendants violated Section 20(a) of the Exchange Act. The plaintiff purports to be acting on behalf of a class consisting of purchasers or acquirers of our common stock between November 6, 2014 and February 26, 2015 (the DeVouassoux Class Period ). The plaintiff alleges that, as a result of the defendants allegedly false and/or misleading statements and/or omissions concerning our financial well-being and prospects, our common stock traded at artificially inflated prices throughout the DeVouassoux Class Period. The plaintiff seeks compensatory damages and fees and costs, among other relief, but has not specified the amount of damages being sought in the action.

On March 31, 2015, a putative class action lawsuit was commenced against the Company, Terry Lingren and John Philpott, in the United States District Court for the Central District of California, captioned *Ramon Arias v. Resonant Inc., et al.*, No. 2:15-cv-02369-DDP-MAN. Later the same day, an amended complaint was filed. The plaintiff alleges that the Company and the individual defendants violated Section 10(b) of the Exchange Act and Rule 10b-5 promulgated thereunder, and that the individual defendants violated Section 20(a) of the Exchange Act. The plaintiff purports to be acting on behalf of a class consisting of purchasers or acquirers of our common stock between August 14, 2014 and February 26, 2015 (the Arias Class Period ). The plaintiff alleges that, as a result of the defendants allegedly false and/or misleading statements and/or omissions concerning our business, operations, prospects and performance, our common stock traded at artificially inflated prices throughout the Arias Class Period. The plaintiff seeks compensatory damages and fees and costs, among other relief, but has not specified the amount of damages being sought in the action.

We deny the material allegations of these three actions and intend to defend them vigorously. We have directors and officers liability insurance, which will be utilized in the defense of these matters. As at March 31, 2015, we have not incurred legal expenses though we do expect to incur

some costs to defend these suits in the future. The liability insurance may not cover all of the future liabilities we may incur in connection with the foregoing matters.

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Legal fees and other costs associated with such actions are expensed as incurred. We assess, in conjunction with our legal counsel, the need to record a liability for litigation and contingencies. Litigation accruals are recorded when and if it is determined that a loss related matter is both probable and reasonably estimable. Material loss contingencies that are reasonably possible of occurrence, if any, are subject to disclosure. Based on the very early stage of litigation for the cases referred to above, it is not possible to estimate the amount or range of possible loss that might result from an adverse judgment or a settlement of these matters. We will evaluate developments in legal proceedings and other matters on a quarterly basis. As of March 31, 2014 and March 31, 2015, there was no litigation or contingency with at least a reasonable possibility of a material loss. No losses have been recorded during the three months ended March 31, 2014 and March 31, 2015, respectively, with respect to litigation or loss contingencies.

## NOTE 8 SUBSEQUENT EVENTS

We evaluated subsequent events through May 6, 2015, the date of issuance of the condensed consolidated financial statements for the period ended March 31, 2015.

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	Item 2.	Management	s Discussion and	<b>Analysis of Financial</b>	Condition and Result	ts of Operations
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Section 21 anticipate outcomes of	terly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and E of the Securities Exchange Act of 1934. The words believe, may, will, potentially, estimate, continue, e, intend, could, would, project, plan, expect and similar expressions that convey uncertainty of future events or are intended to identify forward-looking statements. These forward-looking statements include, but are not limited to, statements g the following:
•	the status of filter designs under development;
•	the prospects for licensing filter designs upon completion of development;
•	plans for other filter designs not currently in development;
•	potential customers for our designs;
•	the timing and amount of future royalty streams;
•	our plans regarding the use of proceeds from our IPO and the expected duration of our capital resources;
•	our hiring plans;
•	the impact of our designs on the mobile device market;
•	our business strategy;

• our intentions, expectations and beliefs regarding anticipated growth, market penetration and trends in our business;

•	the timing and success of our plan of commercialization;
•	our dependence on growth in our customers businesses;
•	the effects of market conditions on our stock price and operating results;
• with defen	our ability to maintain our competitive technological advantages against competitors in our industry and the related costs associated iding intellectual property infringement and other claims;
•	our ability to timely and effectively adapt our existing technology and have our technology solutions gain market acceptance;
•	our ability to introduce new offerings and bring them to market in a timely manner;
•	our ability to maintain, protect and enhance our intellectual property;
• their mani	our expectations concerning our relationships with our customers and other third parties and our customers relationships with ufacturers;
•	the attraction and retention of qualified employees and key personnel;
•	future acquisitions of or investments in complementary companies or technologies; and
• company o	our ability to comply with evolving legal standards and regulations, particularly concerning requirements for being a public and United States export regulations.
ant a	

These forward-looking statements speak only as of the date of this Form 10-Q and are subject to uncertainties, assumptions and business and economic risks. As such, our actual results could differ materially from those set forth in the forward-looking statements as a result of the factors set forth below in Part II, Item 1A, Risk Factors, and in our other reports filed with the Securities and Exchange Commission. Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for us to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks,

uncertainties and assumptions, the forward-looking events and circumstances discussed in this Form 10-Q may not occur, and actual results could differ materially and adversely from those anticipated or implied in our forward-looking statements.

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You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in our forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances described in the forward-looking statements will be achieved or occur. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this Form 10-Q to conform these statements to actual results or to changes in our expectations, except as required by law.

The following discussion should be read in conjunction with our unaudited condensed consolidated financial statements and notes thereto appearing elsewhere in this Quarterly Report on Form 10-Q with the understanding that our actual future results, levels of activity, performance and events and circumstances may be materially different from what we expect.

#### Overview

Resonant is a late-stage development company creating innovative filter designs for radio frequency, or RF, front-ends for the mobile device industry. The RF front-end is the circuitry in a mobile device responsible for analog signal processing and is located between the device s antenna and its digital baseband. We use a fundamentally new technology called Infinite Synthesized Networks®, or ISN®, to configure and connect resonators, the building blocks of RF filters. Filters are a critical component of the RF front-end used to select desired radio frequency signals and reject unwanted signals. We are using ISN to develop new classes of filter designs.

We believe licensing our designs is the most direct and effective means of delivering our solutions to the market. Our target customers make part or all of the RF front-end. We intend to retain ownership of our designs, and we expect to be compensated through license fees and royalties based on sales of RF front-end modules that incorporate our designs. We do not intend to manufacture or sell any physical products or operate as a contract design business.

Our inception date is May 29, 2012. We commenced business on July 6, 2012 and completed our initial public offering, or IPO, on May 29, 2014.

### **Commercialization Plan**

We plan to commercialize our technology by creating filter designs that address the problems created by the growing number of frequency bands in the RF front-end of mobile devices. First, we are developing a series of single-band surface acoustic wave, or SAW, filter designs for frequency bands presently dominated by larger and more expensive bulk acoustic wave, or BAW, filters. Second, we are developing tunable filter designs to replace multiple filters. In order to succeed, we must convince RF front-end suppliers that our filter designs can significantly reduce the size and cost of their products.

Single Band Designs

We completed our first single-band filter design (a duplexer) in the first quarter of 2015. This project has been our principal focus since inception. We developed the duplexer using commercial product specifications provided under a development agreement with a prospective customer. The development agreement included an option to license the filter design and a limited period of exclusivity. The customer terminated the formal development agreement in the first quarter of 2015 and informed us that our design did not meet all the specifications.

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We are continuing work on this project, but the customer has advised us to work through the filter manufacturer. We are collaborating with the filter manufacturer to submit improved designs for consideration by this customer. While the probability has been reduced that our design will be selected for the customer soriginal target product, we believe there are additional product opportunities for our duplexer design with this customer.

We also believe the project has produced a commercially viable duplexer design and are now actively marketing the design to other customers. The project has enabled us to develop our state-of-the-art filter design capability and demonstrate this capability by producing a working SAW duplexer for a typically BAW band. We are presenting our design to other prospective customers and providing them with manufactured parts for testing. The ability to provide manufactured parts for testing is a significant advancement in our marketing efforts.

In the first quarter of 2015, we started a development project with a second customer for the design of our next single-band RF filter, another duplexer. This duplexer is for a different band than our first duplexer. The goal of the project is to develop a new duplexer design for our second customer to market to RF front-end manufacturers and mobile device OEMs. The design, which is estimated to take less than a year to develop, is intended to replace a BAW filter with a less expensive SAW filter. The second customer has not committed to use the resulting design and terms of a license have not been finalized.

Tunable Designs

We are developing a series of tunable filter designs that can be electronically programmed in real time for different RF frequency bands. We believe our tunable filter designs will replace multiple filters and significantly lower the cost and size of RF front-ends. We began development in the fourth quarter of 2014 of a prototype tunable filter to demonstrate our value proposition to prospective customers. We are in discussions with several prospective customers for the design of tunable filters with the goal of securing a lead customer.

## Plan of Operation

We plan to pursue filter design projects with potential customers and other strategic partners. These types of arrangements may subsidize filter design costs, as well as offer complementary technology, market intelligence and other avenues to revenue. We intend to retain ownership of our technology, designs and related improvements. We expect to pursue development of multiple designs for multiple customers, and grant each customer a royalty-bearing license to a specific design.

We are using the net proceeds from our IPO for product development to commercialize our technology, research and development, the development of our patent strategy and expansion of our patent portfolio, as well as for working capital and other general corporate purposes. Our anticipated costs include employee salaries and benefits, compensation paid to consultants, capital costs for research and other equipment, costs associated with development activities including travel and administration, legal expenses, sales and marketing costs, general and administrative expenses, and other costs associated with a late-stage, publicly-traded technology company. However, this is highly dependent on the nature of our development efforts and our success in commercialization. We anticipate adding employees for research and development, as well as general and administrative functions, to support our efforts. We expect to incur consulting expenses related to technology development and other efforts as well as legal and related expenses to protect our intellectual property.

The amounts that we actually spend for any specific purpose may vary significantly and will depend on a number of factors including, but not limited to, our expected cash resources, the pace of progress of our commercialization and development efforts, actual needs with respect to product testing, development and research, market conditions, and changes in or revisions to our marketing strategies. In addition, we may invest in complementary products, technologies or businesses.

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We have earned no revenue since inception, and our operations have been funded with initial capital contributions, proceeds from the sale of equity securities and debt. We have incurred accumulated losses totaling \$23.4 million from inception through March 31, 2015. These losses are primarily the result of research and development costs associated with commercializing our technology, combined with start-up and operating costs. We expect to continue to incur substantial costs for commercialization of our technology on a continuous basis because our business model involves developing and licensing custom filter designs.

We cannot assure you that our technology will be accepted, that we will ever earn revenues sufficient to support our operations or that we will ever be profitable. We believe our current cash and investments of approximately \$11.9 million at March 31, 2015 will provide sufficient funding for planned operations into the first half of 2016. If we do not generate adequate cash from revenues in 2016 in order to reach positive cash flows, we likely will be required to obtain additional financing to continue with our plan of commercialization. Furthermore, since we have no committed source of financing, we cannot assure you that we will be able to raise money as and when we need it to continue our operations. If we cannot raise funds as and when we need them, we might be forced to make substantial reductions in our operating expenses, which could adversely affect our ability to implement our business plan and ultimately our viability as a company.

## **Critical Accounting Policies and Estimates**

Our discussion and analysis of financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in conformity with accounting principles generally accepted in the United States of America. Certain accounting policies and estimates are particularly important to the understanding of our financial position and results of operations and require the application of significant judgment by our management or can be materially affected by changes from period to period in economic factors or conditions that are outside of our control. As a result, they are subject to an inherent degree of uncertainty. In applying these policies, our management uses their judgment to determine the appropriate assumptions to be used in the determination of certain estimates. Those estimates are based on our historical operations, our future business plans and projected financial results, the terms of existing contracts, our observance of trends in the industry, information provided by our customers and information available from other outside sources, as appropriate.

A description of our critical accounting policies that represent the more significant judgments and estimates used in the preparation of our financial statements was provided in the Management s Discussion and Analysis of Financial Condition and Results of Operations section of our Annual Report on Form 10-K for the year ended December 31, 2014. There have been no material changes in these critical accounting policies since December 31, 2014.

### **Recently Issued and Adopted Accounting Pronouncements**

We have reviewed all of the recent accounting pronouncements and have determined that they have not or will not have a material impact on our condensed consolidated financial statements, or do not apply to our operations.

## **Results of Operations**

## Comparison of Three Months Ended March 31, 2014 and 2015

Research and Development. Research and development expenses consist of the direct engineering and other costs associated with the development and commercialization of our technology, including the development of filter designs under development agreements. These consist primarily of the cost of employees and consultants, and to a lesser extent costs for equipment, software and supplies. We also include the costs for our intellectual property development program under research and development. This program focuses on patent strategy and invention extraction.

Research and development expenses increased from \$435,000 in the first quarter of 2014 to \$1.0 million in the first quarter of 2015. The increase of \$565,000 is the result of the increased payroll, benefit costs, stock-based compensation expenses, consulting costs and development costs related to increased activity on our duplexer designs under development.

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General and Administrative Expenses. General and administrative expenses include salaries, taxes and employee benefits for executives and administrative staff. It also includes expenses for corporate overhead such as rent for our facilities, travel expenses, telecommunications, investor relations, insurance, professional fees and business consulting fees. We hired a vice president in January 2014, a chief financial officer and a controller in June 2014 and another vice-president in September 2014. We plan to hire one additional administrative person in 2015.

General and administrative expenses increased \$605,000, from \$522,000 in the first quarter of 2014 to \$1.1 million in the first quarter of 2015. The increase was due primarily to increased payroll, benefit costs, stock-based compensation, directors and officers insurance and accounting expenses. We anticipate that our general and administrative expenses will likely continue to increase as a result of planned growth and the costs associated with operating as a public company. Additionally, we anticipate increased expenses related to the stock compensation, legal, audit, regulatory and investor relations services associated with maintaining compliance with Securities and Exchange Commission and NASDAQ requirements, director and officer insurance premiums and other costs associated with operating as a public company.

Depreciation and Amortization Expense. Depreciation and amortization expense increased by \$98,000, from \$13,000 in first quarter of 2014 to \$111,000 in first quarter of 2015, primarily as a result of our increases in fixed assets associated with our new corporate headquarters and new office equipment and machinery associated with the increase in employees in 2014 and our investment in patents.

*Interest Income.* Interest income increased by \$8,000, from no interest income in the first quarter of 2014 to \$8,000 in the first quarter of 2015 primarily due to the increased cash balances and investments from the net proceeds of the IPO. We expect interest income to increase modestly in 2015 as we earn interest on our cash balances and investments.

Interest Expense. Interest expense for 2014 consists of accrued interest on debt instruments, the amortization of debt discounts and interest on financed insurance contracts. We valued our debt instruments and their various features and derivatives at fair value, and the resulting adjustments required debt discounts to these values that were booked at lower than face value. The debt discounts were being amortized over the expected life of the debt instrument. However, the remaining debt discount and debt issuance costs were expensed in June 2014 due to the conversion of all notes into common stock in connection with our IPO.

Interest expense decreased by \$709,000, from \$709,000 in the first quarter of 2014 to none in the first quarter of 2015. The decrease is due to the conversion the Senior Convertible Notes and the Subordinated Convertible Note into common stock in June 2014 in connection with our IPO. Debt discounts and deferred financing cost amortizations ceased upon conversion of these notes.

Fair Value Adjustments to Warrant and Derivative Liabilities. We recorded all of our warrant and derivative liabilities at their fair value at issuance and adjusted the liabilities quarterly to reflect changes in their fair value. Periodic adjustments to the fair value of these liabilities generated non-cash expense if they increased and non-cash income if they decreased. The fair value of these liabilities fluctuated significantly from quarter to quarter until the IPO Date.

There was an increase of the fair value of the warrant and derivative liabilities as of March 31, 2014 resulting in non-cash expense of \$2.3 million for the first quarter of 2014. The increase in the fair value of these liabilities in 2014 is primarily due to our increasing share price and the related enterprise valuation. The IPO triggered (a) the conversion of all debt into equity and (b) the expiration of the redemption and put option features included in the Bridge Warrants, Financing Warrant and Consulting Warrant. These events eliminated all warrant and derivative

liabilities as of May 29, 2014. Consequently, we ceased recording any further quarterly adjustments after that date for the fair value of warrant or derivative liabilities or any associated gain or loss from such adjustments.

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Other Income. Other income generally consists of non-cash gains or losses from changes in the derivative liability associated with our Senior Convertible Notes. There was no change in the derivative liability for the first quarter of 2014. The notes were converted into common stock in the second quarter of 2014 in connection with our IPO. The derivative liability balance was accounted for as an extinguishment of debt with a portion recognized as a gain and classified in other income the second quarter of 2014. Consequently, we did not incur any further charges associated with fluctuations in the fair value of the derivative liability after the second quarter of 2014.

*Income Taxes*. We have no revenues and are currently operating at a loss. Consequently, our only tax liabilities for both periods were for minimum taxes in the States where we conduct business.

### **Liquidity and Capital Resources**

### Financing Activities

We have earned no revenue since inception. Our operations have been funded with initial capital contributions and proceeds from the sale of equity securities and debt.

We began operations in July 2012 with initial capital contributions from our founders and Superconductor Technologies Inc. The founders contributed \$200,000 and agreed to work full-time without pay until we secured adequate funding. Superconductor Technologies contributed a patent portfolio, software, equipment, temporary office space and an early version of our first development agreement. The founders received Class B units in Resonant LLC, but later exchanged their Class B units for common stock of Resonant Inc. Superconductor Technologies received Class C units in Resonant LLC, but later exchanged its Class C units for the \$2.4 million Subordinated Convertible Note of Resonant Inc.

The Bridge Loans provided \$200,000 of additional funding during the first and second quarters of 2013.

We raised \$6.3 million of net proceeds from the sale of Senior Convertible Notes in June 2013, and we used part of the proceeds to repay the Bridge Loans. In June 2014, we sold 3,105,000 shares of common stock in our IPO generating net proceeds of \$16.2 million.

We had current assets of \$12.0 million and current liabilities of \$839,000 at March 31, 2015, resulting in working capital of \$11.2 million. This compares to a working capital deficit of \$12.3 million at March 31, 2014 and working capital of \$13.2 million at December 31, 2014. The change in working capital is primarily the result of the net proceeds from our IPO and the related conversion of all outstanding notes to common stock.

Our principal sources of liquidity consist of existing cash balances and investments of \$11.9 million at March 31, 2015. We believe our current resources will provide sufficient funding for planned operations into the first half of 2016. If we do not generate adequate cash from revenues in 2016 in order to reach positive cash flows, we likely will be required to obtain additional financing to continue with our plan of commercialization. There is no assurance that additional financing will be available on acceptable terms or at all. If we issue additional equity securities to raise funds, the ownership percentage of our existing stockholders would be reduced. New investors may demand rights, preferences or privileges senior to those of existing holders of common stock. If we cannot raise any needed funds, we might be forced to make substantial reductions in our operating expenses, which could adversely affect our ability to implement our business plan and ultimately our viability as a company.

Our condensed consolidated financial statements have been prepared assuming that we will continue as a going concern. The factors described above raise substantial doubt about our ability to continue as a going concern. These condensed consolidated financial statements do not include any adjustments that might result from this uncertainty.

## Cash Flow Analysis

Operating activities used cash of \$809,000 in first quarter of 2014 and \$1.6 million in the first quarter of 2015. The increase is primarily the result of increased expenses following our IPO in June 2014 and an increase in expenses associated with being a public company. These cash uses were partially offset by non-cash expenses including stock-based compensation and depreciation and amortization. Additionally, the first quarter of 2014 included significant offsets to the net loss from the fair value change in the warrant and derivative liabilities and the amortization of deferred finance costs.

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Investing activities used cash of \$197,000 in the first quarter of 2014 and \$1.3 million in the first quarter of 2015. The increase of \$1.1 million consisted primarily of the net change in investments redeemed and purchased.

Financing activities used cash of \$218,000 in the first quarter of 2014 and \$31,000 in the first quarter of 2015. For the 2014 period, cash used in financing activities consisted primarily of deferred IPO costs. For the 2015 period, cash used in financing activities consisted primarily of the payment of withholding taxes related to the issuance of common stock as compensation to employees.

#### **Off-Balance Sheet Transactions**

We do not have any off-balance sheet arrangements.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Not Applicable

Item 4. Controls and Procedures

#### **Evaluation of Disclosure Controls and Procedures**

We maintain disclosure controls and procedures, as defined by paragraph (e) of Rules 13a-15(f) or 15d-15(f) under the Securities and Exchange Act of 1934, as amended, designed to ensure that we are able to collect the information we are required to disclose in the reports we file with the SEC and to approve, summarize and disclose this information within the time periods specified in the rules of the SEC. Our Chief Executive Officer and Chief Financial Officer are responsible for establishing and maintaining these procedures, and, as required by the rules of the SEC, evaluate their effectiveness. Our Chief Executive Officer and Chief Financial Officer evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2015, the end of the period covered by this report, and based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures are effective.

### **Changes in Internal Controls over Financial Reporting**

There was no change in our internal control over financial reporting during the period ended March 31, 2015 that materially affected, or is reasonable likely to materially affect, our internal control over financial reporting.

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### PART II: OTHER INFORMATION

## Item 1. Legal Proceedings

On March 17, 2015, a putative class action lawsuit was commenced against the Company, Terry Lingren and John Philpott, in the United States District Court for the Central District of California, captioned *John Paggos v. Resonant Inc.*, et al., No. 2:15-cv-01970-SJO-VBK. On March 19, 2015, a putative class action lawsuit was commenced against the Company, Terry Lingren and John Philpott, in the United States District Court for the Central District of California, captioned *John Devouassoux v. Resonant Inc.*, et al., No. 2:15-cv-02054-JFW-VBK. Both of the *Paggos* and *Devouassoux* actions are described in Item 3 of our Annual Report on Form 10-K for the year ended December 31, 2014. There were no material developments in either of the *Paggos* and *Devouassoux* actions during the three months ended March 31, 2015.

On March 31, 2015, a putative class action lawsuit was commenced against the Company, Terry Lingren and John Philpott, in the United States District Court for the Central District of California, captioned *Ramon Arias v. Resonant Inc., et al.*, No. 2:15-cv-02369-DDP-MAN. Later the same day, an amended complaint was filed. The plaintiff alleges that the Company and the individual defendants violated Section 10(b) of the Exchange Act and Rule 10b-5 promulgated thereunder, and that the individual defendants violated Section 20(a) of the Exchange Act. The plaintiff purports to be acting on behalf of a class consisting of purchasers or acquirers of our common stock between August 14, 2014 and February 26, 2015 (the Arias Class Period ). The plaintiff alleges that, as a result of the defendants allegedly false and/or misleading statements and/or omissions concerning our business, operations, prospects and performance, our common stock traded at artificially inflated prices throughout the Arias Class Period. The plaintiff seeks compensatory damages and fees and costs, among other relief, but has not specified the amount of damages being sought in the action.

#### Item 1A. Risk Factors

This Quarterly Report on Form 10-Q contains forward-looking statements, which are subject to a variety of risks and uncertainties. Other actual results could differ materially from those anticipated in those forward-looking statements as a result of various factors, including those set forth in the risk factors relating to our business and common stock contained in Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2014. There have been no material changes to such risk factors during the three months ended March 31, 2015.

## Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

#### **Issuances of Common Stock**

Warrant holders exercised warrants with respect to 235,021 shares of our common stock during the first quarter of 2015. All of the warrants were exercised using the net exercise (or cashless) feature of the warrants and did not generate any cash proceeds. As a consequence of the net exercise, we issued 208,184 shares of our common stock upon the exercise of these warrants. All of these warrants were originally issued to MDB Capital Group, LLC as partial consideration for financing or consulting services. The issuance of such shares was exempt from the

registration requirements of the Securities Act of 1933, or the Securities Act, pursuant to Section 3(a)(9) and Section 4(2) of the Securities Act.

### **Use of Proceeds**

On June 3, 2014, we closed our initial public offering of 3,105,000 shares of our common stock, which included 405,000 shares of common stock sold upon the full exercise of the underwriter's overallotment option. The offer and sale of all of the shares in the initial public offering were registered under the Securities Act pursuant to registration statements on Form S-1 (File Nos. 333-193552 and 333-196340), which were declared effective by the SEC on May 28, 2014. MDB Capital Group, LLC acted as the underwriter for the offering. The public offering price of the shares sold in the offering was \$6.00 per share. The total gross proceeds from the offering to us were \$18.6 million. After deducting underwriting discounts and commissions of \$1.6 million and offering expenses payable by us of \$0.8 million, we received approximately \$16.2 million. There has been no material change in the planned use of proceeds from our initial public offering as described in our final prospectus filed with the SEC on May 29, 2014 pursuant to Rule 424(b) of the Securities Act.

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## Item 6. Exhibits

Exhibit Number	Exhibit Description	Form	Incorporated File Number	by Reference Exhibit	Filing Date	Filed Herewith
3.1	Amended and Restated Certificate of Incorporation of the Registrant	8-K	001-36467	3.1	06-05-14	
3.2	Amended and Restated Bylaws of the Registrant	8-K	001-36467	3.2	06-05-14	
31.1	Certification of Principal Executive Officer Pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
31.2	Certification of Principal Financial Officer Pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
32.1#	Certification of Principal Executive Officer and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
101.INS	XBRL Instance Document					X
101.SCH	XBRL Taxonomy Extension Schema Document					X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document					X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document					X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document					X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document					X

<sup>#</sup> The information in this exhibit is furnished and deemed not filed with the Securities and Exchange Commission for purposes of section 18 of the Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of Resonant Inc. under the Securities Act of 1933, as amended, or the Exchange Act of 1934, as amended, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

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## **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.

Date: May 6, 2015 Resonant Inc.

By: /s/ John M. Philpott

John M. Philpott Chief Financial Officer

(Principal Financial and Accounting Officer)

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