UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

	FORM 10-Q	
\boxtimes	QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF For the quarterly period ended March or	
	TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF	THE SECURITIES EXCHANGE ACT OF 1934
		10
	Commission File Number 000-51	470
	AtriCure, Inc. (Exact name of Registrant as specified in	•
	Delaware (State or other jurisdiction of incorporation)	34-1940305 (IRS Employer Identification No.)
	7555 Innovation Way Mason, OH 45040 (Address of principal executive offices)	
	(513) 755-4100 (Registrant's telephone number, including area (Former name, former address and former fiscal year, if char	
Exchang	dicate by check mark whether the registrant (1) has filed all reports required to ge Act of 1934 during the preceding 12 months (or for such shorter period that been subject to such filing requirements for the past 90 days: YES \boxtimes NO \square	
Interactiv	dicate by check mark whether the registrant has submitted electronically and posted pursuant to Rule 405 of Reg g 12 months (or for such shorter period that the registrant was required to sub	ulation S-T (§232.405 of this chapter) during the
	dicate by check mark whether the registrant is a large accelerated filer, an accelerated geompany. See the definitions of "large accelerated filer, accelerated filer and the Act.	
Large Ac	ccelerated Filer	Accelerated Filer ⊠
Non-Acc	celerated Filer	Smaller reporting company \Box
Inc	dicate by check mark whether the registrant is a shell company (as defined in	Rule 12b-2 of the Exchange Act): YES \square NO \boxtimes
Inc	dicate the number of shares outstanding of each of the issuer's classes of com-	mon stock, as of the latest practicable date.
	Class	Outstanding at April 27, 2016
	Common Stock, \$.001 par value	33,094,148

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

ATRICURE, INC. AND SUBSIDIARIES CONDENSED CONSOLIDATED BALANCE SHEETS (In Thousands, Except Per Share Amounts) (Unaudited)

	March 31, 2016	December 31, 2015
Assets	_	
Current assets:		
Cash and cash equivalents	\$ 20,768	\$ 23,764
Short-term investments	2,556	10,814
Accounts receivable, less allowance for doubtful accounts of \$129 and \$136, respectively	19,446	19,409
Inventories	19,015	17,659
Other current assets	 3,608	3,106
Total current assets	65,393	74,752
Property and equipment, net	31,155	31,279
Long-term investments	6,150	7,706
Intangible assets, net	53,364	53,775
Goodwill	105,257	105,257
Other noncurrent assets	391	323
Total Assets	\$ 261,710	\$ 273,092
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 12,801	\$ 12,744
Accrued liabilities	12,931	18,394
Other current liabilities and current maturities of capital leases	462	450
Total current liabilities	 26,194	31,588
Capital leases	13,592	13,710
Other noncurrent liabilities	40,897	41,109
Total Liabilities	80,683	86,407
Commitments and contingencies (Note 7)		
Stockholders' Equity:		
Common stock, \$0.001 par value, 90,000 shares authorized and 33,084 and 32,274 issued and		
outstanding, respectively	33	32
Additional paid-in capital	356,638	352,900
Accumulated other comprehensive loss	(284)	(611)
Accumulated deficit	(175,360)	(165,636)
Total Stockholders' Equity	181,027	186,685
Total Liabilities and Stockholders' Equity	\$ 261,710	\$ 273,092

See accompanying notes to condensed consolidated financial statements.

ATRICURE, INC. AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS (In Thousands, Except Per Share Amounts) (Unaudited)

Three Months Ended March 31, 2016 2015 Revenue 35,940 29,886 Cost of revenue 10,026 8,151 25,914 Gross profit 21,735 Operating expenses: Research and development expenses 8,563 5,609 26,770 21,270 Selling, general and administrative expenses 26,879 Total operating expenses 35,333 Loss from operations (9,419)(5,144)Other income (expense): Interest expense (259)(18)Interest income 39 43 Other (80)(141) Loss before income tax expense (9,719)(5,260)Income tax expense 5 6 (9,724)(5,266)Net loss \$ Basic and diluted net loss per share (0.31)\$ (0.19)Weighted average shares outstanding—basic and diluted 31,358 27,069 Comprehensive loss: Unrealized gains on investments 41 37 Foreign currency translation adjustment 286 (487)Other comprehensive income (loss) 327 (450) Net loss (9,724)(5,266)Comprehensive loss (9,397)(5,716)

See accompanying notes to condensed consolidated financial statements.

ATRICURE, INC. AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(In Thousands) (Unaudited)

		Three Months Ended March 31,		
		2016		2015
Cash flows from operating activities:		/A == 1)		
Net loss	\$	(9,724)	\$	(5,266)
Adjustments to reconcile net loss to net cash used in operating activities:				
Share-based compensation expense		2,842		1,724
Depreciation		1,800		1,008
Amortization of intangible assets		411		303
Amortization of deferred financing costs		15		16
Loss on disposal of property and equipment		141		57
Realized (gain) loss from foreign exchange on intercompany transactions		(5)		251
Amortization/accretion on investments		56		184
Change in allowance for doubtful accounts		_		100
Changes in operating assets and liabilities:				
Accounts receivable		30		(2,685)
Inventories		(1,232)		(1,104)
Other current assets		(439)		(779)
Accounts payable		1,034		2,124
Accrued liabilities		(5,569)		(4,931)
Other noncurrent assets and liabilities		(291)		28
Net cash used in operating activities		(10,931)		(8,970)
Cash flows from investing activities:				
Purchases of available-for-sale securities		_		(6,086)
Sales and maturities of available-for-sale securities		9,800		11,899
Purchases of property and equipment		(2,804)		(1,434)
Increases in property under build-to-suit obligation		_		(1,822)
Net cash provided by investing activities		6,996		2,557
Cash flows from financing activities:				
Payments on capital leases		(107)		(14)
Increases in build-to-suit obligation		`		1,822
Proceeds from stock option exercises		1,896		516
Shares repurchased for payment of taxes on stock awards		(999)		(503)
Net cash provided by financing activities		790		1,821
Effect of exchange rate changes on cash and cash equivalents		149		(233)
Net decrease in cash and cash equivalents		(2,996)		(4,825)
Cash and cash equivalents—beginning of period		23,764		28,384
Cash and cash equivalents—end of period	\$	20,768	\$	23,559
Supplemental cash flow information:	<u> </u>	,		,
Cash paid for interest	\$	244	\$	2
Cash paid for income taxes	-		-	_
Non-cash investing and financing activities:				
Accrued purchases of property and equipment		243		751
Assets acquired through capital lease		_		36
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See accompanying notes to condensed consolidated financial statements.

1. DESCRIPTION OF BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of the Business—AtriCure, Inc. was incorporated in the State of Delaware on October 31, 2000. The "Company" or "AtriCure" consists of AtriCure, Inc. and its wholly-owned subsidiaries. The Company is a leading atrial fibrillation (Afib) solutions partner providing innovative products, professional education and support for clinical science to reduce the economic and social burden of atrial fibrillation. The Company sells its products to medical centers globally through a direct sales force and distributors.

Basis of Presentation—The accompanying interim financial statements have been prepared in accordance with the rules and regulations of the Securities and Exchange Commission (SEC). The accompanying interim financial statements are unaudited, but in the opinion of the Company's management, contain all of the normal, recurring adjustments considered necessary to present fairly the financial position, results of operations and cash flows for the periods presented in conformity with accounting principles generally accepted in the United States of America (GAAP) applicable to interim periods. Certain information and footnote disclosures normally included in annual financial statements prepared in accordance with GAAP have been omitted or condensed. The Company believes the disclosures herein are adequate to make the information presented not misleading. Results of operations are not necessarily indicative of the results expected for the full fiscal year or for any future period.

The accompanying Condensed Consolidated Financial Statements should be read in conjunction with the audited financial statements of the Company included in the Company's Annual Report on Form 10-K for the year ended December 31, 2015 filed with the SEC.

Principles of Consolidation—The Condensed Consolidated Financial Statements include the accounts of the Company, AtriCure, LLC, Endoscopic Technologies, LLC and nContact Surgical, LLC, the Company's wholly-owned subsidiaries, all organized in the State of Delaware, and AtriCure Europe B.V. (AtriCure Europe), the Company's wholly-owned subsidiary incorporated in the Netherlands. All intercompany accounts and transactions have been eliminated in consolidation.

Cash and Cash Equivalents—The Company considers highly liquid investments with maturities of three months or less at the date of acquisition as cash equivalents in the accompanying Condensed Consolidated Financial Statements.

Investments—The Company places its investments primarily in U.S. Government agencies and securities, corporate bonds and commercial paper. The Company classifies all investments as available-for-sale. Investments with maturities of less than one year are classified as short-term investments. Investments are recorded at fair value, with unrealized gains and losses recorded as accumulated other comprehensive income (loss). The Company recognizes gains and losses when these securities are sold using the specific identification method and includes them in interest income or expense in the Condensed Consolidated Statements of Operations and Comprehensive Loss.

Revenue Recognition—The Company accounts for revenue in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 605, "Revenue Recognition" (ASC 605). The Company recognizes revenue when all of the following criteria are met: (i) there is persuasive evidence that an arrangement exists; (ii) delivery of the products and/or services has occurred; (iii) the selling price is fixed or determinable; and (iv) collectability is reasonably assured.

Pursuant to the Company's standard terms of sale, revenue is recognized when title to the goods and risk of loss transfers to customers and there are no remaining obligations that will affect the customers' final acceptance of the sale. Generally, the Company's standard terms of sale define the transfer of title and risk of loss to occur upon shipment to the respective customer. The Company generally does not maintain any post-shipping obligations to the recipients of the products. No installation, calibration or testing of products is performed by the Company subsequent to shipment to the customer in order to render it operational.

Revenue includes shipping and handling revenue of \$296 and \$247 for the three months ended March 31, 2016 and 2015, respectively. Cost of freight for shipments made to customers is included in cost of revenue. Sales and other value-added taxes collected from customers and remitted to governmental authorities are excluded from revenue. The Company sells its products primarily through a direct sales force, with certain international markets sold through distributors. Terms of sale are generally consistent for both end-users and distributors except that payment terms are generally net 30 days for end-users and net 60 days for distributors with limited exceptions.

Sales Returns and Allowances—The Company maintains a provision for sales returns and allowances to account for potential returns of defective or damaged products, products shipped in error and invoice adjustments. The Company estimates such provision on a quarterly basis based primarily on specific identification, in addition to estimating a general reserve based on historical experience. Increases to the provision result in a reduction of revenue. The provision is included in accrued liabilities in the Condensed Consolidated Balance Sheets.

Allowance for Doubtful Accounts Receivable—The Company evaluates the collectability of accounts receivable to determine the appropriate reserve for doubtful accounts. In determining the amount of the reserve, the Company considers aging of account balances, historical credit losses, customer-specific information and other relevant factors. An increase to the allowance for doubtful accounts results in a corresponding increase in selling, general and administrative expense. The Company reviews accounts receivable

and adjusts the allowance based on current circumstances and charges off uncollectible receivables against the allowance when all attempts to collect the receivable have failed. The Company's history of write-offs against the allowance has not been significant.

Inventories—Inventories are stated at the lower of cost or market using approximate costs based on the first-in, first-out cost method (FIFO). Inventories consist of raw materials, work in process and finished goods. The Company's industry is characterized by rapid product development and frequent new product introductions. Uncertain timing of product approvals, variability in product launch strategies and variation in product utilization all impact excess and obsolete inventory. An inventory allowance based on product usage is estimated and recorded quarterly for excess, slow moving and obsolete inventory, as well as inventory with a carrying value in excess of its net realizable value. An increase to the inventory reserve allowance results in a corresponding increase in cost of revenue. Write-offs are recorded when a product is destroyed. The Company's history of write-offs against the reserve has not been significant.

Inventories consist of the following:

	March 31,	I	December 31,
	2016		2015
Raw materials	\$ 6,228	\$	6,159
Work in process	2,023		974
Finished goods	10,764		10,526
Inventories	\$ 19,015	\$	17,659

Property and Equipment—Property and equipment is stated at cost less accumulated depreciation. Depreciation is computed using the straight-line method of depreciation for financial reporting purposes and is applied over the estimated useful lives of the assets. The estimated useful life by major asset category is the following: generators and other capital equipment, machinery, equipment and vehicles is three to seven years, computer and other office equipment is three years, furniture and fixtures is three to seven years and leasehold improvements and equipment under capital leases are the shorter of their useful life or remaining lease term. The Company reassesses the useful lives of property and equipment annually, and assets are retired if they are no longer in service. Maintenance and repair costs are expensed as incurred.

Generators and other capital equipment (such as the Company's switchbox units and cryosurgical consoles) are placed with direct customers that use the Company's disposable products. Depreciation of such assets is included in cost of revenue. The estimated useful lives of this equipment are based on anticipated usage by customers and the timing and impact of expected new technology rollouts by the Company. To the extent the Company experiences changes in the usage of this equipment or introduces new technologies, the estimated useful lives of this equipment may change in a future period. Depreciation related to these generators was \$836 and \$620 for the three months ended March 31, 2016 and 2015, respectively. As of March 31, 2016 and December 31, 2015, the net carrying amount of loaned equipment included in net property and equipment in the Condensed Consolidated Balance Sheets was \$5,393 and \$5,447, respectively.

The Company reviews property and equipment for impairment using its best estimates based on reasonable and supportable assumptions and projections.

Intangible Assets—Intangible assets with determinable useful lives are amortized on a straight-line basis over the estimated periods benefited.

Included in intangible assets is In Process Research and Development (IPR&D). The Company defines IPR&D as the value of acquired technology which has not yet reached technological feasibility. The primary basis for determining the technological feasibility is obtaining specific regulatory approvals. The estimated fair value of IPR&D acquired in a business combination is capitalized as an indefinite-lived intangible asset until completion or abandonment of the IPR&D project. Upon completion of the development project, the IPR&D is amortized over its estimated useful life. If the IPR&D project is abandoned, the related IPR&D asset is written off. The estimated fair value of IPR&D was determined using an income approach model. IPR&D represents an estimate of the fair value of the PMA approval that could result from the CONVERGE IDE clinical trial.

The Company reviews intangible assets for impairment using its best estimates based on reasonable and supportable assumptions and projections.

Goodwill—Goodwill represents the excess of purchase price over the fair value of the net assets acquired in business combinations. The Company tests goodwill for impairment annually on November 30, or more often if impairment indicators are present. The Company's goodwill is accounted for in a single reporting unit representing the Company as a whole.

Other Current Liabilities and Current Maturities of Capital Leases—As of March 31, 2016, other current liabilities consisted of a financing obligation related to the construction of the Company's new headquarters. Current maturities of capital leases consist of capital lease obligations with maturities of less than one year (see Note 6 – Indebtedness).

Other Noncurrent Liabilities—Other noncurrent liabilities include contingent consideration recorded in business combinations, as well as long-term deferred revenues and other contractual obligations.

Other Income—Other income consists primarily of foreign currency transaction gains and losses. The Company recorded net foreign currency transaction gains (losses) of \$(80) and \$(163) for the three months ended March 31, 2016 and 2015, respectively, in connection with settlements of its intercompany balance with AtriCure Europe and invoices transacted in British Pounds.

Taxes—Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities from a change in tax rates is recognized in the period that includes the enactment date.

The Company's estimate of the valuation allowance for deferred tax assets requires it to make significant estimates and judgments about its future operating results. Deferred tax assets are reduced by valuation allowances if, based on the consideration of all available evidence, it is more-likely-than-not that some portion of the deferred tax asset will not be realized. Significant weight is given to evidence that can be objectively verified. The Company evaluates deferred tax assets on a quarterly basis to determine if valuation allowances are required by considering all available evidence. Deferred tax assets are realized by having sufficient future taxable income to allow the related tax benefits to reduce taxes otherwise payable. The sources of taxable income that may be available to realize the benefit of deferred tax assets are future reversals of existing taxable temporary differences, future taxable income, exclusive of reversing temporary differences and carryforwards, taxable income in carry-back years and tax planning strategies that are both prudent and feasible. In evaluating whether to record a valuation allowance, the applicable accounting standards deem that the existence of cumulative losses in recent years is a significant piece of objectively verifiable negative evidence that must be overcome by objectively verifiable positive evidence to avoid the need to record a valuation allowance. The Company has recorded a full valuation allowance against its net deferred tax assets as it is more likely than not that the benefit of the deferred tax assets will not be recognized in future periods.

A provision of The Patient Protection and Affordable Care Act enacted in 2010, as amended (Patient Act), requires manufacturers of medical devices to pay an excise tax on all U.S. medical device sales. In December 2015, the U.S. government approved the suspension of the excise tax on medical device sales beginning January 1, 2016 through December 31, 2017. The Company's expense related to the medical device excise tax, which was recorded in cost of revenue, was \$0 and \$155 for the three months ended March 31, 2016 and 2015, respectively.

Net Loss Per Share—Basic and diluted net loss per share is computed in accordance with FASB ASC 260, "Earnings Per Share" (ASC 260) by dividing the net loss by the weighted average number of common shares outstanding during the period. Since the Company has experienced net losses for all periods presented, net loss per share excludes the effect of 4,480 and 4,320 stock options and restricted stock shares as of March 31, 2016 and 2015, respectively, because they are anti-dilutive. Therefore the number of shares calculated for basic net loss per share is also used for the diluted net loss per share calculation.

Comprehensive Loss and Accumulated Other Comprehensive Loss—In addition to net losses, the comprehensive loss includes foreign currency translation adjustments and unrealized gains and losses on investments.

Accumulated other comprehensive income (loss) consisted of the following:

	Three Months Ended March 31,				
	2016		2015		
Total accumulated other comprehensive loss at			_		
beginning of period	\$ (611)	\$	(348)		
<u>Unrealized Gains on Investments</u>					
Balance at beginning of period	\$ (39)	\$	(54)		
Other comprehensive income (loss) before reclassifications	41		37		
Amounts reclassified from accumulated other comprehensive					
income to other income on the statement of operations	_		_		
Balance at end of period	\$ 2	\$	(17)		
Foreign Currency Translation Adjustment					
Balance at beginning of period	\$ (572)	\$	(294)		
Other comprehensive income (loss) before reclassifications	281		(324)		
Amounts reclassified from accumulated other comprehensive					
income to other income on the statement of operations	5		(163)		
Balance at end of period	\$ (286)	\$	(781)		
Total accumulated other comprehensive loss at end of period	\$ (284)	\$	(798)		

Research and Development—Research and development costs are expensed as incurred. These costs include compensation and other internal and external costs associated with the development and research related to new and existing products or concepts, preclinical studies, clinical trials, healthcare compliance and regulatory affairs.

Advertising Costs— The Company expenses advertising costs as incurred. Advertising costs were not significant during the three months ended March 31, 2016 and 2015.

Share-Based Compensation—The Company follows FASB ASC 718, "Compensation-Stock Compensation" (ASC 718) to record share-based compensation for all employee share-based payment awards, including stock options, restricted stock and stock purchases related to an employee stock purchase plan, based on estimated fair values. The Company's share-based compensation expense recognized under ASC 718 for the three months ended March 31, 2016 and 2015 was \$2,842 and \$1,724, respectively, on a before and after tax basis.

ASC 718 requires companies to estimate the fair value of share-based payment awards on the date of grant using an option-pricing model. The value of the portion of the award that is ultimately expected to vest is recognized as expense over the requisite service periods in the Company's Condensed Consolidated Statement of Operations and Comprehensive Loss. The expense has been reduced for estimated forfeitures. ASC 718 requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

The Company estimates the fair value of time-based options on the date of grant using the Black-Scholes option-pricing model (Black-Scholes model). The Company's determination of fair value of share-based payment awards on the date of grant using an option-pricing model is affected by the Company's stock price, as well as assumptions regarding a number of subjective variables. These variables include but are not limited to the Company's expected stock price volatility over the term of the awards and actual and projected employee stock option exercise behaviors. The fair value of market-based performance option grants is estimated at the date of grant using a Monte-Carlo simulation. The value of the portion of the award that is ultimately expected to vest is recognized as expense over the requisite service periods in the Consolidated Statement of Operations and Comprehensive Loss.

The Company estimates the fair value of restricted stock based upon the grant date closing market price of the Company's common stock. The Company's determination of fair value is affected by the Company's stock price as well as assumptions regarding the number of shares expected to be granted.

The Company also has an employee stock purchase plan (ESPP) which is available to all eligible employees as defined by the plan document. Under the ESPP, shares of the Company's common stock may be purchased at a discount. The Company estimates the number of shares to be purchased under the ESPP and records compensation expense based upon the fair value of the stock at the beginning of the purchase period using the Black-Scholes model.

Use of Estimates—The preparation of the financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expense during the reporting period. Actual results could differ from those estimates.

Fair Value Disclosures—The Company classifies and records cash and investments in U.S. government agencies and securities as Level 1 within the fair value hierarchy. Accounts receivable, short-term other assets, accounts payable and accrued liabilities are also classified as Level 1. The carrying amounts of these assets and liabilities approximate their fair value due to their relatively short-term nature. Cash equivalents and investments in corporate bonds are classified as Level 2 within the fair value hierarchy (see Note 3 – Fair Value for further information). Significant unobservable inputs with respect to the fair value measurement of the Level 3 contingent consideration liability is developed using Company data. When an input is changed, the corresponding valuation models are updated and the results are analyzed for reasonableness.

2. RECENT ACCOUNTING PRONOUNCEMENTS

In May 2014 the FASB issued a final standard on revenue from contracts with customers. The standard, issued as FASB ASU 2014-09, "Revenue from Contracts with Customers" (ASU 2014-09), outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance. In July 2015 the FASB decided to defer the effective date of ASU 2014-09 for entities reporting under U.S. GAAP from interim and annual reporting periods beginning after December 15, 2016 to interim and annual reporting periods beginning after December 15, 2017 and allow early adoption as of the original effective date. A full retrospective or modified retrospective approach may be taken to adopt the guidance in the ASU. The Company is evaluating the impact of the provisions of ASU 2014-09 on its consolidated financial position, results of operations and related disclosures.

In November 2015 the FASB issued ASU 2015-17, "Income Taxes (Topic 740), Balance Sheet Classification of Deferred Taxes" (ASU 2015-17), which requires companies to classify all deferred tax assets and liabilities as noncurrent on the balance sheet instead of separating deferred taxes into current and noncurrent amounts. Also, companies will no longer allocate valuation allowances between current and noncurrent deferred tax assets because those allowances also will be classified as noncurrent. ASU 2015-17 is effective for financial statements issued for annual periods beginning after December 15, 2016, and interim periods within those annual periods. Early adoption is permitted for financial statements that have not been issued. The Company has evaluated the impact of the provisions of ASU 2015-17 on its consolidated financial position and related disclosures and has determined that the new guidance does not have a material impact on its financial reporting.

In January 2016 the FASB issued ASU 2016-01, "Financial Instruments — Overall — Recognition and Measurement of Financial Assets and Financial Liabilities" (ASU 2016-01), which amends the guidance in U.S. GAAP on the classification and measurement of financial instruments. Although the ASU retains many current requirements, it significantly revises an entity's accounting related to (1) the classification and measurement of investments in equity securities and (2) the presentation of certain fair value changes for financial liabilities measured at fair value. The ASU also amends certain disclosure requirements associated with the fair value of financial instruments. The new standard is effective for fiscal years and interim periods within those fiscal years beginning after December 15, 2017. The Company is evaluating the impact of ASU 2016-01 on its consolidated financial position and related disclosures.

In February 2016 the FASB issued ASU 2016-02, "Leases" (ASU 2016-02) which requires lessees to record most leases onto their balance sheet but recognize expenses on their income statement in a manner similar to today's accounting. The guidance is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Entities are required to use a modified retrospective approach for leases that exist or are entered into after the beginning of the earliest comparative period in the financial statements. Full retrospective application is prohibited. The Company is evaluating the provisions of ASU 2016-02 to determine the impact on its consolidated financial position and related disclosures.

In March 2016 the FASB issued ASU 2016-09, "Improvements to Employee Share-Based Payment Accounting" (ASU 2016-09), which changes certain aspects of accounting for share-based payments to employees. The new guidance requires all income tax effects of awards to be recognized in the income statement when the awards vest or are settled. It also allows an employer to repurchase more of an employee's shares for tax withholding purposes without triggering liability accounting and to make a policy election to account for forfeitures as they occur. ASU 2016-09 is effective for fiscal years beginning after December 15, 2016, and interim periods within those years. Early adoption is permitted, but all of the guidance within the ASU must be adopted in the same period. The Company is evaluating the impact of ASU 2016-09 on its consolidated financial position, results of operations and related disclosures.

3. FAIR VALUE

FASB ASC 820, "Fair Value Measurements and Disclosures" (ASC 820) defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. The standard describes a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, that may be used to measure fair value which are the following:

- Level 1—Quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date. An active market for the asset or liability is a market in which transactions for the asset or liability occur with sufficient frequency and volume to provide pricing information on an ongoing basis. The valuation under this approach does not entail a significant degree of judgment.
- Level 2—Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. The valuation technique for the Company's Level 2 assets is based on quoted market prices for similar assets from observable pricing sources at the reporting date.
- Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Unobservable inputs shall be used to measure fair value to the extent that observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at the measurement date. The fair value of the Company's Level 3 contingent consideration liability was estimated on the acquisition date of nContact Surgical, Inc. (nContact) and is revalued at the end of each subsequent reporting period.

In accordance with ASC 820, the following table represents the Company's fair value hierarchy for its financial assets and liabilities measured at fair value on a recurring basis as of March 31, 2016:

	Active Iden	ed Prices in Markets for tical Assets Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)	Total
Assets:	'	_			
Money market funds	\$	_	\$ 13,041	\$ _	\$ 13,041
U.S. government agencies and securities		1,580	_	_	1,580
Corporate bonds		_	7,125	_	7,125
Total assets	\$	1,580	\$ 20,166	\$ 	\$ 21,746
Liabilities:					
Acquisition-related contingent consideration		_	_	40,207	40,207
Total liabilities	\$	_	\$ _	\$ 40,207	\$ 40,207

There were no changes in the levels or methodology of measurement of financial assets and liabilities during the three month period ended March 31, 2016.

In accordance with ASC 820, the following table represents the Company's fair value hierarchy for its financial assets and liabilities measured at fair value on a recurring basis as of December 31, 2015:

	Active Iden	ed Prices in Markets for tical Assets Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)	Total
Assets:					
Money market funds	\$	_	\$ 18,572	\$ _	\$ 18,572
U.S. government agencies and securities		1,590	_	_	1,590
Corporate bonds		_	16,930	_	16,930
Total assets	\$	1,590	\$ 35,502	\$ 	\$ 37,092
Liabilities:					
Acquisition-related contingent consideration		_	_	40,207	40,207
Total liabilities	\$	_	\$ _	\$ 40,207	\$ 40,207

There were no changes in the levels or methodology of measurement of financial assets and liabilities during the twelve months ended December 31, 2015.

Acquisition-Related Contingent Consideration. Contingent consideration arrangements obligate the Company to pay former shareholders of an acquired entity if specified future events occur or conditions are met, such as the achievement of certain technological milestones or the achievement of targeted revenue milestones. The Company measures such liabilities using unobservable inputs, applying the income approach, such as the discounted cash flow technique or the probability-weighted scenario method. Various key assumptions, such as the probability of achievement of the agreed milestones, projected revenues from

acquisitions and the discount rate, are used in the determination of fair value of contingent consideration arrangements and are not observable in the market, thus representing a Level 3 measurement within the fair value hierarchy. Subsequent revisions to key assumptions, which impact the estimated fair value of contingent consideration liabilities, are reflected in the Condensed Consolidated Statements of Operations and Comprehensive Loss.

The Company acquired nContact on October 13, 2015. The aggregate consideration paid to nContact shareholders includes up to \$50,000 in contingent consideration based on completion of enrollment of the CONVERGE IDE trial and corresponding PMA approval by December 31, 2020. nContact shareholders are entitled to additional contingent consideration based on revenue in excess of an annual growth rate of more than 25% through 2019. There were no changes in the estimates, discount rate or measurement period during the three months ended March 31, 2016.

The following table represents the Company's Level 3 fair value measurements using significant other unobservable inputs for acquisition-related contingent consideration as of March 31, 2016:

Beginning Balance – January 1, 2016	\$ 40,207
Amounts acquired	_
Transfers in (out) of Level 3	_
Changes in fair value included in earnings	
Ending Balance – March 31, 2016	\$ 40,207

The following table represents the Company's Level 3 fair value measurements using significant other unobservable inputs for acquisition-related contingent consideration as of December 31, 2015:

Beginning Balance – January 1, 2015	\$ _
Amounts acquired	40,207
Transfers in (out) of Level 3	_
Changes in fair value included in earnings	_
Ending Balance – December 31, 2015	\$ 40,207

4. INTANGIBLE ASSETS

The following table provides a summary of the Company's intangible assets:

	March 31, 2016					December 31, 2015			
	Cost Accumulated Amortization			Cost		Accumulated Amortization			
Non-compete agreement	\$	100	\$	100	\$	100	\$	100	
Fusion technology		9,242		2,079		9,242		1,848	
Clamp & probe technology		829		622		829		552	
Estech trade name		208		208		208		208	
SUBTLE access technology		2,179		206		2,179		96	
IPR&D		44,021		_		44,021		_	
Total	\$	56,579	\$	3,215	\$	56,579	\$	2,804	

Amortization expense related to intangible assets with definite lives was \$411 and \$303 for the three months ended March 31, 2016 and 2015, respectively.

Future amortization expense related to intangible assets with definite lives is projected as follows:

2016	\$ 1,233 April 1, 2016 through December 31, 2016
2017	1,367
2018	1,367
2019	1,367
2020	1,235
2021 and thereafter	2,774
Total	\$ 9,343

5. ACCRUED LIABILITIES

Accrued liabilities consisted of the following:

	March 31, 2016		December 31, 2015	
Accrued payroll and employee-related expenses	\$	4,694	\$	4,021
Accrued commissions		3,045		6,061
Accrued taxes and value-added taxes payable		2,214		912
Accrued bonus		1,565		6,088
Other accrued liabilities		807		723
Accrued royalties		398		382
Sales returns allowance		208		207
Total	\$	12,931	\$	18,394

6. INDEBTEDNESS

Bank Credit Facility. The Company has a debt agreement (Loan Agreement) with Silicon Valley Bank (SVB). The Loan Agreement, as amended, restated and modified, includes a \$15,000 revolving credit facility which matures on April 30, 2018. Borrowing availability under the revolving credit facility is based on the lesser of \$15,000 or a borrowing base calculation as defined by the Loan Agreement. As of March 31, 2016 the Company had no borrowings under the revolving credit facility and had borrowing availability of \$15,000. The applicable interest rate is 3.5%.

Effective April 25, 2016, the Company and SVB entered into the Second Amended and Restated Loan and Security Agreement which amends and restates the Company's credit facility with SVB. The agreement provides for a new \$25,000 term loan, in addition to a \$15,000 revolving line of credit, both which mature in April 2021. The term loan has a five-year term, with principal payments to be made ratably commencing twelve months after the inception of the loan through to the loan's maturity date. If the Company meets certain conditions, as specified by the loan agreement, the commencement of term loan principal payments may be deferred by an additional six months. The term loan accrues interest at the Prime Rate and is subject to an additional 4.0% fee on the original \$25,000 term loan principal amount at maturity. The revolving line of credit is subject to an annual commitment fee of \$50, and any borrowings bear interest at the Prime Rate. The Second Amended and Restated Loan and Security Agreement also provides for certain prepayment and early termination fees, as well as establishes covenants related to liquidity, sales growth and a minimum cash balance, along with other terms and conditions similar to those in the Company's previous agreements with SVB. The proceeds from the agreement are expected to fund current and future operations of the Company.

Capital Lease Obligations. As of March 31, 2016 the Company had capital leases for its corporate headquarters building and computer equipment that expire at various terms through 2030.

In August 2014, the Company entered into a new building lease (Mason Lease) in order to re-locate its corporate headquarters and West Chester, Ohio facilities from their current location to a building to be constructed on Innovation Way in Mason, Ohio. The term of the Mason Lease is fifteen years with three separate five-year renewal options, at the Company's option, and commenced in October 2015. On the Commencement Date, the Company provided a letter of credit to the Landlord in the amount of \$1,250, which amount may decrease or be removed entirely based on the Company's financial performance. The Company was deemed the owner of the project during the construction period. As a result, project costs incurred during construction of the building were included in property and equipment as construction in progress and the corresponding financing obligation was included in other current liabilities during the construction period. Increases in purchases of building under construction and proceeds from the construction financing obligation were also included in the Condensed Consolidated Statement of Cash Flows during the construction period. Upon completion of construction, the Company recorded the current and noncurrent portions of the Mason Lease obligation within capital leases and the value of the underlying asset in property and equipment in the Condensed Consolidated Balance Sheet.

The cost of the leased assets, both building and computer equipment, under lease at March 31, 2016 was \$14,462. The assets are depreciated over their estimated useful lives, which equal the terms of the leases. Accumulated amortization on the capital leases was \$597 at March 31, 2016.

Future maturities on capital lease obligations are projected as follows:

2016	\$ 1,065	April 1, 2016 through December 31, 2016
2017	1,425	
2018	1,439	
2019	1,457	
2020	1,479	
2021 and thereafter	15,894	
Total payments	\$ 22,759	
Imputed interest	(8,705)	
Net capital lease obligations, of which \$462 is current and \$13,592		
is noncurrent	\$ 14,054	

7. COMMITMENTS AND CONTINGENCIES

Lease Commitments. The Company leases certain office, manufacturing and warehouse facilities and equipment under noncancelable operating leases that expire at various terms through 2021.

Royalty Agreements. The Company has certain royalty agreements in place with terms that include payment of royalties based on product revenue from sales of specified current products. The royalty agreements have effective dates as early as 2003 and terms ranging from three years to at least twenty years. The royalties range from 0.75% to 5% of specified product sales. Parties to the royalty agreements have the right at any time to terminate the agreement immediately for cause. Royalty expense of \$441 and \$427 was recorded as part of cost of revenue for the three months ended March 31, 2016 and 2015, respectively.

Purchase Agreements. The Company enters into standard purchase agreements with certain vendors in the ordinary course of business. Outstanding commitments at March 31, 2016 and 2015 were not significant.

Legal. The Company is not currently party to any material pending or threatened litigation. The Company may, from time to time, become a party to legal proceedings.

8. INCOME TAX PROVISION

The Company files federal, state, and foreign income tax returns in jurisdictions with varying statutes of limitations. Income taxes are computed using the asset and liability method in accordance with FASB ASC 740, "Income Taxes", under which deferred income taxes are provided for the temporary differences between the financial reporting basis and the tax basis of the Company's assets and liabilities. Deferred taxes are measured using provisions of currently enacted tax laws. A valuation allowance against deferred tax assets is recorded when it is more-likely-than-not that such assets will not be fully realized. The Company has recorded a full valuation allowance against its net deferred tax assets as it is more-likely-than-not that the benefit of the deferred tax assets will not be recognized in future periods. Tax credits are accounted for as a reduction of income taxes in the year in which the credit originates. The Company does not expect any significant unrecognized tax benefits to arise over the next twelve months.

The Company's provision for income taxes for continuing operations in interim periods is computed by applying its estimated annual effective rate against its loss before income tax (expense) benefit for the period. In addition, non-recurring or discrete items are recorded during the period in which they occur. The effective tax rate for the three months ended March 31, 2016 and 2015 was (0.05%) and (0.11%), respectively.

The Company has not had to accrue any interest and penalties related to unrecognized income tax benefits as a result of offsetting of net operating losses. However, if the situation occurs, the Company will recognize interest and penalties within the income tax expense (benefit) line in the Condensed Consolidated Statements of Operations and Comprehensive Loss and within the related tax liability line in the Condensed Consolidated Balance Sheets. Federal, state and local tax returns of the Company are routinely subject to review by various taxing authorities.

9. EQUITY COMPENSATION PLANS

The Company has several share-based incentive plans: the 2005 Equity Incentive Plan (2005 Plan), the Amended and Restated 2014 Stock Incentive Plan (2014 Plan) and the 2008 Employee Stock Purchase Plan (ESPP).

2005 Plan and 2014 Plan

The Company granted awards under the 2005 Plan until the 2014 Annual Meeting of Stockholders at which stockholders adopted the 2014 Plan. Pursuant to its terms, the 2014 Plan supersedes and replaces the 2005 Plan. Under the 2014 Plan, the Board of Directors may grant incentive stock options to employees and any parent or subsidiary's employees, and may grant nonstatutory stock options, restricted stock or stock appreciation rights to employees, directors and consultants of the Company and any parent or subsidiary's employees, directors and consultants. The administrator (currently the Compensation Committee of the Board of Directors) has the power to determine the terms of any awards, including the number of shares subject to each award, the exercisability of the awards and the form of consideration. As of March 31, 2016, 8,949 shares of common stock had been reserved for issuance under the 2014 Plan.

Options granted under the plans generally expire ten years from the date of grant. Options granted from the 2005 Plan and 2014 Plan generally vest at a rate of 25% on the first anniversary date of the grant and ratably each month thereafter over the following three years. Restricted stock awards granted under the 2005 Plan and 2014 Plan generally vest 25% annually over four years from date of grant.

Employee Stock Purchase Plan (ESPP)

The Employee Stock Purchase Plan is available to eligible employees as defined in the ESPP. Under the ESPP, shares of the Company's common stock may be purchased at a discount (currently 15%) of the lesser of the closing price of the Company's common stock on the first trading day or the last trading day of the offering period. The offering period (currently six months) and the offering price are subject to change. Participants may not purchase more than \$25 of the Company's common stock in a calendar year and, effective January 1, 2014, may not purchase a value of more than 3 shares during an offering period. Beginning on January 1, 2009 and on the first day of each fiscal year thereafter during the term of the ESPP, the number of shares available for sale under the ESPP shall be increased by the lesser of (i) two percent (2%) of the Company's outstanding shares of common stock as of the close of business on the last business day of the prior calendar year, not to exceed 600 shares, or (ii) a lesser amount determined by the Board of Directors. At March 31, 2016 there were 491 shares available for future issuance under the ESPP.

Expense Information Under FASB ASC 718

The following table summarizes share-based compensation expense related to employees under FASB ASC 718 for the three months ended March 31, 2016 and 2015. This expense was allocated as follows:

Three Months Ended			
 March 31,			
2016		2015	
\$ 139	\$	90	
479		289	
2,224		1,345	
\$ 2,842	\$	1,724	
\$	2016 \$ 139 479 2,224	March 31, 2016 \$ 139 \$ 479 2,224	

10. SEGMENT AND GEOGRAPHIC INFORMATION

The Company evaluates reporting segments in accordance with FASB ASC 280, "Segment Reporting". The Company develops, manufactures, and sells devices designed primarily for the surgical ablation of cardiac tissue and systems designed for the exclusion of the left atrial appendage. These devices are developed and marketed to a broad base of medical centers in the United States and internationally. Management considers all such sales to be part of a single reportable segment. Revenue attributed to geographic areas is based on the location of the customers to whom products are sold.

Revenue by geographic area was as follows:

	Three Months Ended March 31,			
	 2016		2015	
United States	\$ 28,272	\$	22,923	
Europe	4,761		4,416	
Asia	2,728		2,300	
Other international	179		247	
Total international	7,668		6,963	
Total revenue	\$ 35,940	\$	29,886	

Domestic revenue by product type was as follows:

	Three Months Ended		
	 March 31,		
	 2016		2015
Open-heart ablation	\$ 13,968	\$	12,354
Minimally invasive ablation	6,725		4,347
AtriClip	6,848		5,503
Total ablation and AtriClip	27,541		22,204
Valve tools	731		719
Total domestic	\$ 28,272	\$	22,923

International revenue by product type was as follows:

	Three Months Ended			
	 March 31,			
	 2016		2015	
Open-heart ablation	\$ 4,472	\$	4,216	
Minimally invasive ablation	2,164		1,968	
AtriClip	865		671	
Total ablation and AtriClip	7,501		6,855	
Valve tools	167		108	
Total international	\$ 7,668	\$	6,963	

The majority of the Company's long-lived assets are located in the United States.

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

(Dollar amounts referenced in this Item 2 are in thousands, except per share amounts.)

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the accompanying Condensed Consolidated Financial Statements and notes thereto contained in Item 1 of Part I of this Form 10-Q and our audited financial statements and notes thereto as of and for the year ended December 31, 2015 included in our Form 10-K filed with the Securities and Exchange Commission (SEC) to provide an understanding of our results of operations, financial condition and cash flows.

Forward-Looking Statements

This Form 10-Q, including the sections titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Risk Factors," contains forward-looking statements regarding our future performance. All forward-looking information is inherently uncertain and actual results may differ materially from assumptions, estimates or expectations reflected or contained in the forward-looking statements as a result of various factors, including those set forth under "Risk Factors" and elsewhere in this quarterly report on Form 10-Q, and in our annual report on Form 10-K for the year ended December 31, 2015. Forward-looking statements convey our current expectations or forecasts of future events. All statements contained in this Form 10-Q other than statements of historical fact are forward-looking statements. Forward-looking statements include statements regarding our future financial position, business strategy, budgets, projected costs, plans and objectives of management for future operations. The words "may," "continue," "estimate," "intend," "plan," "will," "believe," "project," "expect," "anticipate" and similar expressions may identify forward-looking statements, but the absence of these words does not necessarily mean that a statement is not forward-looking. With respect to the forward-looking statements, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995. These forward-looking statements speak only as of the date of this Form 10-Q. We undertake no obligation to publicly update or revise any forward-looking statements to reflect new information or future events or otherwise unless required by law.

Overview

We are a leading atrial fibrillation (Afib) solutions partner providing innovative products, professional education and support for clinical science to reduce the economic and social burden of atrial fibrillation. We have several product lines for the ablation of cardiac tissue, including our Isolator* Synergy Ablation System, the first and only surgical device approved by the United States Food and Drug Administration (FDA) for the treatment of persistent and longstanding persistent forms of Afib in patients undergoing certain open concomitant procedures. We also offer a variety of minimally invasive ablation devices and access tools to facilitate the growing trend in less invasive cardiac and thoracic surgery. Our cryoICE* cryosurgery product line offers a variety of cryoablation devices. Our AtriClip* Left Atrial Appendage Exclusion System is the most widely sold device worldwide specifically designed to occlude the heart's left atrial appendage (LAA). We believe cardiothoracic surgeons are adopting our ablation and LAA management (LAAM) devices for the treatment of Afib and reduction of Afib-related complications such as stroke.

Cardiothoracic surgeons have adopted our radiofrequency ablation and cryoablation systems to treat Afib in an estimated 202,000 patients since 2004, and we believe that we are currently the market leader in the surgical treatment of Afib. Our products are utilized by cardiothoracic surgeons during both open-heart and minimally invasive surgical procedures, either on a concomitant or sole-therapy basis. During a concomitant procedure, the surgeon ablates cardiac tissue and/or excludes the left atrial appendage, secondary, or concomitant, to a primary cardiac procedure such as a valve repair or replacement or coronary artery bypass graft (CABG). Our Isolator Synergy System, which includes our Isolator Synergy clamps, RF generator and related switchbox, is approved by FDA for the treatment of persistent and long-standing persistent Afib concomitant to other open-heart surgical procedures such as coronary artery bypass grafting and/or valve replacement or repair. To date, none of our other products have been approved or cleared by FDA specifically for the treatment of Afib. Our 510(k)-cleared RF and cryo ablation products are indicated for the ablation of cardiac tissue and/or treatment of cardiac arrhythmias. In addition, our cryoICE® probe is cleared for blocking pain by temporarily ablating peripheral nerves. Our AtriClip products are 510(k)cleared with an indication for occlusion of the LAA, under direct visualization, concomitant to other open cardiac surgical procedures. In October 2015 we acquired nContact, a leader in minimally invasive technology for epicardial ablation. We also have a line of reusable surgical instruments typically used for cardiac valve replacement or repair. We anticipate that substantially all of our revenue for the foreseeable future will relate to products we currently sell, or are in the process of developing, which surgeons use to ablate cardiac tissue, to exclude the left atrial appendage, to perform mitral and aortic valve replacement and repair and/or to ablate peripheral nerves during cardiothoracic surgery.

In the United States we sell our products to medical centers through our direct sales force. AtriCure Europe, B.V., our wholly-owned subsidiary incorporated and based in the Netherlands, markets and sells our products throughout Europe and the Middle East. In certain markets, such as Germany, France, the United Kingdom and the Benelux region, sales are made directly to medical centers, with the remaining sales being made through distributors. In other international markets we sell our products to distributors who in turn sell them to end users. Our business is primarily transacted in U.S. Dollars with the exception of transactions with our European subsidiary which are transacted in Euros or British Pounds.

Recent Developments

The December 2011 FDA approval of our Isolator Synergy System included the requirement to implement a 350-patient post-approval study (PAS). The PAS was designed to evaluate the long-term safety and efficacy of our Isolator Synergy System in the treatment of persistent and long-standing persistent Afib in patients undergoing open-heart procedures. Enrollment in the trial was completed in October 2014 with 365 patients at 40 medical centers. We expect to release preliminary data from the study in 2016, with a complete report expected to be published in 2017.

We submitted an Investigational Device Exemption (IDE) application for the Staged DEEP AF pivotal trial to FDA in May 2014. The Staged DEEP AF pivotal trial evaluates the safety and efficacy of the Isolator Synergy System when used in a staged approach, where a minimally invasive surgical ablation procedure is first performed, and the patient undergoes the intracardiac catheter procedure approximately 90-120 days later. FDA approval to enroll up to 220 subjects at 23 domestic medical centers and two international medical centers was received during the third quarter of 2014. Enrollment began during the first quarter of 2015, and there are currently 40 patients enrolled and thirteen sites initiated.

We are in the beginning stages of our ATLAS study, which is a non-IDE randomized pilot study evaluating outcomes of patients with risk factors for developing postoperative Afib as well as risk of bleeding on oral anticoagulation. There are two types of patients subject to this study: those with a postoperative Afib diagnosis and receiving prophylactic exclusion of the left atrial appendage with the AtriClip device concomitant to cardiac surgery and those with a postoperative Afib diagnosis who are medically managed. At full capacity, we expect to enroll approximately 2,000 patients at up to twenty sites. We began enrollment in February 2016, and there are currently fourteen patients enrolled and four sites initiated.

We are in the beginning stages of our cryoanalgesia study (FROST), which is a non-IDE randomized pilot study evaluating whether intraoperative intercostal cryoanalgesia in conjunction with standard of care provides improved analgesic efficacy in patients undergoing unilateral thoracotomy cardiac procedures as compared to current standard of care. The study will involve treatment arm subjects who will receive intercostal cryoanalgesia in conjunction with standard post-operative pain management and control arm subjects who will receive standard post-operative pain management only. At full capacity, we expect to enroll 100 patients at up to five sites. We have initiated one site and expect to begin enrollment in the second quarter of 2016.

We are also pursuing a non-IDE trial in Europe, CEASE AF, to compare staged hybrid ablation treatment (minimally invasive surgical ablation procedure is first performed and the patient undergoes the intracardiac catheter procedure approximately 91-180 days later) versus catheter ablation alone. We expect the study to have an enrollment of approximately 210 patients across ten sites. There are currently seven patients enrolled and eight sites initiated.

With the acquisition of nContact, we are conducting the CONVERGE IDE clinical trial. The CONVERGE pivotal trial evaluates the safety and efficacy of the nContact EPi-Sense Guided Coagulation System with VisiTrax technology to treat symptomatic persistent Afib patients who are refractory or intolerant to at least one Class I and/or III anti-arrhythmic drug. We have FDA approval to enroll up to 153 subjects at fifteen domestic medical centers and two international medical centers. Enrollment began during the first quarter of 2014, and there are currently 43 patients enrolled and thirteen domestic sites initiated.

In September 2015 we announced the launch of the cryoFORMTM cryoablation probe in Europe, which offers increased probe flexibility to adapt to a variety of surgical ablation procedures. This offering adds to the cryoICETM family of ablation products which are used in the cryosurgical treatment of cardiac arrhythmias. The cryoFORMTM probe builds off of our core strengths in cryoablation technology, leveraging such important features as thermal capacity to remove heat and active defrost, which allows the probe to be safely and quickly detached while maintaining the tissue's frozen state. Building upon those strengths, the new probe offers increased flexibility, allowing the surgeon to more easily manipulate and apply the device and conform to challenging anatomies. We announced the launch of the cryoFORMTM probe in the United States in April 2016.

We announced the launch of the AtriClip PRO2 LAA Exclusion System in the United States in April 2016. The new AtriClip PRO2 system has increased functionality which enhances the capability to occlude the LAA during minimally-invasive surgical (MIS) procedures. The AtriClip PRO2 system features an ambidextrous locking and trigger-style clip closing mechanism, handle-based active articulation levers, and a hoopless end effector. The ambidextrous locking and trigger-style clip closing mechanism allows the operator to maintain focus on the LAA while maneuvering the device. The handle-based active articulation levers allow the operator to steer the end effector without removing the device. The hoopless end effector enhances anatomical visualization, and simplifies removal of the applier after deployment of the clip.

Results of Operations

Three months ended March 31, 2016 compared to three months ended March 31, 2015

The following table sets forth, for the periods indicated, our results of operations expressed as dollar amounts and as percentages of total revenue:

	Three Months Ended						
	March 31,						
	-	2016			2015		
		Amount	% of Revenues	Amount	% of Revenues		
Revenue	\$	35,940	100.0 %	\$ 29,886	100.0 %		
Cost of revenue		10,026	27.9 %	8,151	27.3 %		
Gross profit		25,914	72.1 %	21,735	72.7 %		
Operating expenses:							
Research and development expenses		8,563	23.8 %	5,609	18.8 %		
Selling, general and administrative expenses		26,770	74.5 %	21,270	71.1 %		
Total operating expenses		35,333	98.3 %	26,879	89.9 %		
Loss from operations		(9,419)	(26.2) %	(5,144)	(17.2)%		
Other income (expense):							
Interest expense		(259)	(0.6) %	(18)	(0.1)%		
Interest income		39	0.1 %	43	0.1 %		
Other		(80)	(0.2) %	(141)	(0.4)%		
Total other expense		(300)	(0.8) %	(116)	(0.4)%		
Loss before income tax expense		(9,719)	(27.0) %	(5,260)	(17.6)%		
Income tax expense		5	0.0 %	6	— %		
Net loss	\$	(9,724)	(27.1) %	\$ (5,266)	(17.6)%		

Revenue. Total revenue increased 20.3% (20.4% on a constant currency basis) from \$29,886 for the three months ended March 31, 2015 to \$35,940 for the three months ended March 31, 2016. Constant currency basis amounts are calculated by applying previous period foreign currency exchange rates to each of the comparable periods. Revenue from sales to customers in the United States increased \$5,349, or 23.3%, and revenue from sales to international customers increased \$705, or 10.1% (10.9% on a constant currency basis). The increase in sales to customers in the United States was primarily due to increased sales of ablation-related open-heart products of \$1,614, increased sales of ablation-related minimally invasive (MIS) products of \$2,378 and increased sales of the AtriClip system of \$1,345. The increase in MIS sales was largely influenced by the nContact acquisition, which closed in the fourth quarter of 2015. The increase in international revenue was primarily due to increased sales in Japan, China and France.

Cost of revenue and gross margin. Cost of revenue increased \$1,875, from \$8,151 for the three months ended March 31, 2015 to \$10,026 for the three months ended March 31, 2016. As a percentage of revenue, cost of revenue increased from 27.3% for the three months ended March 31, 2015 to 27.9% for the three months ended March 31, 2016. Gross margin for the three months ended March 31, 2016 and 2015 was 72.1% and 72.7%, respectively. The decrease in gross margin was primarily due to heavier loaner generator depreciation and increased costs related to moving into a larger and more modern facility, partially offset by the slightly heavier U.S. sales mix and the repeal of the medical device excise tax.

Research and development expenses. Research and development expenses increased \$2,954, or 52.7%, from \$5,609 for the three months ended March 31, 2015 to \$8,563 for the three months ended March 31, 2016. The increase in expense was primarily due to a \$1,196 increase in product development, regulatory and clinical personnel expense, a \$578 increase in product development project expense, a \$190 increase in share-based compensation and a \$111 increase in amortization expense as a result of the nContact acquisition.

Selling, general and administrative expenses. Selling, general and administrative expenses increased \$5,500, or 25.9%, from \$21,270 for the three months ended March 31, 2015 to \$26,770 for the three months ended March 31, 2016. The increase was primarily due to a \$2,949 increase in personnel expense and an \$879 increase in share-based compensation expense.

Net interest (income) expense. Net interest (income) expense for the three months ended March 31, 2016 and 2015 was \$220 and (\$25), respectively. Interest expense associated with capital lease obligations and the amortization of financing costs are included in net interest expense.

Other income and expense. Other income and expense consists primarily of foreign currency transaction gains and losses and grant income. Non-employee option gains and losses related to the fair market value change for fully vested options outstanding for consultants, which are accounted for as free-standing derivatives, were also included in other income and expense during the three

months ended March 31, 2015. Net other expense for the three months ended March 31, 2016 and 2015 totaled \$80 and \$141, respectively.

Liquidity and Capital Resources

As of March 31, 2016 the Company had cash, cash equivalents and investments of \$29,474 and no outstanding debt, resulting in a net cash position of \$29,474. We had unused borrowing capacity of \$15,000 under our revolving credit facility. Most of our cash is held by financial institutions in the United States of America. We had net working capital of \$39,199 and an accumulated deficit of \$175,360 as of March 31, 2016.

Cash flows used in operating activities. Net cash used in operating activities for the three months ended March 31, 2016 was \$10,931. The primary net uses of cash for operating activities were as follows:

- the net loss of \$9,724, offset by \$5,260 of non-cash expenses, including \$2,842 in share-based compensation and \$2,211 in depreciation and amortization; and
- a net decrease in cash used related to changes in operating assets and liabilities of \$6,467, due primarily to the following:
 - an increase in inventory of \$1,232, due primarily to increased inventory levels in support of anticipated revenue growth and the move to a new corporate headquarters building;
 - an increase in other current assets of \$439, due primarily to the timing of insurance premium payments; and
 - a \$4,535 decrease in accounts payable and accrued liabilities due primarily to the timing of payments, including variable compensation payments.

Cash flows provided by investing activities. Net cash provided by investing activities was \$6,996 for the three months ended March 31, 2016. The primary source of cash from investing activities was \$9,800 related to sales and maturities of available-for-sale securities. This source of cash was partially offset by \$2,804 related to the purchase of property and equipment, which included the placement of our RF and cryo generators with our customers.

Cash flows provided by financing activities. Net cash provided by financing activities during the three months ended March 31, 2016 was \$790, which was primarily due to proceeds from stock option exercises of \$1,896, partially offset by shares repurchased for payment of taxes on stock awards of \$999 and capital lease payments of \$107.

Credit facility. The Company's Loan and Security Agreement with SVB, as amended, restated, and modified (Loan Agreement) provides for a revolving credit facility under which we may borrow a maximum of \$15,000. Borrowing availability under the revolving credit facility is based on the lesser of \$15,000 or a borrowing base calculation as defined by the Loan Agreement. As of March 31, 2016 we had no borrowings under the revolving credit facility, and we had borrowing availability of \$15,000. The applicable borrowing rate on the revolving facility is the Prime Rate during a period when we meet the requirements for Streamline Period, which are based on available cash and amounts drawn under the credit facility, and Prime plus 1.25% at all other times. The revolving credit facility expires on April 30, 2018.

The Loan Agreement contains covenants that include, among others, covenants that limit our ability to dispose of assets, enter into mergers or acquisitions, incur indebtedness, incur liens, pay dividends or make distributions on our capital stock, make investments or loans, and enter into certain affiliate transactions, in each case subject to customary exceptions for a credit facility of this size and type. Additional covenants apply when we have outstanding borrowings under the revolving credit facility or when we hold less than \$20,000 in cash and investments with SVB. Financial covenants under the credit facility include a minimum EBITDA and a minimum liquidity ratio. Further, a minimum fixed charge ratio applies when specific covenant milestones are achieved. None of the covenants must be applied as of March 31, 2016. The occurrence of an event of default could result in an increase to the applicable interest rate by 3.0%, an acceleration of all obligations under the Loan Agreement, an obligation to repay all obligations in full and a right by SVB to exercise all remedies available to it under the Loan Agreement and related agreements including the Guaranty and Security Agreement. Specified assets have been pledged as collected.

Effective April 25, 2016, we entered into the Second Amended and Restated Loan and Security Agreement with SVB which amends and restates our credit facility with SVB. The agreement provides for a new \$25,000 term loan, in addition to a \$15,000 revolving line of credit, both which mature in April 2021. The term loan has a five-year term, with principal payments to be made ratably commencing twelve months after the inception of the loan through to the loan's maturity date. If we meet certain conditions, as specified by the loan agreement, the commencement of term loan payments may be deferred by an additional six months. The term loan accrues interest at the Prime Rate and is subject to an additional 4.0% fee on the original \$25,000 term loan principal amount at maturity. The revolving line of credit is subject to an annual commitment fee of \$50, and any borrowings bear interest at the Prime Rate. The Second Amended and Restated Loan and Security Agreement also provides for certain prepayment and early termination fees, as well as establishes covenants related to liquidity, sales growth and a minimum cash balance, along with other terms and conditions similar to those in our previous agreements with SVB. The proceeds from the agreement are expected to fund our current and future operations.

In connection with the terms of our Mason facility lease, a letter of credit in the amount of \$1,250 was issued to the landlord of our Mason facility in October 2015 and remains outstanding as of March 31, 2016.

Uses of liquidity and capital resources. Our future capital requirements depend on a number of factors, including the rate of market acceptance of our current and future products, the resources we devote to developing and supporting our products, future expenses to expand and support our sales and marketing efforts, costs relating to changes in regulatory policies or laws that affect our operations and costs of filing, costs associated with clinical trials and securing regulatory approval for new products, costs associated with acquiring and integrating businesses, costs associated with prosecuting, defending and enforcing our intellectual property rights and possible acquisitions and joint ventures. Global economic turmoil may adversely impact our revenue, access to the capital markets or future demand for our products.

We have on file with the SEC a shelf registration statement which allows us to sell any combination of senior or subordinated debt securities, common stock, preferred stock, warrants, depositary shares and units in one or more offerings should we choose to do so in the future. We expect to maintain the effectiveness of this shelf registration statement for the foreseeable future.

We believe that our current cash, cash equivalents and investments, along with the cash we expect to generate or use for operations or access via our term loan and revolving line of credit, will be sufficient to meet our anticipated cash needs for working capital and capital expenditures for at least the next twelve months. Such cash needs over the next twelve months include incremental operating and integration costs resulting from the acquisition of nContact in October 2015. The transaction provides for contingent consideration to be paid upon attaining specified regulatory approvals and clinical and revenue milestones over the next five years. Subject to the terms and conditions of the nContact merger agreement, such contingent consideration is paid in AtriCure common stock and cash. Over the next twelve months, we do not expect our cash requirements to include significant payments of contingent consideration based on terms of the acquisition agreement and related milestones.

If our sources of cash are insufficient to satisfy our liquidity requirements, we may seek to sell additional equity or debt securities or obtain a revised or additional credit facility. The sale of additional equity or convertible debt securities could result in dilution to our stockholders. If additional funds are raised through the issuance of debt securities, these securities could have rights senior to those associated with our common stock and could contain covenants that would restrict our operations. Finally, our term loan agreement and revolving line of credit require compliance with certain financial and other covenants. If we are unable to maintain these financing arrangements, we may be required to reduce the scope of our planned research and development, clinical activities and selling and marketing efforts.

Off-Balance-Sheet Arrangements

As of March 31, 2016 we had operating lease agreements not recorded on the Condensed Consolidated Balance Sheets. Operating leases are utilized in the normal course of business.

Seasonality

During the third quarter, we typically experience a moderate decline in revenue that we attribute primarily to the elective nature of certain procedures in which our products are used. We believe this is due to fewer people choosing to undergo elective procedures during the summer months.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations is based upon our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP). The preparation of financial statements requires management to make estimates and judgments that affect the reported amounts of assets and liabilities, revenue and expenses and disclosures of contingent assets and liabilities at the date of the financial statements. On a periodic basis, we evaluate our estimates, including those related to sales returns and allowances, accounts receivable, inventories and share-based compensation. We use authoritative pronouncements, historical experience and other assumptions as the basis for making estimates. Actual results could differ from those estimates under different assumptions or conditions. Our Annual Report on Form 10-K for the fiscal year ended December 31, 2015 includes additional information about the Company, our operations, our financial position and our critical accounting policies and estimates and should be read in conjunction with this Ouarterly Report.

Recent Accounting Pronouncements

See Note 2 in the Notes to the Condensed Consolidated Financial Statements for a discussion of recent accounting pronouncements.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

As of March 31, 2016 there were no material changes to the information provided under Item 7A, "Quantitative and Qualitative Disclosures About Market Risk" in the Company's Form 10-K for the year ended December 31, 2015.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We have evaluated the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13(a)-15(e) and 15(d)-15(e) of the Securities Exchange Act of 1934 (Exchange Act), as of the end of the period covered by this report. Our management, including the President and Chief Executive Officer (the Principal Executive Officer) and Senior Vice President and Chief Financial Officer (the Principal Accounting and Financial Officer), supervised and participated in the evaluation. Based on the evaluation, we concluded that, as of the end of the period covered by this report, our disclosure controls and procedures were effective in providing reasonable assurance that information required to be disclosed by us in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's forms and rules, and the material information relating to the Company is accumulated and communicated to management, including the President and Chief Executive Officer (the Principal Executive Officer) and Senior Vice President and Chief Financial Officer (the Principal Accounting and Financial Officer), as appropriate, to allow timely decisions regarding required disclosures.

Control systems, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that control objectives are met. Because of inherent limitations in all control systems, no evaluation of controls can provide assurance that all control issues and instances of fraud, if any, within a company will be detected. Additionally, controls can be circumvented by individuals, by collusion of two or more people, or by management override. Over time, controls can become inadequate because of changes in conditions or the degree of compliance may deteriorate. Further, the design of any system of controls is based in part upon assumptions about the likelihood of future events. There can be no assurance that any design will succeed in achieving its stated goals under all future conditions. Because of the inherent limitations in any cost-effective control system, misstatements due to errors or fraud may occur and not be detected.

Changes in Internal Control Over Financial Reporting

In the ordinary course of business we routinely enhance our information systems by either upgrading current systems or implementing new ones. There were no changes in our internal control over financial reporting that occurred during the three months ended March 31, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

Information with respect to legal proceedings can be found under the heading "Legal" in Note 7 – Commitments and Contingencies to the Condensed Consolidated Financial Statements in Part I, Item 1 of this Quarterly Report on Form 10-Q, and is incorporated herein by reference.

Item 1A. Risk Factors

In addition to the other information set forth in this report, careful consideration should be given to the factors discussed in Item 1A, "Risk Factors" in our Form 10-K for the year ended December 31, 2015, all of which could materially affect our business, financial condition or future results. The risks described are not the only risks facing us. Additional risks and uncertainties not currently known to us, or that we currently deem to be immaterial, also may adversely affect our business, financial condition and/or operating results. There have been no material changes with respect to the risk factors disclosed in our Annual Report on Form 10-K for the year ended December 31, 2015.

Item 6. Exhibits

Exhibit	
No.	Description
31.1	Rule 13a-14(a) Certification of Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Rule 13a-14(a) Certification of Principal Accounting and Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification pursuant to 18 U.S.C. Section 1350 by the Principal Executive Officer, as adopted, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification pursuant to 18 U.S.C. Section 1350 by the Principal Accounting and Financial Officer, as adopted, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

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.

	AtriCure, Inc. (REGISTRANT)
Date: April 29, 2016	/s/ Michael H. Carrel Michael H. Carrel President and Chief Executive Officer
	(Principal Executive Officer)
Date: April 29, 2016	/s/ M. Andrew Wade
	M. Andrew Wade Senior Vice President and Chief Financial Officer (Principal Accounting and Financial Officer)
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EXHIBIT INDEX

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CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO SECTION 13(a) OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

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

Date: April 29, 2016

By: /s/ Michael H. Carrel

Michael H. Carrel President and Chief Executive Officer (Principal Executive Officer)

CERTIFICATION OF PRINCIPAL ACCOUNTING AND FINANCIAL OFFICER PURSUANT TO SECTION 13(a) OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

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

Date: April 29, 2016

By: /s/ M. Andrew Wade

M. Andrew Wade Senior Vice President and Chief Financial Officer (Principal Accounting and Financial Officer)

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the quarterly report of AtriCure, Inc. (Company) on Form 10-Q for the quarter ended March 31, 2016 as filed with the Securities and Exchange Commission on the date hereof (Report), I, Michael H. Carrel, President and Chief Executive Officer and Principal Executive Officer of the Company, certify, pursuant to Rule 13a–14(b) and Section 1350 of Chapter 63 of Title 18 of the United States Code, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- 1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 29, 2016

By: /s/ Michael H. Carrel

Michael H. Carrel President and Chief Executive Officer (Principal Executive Officer)

A signed original of this written statement or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement has been provided to AtriCure, Inc. and will be retained by AtriCure, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

The foregoing certification is being furnished solely pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code) and is not being filed as part of the report or as a separate disclosure document.

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the quarterly report of AtriCure, Inc. (Company) on Form 10-Q for the quarter ended March 31, 2016 as filed with the Securities and Exchange Commission on the date hereof (Report), I, M. Andrew Wade, Vice President and Chief Financial Officer and Principal Accounting and Financial Officer of the Company, certify, pursuant to Rule 13a–14(b) and Section 1350 of Chapter 63 of Title 18 of the United States Code, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 29, 2016

/s/ M. Andrew Wade

M. Andrew Wade Senior Vice President and Chief Financial Officer (Principal Accounting and Financial Officer)

A signed original of this written statement or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement has been provided to AtriCure, Inc. and will be retained by AtriCure, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

The foregoing certification is being furnished solely pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code) and is not being filed as part of the report or as a separate disclosure document.