UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-Q

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended June 30, 2017

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission File Number 1-10352

JUNIPER PHARMACEUTICALS, INC.

(Exact name of Registrant as specified in its charter)

Delaware	**59-2758596**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
33 Arch Street Boston, Massachusetts	**02110**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (617) 639-1500

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this Chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

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

Large accelerated filer ☐	Accelerated filer ☒
Non-accelerated filer ☐ (Do not check if a smaller reporting company) Emerging Growth Company ☐	Smaller reporting company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

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

The number of shares outstanding of the registrant's common stock as of July 31, 2017: 10,844,113.

EXPLANATORY NOTE

Unless the context indicates otherwise, references in this Quarterly Report to “Juniper Pharmaceuticals,” “Juniper,” “the Company,” “we” “our,” and “us” mean Juniper Pharmaceuticals, Inc. and its subsidiaries.

Juniper Pharmaceuticals, Inc.

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Part I—Financial Information

Item 1. Financial Statements

Juniper Pharmaceuticals, Inc.

Condensed Consolidated Balance Sheets
(in thousands, except per share data)
(unaudited)

	June 30, 2017	December 31, 2016
Assets		
Current assets:		
Cash and cash equivalents	$ 21,464	$ 20,994
Accounts receivable, net	6,900	6,573
Inventories	5,212	5,621
Prepaid expenses and other current assets	1,812	1,539
Total current assets	35,388	34,727
Property and equipment, net	14,811	13,366
Intangible assets, net	869	969
Goodwill	8,793	8,342
Other assets	167	167
Total assets	$ 60,028	$ 57,571
Liabilities, contingently redeemable preferred stock, and stockholders' equity		
Current liabilities:		
Accounts payable	$ 3,461	$ 3,893
Accrued expenses and other	5,134	5,271
Deferred revenue	7,191	5,624
Current portion of long-term debt	516	204
Total current liabilities	16,302	14,992
Long-term debt, net of current portion	3,398	2,203
Other noncurrent liabilities	32	56
Total liabilities	19,732	17,251
Commitments and contingencies		
Contingently redeemable series C preferred stock, 0 and 0.55 shares issued and outstanding at June 30, 2017 and December 31, 2016, respectively (liquidation preference of $550)	—	550
Stockholders' equity:		
Preferred stock, $0.01 par value; 1,000 shares authorized Series B convertible preferred stock, 0 and 0.13 shares issued and outstanding at June 30, 2017 and December 31, 2016, respectively (liquidation preference of $13)	—	—
Common stock $0.01 par value; 150,000 shares authorized; 12,257 issued and 10,844 outstanding at June 30, 2017 and December 31, 2016	123	123
Additional paid-in capital	291,469	290,636
Treasury stock (at cost), 1,413 shares at June 30, 2017 and December 31, 2016	(8,601)	(8,601)
Accumulated deficit	(238,718)	(237,360)
Accumulated other comprehensive loss	(3,977)	(5,028)
Total stockholders' equity	40,296	39,770
Total liabilities, contingently redeemable preferred stock, and stockholders' equity	$ 60,028	$ 57,571

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

Juniper Pharmaceuticals, Inc.

Condensed Consolidated Statements of Operations
(in thousands, except per share data)
(unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Revenues				
Product revenues	$ 9,569	$ 7,334	$ 17,295	$ 13,659
Service revenues	4,387	3,374	7,908	6,627
Royalties	—	902	—	1,801
Total revenues	13,956	11,610	25,203	22,087
Cost of product revenues	5,303	4,182	9,617	8,209
Cost of service revenues	2,347	2,285	4,590	4,608
Total cost of revenues	7,650	6,467	14,207	12,817
Gross profit	6,306	5,143	10,996	9,270
Operating expenses				
Sales and marketing	410	379	788	651
Research and development	1,648	3,797	2,994	5,930
General and administrative	4,604	3,244	9,025	6,704
Total operating expenses	6,662	7,420	12,807	13,285
Loss from operations	(356)	(2,277)	(1,811)	(4,015)
Interest expense, net	(30)	(24)	(58)	(50)
Other income, net	10	81	52	206
Total non-operating (loss) income	(20)	57	(6)	156
Loss before income taxes	(376)	(2,220)	(1,817)	(3,859)
Provision for income taxes	—	48	—	52
Net loss	$ (376)	$ (2,268)	$ (1,817)	$ (3,911)
Basic net income (loss) per common share	$ 0.01	$ (0.21)	$ (0.13)	$ (0.36)
Diluted net loss per common share	$ (0.03)	$ (0.21)	$ (0.13)	$ (0.36)
Basic weighted average common shares outstanding	10,803	10,789	10,803	10,789
Diluted weighted average common shares outstanding	10,954	10,789	10,803	10,789

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

Juniper Pharmaceuticals, Inc.

Condensed Consolidated Statements of Comprehensive Income (Loss)
(in thousands)
(unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Net loss	$ (376)	$ (2,268)	$ (1,817)	$ (3,911)
Other comprehensive income (loss) components:				
Foreign currency translation	823	(1,541)	1,051	(2,205)
Total other comprehensive income (loss)	823	(1,541)	1,051	(2,205)
Comprehensive income (loss)	$ 447	$ (3,809)	$ (766)	$ (6,116)

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

Juniper Pharmaceuticals, Inc.

Condensed Consolidated Statements of Cash Flows
(in thousands)
(unaudited)

	Six Months Ended June 30,	
	2017	**2016**
Operating activities:		
Net loss	$ (1,817)	$ (3,911)
Reconciliation of net loss to net cash provided by operating activities:		
Depreciation and amortization	1,075	966
Stock-based compensation expense	845	475
Changes in operating assets and liabilities:		
Accounts receivable	(145)	903
Inventories	409	(314)
Prepaid expenses and other current assets	(240)	(391)
Other non-current assets	—	18
Accounts payable	(805)	1,873
Accrued expenses and other	(335)	(616)
Deferred rent	(18)	—
Deferred revenue	1,522	1,519
Net cash provided by operating activities	491	522
Investing activities:		
Purchases of property and equipment	(1,404)	(1,202)
Net cash used in investing activities	(1,404)	(1,202)
Financing activities:		
Proceeds from loan facility	954	—
Proceeds from equipment loans	1,501	—
Principal payments on debt	(1,143)	(122)
Dividends paid	(7)	(14)
Net cash provided by (used in) financing activities	1,305	(136)
Effect of exchange rate changes on cash and cash equivalents	78	(110)
Net increase (decrease) in cash and cash equivalents	470	(926)
Cash and cash equivalents, beginning of period	20,994	13,901
Cash and cash equivalents, end of period	$ 21,464	$ 12,975
Supplemental cash flow information		
Cash paid for interest	$ 50	$ 44
Supplemental noncash information		
Purchases of equipment through accounts payable and accrued expenses	$ 327	$ —
Excess of carrying value of Series C Preferred Stock over redemption value	$ 459	$ —
Redemption of Series C Preferred Stock and dividend included in accounts payable	$ 98	$ —

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

(1) Interim Condensed Consolidated Financial Statements

The accompanying unaudited interim condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP") for interim information and pursuant to the rules and regulations of the Securities and Exchange Commission (the "SEC") for reporting on Form 10-Q. Accordingly, certain information and footnote disclosures required for complete financial statements are not included herein. It is recommended that these financial statements be read in conjunction with the consolidated financial statements and related notes that appear in the Annual Report on Form 10-K of Juniper Pharmaceuticals, Inc. ("Juniper" or the "Company") for the year ended December 31, 2016 filed with the SEC on March 7, 2017 (the "2016 Annual Report"). In the opinion of the Company, the accompanying unaudited condensed consolidated financial statements contain all adjustments, consisting of only normal recurring adjustments, necessary for a fair statement of its financial position as of June 30, 2017, and its results of operations for the three and six months ended June 30, 2017 and 2016, and cash flows for the six months ended June 30, 2017 and 2016. The condensed consolidated balance sheet at December 31, 2016, was derived from audited annual financial statements, but does not contain all of the footnote disclosures from the annual financial statements. Results of operations for the three and six months ended June 30, 2017 are not necessarily indicative of the results for the year ending December 31, 2017 or any period thereafter.

At June 30, 2017, cash and cash equivalents were $21.5 million. The Company's future funding requirements depend on a number of factors, including the rate of market acceptance of its current and future products and services and the resources the Company devotes to developing and supporting the same. The Company believes that current cash and cash equivalents, as well as cash generated from operations, will be sufficient to meet anticipated cash needs for working capital, including advancing its product candidates, and capital expenditures through August 3, 2018. The Company may be dependent on its ability to raise additional capital to finance operations and further fund research and development programs. If the Company is not able to raise additional capital on terms acceptable to it, or at all, as and when needed, it may be required to curtail its operating spend including spend related to its research and development programs.

Management Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses and related disclosures at the date of the financial statements during the reporting period. Significant estimates are used for, but are not limited to, revenue recognition, allowance for doubtful accounts, inventory reserve, impairment analysis of goodwill and intangibles including their useful lives, research and development accruals, deferred tax assets, liabilities and valuation allowances, and fair value of stock options. On an ongoing basis, management evaluates its estimates. Actual results could differ from those estimates.

(2) Inventories

Inventories are stated at the lower of cost (first-in, first-out) or net realizable value. Components of inventory cost include materials, labor and manufacturing overhead. Inventories consist of the following (in thousands):

	June 30, 2017	December 31, 2016
Raw materials	$ 785	$ 856
Work in process	4,050	3,806
Finished goods	377	959
Total	$ 5,212	$ 5,621

The inventory reserve balance at June 30, 2017 and December 31, 2016 was $0.2 million and $0 million, respectively. During the three months ended March 31, 2017 and 2016, the Company recorded charges in the condensed consolidated statements of operations for excess and obsolete inventory of $0.2 million. No charges were recorded for the three months ended June 30, 2017 and 2016.

(3) Goodwill and Intangible Assets

Changes to goodwill during the six months ended June 30, 2017 were as follows (in thousands):

	Total
Balance—December 31, 2016	$ 8,342
Effects of foreign currency translation	451
Balance—June 30, 2017	$ 8,793

Intangible assets consist of the following at June 30, 2017 and December 31, 2016 (in thousands):

	Trademark	Developed Technology	Customer Relationships	Total
Gross carrying amount—June 30, 2017	$ 300	$ 1,370	$ 1,240	$ 2,910
Foreign currency translation adjustment	(65)	(240)	(217)	(522)
Accumulated amortization	(235)	(730)	(554)	(1,519)
Balance—June 30, 2017	$ —	$ 400	$ 469	$ 869

	Trademark	Developed Technology	Customer Relationships	Total
Gross carrying amount—December 31, 2016	$ 300	$ 1,370	$ 1,240	$ 2,910
Foreign currency translation adjustment	(53)	(298)	(270)	(621)
Accumulated amortization	(247)	(617)	(456)	(1,320)
Balance—December 31, 2016	$ —	$ 455	$ 514	$ 969

Amortization expense related to developed technology is classified as a component of cost of service revenues in the accompanying consolidated statements of operations. Amortization expense related to trademark and customer relationships is classified as a component of general and administrative expenses in the accompanying consolidated statements of operations.

Amortization expense for the three months ended June 30, 2017 and 2016 was $0.1 million. Amortization expense for the six months ended June 30, 2017 and 2016 was $0.2 million and $0.2 million, respectively. Amortization expense on existing intangible assets as of June 30, 2017 is as follows (in thousands):

Year ending December 31,	Total
Remainder of 2017	$ 152
2018	279
2019	252
2020	186
Total	$ 869

(4) Debt and other Contractual Obligations

In September 2013, Juniper assumed debt of $3.9 million in connection with its acquisition of Juniper Pharma Services ("JPS"). JPS had entered into a Business Loan Agreement ("Loan Agreement") covering three loan facilities (collectively referred to as the "original agreements") with Lloyds TSB Bank ("Lloyds") as administrative agent. During the three months ended June 30, 2017, JPS repaid one of the existing loan facilities upon which JPS subsequently entered into a new loan facility with the same administrative agent for the same outstanding balance. The refinancing was accounted for as a modification with no resulting gain or loss. The remaining original agreements and the new agreement are collectively referred to as the loan facilities.

As of June 30, 2017, the Company owed $2.4 million on the loan facilities. The loan facilities are due for repayment over periods ranging from 7-15 years. Two of the facilities bear interest at the Bank of England's base rate plus 1.95%, and 2.55%, respectively. The interest rates at June 30, 2017 for these facilities were 2.45% and 3.05%, respectively. The third facility is a fixed rate agreement bearing interest at 2.99% per annum. The weighted average interest rate for the three loan facilities for the three months ended June 30, 2017 was 2.76%. The Loan Agreement is secured by the mortgaged property and an unlimited lien on other assets of JPS. The original agreements under the Loan Agreement contains financial covenants that limit the amount of indebtedness JPS may incur, requires JPS to maintain certain levels of net worth, and restricts JPS's ability to materially alter the character of its business. The new loan facility contains the same financial covenants outlined above in addition to a covenant which requires that JPS

maintain certain levels of earnings before interest, taxes, depreciation and amortization. As of June 30, 2017, the Company is in compliance with all of the covenants under the Loan Agreement.

In September 2013, as part of the acquisition of JPS, Juniper assumed a $2.5 million obligation under a grant arrangement with the Regional Growth Fund on behalf of the Secretary of State for Business, Innovation, and Skills in the United Kingdom. JPS used this grant to fund the building of its second facility, which includes analytical labs, office space, and a manufacturing facility. As part of the arrangement, JPS is required to create and maintain certain full-time equivalent personnel levels through October 2017. As of June 30, 2017, the Company is in compliance with the covenants of the arrangement.

The income from the Regional Growth Fund will be recognized on a decelerated basis through October 2017. As of June 30, 2017, the obligation is valued at $0.2 million and is recorded as deferred revenue on the consolidated balance sheets. Other income associated with the Regional Growth Fund obligation for the three months ended June 30, 2017 and 2016 was $0.2 million, respectively. Other income associated with the Regional Growth Fund obligation for the six months ended June 30, 2017 and 2016 was $0.4 million and $0.3 million, respectively. The amount of other income on the obligation that will be recognized provided the Company remains in compliance with the covenants will be $0.2 million.

Juniper leases the buildings portion of its U.S. corporate office under an operating lease and debt for the Nottingham, U.K. facility. Additionally, Juniper leases certain equipment under loan agreements with payments through March 2022. In October 2015, the Company entered into a lease agreement for its corporate office in Boston, Massachusetts. The initial term of the lease agreement is approximately 39 months, which includes a three-month free rent period. In January and March 2017, the Company entered into loans of $0.9 million and $0.6 million, respectively, for equipment in its Nottingham, U.K. facility. The interest rate for the two loans was 2.09% at June 30, 2017. The transactions were considered failed sales-leaseback arrangements as the amount of the loans are less than the carrying value of the equipment. These failed sale-leaseback arrangements have been recorded as a component of long-term debt on the Company's condensed consolidated balance sheets. The initial terms of the loans are 60 months.

Commitments under Juniper's debt and lease arrangements are as follows as of June 30, 2017 (in thousands):

	Operating Leases	Debt Principal Payments	Total
Remainder of 2017	$ 219	$ 256	$ 475
2018	443	524	967
2019	74	547	621
2020	—	566	566
2021	—	584	584
Thereafter	—	1,437	1,437
Total minimum debt and lease payments	$ 736	$ 3,914	$ 4,650

(5) Intravaginal Ring Technology License

In March 2015, the Company obtained an exclusive worldwide license ("License Agreement") to the intellectual property rights for a novel segmented intravaginal ring ("IVR") technology. Due to its novel polymer and segmentation composition, the Company believes the IVR has the potential to deliver one or more drugs, including hormones and larger molecules such as peptides, at different dosages and release rates within a single segmented ring. Drugs such as progesterone and leuprolide have already been tested using the technology and demonstrated sustained release for up to three weeks. This technology was developed by Dr. Robert Langer from the Massachusetts Institute of Technology ("MIT") and Dr. William Crowley from Massachusetts General Hospital ("MGH") and Harvard Medical School. Drs. Langer and Crowley have each agreed to serve a three-year term as strategic advisors to the Company in exchange for an upfront one-time payment plus quarterly fees and equity compensation.

Unless earlier terminated by the parties, the License Agreement will remain in effect until the later of (i) the date on which all issued patents and filed patent applications within the licensed patent rights have expired or been abandoned and (ii) one year after the last sale for which a royalty is due under the License Agreement or 10 years after such expiration or abandonment date referred to in (i), whichever is earlier. Juniper has the right to terminate the License Agreement by giving 90 days advance written notice to MGH. MGH has the right to terminate the License Agreement based on the Company's failure to make payments due under the License

Agreement, subject to a 15 day cure period, or the Company's failure to maintain the insurance required by the License Agreement. MGH may also terminate the License Agreement based on Juniper's non-financial default under the License Agreement, subject to a 60 day cure period.

Pursuant to the terms of the License Agreement, Juniper has agreed to reimburse MGH for all costs associated with the preparation, filing, prosecution and maintenance of the licensed patent rights, and has agreed to pay MGH a $50,000 annual license fee on each of the first five year anniversaries of the effective date of the License Agreement, and a $100,000 annual license fee beginning on the sixth anniversary of the effective date of the License Agreement and on each subsequent anniversary thereafter. The annual license fee is creditable against any royalties or sublicense income payable in each calendar year.

Under the terms of the License Agreement, Juniper has agreed to use commercially reasonable efforts to develop and commercialize at least one product and/or process related to the IVR technology, which efforts will include the making of certain minimum annual expenditures in each of the first five years following the effective date of the License Agreement. Juniper has also agreed to pay MGH certain milestone payments totaling up to $1.2 million tied to the Company's achievement of certain development and commercialization milestones, and certain annual royalty payments based on net sales of any such patented products or processes developed by Juniper.

(6) Segments and Geographic Information

The Company and its subsidiaries currently operate in two segments: product and service. The product segment oversees the supply chain and manufacturing of CRINONE, the Company's sole commercialized product. The product segment included the royalty stream the Company received from Allergan for CRINONE sales in the United States, which ceased with the November 2016 agreement with Allergan, as well as the development of new product candidates. The service segment includes product development, clinical trial manufacturing, and advanced analytical and consulting services for the Company's customers, as well as the characterizing and developing of pharmaceutical product candidates for the Company's internal programs and managing certain preclinical activities including manufacturing of the Company's pipeline products. In September 2013, the Company acquired JPS, a U.K.-based provider of pharmaceutical development, clinical trial manufacturing, and advanced analytical and consulting services to the pharmaceutical industry. The Company has integrated its supply chain management for its sole commercialized product, CRINONE, into those operations and have therefore sought to capture synergies by transferring all operational activities related to its historic business. The Company owns certain plant and equipment physically located at third party contractor facilities in the United Kingdom and Switzerland. The Company conducts its advanced formulation, analytical and consulting services through its subsidiary, JPS.

The Company's largest customer, Merck KGaA, utilizes a Switzerland-based subsidiary to acquire product from the Company, which it then sells throughout the world excluding the United States. Up until November 2016, the Company's primary domestic customer, Allergan, Plc ("Allergan"), was responsible for the commercialization and sale of CRINONE in the United States. In November 2016, the Company entered into an agreement with Allergan to monetize future royalty payments. Under the agreement, the Company received a one-time payment of $11.0 million representing all future royalty amounts payable.

The following tables show selected information by geographic area (in thousands):

Revenues:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
United States	$ 2,387	$ 2,421	$ 4,015	$ 4,215
Switzerland	9,759	7,350	17,516	13,691
United Kingdom	1,088	1,142	2,037	2,493
Other countries	722	697	1,635	1,688
Total	$ 13,956	$ 11,610	$ 25,203	$ 22,087

Total assets:

	June 30, 2017	December 31, 2016
United States	$ 21,494	$ 21,423
Switzerland	33,566	4,673
United Kingdom	4,838	31,288
Other countries	130	187
Total	$ 60,028	$ 57,571

Long-lived assets:

	June 30, 2017	December 31, 2016
United States	$ 667	$ 663
Switzerland	460	369
United Kingdom	14,718	13,468
Other countries	2	2
Total	$ 15,847	$ 14,502

No other individual country represented greater than 10% of total revenues, total assets, or long-lived assets for any period presented.

For the three and six months ended June 30, 2017, Merck KGaA accounted for 100% of the product segment revenue. For the three and six months ended June 30, 2016, Merck KGaA accounted for 89% and 88% of the product segment revenue, respectively. For the three and six months ended June 30, 2016, Allergan accounted for 11% and 12% of the product segment revenue, respectively. At June 30, 2017 and December 31, 2016, Merck KGaA made up 100% of the product segment accounts receivable.

For the three and six months ended June 30, 2017 the same customer accounted for 28% and 23% of the service segment total revenue, respectively. No customers accounted for 10% or more of the service segment total revenue for the three and six months ended June 30, 2016. At June 30, 2017, two customers accounted for 24% and 10% of total service segment accounts receivable, respectively. No other customers accounted for greater than 10% of the service segment accounts receivable. At December 31, 2016, two customers accounted for 18% and 13% of total service segment net accounts receivable..

The following summarizes other information by segment for the three months ended June 30, 2017 (in thousands):

	Product	Service	Total
Revenues			
Product revenues	$ 9,569	$ —	$ 9,569
Service revenues	—	4,387	4,387
Total revenues	$ 9,569	$ 4,387	$ 13,956
Cost of product revenues	$ 5,303	$ —	$ 5,303
Cost of service revenues	—	2,347	2,347
Total cost of revenues	$ 5,303	$ 2,347	$ 7,650
Gross profit	$ 4,266	$ 2,040	$ 6,306
Total operating expenses			6,662
Total non-operating expense			(20)
Loss before income taxes			$ (376)

The following summarizes other information by segment for the three months ended June 30, 2016 (in thousands):

	Product	Service	Total
Revenues			
Product revenues	$ 7,334	$ —	$ 7,334
Service revenues	—	3,374	3,374
Royalties	902	—	902
Total revenues	$ 8,236	$ 3,374	$ 11,610
Cost of product revenues	$ 4,182	$ —	$ 4,182
Cost of service revenues	—	2,285	2,285
Total cost of revenues	$ 4,182	$ 2,285	$ 6,467
Gross profit	$ 4,054	$ 1,089	$ 5,143
Total operating expenses			7,420
Total non-operating income			57
Loss before income taxes			$ (2,220)

The following summarizes other information by segment for the six months ended June 30, 2017 (in thousands):

	Product	Service	Total
Revenues			
Product revenues	$ 17,295	$ —	$ 17,295
Service revenues	—	7,908	7,908
Total revenues	$ 17,295	$ 7,908	$ 25,203
Cost of product revenues	$ 9,617	$ —	$ 9,617
Cost of service revenues	—	4,590	4,590
Total cost of revenues	$ 9,617	$ 4,590	$ 14,207
Gross profit	$ 7,678	$ 3,318	$ 10,996
Total operating expenses			12,807
Total non-operating expense			(6)
Loss before income taxes			$ (1,817)

The following summarizes other information by segment for the six months ended June 30, 2016 (in thousands):

	Product	Service	Total
Revenues			
Product revenues	$ 13,659	$ —	$ 13,659
Service revenues	—	6,627	6,627
Royalties	1,801	—	1,801
Total revenues	$ 15,460	$ 6,627	$ 22,087
Cost of product revenues	$ 8,209	$ —	$ 8,209
Cost of service revenues	—	4,608	4,608
Total cost of revenues	$ 8,209	$ 4,608	$ 12,817
Gross profit	$ 7,251	$ 2,019	$ 9,270
Total operating expenses			13,285
Total non-operating income			156
Loss before income taxes			$ (3,859)

(7) Property and Equipment

Property and equipment consists of the following (in thousands):

	Estimated Useful Life (Years)	June 30, 2017	December 31, 2016
Machinery and equipment	3-10	$ 11,231	$ 8,628
Furniture and fixtures	3-5	1,083	1,190
Computer equipment and software	3-5	637	538
Buildings	Up to 39	7,705	7,310
Land	Indefinite	494	469
Construction in-process		965	1,567
		22,115	19,702
Less: Accumulated depreciation		(7,304)	(6,336)
Total		$ 14,811	$ 13,366

Depreciation expense was $0.5 million and $0.5 million for the three month periods ended June 30, 2017 and 2016, respectively. Depreciation expense was $0.9 million and $1.0 million for the six month periods ended June 30, 2017 and 2016, respectively. The Company recorded $0.1 million in disposals during the period ended June 30, 2017.

Machinery and equipment includes $1.5 million of equipment purchased under equipment loans.

(8) Shareholders' Equity

Preferred Stock

At December 31, 2016, 130 shares of Series B Preferred Stock ("Series B") and 550 shares of Series C Preferred Stock ("Series C") remained outstanding. During the quarter ending June 30, 2017, the Company issued a Notice of Conversion to the holders of the Series B and a Notice of Redemption to the Series C giving notice that on June 30, 2017 (the "Redemption and Conversion Date") all outstanding shares of the respective Preferred Stock issuances would be converted, as in the case of the Series B, or redeemed, as in the case of the Series C.

The Series B, by its terms, automatically convert into common stock upon the occurrence of certain events. On the Redemption and Conversion Date, each share of Series B converted into 2.78 shares of common stock resulting in an issuance of 361 common shares.

The holders of the Series C had the right to require the Company to redeem their shares in cash plus all accrued and unpaid dividends thereon the date such redemption is demanded. On the Redemption and Conversion Date, the Company paid to the holders of the Series C approximately $0.1 million and as a result of the transaction recorded the excess of the carrying value of Series C Preferred Stock over redemption value of approximately $0.5 million to accumulated deficit for the six months ended June 30, 2017.

As of June 30, 2017 there are no remaining outstanding shares of either the Series B or the Series C.

(9) Net Loss Per Common Share

The calculation of basic and diluted loss per common share and common share equivalents is as follows (in thousands except for per share data):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Basic net loss per common share				
Net loss	$ (376)	$ (2,268)	$ (1,817)	$ (3,911)
Add: Excess of carrying value of Series C Preferred Stock over redemption value	459	—	459	—
Less: Preferred stock dividends	(7)	(7)	(14)	(14)
Net income (loss) applicable to common stock	$ 76	$ (2,275)	$ (1,372)	$ (3,925)
Basic weighted average number of common shares outstanding	10,803	10,789	10,803	10,789
Basic net income (loss) per common share	$ 0.01	$ (0.21)	$ (0.13)	$ (0.36)
Diluted loss per common share				
Net loss applicable to common stock	$ 76	$ (2,275)	$ (1,372)	$ (3,925)
Less: Excess of carrying value of Series C Preferred Stock over redemption value	(459)	—	—	—
Add: Preferred stock dividends	7	—	—	—
Net loss applicable to dilutive common stock	$ (376)	$ (2,275)	$ (1,372)	$ (3,925)
Basic weighted average number of common shares outstanding	10,803	10,789	10,803	10,789
Effect of dilutive securities				
Dilutive stock awards	40	—	—	—
Dilutive preferred share conversions	111	—	—	—
	151	—	—	—
Diluted weighted average number of common shares outstanding	10,954	10,789	10,803	10,789
Diluted net loss per common share	$ (0.03)	$ (0.21)	$ (0.13)	$ (0.36)

Basic net loss per common share is computed by dividing the net loss, less preferred dividends and adding the excess of carrying value of Series C Preferred Stock over redemption value recognized on the conversion of the Series C Preferred Stock, by the weighted-average number of shares of common stock outstanding during a period. The diluted loss per common share calculation gives effect to dilutive options, convertible preferred stock, and other potential dilutive common stock including restricted shares of common stock outstanding during the period. Diluted net loss per share is based on the treasury stock method and includes the effect from potential issuance of common stock, such as shares issuable pursuant to the exercise of stock options, assuming the exercise of all in-the-money stock options. Common share equivalents have been excluded where their inclusion would be anti-dilutive.

Shares to be issued upon the exercise of the outstanding options, performance-based restricted stock units, convertible preferred stock, and selected restricted shares of common stock excluded from the income per share calculation amounted to 2.4 million and 1.5 million in each of the three month and six month periods ended June 30, 2017 and 2016, respectively, because the awards were anti-dilutive.

(10) Accumulated Other Comprehensive Loss

Changes to accumulated other comprehensive loss during the six months ended June 30, 2017 were as follows (in thousands):

	Translation Adjustment
Balance—December 31, 2016	$ (5,028)
Current period other comprehensive income (loss)	1,051
Balance—June 30, 2017	$ (3,977)

(11) Stock-Based Compensation

Stock-based compensation expense was $0.5 million and $0.4 million for the three months ended June 30, 2017 and 2016, respectively. Stock-based compensation expense for the six months ended June 30, 2017 and 2016 was $0.8 million and $0.5 million, respectively.

Stock-based compensation relates to options granted to employees, non-employee members of the Board of Directors and non-employees, time-based restricted stock units granted to employees and non-employee members of the Board of Directors and performance-based restricted stock units granted to employees. Total stock-based compensation expense was recorded to cost of revenues and operating expenses based upon the functional responsibilities of the individuals holding the respective awards as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Cost of revenues	$ 31	$ 32	$ 59	$ 58
Sales and marketing	12	17	23	31
Research and development	71	109	28	(37)
General and administrative	390	199	735	423
Total	$ 504	$ 357	$ 845	$ 475

There were no option exercises in the six months ended June 30, 2017 and 2016.

Juniper granted options to purchase 680,400 shares of common stock to employees and non-employee directors in the six months ended June 30, 2017 and options to purchase 397,500 shares of common stock to employees during the six months ended June 30, 2016. Stock options granted to employees typically vest over a four-year term. Stock options granted to non-employee directors typically vest over a three-year term.

Juniper granted 52,700 time-based restricted stock units to employees and 51,234 time-based restricted stock units to non-employee directors during the six months ended June 30, 2017. No time-based restricted stock units were granted during the six months ended June 30, 2016.

Juniper granted 186,000 performance-based restricted stock units to employees during the six months ended June 30, 2017. No performance-based restricted stock units were granted during the six months ended June 30, 2016. The performance-based restricted stock units vest based on the occurrence of certain operational and strategic events which were determined by the Company's Board of Directors.

The Company uses the Black-Scholes option pricing model to determine the estimated grant date fair values for stock options and estimates the fair value of time-based restricted stock units and performance-based restricted stock units based on the closing price of the Company's common stock on the date of grant. The Company's assumptions do not include an estimated forfeiture rate.

The weighted-average grant date fair values of options granted to employees during the six months ended June 30, 2017 and 2016 were $2.43 and $4.81, respectively, using the following assumptions:

	Six Months Ended June 30,	
	2017	2016
Risk free interest rate	1.45% - 1.59%	1.14%
Expected term	4.5 - 4.75 years	4.75 years
Dividend yield	—	—
Expected volatility	53.15% - 55.20%	79.23% - 79.29%

The Company records stock-based compensation expense for stock options granted to non-employees based on the fair value of the stock options, which is re-measured over the graded vesting term resulting in periodic adjustments to stock-based compensation expense. The stock-based compensation expense recorded for non-employees is primarily reflected in the research and development line of the statement of operations and is remeasured on a quarterly basis from the date of grant. During the six months ended June 30, 2017, the Company recorded a reduction of stock-based compensation expense of $0.1 million for non-employee options as a result of changes in the fair value of the options during the period. During the six months ended June 30, 2016, the Company recorded a reduction of stock-based compensation expense of $0.1 million for non-employee options. No tax benefit has been recognized due to the net tax losses during the periods presented. There were no options granted to non-employees during the six months ended June 30, 2017 and 2016.

Option-pricing models require the input of various subjective assumptions, including the option's expected life and the price volatility of the underlying stock. Juniper's estimated expected stock price volatility is based on its own historical volatility. Juniper's expected term of options granted during the six months ended June 30, 2017 and 2016 was derived using the simplified method for employees. The risk-free rate for the expected term of the option is based on the U.S. Treasury yield curve in effect at the time of grant.

The weighted-average grant date fair value of both the time-based restricted stock units and performance-based restricted stock units was $5.11 during the six months ended June 30, 2017. The Company recognizes stock-based compensation expense for time-based restricted stock units over the vesting period. For performance-based restricted stock units, the Company considers the performance criteria at each balance sheet date and recognizes stock-based compensation expense for those criteria considered probable. The criteria associated with these performance-based stock units were not determined to be probable at June 30, 2017 and as such, no expense was recorded.

As of June 30, 2017, the total unrecognized compensation cost related to outstanding stock options, time-based restricted stock units and performance-based restricted stock units expected to vest was $5.4 million, which the Company expects to recognize over a weighted-average period of 2.85 years.

(12) Fair Value of Financial Instruments

U.S. GAAP establishes a framework for measuring fair value under generally accepted accounting principles and enhances disclosures about fair value measurements. Fair value is defined as the amount that would be received for an asset or paid to transfer a liability (i.e., 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 maximize the use of observable inputs and minimize the use of unobservable inputs. The standard describes the following 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:

Level 1: Quoted prices in active markets for identical assets and liabilities.

Level 2: Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3: Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The fair value of cash and cash equivalents are classified as Level 1 at June 30, 2017 and December 31, 2016.

The fair values of accounts receivable and accounts payable approximate their respective carrying amounts. The Company's long-term debt is carried at amortized face value, which approximates fair value based on current market pricing of similar debt instruments and is categorized as a Level 2 measurement.

During the three and six months ended June 30, 2017, the Company did not have transfers of financial assets between Level 1 and 2.

(13) Income Taxes

During the three and six months ended June 30, 2017, Juniper recorded no income tax expense due to expected losses forecasted for the year. During the three months ended June 30, 2016, Juniper recorded income tax expense of $48,000, representing an effective tax rate of (2.2)%. During the six months ended June 30, 2016, Juniper recorded income tax expense of $52,000, representing an effective tax rate of (1.3)%. The income tax provision for the three and six months ended June 30, 2016, is primarily attributable to alternative minimum taxes.

Juniper files income tax returns in the U.S. federal jurisdiction, and in various state and foreign jurisdictions. Juniper is no longer subject to U.S. federal income tax examinations by tax authorities for years prior to 2012. Additionally, with few exceptions, Juniper is no longer subject to U.S. state tax examinations for years prior to 2012.

(14) Recent Accounting Pronouncements

In March 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2016-09, *Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting* ("ASU 2016-09"). The standard is intended to simplify several areas of accounting for share-based compensation arrangements, including the income tax impact, classification of awards as either equity or liabilities and classification on the statement of cash flows. ASU 2016-09 is effective for fiscal years, and interim periods within those years, beginning after December 15, 2016. The Company adopted the standard as of January 1, 2017. The adoption did not have a material impact on the Company's financial position, results of operations or cash flows.

In November 2015, the FASB issued ASU No. 2015-17, *Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes* ("ASU 2015-17"). The standard requires that deferred tax assets and liabilities be classified as noncurrent on the balance sheet rather than being separated into current and noncurrent. ASU 2015-17 is effective for fiscal years, and interim periods within those years, beginning after December 15, 2016. The standard may be applied either retrospectively or on a prospective basis to all deferred tax assets and liabilities. The Company adopted the standard as of January 1, 2017. The adoption did not have a material impact on the Company's financial position.

In July 2015, the FASB issued ASU No. 2015-11, *Simplifying the Measurement of Inventory*. This ASU simplifies the measurement of inventory by requiring certain inventory to be measured at the lower of cost or net realizable value. The amendments in this ASU are effective for fiscal years beginning after December 15, 2016 and for interim periods therein. The Company adopted the standard as of January 1, 2017. The adoption did not have a material impact on the Company's financial position, results of operations or cash flows.

In January 2016, the FASB issued ASU No. 2016-01, *Financial Instruments – Recognition and Measurement of Financial Assets and Financial Liabilities*, which provides new guidance for the recognition, measurement, presentation, and disclosure of financial assets and liabilities. The standard becomes effective for Juniper beginning in the first quarter of 2018 and early adoption is permitted. The Company is currently evaluating the effect, if any, that the standard will have on its consolidated financial statements and related disclosures.

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers* ("ASU 2014-09"), which provides guidance for revenue recognition. ASU 2014-09 affects any entity that either enters into contracts with customers to transfer goods or services or enters into contracts for the transfer of nonfinancial assets and supersedes the revenue recognition requirements in Topic 605, *Revenue Recognition*, and most industry-specific guidance. This ASU also supersedes some cost guidance included in Subtopic 605-35, *Revenue Recognition-Construction-Type and Production-Type Contracts*. The standard's core principle is that a company will recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which a company expects to be entitled in exchange for those goods or services. In doing so, companies will need to use more judgment and make more estimates than under today's guidance. Currently, the Company is in the process of reviewing our historical contracts and evaluating the impact of ASU 2014-09 on its accounting policies, processes and system requirements, and has assigned internal resources and engaged a third-party provider to assist in its evaluation. While the Company continues to assess the impact under the new standard, there is the potential for changes to the pattern of revenue recognition for its arrangements resulting from, for example,

the identification of performance obligation, inclusion of variable consideration in the transaction price, allocation of the transaction price based on relative standalone selling prices, timing of recognition, accounting for contract acquisition costs, among other areas, as well as the related financial statement disclosures. The guidance is effective for the Company beginning January 1, 2018 and, at that time the Company plans to adopt the standard using the modified retrospective approach.

In February 2016, the FASB issued ASU No. 2016-02, *Leases*. The new standard establishes a right-of-use (ROU) model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. The new standard is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. A modified retrospective transition approach is required for lessees for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements, with certain practical expedients available. The Company is currently evaluating the method and impact that the adoption will have on its consolidated financial statements and related disclosures.

In January 2017, the FASB issued ASU No. 2017-04, *Simplifying the Test for Goodwill Impairment*. The standard simplifies the accounting for goodwill impairment by removing Step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. The ASU is effective for annual or interim goodwill impairment tests in fiscal years beginning after December 15, 2019, and should be applied on a prospective basis. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The adoption of this standard is not expected to have a material impact on the consolidated financial statements and related disclosures.

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

Forward-Looking Information

This Quarterly Report on Form 10-Q ("Quarterly Report") contains information that may constitute forward-looking statements. Generally, forward-looking statements can be identified by words such as "may," "will," "plan," "believe," "expect," "intend," "anticipate," "potential," "should," "estimate," "predict," "project," "would," and similar expressions, which are generally not historical in nature. However, the absence of these words or similar expressions does not mean that a statement is not forward-looking. All statements that address operating performance, events or developments that we expect or anticipate will occur in the future—including statements relating to our future operating or financial performance or events, our strategy, goals, plans and projections regarding our financial position, our liquidity and capital resources, and our product development—are forward-looking statements. Management believes that these forward-looking statements are reasonable as and when made. However, caution should be taken not to place undue reliance on any such forward-looking statements because such statements speak only as of the date when made. Our Company undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. In addition, forward-looking statements are subject to certain known and unknown risks, uncertainties and factors that may cause actual results to differ materially from our Company's historical experience and our present expectations or projections. These risks and uncertainties include, but are not limited to, those described in this Quarterly Report on Form 10-Q, our Quarterly Report on Form 10-Q for the quarter ended March 31, 2017 and our Annual Report on Form 10-K for the year ended December 31, 2016, and those described from time to time in our future reports filed with the Securities and Exchange Commission (the "SEC").

You should read this Quarterly Report and the documents that we have filed as exhibits to this Quarterly Report completely and with the understanding that our actual future results may be materially different from what we expect. While we may elect to update forward-looking statements at some point in the future, we do not undertake any obligation to update any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future events or otherwise.

Company Overview

We are a women's health company focused on developing therapeutics that address unmet medical needs in women's health. Our marketed product and product development programs utilize our proprietary drug delivery technologies, which we believe are suited to applications in women's health. These technologies consist of our bioadhesive delivery systems ("BDS"), a polymer designed to adhere to epithelial surfaces or mucosa and achieve sustained and controlled delivery of active drug product and our novel intra-vaginal ring ("IVR") technology, a multi-segment IVR.

We are advancing three product development programs utilizing our IVR technology, which target overactive bladder, hormone replacement therapy in women, and prevention of preterm birth in women with short cervical length.

Our objective is to be a leader in the discovery, development, and commercialization of therapeutics designed to treat unmet medical needs in women's health. Key elements of our strategy include:

- Advancing our product candidates from clinical development through regulatory approvals utilizing our IVR technology to target overactive bladder, hormone replacement therapy, and preterm birth;
- Supplying CRINONE to our commercial partner, Merck KGaA, for sale in over 90 countries around the world;
- Growing revenue from our formulation, analytical and product development capabilities at our pharmaceutical service business, Juniper Pharma Services ("JPS"), and deploying those same capabilities for the advancement of our in-house product candidates;
- Exploring potential business development collaborations, including co-development opportunities that leverage our IVR technology and/or the pharmaceutical development capabilities of JPS; and
- Expanding our product pipeline through potential in-license or acquisition of externally-developed women's health therapeutics.

We are applying the revenue generated from our CRINONE franchise and JPS to partially fund the commercialization of new therapeutics using our proprietary drug delivery technologies. We believe this strategy, in concert with our product and product development programs, positions us well for effective and capital-efficient growth.

Product Development:

We are developing a pipeline of proprietary products to treat unmet medical needs in women's health. The following table includes the programs that we currently believe are significant to our business:

Product Candidate	Indication/Field	Status
JNP-0101 - Oxybutynin IVR	Overactive bladder in women	Preclinical
JNP-0201 - Progesterone + Estradiol IVR	Hormone replacement therapy in post menopausal population	Preclinical
JNP-0301 - Progesterone IVR	Prevention of preterm birth in women with short cervical length	Preclinical

The expenditures that will be necessary to execute our business plan are subject to numerous uncertainties. Completion of clinical trials may take several years or more, and the length of time generally varies substantially according to the type, complexity, novelty and intended use of a product candidate. It is not unusual for the clinical development of these types of product candidates to each take three years or more, and for total development costs to exceed $25 million for each product candidate. We estimate that clinical trials of the type we generally conduct are typically completed over the following timelines:

Clinical Phase	Estimated Completion Period
Phase 1	1 - 2 Years
Phase 2	1 - 3 Years
Phase 3	1 - 3 Years

The duration and the cost of clinical trials may vary significantly over the life of a project as a result of differences arising during the clinical trial protocol, including, among others, the following:

- the number of patients that ultimately participate in the trial;
- the duration of patient follow-up that seems appropriate in view of results;
- the number of clinical sites included in the trials;
- the length of time required to enroll suitable patient subjects; and
- the efficacy and safety profile of the product candidate.

We generally will test potential product candidates in preclinical studies for safety, toxicology and immunogenicity in addition to utilizing already published data for the underlying active pharmaceutical ingredient. We may then conduct multiple clinical trials for each product candidate. As we obtain results from trials, we may elect to discontinue or delay clinical trials for certain product candidates in order to focus our resources on more promising product candidates.

An element of our business strategy is to pursue the research and development of a broad portfolio of product candidates. This is intended to allow us to diversify the risks associated with our research and development expenditures. To the extent we are unable to maintain a broad range of product candidates, our dependence on the success of one or a few product candidates increases.

Regulatory approval is required before we can market our product candidates as therapeutic products. In order to proceed to subsequent clinical trial stages and to ultimately achieve regulatory approval, the regulatory agency must conclude that our clinical data is safe and effective. Results from preclinical testing and early clinical trials (through Phase 2) may often not be predictive of results obtained in later clinical trials. In various pharmaceutical companies like ours, a number of new drugs have shown promising results in early clinical trials, but subsequently failed to establish sufficient safety and efficacy data to obtain necessary regulatory approvals.

Our business strategy includes the option of entering into collaborative arrangements with third parties to complete the development and commercialization of our product candidates. In the event that third parties take over the clinical trial process for one of our product candidates, the estimated completion date would largely be under control of that third party rather than us. We cannot forecast with any degree of certainty which proprietary product candidates, if any, will be subject to future collaborative arrangements, in whole or in part, and how such arrangements would affect our development plan or capital requirements.

As a result of the uncertainties discussed above, among others, it is difficult to accurately estimate the duration and completion costs of our research and development projects or when, if ever, and to what extent we will receive cash inflows from the commercialization and sale of a product. Our inability to complete our research and development projects in a timely manner or our failure to enter into collaborative agreements, when appropriate, could significantly increase our capital requirements and could adversely impact our liquidity. These uncertainties could force us to seek additional, external sources of financing from time to time in order to continue with our business strategy. Our inability to raise additional capital, or to do so on terms reasonably acceptable to us, would jeopardize the future success of our business.

Preclinical Programs

JNP-0101 - Oxybutynin IVR for the treatment of OAB

We are developing an IVR product candidate designed to deliver oxybutynin for the treatment of overactive bladder ("OAB") in women. Oxybutynin is currently approved for the treatment of OAB, however, oral oxybutynin therapy is frequently discontinued by patients due to undesirable side effects including dry mouth, blurred vision, and constipation. We expect that the delivery of oxybutynin using our IVR technology will provide an improved side effect profile as the drug will bypass first pass, hepatic metabolism issues. In the case of oxybutynin the drug is metabolized in the liver to an active metabolite resulting in increased central nervous system ("CNS") side effects. In addition, we believe that delivery using our IVR technology will improve patient compliance and convenience versus other routes of administration, including oral therapies, patches, and gels. Based on preclinical data from a recently completed pilot sheep study, we are refining the cGMP formulation to potentially address the unique properties of this molecule and plan to conduct preclinical activities upon completion. Positive results from our preclinical activities could support an Investigational New Drug ("IND") filing in the first half of 2018.

JNP-0201 - Progesterone and Estradiol IVR for HRT

JNP-0201 is our segmented IVR product candidate, containing both natural progesterone and natural estradiol to be used for hormone replacement therapy ("HRT") in menopausal women. JNP-0201 has been designed to deliver natural hormones locally to vaginal tissue. This is another example where avoiding first pass, hepatic metabolism of estradiol may result in an improved side-effect profile. We also believe our delivery approach will provide an improvement in the beneficial effects of estradiol when compared to the currently approved combination HRT therapies; these include orally administered formulations utilizing synthetic progestogens, which have been associated in published clinical trials with higher risk of side effects including cardiovascular events. In July 2017, the North American Menopause Society reaffirmed their opinion of hormone therapy as an effective treatment. We believe that delivery using our IVR technology will improve patient compliance and convenience versus other routes of administration, including oral therapies and patches. We are focused on preclinical activities in 2017 and plan to file an IND for JNP-0201 in the first half of 2018.

JNP-0301 - Progesterone IVR for the prevention of PTB

JNP-0301 is a natural progesterone IVR product candidate for the prevention of preterm birth ("PTB") in women with a short cervical length. Short cervical length at mid-pregnancy is a critical predictor of preterm birth in women. Medical guidelines issued by the American College of Obstetricians and Gynecologists and the Society of Maternal Fetal Medicine, among others, support use of vaginal progesterone in women with a short cervical length at mid-pregnancy to reduce the risk of PTB. There is no Food and Drug Administration ("FDA") approved therapy to prevent PTB in women at risk due to short cervix. We believe JNP-0301 can enable the consistent local delivery of progesterone while facilitating patient compliance. The development of JNP-0301 benefits from the concurrent work being done on JNP-0201. We are focused on preclinical activities in 2017 and plan to file an IND for JNP-0301 in the first half of 2018.

CRINONE:

CRINONE is a progesterone gel designed to be used for progesterone supplementation or replacement as part of assisted reproductive technology for infertile women with progesterone deficiency. CRINONE is approved for marketing in the United States, Europe, China, Japan and certain other markets, and the sole source of our product revenue currently. We have licensed CRINONE to our commercial partner, Merck KGaA, for the markets outside the United States and we receive product revenues from the manufacture and sale of CRINONE internationally. We sold the U.S. intellectual property rights to CRINONE to Allergan in 2010, and received royalty revenues from Allergan based on its U.S. sales through October 2016. In November 2016, we entered into an agreement with Allergan to monetize future royalty payments due to us. Under the agreement, we received a one-time non-refundable payment of $11.0 million in exchange for which Allergan is no longer required to make future royalty payments to us.

CRINONE continues to be introduced in new countries by Merck KGaA. Under the terms of our current license and supply agreement with Merck KGaA, we manufacture and sell CRINONE to Merck KGaA on a country-by-country basis at the greater of (i) direct manufacturing cost plus 20% or (ii) a percentage of Merck KGaA's net selling price. Additionally, we are jointly cooperating with Merck KGaA to evaluate and implement manufacturing cost reductions, with both parties sharing any benefits realized from these initiatives. The license and supply agreement with Merck KGaA was renewed in April 2013, extending the expiration date to May 2020. If, at the end of the supply term, the parties cannot agree upon mutually acceptable terms for renewal of the supply arrangement, Merck KGaA will have the option of converting the agreement into a license agreement and will be free to manufacture, or have manufactured, CRINONE pursuant to the terms set forth in the current license and supply agreement.

Product revenues include sales of CRINONE to Merck KGaA and prior to November 2016, also included a royalty stream from Allergan based on U.S. sales of CRINONE. This royalty stream ceased in connection with our November 2016 agreement with Allergan, under which we received a one-time payment of $11.0 million representing all future royalty amounts payable to us.

Pharmaceutical Service Business:

JPS, our pharmaceutical service business, offers a range of sophisticated technical services to the pharmaceutical and biotechnology industry. Our customers range from start-up biotechnology firms to global pharmaceutical companies.

Within our services offering, we provide expertise to our customers on the characterization, development, and manufacturing of pharmaceutical compounds for clinical trials. We believe we have particular expertise in problem solving for challenging compounds that are considered "difficult to progress." Our service model allows us to take our customers' product candidates from early development through clinical trials manufacturing. We also support our customers with advanced analytical and consulting services for intellectual property issues. We deploy these same capabilities for our in-house proprietary product development activities.

Through JPS, we also manage the global supply chain and contract manufacturing of CRINONE, for our partner Merck KGaA.

Business Development Collaborations:

Our IVR technology can be applied to life-cycle management strategies for existing commercial products that may benefit from intravaginal delivery of drugs. In particular, existing commercial products that are injectable, experience poor compliance, or have systemic toxicity limitations may benefit from our delivery technologies.

We continue to explore business development collaborations that will leverage the IVR technology and in-house expertise at JPS. If successful, we expect to be an active participant in these collaborations, including participating as a co-development partner, depending on the product and market opportunity.

Sources of Revenue

We generate revenues primarily from the sale of our product and services and, prior to November 2016, from a royalty stream that ceased in connection with the November 2016 agreement with Allergan, under which a one-time payment of $11.0 million representing all future royalty amounts payable to us. During the three months ended June 30, 2017, we derived approximately 69% of our revenues from the sale of our products and 31% from the sale of our services. During the three months ended June 30, 2016, we derived approximately 63% of our revenues from the sale of our products, 29% from the sale of our services, and 8% from our royalty stream. During the six months ended June 30, 2017, we derived approximately 69% of our revenues from the sale of our products and 31% from the sale of our services. During the six months ended June 30, 2016, we derived approximately 62% of our revenues from the sale of our products, 30% from the sale of our services, and 8% from our royalty stream.

We expect that future recurring revenues will be derived from product sales to Merck KGaA, and from offering pharmaceutical development, clinical trial manufacturing, and analytical and consulting services. Quarterly sales results can vary widely and affect comparisons with prior periods because (i) products shipped to Merck KGaA occur only in full batches, and a portion of revenue recognized each period relates to Merck KGaA's in-market sales and (ii) service revenues are driven by contracting and maintaining an active backlog of customer projects, which may vary widely from quarter to quarter.

We recognize revenue from the sale of our product to Merck KGaA when all of the following criteria are met: persuasive evidence of an arrangement exists; delivery has occurred; the price is fixed or determinable; and collectability is reasonably assured. Revenues from services are recognized as the work is performed, and revenues from royalties until November 2016, were recognized as sales were made by Allergan.

Results of Operations – Three Months Ended June 30, 2017 Compared to Three Months Ended June 30, 2016

The following tables contain selected consolidated statements of operations information, which serves as the basis of the discussion surrounding the results of our operations for the three months ended June 30, 2017 and 2016:

	Three Months Ended June 30,					
	2017		2016			
(in thousands, except for percentages)	Amount	As a % of Total Revenues	Amount	As a % of Total Revenues	$ Change	% Change
Product revenues	$ 9,569	69%	$ 7,334	63%	$ 2,235	30%
Service revenues	4,387	31	3,374	29	1,013	30
Royalties	—	-	902	8	(902)	(100)
Total revenues	13,956	100	11,610	100	2,346	20
Cost of product revenues	5,303	38	4,182	36	1,121	27
Cost of service revenues	2,347	17	2,285	20	62	3
Total cost of revenues	7,650	55	6,467	56	1,183	18
Gross profit	6,306	45	5,143	44	1,163	23
Operating expenses:						
Sales and marketing	410	3	379	3	31	8
Research and development	1,648	12	3,797	33	(2,149)	(57)
General and administrative	4,604	33	3,244	28	1,360	42
Total operating expenses	6,662	48	7,420	64	(758)	(10)
Loss from operations	(356)	(3)	(2,277)	(20)	1,921	(84)
Interest expense, net	(30)	—	(24)	—	(6)	25
Other income, net	10	—	81	1	(71)	(88)
Loss before income taxes	(376)	(3)	(2,220)	(19)	1,844	(83)
Provision for income taxes	—	—	48	—	(48)	(100)
Net loss	$ (376)	(3)%	$ (2,268)	(20)%	$ 1,892	(83)%

Revenues

	Three Months Ended June 30,		$	%
(in thousands, except for percentages)	2017	2016	Change	Change
Product revenues	$ 9,569	$ 7,334	$ 2,235	30%
Service revenues	4,387	3,374	1,013	30
Royalties	—	902	(902)	(100)
Total revenues	$ 13,956	$ 11,610	$ 2,346	20%

Revenues in the three months ended June 30, 2017 increased by $2.3 million, or 20%, compared to the three months ended June 30, 2016. The increase was primarily attributable to the following factors by segment:

Product

- Revenues from the sale of CRINONE, increased by approximately $2.2 million, or 30%, from the 2016 period primarily due to both in-market and new market growth by Merck KGaA. Revenues included $7.1 million related to product shipped to Merck KGaA and $2.5 million related to product sold through by Merck KGaA to its customers in the three months ended June 30, 2017. Revenues included $5.6 million related to product shipped to Merck KGaA and $1.7 million related to product sold through by Merck KGaA to its customers in the three months ended June 30, 2016.
- Royalty revenues decreased $0.9 million, or 100% in the three months ended June 30, 2017 as compared to the three months ended June 30, 2016. In November 2016, we entered into an agreement with Allergan under which we received a one-time payment of $11.0 million representing all future royalties due to us. No future royalties will be paid to us as a result of this agreement.

Service

- Service revenues increased approximately $1.0 million, or 30%, from the 2016 period primarily due to increases in customer volume across our service offerings and a sales focus on larger customer contracts.

Cost of revenues

(in thousands, except for percentages)	Three Months Ended June 30, 2017	2016	$ Change	% Change
Cost of product revenues	$ 5,303	$ 4,182	$ 1,121	27%
Cost of service revenues	2,347	2,285	62	3
Total cost of revenues	$ 7,650	$ 6,467	$ 1,183	18%
Total cost of revenues (as a percentage of total revenues)	55%	56%		
Product gross margin	45%	49%		
Service gross margin	47%	32%		

Total cost of revenues was $7.7 million and $6.5 million for the three month periods ended June 30, 2017 and 2016, respectively. The increase in total cost of revenues in 2017 was largely driven by the increased volume of CRINONE product sold to Merck KGaA. There was a 14% increase in CRINONE units shipped in the 2017 period as compared to the 2016 period.

Cost of service revenues are largely fixed and consist mainly of facility costs, external consultant fees, depreciation and materials used in connection with generating our service revenues. Personnel costs are scaled to support customer volume.

Product gross margin decreased in 2017 as compared to 2016 largely due to the reduction of royalty revenue year over year offset by the increase in product sold through by Merck KGaA to its customers in more profitable markets where we benefit from a higher selling price from Merck KGaA. Service gross margin increased in 2017 as compared to 2016 due to mix of revenue type within the service segment and increased capacity utilization.

Sales and marketing expenses

(in thousands, except for percentages)	Three Months Ended June 30, 2017	2016	$ Change	% Change
Sales and marketing	$ 410	$ 379	$ 31	8%
Sales and marketing (as a percentage of total revenues)	3%	3%		

Sales and marketing expenses incurred during the three months ended June 30, 2017 and 2016 were attributable to our service business and consisted of personnel costs for our sales force as well as marketing costs for certain tradeshows and conference fees. The increase in sales and marketing expense during the 2017 period as compared to the corresponding 2016 period primarily relates to our continued growth of business in the U.S. market.

Research and development

(in thousands, except for percentages)	Three Months Ended June 30, 2017	2016	$ Change	% Change
Research and development	$ 1,648	$ 3,797	$ (2,149)	(57)%
Research and development (as a percentage of total revenues)	12%	33%		

Research and development expenses primarily include clinical trial costs, personnel-related expenses and professional service consultants. The decrease in research and development costs incurred during the three months ended June 30, 2017 were largely associated with the reduction of costs related to the Phase 2b clinical trial of COL-1077 which was completed in August 2016. In the three months ended June 30, 2016, we incurred approximately $1.4 million related to this trial. The trial did not achieve its primary and secondary endpoints, and further development was discontinued. As we continue to advance JNP-0101, JNP-0201 and JNP-0301, we expect corresponding increases in research and development costs.

General and administrative expenses

(in thousands, except for percentages)	Three Months Ended June 30, 2017	2016	$ Change	% Change
General and administrative	$ 4,604	$ 3,244	$ 1,360	42%
General and administrative (as a percentage of total revenues)	33%	28%		

General and administrative expenses increased by $1.4 million to $4.6 million for the three months ended June 30, 2017, compared with $3.2 million for the three months ended June 30, 2016. This increase was attributable principally to infrastructure related costs including legal, accounting and other professional fees associated with a growing public company, including matters related to the restatement of our financial results for the fiscal years ended December 31, 2013 through December 2015 and the remediation of material weaknesses in our internal control over financial reporting resulting from the restatement, costs associated with our evaluation of potential strategic opportunities and other business development matters and costs associated with shareholder and investor relations, including matters related to our 2017 annual meeting.

Non-operating income and expense

(in thousands, except for percentages)	Three Months Ended June 30, 2017	2016	$ Change	% Change
Interest expense, net	$ (30)	$ (24)	$ (6)	25%
Other income, net	$ 10	$ 81	$ (71)	(88)%

Interest expense, net, primarily relates to interest payments, denominated in British pounds, associated with loan facilities assumed in the acquisition of JPS and equipment loans in 2017.

Other income, primarily relates to the income associated with the Regional Growth Fund offset by net foreign currency transaction losses related to the weakening of the Euro and British pound against the U.S dollar.

Provision for income taxes

(in thousands, except for percentages)	Three Months Ended June 30, 2017	2016	$ Change	% Change
Provision for income taxes	$ —	$ 48	$ (48)	(100)%
Provision for income taxes (as a percentage of loss before income taxes)	—	(2.2)%		

The 2016 tax expense represents alternative minimum taxes. No tax expense was recorded for the three months ended June 30, 2017 as we have a full valuation allowance offsetting our net domestic deferred tax asset.

Results of Operations – Six Months Ended June 30, 2017 Compared to Six Months Ended June 30, 2016

The following tables contain selected consolidated statements of operations information, which serves as the basis of the discussion surrounding the results of our operations for the six months ended June 30, 2017 and 2016:

	Six Months Ended June 30,					
	2017		2016			
(in thousands, except for percentages)	Amount	As a % of Total Revenues	Amount	As a % of Total Revenues	$ Change	% Change
Product revenues	$ 17,295	69%	$ 13,659	62%	$ 3,636	27%
Service revenues	7,908	31	6,627	30	1,281	19
Royalties	—	—	1,801	8	(1,801)	(100)
Total revenues	25,203	100	22,087	100	3,116	14
Cost of product revenues	9,617	38	8,209	37	1,408	17
Cost of service revenues	4,590	18	4,608	21	(18)	(0)
Total cost of revenues	14,207	56	12,817	58	1,390	11
Gross profit	10,996	44	9,270	42	1,726	19
Operating expenses:						
Sales and marketing	788	3	651	3	137	21
Research and development	2,994	12	5,930	27	(2,936)	(50)
General and administrative	9,025	36	6,704	30	2,321	35
Total operating expenses	12,807	51	13,285	60	(478)	(4)
Loss from operations	(1,811)	(7)	(4,015)	(18)	2,204	(55)
Interest expense, net	(58)	—	(50)	—	(8)	16
Other income, net	52	—	206	—	(154)	(75)
Loss before income taxes	(1,817)	(7)	(3,859)	(17)	2,042	(53)
Provision for income taxes	—	—	52	—	(52)	(100)
Net loss	$ (1,817)	(7)%	$ (3,911)	(18)%	$ 2,094	(54)%

Revenues

	Six Months Ended June 30,		$	%
(in thousands, except for percentages)	2017	2016	Change	Change
Product revenues	$ 17,295	$ 13,659	$ 3,636	27%
Service revenues	7,908	6,627	1,281	19
Royalties	—	1,801	(1,801)	(100)
Total revenues	$ 25,203	$ 22,087	$ 3,116	14%

Revenues in the six months ended June 30, 2017 increased by $3.1 million, or 14%, compared to the six months ended June 30, 2016. The increase was primarily attributable to the following factors by segment:

Product

- Revenues from the sale of CRINONE, increased by approximately $3.6 million, or 27%, from the 2016 period primarily due to both in-market and new market growth by Merck KGaA. Revenues included $13.0 million related to product shipped to Merck KGaA and $4.3 million related to product sold through by Merck KGaA to its customers in the six months ended June 30, 2017. Revenues included $10.3 million related to product shipped to Merck KGaA and $3.4 million related to product sold through by Merck KGaA to its customers in the six months ended June 30, 2016.
- Royalty revenues decreased $1.8 million, or 100% in the six months ended June 30, 2017 as compared to the six months ended June 30, 2016. In November 2016, we entered into an agreement with Allergan under which we received a one-time payment of $11.0 million representing all future royalties due to us. No future royalties will be paid to us as a result of this agreement.

Service

- Service revenues increased approximately $1.3 million, or 19%, from the 2016 period primarily due to increases in customer volume across our service offerings and a sales focus on larger customer contracts.

Cost of revenues

(in thousands, except for percentages)	Six Months Ended June 30, 2017	2016	$ Change	% Change
Cost of product revenues	$ 9,617	$ 8,209	$ 1,408	17%
Cost of service revenues	4,590	4,608	(18)	(0)
Total cost of revenues	$ 14,207	$ 12,817	$ 1,390	11%
Total cost of revenues (as a percentage of total revenues)	56%	58%		
Product gross margin	44%	47%		
Service gross margin	42%	30%		

Total cost of revenues was $14.2 million and $12.8 million for the six month periods ended June 30, 2017 and 2016, respectively. The increase in total cost of revenues in 2017 was largely driven by the increased volume of CRINONE product sold to Merck KGaA offset by quality improvements. There was a 14% increase in CRINONE units shipped in the 2017 period as compared to the 2016 period.

Cost of service revenues are largely fixed and consist mainly of facility costs, external consultant fees, depreciation and materials used in connection with generating our service revenues. Personnel costs are scaled to support customer volume.

Product gross margin decreased in 2017 as compared to 2016 largely due to the reduction of royalty revenue year over year offset by the increase in product sold through by Merck KGaA to its customers in more profitable markets where we benefit from a higher selling price from Merck KGaA. Service gross margin increased in 2017 as compared to 2016 due to mix of revenue type within the service segment and increased capacity utilization.

Sales and marketing expenses

(in thousands, except for percentages)	Six Months Ended June 30, 2017	2016	$ Change	% Change
Sales and marketing	$ 788	$ 651	$ 137	21%
Sales and marketing (as a percentage of total revenues)	3%	3%		

Sales and marketing expenses incurred during the six months ended June 30, 2017 and 2016 were attributable to our service business and consisted of personnel costs for our sales force as well as marketing costs for certain tradeshows and conference fees. The increase in sales and marketing expense during the 2017 period as compared to the corresponding 2016 period primarily relates to our continued growth of business in the U.S. market.

Research and development

(in thousands, except for percentages)	Six Months Ended June 30, 2017	2016	$ Change	% Change
Research and development	$ 2,994	$ 5,930	$ (2,936)	(50)%
Research and development (as a percentage of total revenues)	12%	27%		

Research and development expenses primarily include clinical trial costs, personnel-related expenses and professional service consultants. The decrease in research and development costs incurred during the six months ended June 30, 2017 were largely associated with the reduction of costs related to the Phase 2b clinical trial of COL-1077 which was completed in August 2016. In the six months ended June 30, 2016, we incurred approximately $2.5 million related to this trial. The trial did not achieve its primary and secondary endpoints, and further development was discontinued. As we continue to advance JNP-0101, JNP02-01 and JNP03-01, we expect corresponding increases in research and development costs.

General and administrative expenses

(in thousands, except for percentages)	Six Months Ended June 30, 2017	2016	$ Change	% Change
General and administrative	$ 9,025	$ 6,704	$ 2,321	35%
General and administrative (as a percentage of total revenues)	36%	30%		

General and administrative expenses increased by $2.3 million to $9.0 million for the six months ended June 30, 2017, compared with $6.7 million for the six months ended June 30, 2016. This increase was attributable principally to infrastructure related costs including legal, accounting and other professional fees associated with a growing public company, including matters related to the restatement of our financial results for the fiscal years ended December 31, 2013 through December 2015 and the remediation of material weaknesses in our internal control over financial reporting resulting from the restatement, costs associated with our evaluation of potential strategic opportunities and other business development matters and costs associated with shareholder and investor relations, including matters related to our 2017 annual meeting.

Non-operating income and expense

(in thousands, except for percentages)	Six Months Ended June 30, 2017	2016	$ Change	% Change
Interest expense, net	$ (58)	$ (50)	$ (8)	16%
Other income, net	$ 52	$ 206	$ (154)	(75)%

Interest expense, net, primarily relates to interest payments, denominated in British pounds, associated with loan facilities assumed in the acquisition of JPS and equipment loans in 2017.

Other income, primarily relates to the income associated with the Regional Growth Fund offset by net foreign currency transaction losses related to the weakening of the Euro and British pound against the U.S dollar.

Provision for income taxes

(in thousands, except for percentages)	Three Months Ended June 30, 2017	2016	$ Change	% Change
Provision for income taxes	$ —	$ 52	$ (52)	(100)%
Provision for income taxes (as a percentage of loss before income taxes)	—	(1.3)%		

The 2016 tax expense represents alternative minimum taxes. No tax expense was recorded for the six months ended June 30, 2017 as we have a full valuation allowance offsetting our net domestic deferred tax asset.

Liquidity and Capital Resources

The Company requires cash to fund operating expenses and working capital needs, finance research and development efforts, make capital expenditures and fund acquisitions.

At June 30, 2017, cash and cash equivalents were $21.5 million. Cash and cash equivalents are highly liquid investments with original maturities of 90 days or less at date of purchase and consist of cash in operating accounts.

In September 2013, Juniper assumed debt of $3.9 million in connection with its acquisition of JPS. JPS had entered into a Business Loan Agreement ("Loan Agreement") covering three loan facilities (collectively referred to as the "original agreements") with Lloyds TSB Bank ("Lloyds") as administrative agent. During the three months ended June 30, 2017, JPS repaid on one of the existing loan facilities upon which JPS subsequently entered into a new loan facility with the same administrative agent for the same outstanding balance. The refinancing was accounted for as a modification with no resulting gain or loss. The remaining original agreements and the new agreement are collectively referred to as the loan facilities.

As of June 30, 2017, the Company owed $2.4 million on the loan facilities. The three loan facilities are each repayable by monthly installments. The loan facilities are due for repayment over periods ranging from 7-15 years. Two of the facilities bear interest at the Bank of England's base rate plus 1.95%, and 2.55%, respectively. The interest rates at June 30, 2017 for these facilities were 2.45% and 3.05%, respectively. The third facility is a fixed rate agreement bearing interest at 2.99% per annum. The weighted average interest rate for the three loan facilities for the three months ended June 30, 2017 was 2.76%. The Loan Agreement is secured by the mortgaged property and an unlimited lien on other assets of JPS. The original agreements under the Loan Agreement contains financial covenants that limit the amount of indebtedness JPS may incur, requires JPS to maintain certain levels of net worth, and restricts JPS's ability to materially alter the character of its business. The new loan facility contains the same financial covenants outlined above in addition to a covenant which requires that JPS maintain certain levels of earnings before interest, taxes, depreciation and amortization. As of June 30, 2017, we are in compliance with all of the covenants under the Loan Agreement.

In September 2013, we assumed a $2.5 million obligation under a grant arrangement with the Regional Growth Fund on behalf of the Secretary of State for Business, Innovation, and Skills in the United Kingdom. As a part of the arrangement, JPS is required to create and maintain certain full-time equivalent personnel levels through October 2017. As of June 30, 2017, we remained in compliance with the covenants of the arrangement.

The income from the Regional Growth Fund will be recognized on a decelerated basis through October 2017. As of June 30, 2017, the obligation is valued at $0.2 million and is recorded as deferred revenue on the consolidated balance sheets. The amount of other income on the obligation that will be recognized provided we remain in compliance with the covenants will be $0.2 million.

Juniper leases the buildings portion of our U.S. corporate office under an operating lease and assumed debt for the Nottingham, U.K. facility. Additionally, Juniper leases certain equipment under loan agreements with payments through March 2022. In October 2015, we entered into a lease agreement for our corporate office in Boston, Massachusetts. The initial term of the lease agreement is approximately 39 months, which includes a three-month free rent period. In January and March 2017, we entered into loans of $0.9 million and $0.6 million, respectively, for equipment in its Nottingham, U.K. facility. The interest rate for the two loans was 2.09% at June 30, 2017. The transactions were considered failed sales-leaseback arrangements as the amount of the loans are less than the carrying value of the equipment. The initial terms of the loans are 60 months.

Commitments under our lease arrangements are as follows as of June 30, 2017 (in thousands).

	Operating Leases	Debt Principal Payments	Total
Remainder of 2017	$ 219	$ 256	$ 475
2018	443	524	967
2019	74	547	621
2020	—	566	566
2021	—	584	584
Thereafter	—	1,437	1,437
Total minimum debt and lease payments	$ 736	$ 3,914	$ 4,650

Our future capital requirements depend on a number of factors, including the rate of market acceptance of our current and future products and services and the resources we devote to developing and supporting the same. Our capital expenditures for the six months ended June 30, 2017 and June 30, 2016 were $1.4 million and $1.2 million, respectively. Our capital expenditures primarily relate to investments in capital equipment made at our Nottingham, U.K. site, our contract manufacturer sites and for research and development. We expect our capital expenditures to increase for the remainder of the year ending December 31, 2017, as compared to the year ended December 31, 2016, primarily due to continued investments we plan to make related to research and development and additional investments in capital equipment at our Nottingham, U.K. site.

Research and development expenses include costs for product and clinical development, which were a combination of internal and third-party costs, and regulatory fees. For the remainder of 2017, we expect our research and development expenses will increase from current levels as we advance research and development, including efforts related to JNP-0101, JNP-0201 and JNP-0301.

We believe that our current cash and cash equivalents, as well as cash generated from operations, will be sufficient to meet our anticipated cash needs for working capital, including advancing our product candidates, and capital expenditures at least through August 2018. We may be dependent on our ability to raise additional capital to finance operations and fund research and development programs beyond August 2018. If we are not able to raise additional capital on terms acceptable to us, or at all, as and when needed, we may be required to curtail our research and development programs.

Cash Flows

Net cash provided by operating activities for the six months ended June 30, 2017 was $0.5 million, which resulted primarily from approximately $1.9 million in depreciation and amortization, stock-based compensation expense, and net changes in working capital items which increased cash by approximately $0.4 million offset by a $1.8 million net loss. Net cash used in investing activities was $1.4 million for the six months ended June 30, 2017, which resulted primarily from the purchase of property plant and equipment. Net cash provided by financing activities was approximately $1.3 million for the six months ended June 30, 2017, primarily relating to proceeds from the equipment loans and financing agreement offset by the principal payments on debt.

Net cash provided by operating activities for the six months ended June 30, 2016 was $0.5 million, which resulted primarily from approximately $1.4 million in depreciation and amortization and stock-based compensation expense and net changes in working capital items which increased cash by approximately $3.0 million offset by a $3.9 million net loss. Net cash used in investing activities was $1.2 million for the six months ended June 30, 2016, which resulted primarily from the purchase of property plant and equipment. Net cash used in financing activities was approximately $0.1 million for the six months ended June 30, 2016, primarily relating to the principal payments under the Loan Agreement.

Off-Balance Sheet Arrangements

As of June 30, 2017, we did not have any off-balance sheet arrangements as defined in Regulation S-K, Item 303(a)(4)(ii).

Contractual Obligations

On October 15, 2015, we entered into a lease agreement for our corporate office in Boston, Massachusetts. The initial term of the lease agreement is approximately 39 months, which includes a three-month free rent period and after which, monthly rental payments totaling $430,050 for the first twelve months, $437,100 for the next twelve months and $444,150 for the final twelve months.

In January and March 2017, we entered into loans for equipment in our Nottingham, U.K. facility. The initial terms of the leases are 60 months.

There have been no other material changes to our contractual obligations and commitments outside the ordinary course of business or described above from those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2016.

Critical Accounting Policies and Estimates

The discussion and analysis of our financial condition and results of operations set forth above are based on our financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses. On an ongoing basis, we evaluate our estimates and judgments, including those described in our Annual Report on Form 10-K for the year ended December 31, 2016. We base our estimates on historical experience and on various assumptions that we believe to be reasonable under the circumstances. These estimates and assumptions form the basis for making judgments about the carrying values of assets and liabilities, and the reported amounts of revenues and expenses, that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. There have been no material changes to our critical accounting policies as of December 31, 2016.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Market Rate Risk

We do not believe that we have material exposure to market rate risk. We may, however, seek additional financing to fund future obligations and no assurance can be given that the terms of future sources of financing will not expose us to material market rate risk.

There has been no material change to our market rate risk exposure since December 31, 2016.

Foreign Currency Exchange

A significant portion of our operations are conducted through operations in countries other than the United States. Revenues from our international operations that were recorded in U.S. dollars represented approximately 72% of our total international revenues for the six months ended June 30, 2017. The remaining 28% were sales in British pounds. Since we conduct our business in U.S. dollars, our main exposure, if any, results from changes in the exchange rate between the British pound and the U.S. dollar. Our exposure is reduced given assets and liabilities, revenues and expenses are designated in U.S. dollars, or U.S. dollar linked. We have not historically engaged in hedging activities relating to our non-U.S. dollar operations. We may be exposed to exchange rate fluctuations that occur from certain intercompany transactions with our subsidiaries, which we recognize as unrealized gains and losses in our statements of operations.

There has been no material change to our foreign currency exchange risk exposure since December 31, 2016.

Item 4. Controls and Procedures

An evaluation was performed under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of the end of June 30, 2017. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were not effective as of June 30, 2017 at the reasonable assurance level due to the fact that material weaknesses described under "Management's Annual Report on Internal Control over Financial Reporting" were previously identified in the 2015 Form 10-K/A filed on November 14, 2016 and continued to exist at June 30, 2017.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the evaluation required by paragraph (d) of Exchange Act Rules 13a-15 or 15d-15 that occurred during our last fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's Remediation Initiatives

Our management is committed to the planning and implementation of remediation to address all material weaknesses as well as other identified areas of risk. These remediation efforts, summarized below, which are implemented, in the process of being implemented or are planned for implementation, are intended to address the identified material weaknesses and to enhance our overall internal control over financial reporting.

With the oversight of senior management and our audit committee, we plan to take steps intended to address the underlying causes of the material weaknesses in the immediate future, primarily through the following:

- Process improvements: We have commenced the redesign of specific processes and controls associated with review of contractual agreements, including a quarterly identification and review of significant agreements with the senior management team to ensure that the relevant accounting implications are identified and considered.
- Additionally, we are in the process of redesigning our controls over research and development expenses, including the related balance sheet accounts.

We have not yet been able to remediate these material weaknesses. These actions are subject to ongoing review by our senior management, as well as oversight by the audit committee of our board of directors. Although we plan to complete this remediation process as quickly as possible, we cannot, at this time, estimate when such remediation may occur, and our initiatives may not prove successful in remediating the material weaknesses. Management may determine to enhance other existing controls and/or implement additional controls as the implementation progresses. It will take time to determine whether the additional controls we are

implementing will be sufficient to accomplish their intended purpose; accordingly, the material weaknesses may continue for a period of time. While the audit committee of our board of directors and senior management are closely monitoring this implementation, until the remediation efforts discussed in this section, including any additional remediation efforts that our senior management identifies as necessary, are complete, tested and determined effective, we will not be able to conclude that the material weaknesses have been remediated. In addition, we may need to incur incremental costs associated with this remediation, primarily due to the hiring and training of finance and accounting personnel, and the implementation and validation of improved accounting and financial reporting procedures.

We are committed to improving our internal control and processes and intend to continue to review and improve our financial reporting controls and procedures. As we continue to evaluate and work to improve our internal control over financial reporting, we may take additional measures to address control deficiencies or determine to modify, or in appropriate circumstances not to complete, certain of the remediation measures described above.

Part II—Other Information

Item 1. Legal Proceedings

Claims and lawsuits are filed against our Company from time to time. Although the results of pending claims are always uncertain, we believe that we have adequate reserves or adequate insurance coverage in respect of these claims, but no assurance can be given as to the sufficiency of such reserves or insurance coverage in the event of any unfavorable outcome resulting from these actions.

Item 1a. Risk Factors

An investment in shares of our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described in our Annual Report on Form 10-K for the year ended December 31, 2016 and in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, in addition to other information included in this Quarterly Report on Form 10-Q, including our financial statements and related notes hereto, before deciding to invest in our common stock. The occurrence of any of these risks could have a material adverse effect on our business, financial condition, results of operations and future growth prospects. In these circumstances, the market price of our common stock could decline, and you may lose all or part of your investment.

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

None.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

None.

Item 5. Other Information

None.

Item 6. Exhibits

(a) Exhibits

3.1.1***	Restated Certificate of Incorporation, as amended (filed as Exhibit 3.1 to Juniper Pharmaceuticals, Inc.'s Annual Report on Form 10-K filed on March 13, 2006).
3.1.2***	Certificate of Amendment of Restated Certificate of Incorporation, dated July 1, 2010 (filed as Exhibit 3.1 to Juniper Pharmaceuticals, Inc.'s Current Report on Form 8-K filed on July 6, 2010).
3.1.3***	Certificate of Amendment of Restated Certificate of Incorporation, dated August 7, 2013 (filed as Exhibit 3.1 to Juniper Pharmaceuticals, Inc.'s Current Report on Form 8-K filed on August 3, 2013).
3.1.4***	Certificate of Amendment of Restated Certificate of Incorporation, dated April 2, 2015 (filed as Exhibit 3.1 to Juniper Pharmaceuticals, Inc.'s Current Report on Form 8-K filed on April 3, 2015).
3.2.1***	Amended and Restated By-Laws of Juniper Pharmaceuticals, Inc. (filed as Exhibit 3.2 to Juniper Pharmaceuticals, Inc.'s Current Report on Form 8-K filed on January 12, 2015).
3.2.2***	Amendment No. 1 to the Amended and Restated By-Laws of Juniper Pharmaceuticals, Inc. (filed as Exhibit 3.2 to Juniper Pharmaceuticals, Inc.'s Current Report on Form 8-K filed on April 3, 2015).
31.1*	Rule 13a-14(a)/15d-14(a) Certification of Chief Executive Officer of the Company.
31.2*	Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer of the Company.
32.1**	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2**	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101*	The following materials from the Juniper Pharmaceuticals, Inc. Quarterly Report on Form 10-Q for the quarter ended June 30, 2017, formatted in XBRL (eXtensible Business Reporting Language): (i) Condensed Consolidated Statements of Operations for the three and six months ended June 30, 2017 and 2016, (ii) Condensed Consolidated Balance Sheets at June 30, 2017 and December 31, 2016, (iii) Condensed Consolidated Statements of Comprehensive Income (Loss) for the three and six months ended June 30, 2017 and 2016, (iv) Condensed Consolidated Statements of Cash Flows for the six months ended June 30, 2017 and 2016, and (v) Notes to Condensed Consolidated Financial Statements.

* Filed herewith.
** Furnished herewith.
*** Incorporated by reference.

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.

Juniper Pharmaceuticals, Inc.

/s/ Jeffrey E. Young
Jeffrey E. Young
Senior Vice President, Finance, Chief Financial Officer and Treasurer
(Principal Financial and Accounting Officer)
DATE: August 3, 2017

Exhibit 31.1

Certification Pursuant to Rule 13a-14(a)/15d-14(a)
of the Securities Exchange Act of 1934

I, Alicia Secor, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Juniper Pharmaceuticals, 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.

/s/ Alicia Secor
Alicia Secor
President and Chief Executive Officer
(Principal Executive Officer)
DATE: August 3, 2017

Exhibit 31.2

Certification Pursuant to Rule 13a-14(a)/15d-14(a)
of the Securities Exchange Act of 1934

I, Jeffrey E. Young, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Juniper Pharmaceuticals, 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.

/s/ Jeffrey E. Young
Jeffrey E. Young
Senior Vice President, Finance, Chief Financial Officer and Treasurer
(Principal Financial and Accounting Officer)
DATE: August 3, 2017

Exhibit 32.1

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 Juniper Pharmaceuticals, Inc. (the "Company") on Form 10-Q for the period ended June 30, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Alicia Secor, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(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 result of operations of the Company.

/s/ Alicia Secor
Alicia Secor
President and Chief Executive Officer
(Principal Executive Officer)
Date: August 3, 2017

Exhibit 32.2

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 Juniper Pharmaceuticals, Inc. (the "Company") on Form 10-Q for the period ended June 30, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jeffrey E. Young, Senior Vice President, Finance, Chief Financial Officer and Treasurer of the Company, certify, pursuant to 18 U.S.C. section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(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 result of operations of the Company.

/s/ Jeffrey E. Young
Jeffrey E. Young
Senior Vice President, Finance, Chief Financial Officer and Treasurer
(Principal Financial and Accounting Officer)
DATE: August 3, 2017