UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 10-Q

Quarterly report pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

For the Quarter Ended September 30, 2017

Commission File No. 000-21429

ArQule, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware	**04-3221586**
(State of Incorporation)	(I.R.S. Employer Identification Number)

One Wall Street, Burlington, Massachusetts 01803
(Address of Principal Executive Offices)

(781) 994-0300
(Registrant's Telephone Number, including Area Code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities 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 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 definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

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

Indicate If an emerging growth company, indicate by check 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 ☒

Number of shares outstanding of the registrant's Common Stock as of October 25, 2017:

Common Stock, par value $.01	87,110,202 shares outstanding

ARQULE, INC.

QUARTER ENDED SEPTEMBER 30, 2017

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ARQULE, INC.

CONDENSED BALANCE SHEETS (Unaudited)

	September 30, 2017	December 31, 2016
	(IN THOUSANDS, EXCEPT SHARE AND PER SHARE DATA)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 11,707	$ 15,267
Marketable securities-short term	15,896	15,859
Prepaid expenses and other current assets	304	822
Total current assets	27,907	31,948
Property and equipment, net	128	180
Other assets	205	252
Total assets	$ 28,240	$ 32,380
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued expenses	$ 7,665	$ 8,700
Notes payable- current portion	417	—
Total current liabilities	8,082	8,700
Long-term liabilities:		
Notes payable	14,100	—
Total liabilities	22,182	8,700
Commitment and contingencies		
Preferred stock, $0.01 par value; 1,000,000 shares authorized; no shares issued or outstanding	—	—
Common stock, $0.01 par value; 100,000,000 shares authorized; 73,171,551 and 71,146,209 shares issued and outstanding at September 30, 2017 and December 31, 2016, respectively	732	711
Additional paid-in capital	531,605	527,802
Accumulated other comprehensive income (loss)	(1)	2
Accumulated deficit	(526,278)	(504,835)
Total stockholders' equity	6,058	23,680
Total liabilities and stockholders' equity	$ 28,240	$ 32,380

The accompanying notes are an integral part of these interim unaudited financial statements.

ARQULE, INC.

CONDENSED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS (Unaudited)

	THREE MONTHS ENDED September 30,		NINE MONTHS ENDED September 30,	
	2017	2016	2017	2016
	(IN THOUSANDS, EXCEPT PER SHARE DATA)			
Research and development revenue	$ —	$ 1,223	$ —	$ 3,522
Costs and expenses:				
Research and development	4,570	5,265	14,747	13,800
General and administrative	1,762	1,824	5,702	5,755
Total costs and expenses	6,332	7,089	20,449	19,555
Loss from operations	(6,332)	(5,866)	(20,449)	(16,033)
Interest income	66	49	125	135
Interest expense	(400)	—	(1,119)	—
Net loss	(6,666)	(5,817)	(21,443)	(15,898)
Unrealized gain (loss) on marketable securities	6	(10)	(3)	19
Comprehensive loss	$ (6,660)	$ (5,827)	$ (21,446)	$ (15,879)
Basic and diluted net loss per share:				
Net loss per share	$ (0.09)	$ (0.08)	$ (0.30)	$ (0.23)
Weighted average basic and diluted common shares outstanding	71,541	71,083	71,282	69,247

The accompanying notes are an integral part of these interim unaudited financial statements.

ARQULE, INC.

CONDENSED STATEMENTS OF CASH FLOWS (Unaudited)

	NINE MONTHS ENDED SEPTEMBER 30,	
	2017	2016
	(IN THOUSANDS)	
Cash flows from operating activities:		
Net loss	$ (21,443)	$ (15,898)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	52	77
Amortization of premium (discount) on marketable securities	(26)	42
Amortization of debt discount	240	—
Non-cash stock compensation	1,142	1,444
Changes in operating assets and liabilities:		
Prepaid expenses and other assets	565	299
Accounts payable and accrued expenses	(1,045)	1,062
Deferred revenue	—	(3,438)
Net cash used in operating activities	(20,515)	(16,412)
Cash flows from investing activities:		
Purchases of marketable securities	(18,460)	(28,445)
Proceeds from sale or maturity of marketable securities	18,446	30,550
Additions to property and equipment	—	(15)
Net cash provided by (used in) investing activities	(14)	2,090
Cash flows from financing activities:		
Proceeds from notes payable and warrants, net	14,624	—
Proceeds from stock offering, net	2,328	15,174
Proceeds from employee stock option exercises and employee stock purchase plan purchases	17	163
Net cash provided by financing activities	16,969	15,337
Net increase (decrease) in cash and cash equivalents	(3,560)	1,015
Cash and cash equivalents, beginning of period	15,267	13,983
Cash and cash equivalents, end of period	$ 11,707	$ 14,998

The accompanying notes are an integral part of these interim unaudited financial statements.

ARQULE, INC.

NOTES TO UNAUDITED CONDENSED FINANCIAL STATEMENTS

(IN THOUSANDS, EXCEPT SHARE AND PER SHARE DATA)

1. NATURE OF OPERATIONS AND BASIS OF PRESENTATION

We are a biopharmaceutical company engaged in the research and development of innovative therapeutics to treat cancers and rare diseases. Our mission is to discover, develop and commercialize novel small molecule drugs in areas of high unmet need that will dramatically extend and improve the lives of our patients. These drugs target biological pathways implicated in a wide range of cancers and certain non-oncology indications. Our discovery and development efforts are guided, when possible, by an understanding of the role of biomarkers, which are indicators of a particular biological condition or process and may predict the clinical benefit of our compounds in defined patient populations. Our clinical-stage pipeline consists of five drug candidates, all of which are in targeted patient populations, making ArQule a leader among companies our size in precision medicine.

ArQule has a long history of kinase drug discovery and development, having discovered and introduced ten kinase inhibitors into clinical trials. Our drug discovery efforts have been informed by our historical expertise in chemistry, our work in rational drug design and by our insight into kinase binding and regulation. We have applied this knowledge to produce significant chemical matter for a number of kinase targets and to build an extensive library of proprietary compounds with the potential to target multiple kinases in oncology and other therapeutic areas, such as rare diseases. We expect to bring further preclinical programs forward and to interrogate our library against new targets beyond kinases either directly or with collaborators.

Our proprietary pipeline of product candidates is directed toward molecular targets and biological processes with demonstrated roles in the development of both human cancers and rare, non-oncology diseases. All of these programs are being developed in targeted, biomarker-defined patient populations. By seeking out subgroups of patients that are most likely to respond to our drugs, we intend to identify small, often orphan, indications that allow for focused and efficient development. At the same time, in addition to pursuing these potentially fast-to-market strategies, we also pursue development in other indications that could allow us to expand the utility of the drugs if approved. The pipeline includes the following wholly-owned compounds:

- Derazantinib (ARQ 087), a multi-kinase inhibitor designed to preferentially inhibit the FGFR family of kinases, in a registrational trial in intrahepatic cholangiocarcinoma (iCCA) patients with FGFR2 fusions;
- Miransertib (ARQ 092), a selective inhibitor of the AKT serine/threonine kinase, in Phase1/2 in rare Overgrowth Disease and in Phase 1 for multiple oncology indications and in the rare disease, Proteus syndrome, in partnership with the National Institutes of Health (NIH);
- ARQ 751, a next-generation inhibitor of AKT, in Phase 1 for solid tumors harboring the AKT1 or PI3K mutations;
- ARQ 531, an investigational, orally bioavailable, potent and reversible inhibitor of both wild type and C481S-mutant BTK, in Phase 1 for B-cell malignancies refractory to other therapeutic options; and
- ARQ 761, a ß-lapachone analog being evaluated as a promoter of NQO1-mediated programmed cancer cell death, in Phase 1/2 in multiple oncology indications in partnership with The University of Texas Southwest Medical Center.

Tivantinib (ARQ 197), an orally administered, small molecule inhibitor of the c-Met receptor tyrosine kinase ("MET") and its biological pathway is no longer being developed. We licensed commercial rights to tivantinib for human cancer indications to Daiichi Sankyo Co., Ltd. ("Daiichi Sankyo") in the U.S., Europe, South America and the rest of the world, excluding Japan and certain other Asian countries, where we have licensed commercial rights to Kyowa Hakko Kirin Co., Ltd. ("Kyowa Hakko Kirin").

Our METIV-HCC trial was a pivotal Phase 3 randomized, double-blind, controlled study of tivantinib as single-agent therapy in previously treated patients with MET diagnostic-high, inoperable HCC conducted by Daiichi Sankyo and us. The primary endpoint was overall survival (OS) in the intent-to-treat (ITT) population, and the secondary endpoint was progression-free survival (PFS) in the same population. On February 17, 2017, we and Daiichi Sankyo announced that the METIV-HCC trial did not meet its primary endpoint of improving OS.

Our JET-HCC trial was a second pivotal Phase 3 randomized, double-blind, controlled study of tivantinib as single-agent therapy in previously treated patients with MET diagnostic-high, inoperable HCC conducted by Kyowa Hakko Kirin. The primary endpoint was PFS. On March 27, 2017, we reported that Kyowa Hakko Kirin, announced top-line results of the JET-HCC Phase 3 trial of tivantinib in Japan and that the trial did not meet its primary endpoint of improving PFS.

Our uses of cash for operating activities have primarily consisted of salaries and wages for our employees, facility and facility-related costs for our offices and laboratories, fees paid in connection with preclinical and clinical studies, laboratory supplies and materials, and professional fees. The sources of our cash flow from operating activities have consisted primarily of payments received from our collaborators for services performed or upfront payments for future services. In the nine months ended September 30, 2017 and 2016, our net use of cash was primarily driven by payments for operating expenses which resulted in net cash outflows of $20.5 million and $16.4 million, respectively.

Our cash requirements may vary materially from those now planned depending upon the results of our drug discovery and development strategies, our ability to enter into additional corporate collaborations and the terms of such collaborations, results of research and development, unanticipated required capital expenditures, competitive and technological advances, acquisitions and other factors. We cannot guarantee that we will be able to develop any of our drug candidates into a commercial product. On January 6, 2017, we entered into a loan and security agreement (the "Loan Agreement") with a principal balance of $15 million (see Note 8). The terms of the Loan Agreement require payments of interest on a monthly basis through September 2018 and payments of interest and principal from October 2018 to August 2021. On September 11, 2017, we sold 2.0 million shares of common stock through an at-the-market (ATM) offering and raised proceeds of $2.3 million. In October 2017, we entered into definitive stock purchase agreements with certain institutional investors. In conjunction with this stock offering we issued 13,938,651 shares of our common stock and warrants for 3,123,674 shares of our common stock for aggregate net proceeds of $15.5 million. Each warrant is exercisable for $1.75 per share and expires in four years from the date of issuance. In November 2017 we entered into definitive securities purchase agreements with certain institutional investors. In conjunction with this stock offering the Company raised gross proceeds of $9.5 million through the sale of 8,370 shares of series A convertible preferred stock (Series A Preferred) and warrants covering 2,260 shares of Series A Preferred (Warrants). Each share of Series A Preferred together with the associated Warrant is priced at $1,135 and will automatically convert into 1,000 shares of common stock upon the adoption of an amendment to the Company's restated certificate of incorporation to increase the number of authorized shares of common stock thereunder. ArQule estimates the net proceeds from this offering will be approximately $9.3 million. The Warrants have a pre-conversion exercise price of $1,750 per share of Series A Preferred (post-conversion price of $1.75 per share of common stock), are exercisable immediately and expire approximately four years from the date of the adoption of the amendment to the Company's restated certificate of incorporation. We anticipate that our cash, cash equivalents and marketable securities on hand at September 30, 2017, and the additional funds raised during the October 2017 common stock offering and the November 2017 preferred stock offering will be sufficient to finance our operations for at least 12 months from the issuance date of these financial statements. We expect that we will need to raise additional capital or incur indebtedness to continue to fund our operations in the future. Our ability to raise additional funds will depend on financial, economic and market conditions, and due to global capital and credit market conditions or for other reasons, we may be unable to raise capital when needed, or on terms favorable to us. If necessary funds are not available, we may have to delay, reduce the scope of, or eliminate some of our development programs, potentially delaying the time to market for any of our product candidates.

We have prepared the accompanying condensed financial statements pursuant to the rules and regulations of the U.S. Securities and Exchange Commission ("SEC"). Certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles have been condensed or omitted pursuant to these rules and regulations. These condensed financial statements should be read in conjunction with our audited financial statements and footnotes related thereto for the year ended December 31, 2016 included in our annual report on Form 10-K filed with the SEC on March 9, 2017.

In our opinion, the accompanying unaudited condensed financial statements contain all adjustments, consisting only of normal recurring adjustments, necessary for a fair statement of its financial position as of September 30, 2017, and its results of operations and cash flows for the three and nine months ended September 30, 2017 and September 30, 2016. The results of operations for such interim periods are not necessarily indicative of the results to be achieved for the full year. The condensed 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

2. COLLABORATIONS AND ALLIANCES

Daiichi Sankyo Tivantinib Agreement

As previously reported, on December 18, 2008, we entered into a license, co-development and co-commercialization agreement with Daiichi Sankyo to conduct research, clinical trials and the commercialization of tivantinib in human cancer indications in the U.S., Europe, South America and the rest of the world, excluding Japan, China (including Hong Kong), South Korea and Taiwan, where Kyowa Hakko Kirin had exclusive rights for development and commercialization.

Under the terms of our tivantinib collaboration agreement with Daiichi Sankyo we shared development costs equally with our share of Phase 3 costs funded solely from milestones and royalties. In each quarter the tivantinib collaboration costs we incurred were compared with those of Daiichi Sankyo. If our costs for the quarter exceeded Daiichi Sankyo's, we recognized revenue on the amounts due to us under the contingency adjusted performance model. Revenue was calculated on a pro-rata basis using the time elapsed from inception of the agreement over the estimated duration of the development period under the agreement. If our costs for the quarter were less than those of Daiichi Sankyo, we reported the amount due to Daiichi Sankyo as contra-revenue in that quarter. To the extent that our share of Phase 3 collaboration costs exceeded the amount of milestones and royalties received, that excess was netted against milestones and royalties earned and was not reported as contra-revenue.

Our cumulative share of the Daiichi Sankyo Phase 3 costs through September 30, 2017 totaled $110.3 million. Our cumulative share of Phase 3 collaboration costs has exceeded the amount of milestones received through September 30, 2017 by $70.3 million which are not required to be repaid upon expiration our agreement.

Revenue for this agreement was recognized using the contingency-adjusted performance model with an estimated development period through December 31, 2016. On February 17, 2017, we and Daiichi Sankyo announced that the METIV-HCC trial did not meet its primary end point of improving OS. Our joint development of tivantinib has subsequently been discontinued. As a result, we do not anticipate receiving further royalties or milestones in connection with the agreement.

For the three months and nine months ended September 30, 2017, no revenue was recognized.. For the three months and nine months ended September 30, 2016, $0.8 million and $2.1 million, respectively, were recognized as revenue.

Kyowa Hakko Kirin Licensing Agreement

As previously reported, on April 27, 2007, we entered into an exclusive license agreement with Kyowa Hakko Kirin to develop and commercialize tivantinib in Japan and parts of Asia. Revenue for this agreement was recognized using the contingency-adjusted performance model with an estimated development period through December 31, 2016. On March 27, 2017, we reported that Kyowa Hakko Kirin, announced top-line results of the JET-HCC Phase 3 trial of tivantinib in Japan, and that the trial did not meet its primary endpoint of improving PFS. Our joint development of tivantinib has subsequently been discontinued. As a result, we do not anticipate receiving further royalties or milestones in connection with the agreement.

For the three months and nine months ended September 30, 2017, no revenue was recognized. For the three months and nine months ended September 30, 2016, $0.5 million and $1.4 million, respectively, were recognized as revenue.

3. MARKETABLE SECURITIES AND FAIR VALUE MEASUREMENTS

We generally classify our marketable securities as available-for-sale at the time of purchase and re-evaluate such designation as of each balance sheet date. Since we generally intend to convert them into cash as necessary to meet our liquidity requirements, our marketable securities are classified as cash equivalents if the original maturity, from the date of purchase, is ninety days or less and as short-term investments if the original maturity, from the date of purchase, is in excess of ninety days but less than one year. Our marketable securities are classified as long-term investments if the maturity date is in excess of one year of the balance sheet date.

We report available-for-sale investments at fair value as of each balance sheet date and include any unrealized gains and, to the extent deemed temporary, unrealized losses in stockholders' equity. Realized gains and losses are determined using the specific identification method and are included in other income (expense) in the statement of operations and comprehensive loss.

We conduct quarterly reviews to determine the fair value of our investment portfolio and to identify and evaluate each investment that has an unrealized loss, in accordance with the meaning of other-than-temporary impairment and its application to certain investments. An unrealized loss exists when the current fair value of an individual security is less than its amortized cost basis. In the event that the cost basis of a security exceeds its fair value, we evaluate, among other factors, the duration of the period that, and extent to which, the fair value is less than cost basis, the financial health of and business outlook for the issuer, including industry and sector performance, and operational and financing cash flow factors, overall market conditions and trends, our intent to sell the investment and if it is more likely than not that we would be required to sell the investment before its anticipated recovery. Unrealized losses on available-for-sale securities that are determined to be temporary, and not related to credit loss, are recorded in accumulated other comprehensive income (loss).

For available-for-sale debt securities with unrealized losses, we perform an analysis to assess whether we intend to sell or whether we would more likely than not be required to sell the security before the expected recovery of the amortized cost basis. Where we intend to sell a security, or may be required to do so, the security's decline in fair value is deemed to be other-than-temporary and the full amount of the unrealized loss is reflected in the statement of operations and comprehensive loss as an impairment loss.

Regardless of our intent to sell a security, we perform additional analysis on all securities with unrealized losses to evaluate losses associated with the creditworthiness of the security. Credit losses are identified where we do not expect to receive cash flows sufficient to recover the amortized cost basis of a security.

The following is a summary of the fair value of available-for-sale marketable securities we held at September 30, 2017 and December 31, 2016:

September 30, 2017	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Security type				
Corporate debt securities-short term	$ 15,897	$ 1	$ (2)	$ 15,896
Total available-for-sale marketable securities	$ 15,897	$ 1	$ (2)	$ 15,896

December 31, 2016	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Security type				
Corporate debt securities-short term	$ 15,857	$ 7	$ (5)	$ 15,859
Total available-for-sale marketable securities	$ 15,857	$ 7	$ (5)	$ 15,859

Our available-for-sale marketable securities in a loss position at September 30, 2017, and December 31, 2016 were in a continuous unrealized loss position for less than 12 months.

The following tables present information about our assets that are measured at fair value on a recurring basis for the periods presented and indicates the fair value hierarchy of the valuation techniques we utilized to determine such fair value. In general, fair values determined by Level 1 inputs utilize quoted prices (unadjusted) in active markets for identical assets or liabilities. Fair values determined by Level 2 inputs utilize data points that are observable such as quoted prices, interest rates and yield curves. We value our level 2 investments using quoted prices for identical assets in the markets where they are traded, although such trades may not occur daily. These quoted prices are based on observable inputs, primarily interest rates. Fair values determined by Level 3 inputs are unobservable data points for the asset or liability, and include situations where there is little, if any, market activity for the asset or liability. There were no transfers in or out of Level 1 or Level 2 measurements for the periods presented:

	September 30, 2017	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash equivalents	$ 8,461	$ 8,461	$ —	$ —
Corporate debt securities-short term	15,896	—	15,896	—
Total	$ 24,357	$ 8,461	$ 15,896	$ —

	December 31, 2016	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash equivalents	$ 12,923	$ 12,923	$ —	$ —
Corporate debt securities-short term	15,859	—	15,859	—
Total	$ 28,782	$ 12,923	$ 15,859	$ —

4. ACCOUNTS PAYABLE AND ACCRUED EXPENSES

Accounts payable and accrued expenses include the following at September 30, 2017 and December 31, 2016:

	September 30, 2017	December 31, 2016
Accounts payable	$ 605	$ 710
Accrued payroll	1,434	1,856
Accrued outsourced pre-clinical and clinical fees	4,762	5,461
Accrued professional fees	564	363
Other accrued expenses	300	310
	$ 7,665	$ 8,700

5. NET LOSS PER SHARE

Net loss per share is computed using the weighted average number of common shares outstanding. Basic and diluted net loss per share amounts are equivalent for the periods presented as the inclusion of potential common shares in the number of shares used for the diluted computation would be anti-dilutive to loss per share. Potential common shares, for the three and nine months ended September 30, 2017, include 10,746,449 shares that would be issued upon the exercise of outstanding employee and Board of Director stock options and 354,330 shares that would be issued upon the exercise of the warrants issued in conjunction with our January 6, 2017 loan agreement. Potential common shares, for the three and nine months ended September 30, 2016, include 9,187,698 shares that would be issued upon the exercise of outstanding employee and Board of Director stock options.

6. STOCK-BASED COMPENSATION AND STOCK PLANS

Our stock-based compensation cost is measured at the grant date, based on the calculated fair value of the award, and is recognized as an expense over the employees' requisite service period (generally the vesting period of the equity grant). We estimate the fair value of stock options using the Black-Scholes valuation model. Key input assumptions used to estimate the fair value of stock options include the exercise price of the award, expected option term, expected volatility of our stock over the option's expected term, risk-free interest rate over the option's expected term, and the expected annual dividend yield. We believe that the valuation technique and approach utilized to develop the underlying assumptions are appropriate in calculating the fair values of our stock options granted in the nine months ended September 30, 2017 and 2016.

The following table presents stock-based compensation expense included in our Condensed Statements of Operations and Comprehensive Loss:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Research and development	$ 80	$ 107	$ 284	$ 407
General and administrative	233	322	858	1,037
Total stock-based compensation expense	$ 313	$ 429	$ 1,142	$ 1,444

In the three and nine months ended September 30, 2017 and 2016, no stock-based compensation expense was capitalized and there were no recognized tax benefits associated with the stock-based compensation expense.

Option activity under our stock plans for the nine months ended September 30, 2017 was as follows:

Stock Options	Number of Shares	Weighted Average Exercise Price
Outstanding as of December 31, 2016	8,715,048	$ 3.71
Granted	2,542,500	1.19
Exercised	—	—
Cancelled	(511,099)	4.93
Outstanding as of September 30, 2017	10,746,449	$ 3.05
Exercisable as of September 30, 2017	6,467,316	$ 4.15

In April 2017, the Company amended its chief executive officer's (the "CEO's") employment agreement to grant the CEO a maximum of 600,000 performance-based stock options that vest upon the achievement of certain performance and market based targets. In April 2017, the Company amended its chief operating officer's (the "COO's") employment agreement to grant the COO 300,000 performance-based stock units that vest upon the achievement of certain performance and market based targets. In April 2017, the Company amended its chief medical officer's (the "CMO's") employment agreement to grant the CMO 260,000 performance-based stock options that vest upon the achievement of certain performance based targets. In April 2017, certain other employees were granted a total of 270,000 performance-based stock options that vest upon the achievement of certain performance based targets. Through September 30, 2017 no expense has been recorded for any performance-based stock options granted to the CEO, COO, CMO, or to any other employees.

The aggregate intrinsic value of options outstanding at September 30, 2017 was $229 including $0 related to exercisable options. The weighted average fair value of options granted in the nine months ended September 30, 2017 and 2016 was $0.72 and $1.10 per share, respectively. No options were exercised in the nine months ended September 30, 2017.

Shares vested, expected to vest and exercisable at September 30, 2017 are as follows:

	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Vested and unvested expected to vest at September 30, 2017	10,539,275	$ 3.05	5.9	$ 221
Exercisable at September 30, 2017	6,467,316	$ 4.15	4.1	$ 0

The total compensation cost not yet recognized as of September 30, 2017 related to non-vested option awards was $1.8million, which will be recognized over a weighted-average period of 2.5 years. During the three months ended September 30, 2017, 342,149 shares expired and 168,950 shares were forfeited. The weighted average remaining contractual life for options exercisable at September 30, 2017 was 4.1 years.

7. STOCK OFFERINGS

On February 26, 2016, we entered into definitive stock purchase agreements with certain institutional and accredited investors. In conjunction with this stock offering we issued 8,027,900 shares of our common stock and non-transferable options for 3,567,956 shares of our common stock for aggregate net proceeds of $15.2 million. Each option was exercisable for $2.50 per share and they all expired on March 22, 2017.

On September 11, 2017, we sold 2.0 million shares of common stock through an at-the-market ("ATM") offering and raised proceeds of approximately $2.3 million.

In October 2017, we entered into definitive securities purchase agreements with certain institutional investors. In conjunction with this stock offering we issued 13,938,651 shares of our common stock and warrants for 3,123,674 shares of our common stock for aggregate net proceeds of $15.5 million. Each warrant is exercisable for $1.75 per share and expires in four years from the date of issuance.

In November 2017, we entered into definitive securities purchase agreements with certain institutional investors. In conjunction with this stock offering the Company raised gross proceeds of $9.5 million through the sale of 8,370 shares of series A convertible preferred stock (Series A Preferred) and warrants covering 2,260 shares of Series A Preferred (Warrants). Each share of Series A Preferred together with the associated Warrant is priced at $1,135 and will automatically convert into 1,000 shares of common stock upon the adoption of an amendment to the Company's restated certificate of incorporation to increase the number of authorized shares of common stock thereunder. ArQule estimates the net proceeds from this offering will be approximately $9.3 million. The Warrants have a pre-conversion exercise price of $1,750 per share of Series A Preferred (post-conversion price of $1.75 per share of common stock), are exercisable immediately and expire approximately four years from the date of the adoption of the amendment to the Company's restated certificate of incorporation.

8. LOAN AGREEMENT

On January 6, 2017, Oxford Finance LLC, as collateral agent and a lender (the "Lender"), and any additional lenders that may become parties thereto, entered into a loan and security agreement with us (the "Loan Agreement").

Pursuant to the terms of the Loan Agreement, the Lender issued us a loan in the principal amount of $15.0 million. The loan will bear interest at the rate equal to (a) the greater of (i) the 30 day U.S. LIBOR rate reported in the Wall Street Journal on the date occurring on the last business day of the month that immediately precedes the month in which the interest will accrue or (ii) 0.65% (b) plus 6.85%. The applicable interest rate on the loan at September 30, 2017 was 8.08%. We will have interest-only payments for 18 months, followed by an amortization period of 36 months. The maturity date of the loan is August 1, 2021.

The expected remaining repayment of the $15 million loan principal is as follows:

2018	$ 1,667
2019	5,000
2020	5,000
2021	3,333
	$ 15,000

Upon the earlier of prepayment or the maturity date, we will pay to the Lender a final payment of 6% of the full principal amount of the loan. We may elect to prepay all amounts owed prior to the maturity date, provided that a prepayment fee also is paid equal to (i) 3% of the outstanding principal balance if prepayment occurs in months 1-12 following the closing, (ii) 2.0% of the outstanding principal balance in months 13-24 following the closing, and (iii) 1% thereafter.

We paid the Lender an upfront facility fee of $75,000.

Pursuant to the terms of the Loan Agreement, we are bound by certain affirmative covenants setting forth actions that are required during the term of the Loan Agreement, including, without limitation, certain information delivery requirements, obligations to maintain certain insurance, and certain notice requirements. Additionally, we are bound by certain negative covenants setting forth actions that are not permitted to be taken during the term of the Loan Agreement without consent, including, without limitation, incurring certain additional indebtedness, entering into certain mergers, acquisitions or other business combination transactions, or incurring any non-permitted lien or other encumbrance on our assets. We are in compliance with the loan covenants at September 30, 2017.

Upon the occurrence of an event of default under the Loan Agreement (subject to cure periods for certain events of default), all amounts owed by us thereunder will begin to bear interest at a rate that is 5% higher than the rate that is otherwise applicable and may be declared immediately due and payable by the Lender. Events of default under the Loan Agreement include, among other things, the following: the occurrence of certain bankruptcy events; the failure to make payments under the Loan Agreement when due; the occurrence of a material adverse change in our business, operations or financial condition ; the rendering of certain types of fines or judgments against us; any breach by us of any covenant (subject to cure for certain covenants only) made in the Loan Agreement; and the failure of any representation or warranty made by us in connection with the Loan Agreement to be correct in all material respects when made.

We have granted Lender, a security interest in substantially all of our personal property, rights and assets, other than intellectual property, to secure the payment of all amounts owed to the Lender under the Loan Agreement. We have also agreed not to encumber any of our intellectual property without required lenders' prior written consent.

In connection with entering into the Loan Agreement, we issued to the Lender warrants to purchase an aggregate of 354,330 shares of our common stock (the "Lender Warrants"). The warrants are exercisable immediately, have a per-share exercise price of $1.27 and have a term of ten years. We have recorded the relative fair value of the warrants as a discount to the carrying value of the notes payable with a corresponding increase to additional paid in capital.

9. RECENT ACCOUNTING PRONOUNCEMENTS

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board ("FASB") or other standard setting bodies that are adopted by us as of the specified effective date. Unless otherwise discussed, we believe that the impact of recently issued standards that are not yet effective will not have a material impact on our financial position or results of operations upon adoption.

In May 2017 the FASB issued ASU No. 2017-09, Compensation-Stock Compensation (Topic 718): Scope of Modification Accounting. This new standard provides clarity and reduces both (1) diversity in practice and (2) cost and complexity when applying the guidance in Topic 718, Compensation-Stock Compensation, to a change to the terms or conditions of a share-based payment award. This new standard will be effective for us on January 1, 2018, however early adoption is permitted. As of September 30, 2017, the adoption of this standard is not expected to have a material impact on our financial position or results of operations.

In March 2016, the FASB issued ASU No. 2016-09, Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting. The new standard involves several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities and classification on the statement of cash flows. We adopted this ASU in 2017 and it will not have a material impact on our financial position, results of operations or statement of cash flows.

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842). The new standard requires that all lessees recognize the assets and liabilities that arise from leases on the balance sheet and disclose qualitative and quantitative information about its leasing arrangements. The new standard will be effective for us on January 1, 2019. We are currently evaluating the potential impact that this standard may have on our financial position and results of operations.

In March 2016, the FASB issued ASU No. 2016-08, Revenue from Contracts with Customer Topic 606s, Principal versus Agent Considerations, which clarifies the implementation guidance on principal versus agent considerations. In April 2016, the FASB issued ASU 2016-10, Revenue from Contracts with Customers Topic 606, Identifying Performance Obligations and Licensing, which clarifies certain aspects of identifying performance obligations and licensing implementation guidance. In May 2016, the FASB issued ASU 2016-12, Revenue from Contracts with Customers Topic 606, Narrow-Scope Improvements and Practical Expedients, related to disclosures of remaining performance obligations, as well as other amendments to guidance on collectability, non-cash consideration and the presentation of sales and other similar taxes collected from customers. In December 2016, the FASB issued ASU No. 2016-20, Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers, which amends certain narrow aspects of the guidance issued in ASU 2014-09, "Revenue from Contracts with Customers" (Topic 606). ASU 2014-09 superseded all existing revenue recognition requirements, including most industry-specific guidance. The new standard requires a company to recognize revenue when it transfers goods or services to customers in an amount that reflects the consideration that the company expects to receive for those goods or services. In August 2015, the FASB issued ASU No. 2015-14, Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date, which delayed the effective date of the new standard from January 1, 2017 to January 1, 2018. The FASB also agreed to allow entities to choose to adopt the standard as of the original effective date. We evaluated this ASU and determined that it will not have a material impact on our financial position or results of operations.

10. INCOME TAXES

As of December 31, 2016, we had federal NOL, state NOL, and research and development credit carryforwards of approximately $382,781, $202,137 and $27,779 respectively, which expire at various dates through 2036. Approximately $15,080 of our federal NOL and $929 of our state NOL were generated from excess tax deductions from share-based awards.

The Company adopted ASU No. 2016-09 in the first quarter of 2017. The recognition of the excess tax benefits from share-based payments mentioned above increased deferred tax assets and retained earnings accordingly. As the company doesn't expect taxable income in the foreseeable future, we reserved the full amount at the time of the recognition and there was no impact on the net positions of deferred tax assets and retained earnings. The amount of excess tax benefits or deficiencies will fluctuate from period to period based on the price of our stock, the volume of share-based instruments settled or vested, and the value assigned to employee equity awards under U.S. GAAP and these fluctuations did not affect our net deferred tax position in the first nine months of 2017.

At September 30, 2017 and December 31, 2016, we had no unrecognized tax benefits. We do not expect that the total amount of unrecognized tax benefits will significantly increase in the next twelve months. Our policy is to recognize interest and penalties related to uncertain tax positions in income tax expense. As of September 30, 2017 and December 31, 2016, we had no accrued interest or penalties related to uncertain tax positions. Our U.S. federal tax returns for the tax years 2013 through 2016 and our state tax returns for the tax years 2013 through 2016 remain open to examination. Prior tax years remain open to the extent of net operating loss and tax credit carryforwards.

Utilization of NOL and research and development credit carryforwards may be subject to a substantial annual limitation in the event of an ownership change that has occurred previously or could occur in the future pursuant to Section 382 and 383 of the Internal Revenue Code of 1986, as amended, as well as similar state provisions. An ownership change may limit the amount of NOL and research and development credit carryforwards that can be utilized annually to offset future taxable income, and may, in turn, result in the expiration of a portion of those carryforwards before utilization. In general, an ownership change, as defined by Section 382, results from transactions that increase the ownership of certain stockholders or public groups in the stock of a corporation by more than 50 percentage points over a three year period. We undertook a detailed study of our NOL and research and development credit carryforwards through January 31, 2017, to determine whether such amounts are likely to be limited by Sections 382 or 383. As a result of this analysis, we currently do not believe any Sections 382 or 383 limitations will significantly impact our ability to offset income with available NOL and research and development credit carryforwards. However, future ownership changes under Section 382 may limit our ability to fully utilize these tax benefits.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion should be read in conjunction with our condensed financial statements and accompanying notes contained in this quarterly report on Form 10-Q and our audited financial statements and related notes included in our Annual Report on Form 10-K for the year ended December 31, 2016.

We are a biopharmaceutical company engaged in the research and development of innovative therapeutics to treat cancers and rare diseases. Our mission is to discover, develop and commercialize novel small molecule drugs in areas of high unmet need that will dramatically extend and improve the lives of our patients. These drugs target biological pathways implicated in a wide range of cancers and certain non-oncology indications. Our discovery and development efforts are guided, when possible, by an understanding of the role of biomarkers, which are indicators of a particular biological condition or process and may predict the clinical benefit of our compounds in defined patient populations. Our clinical-stage pipeline consists of five drug candidates, all of which are in targeted patient populations, making ArQule a leader among companies our size in precision medicine.

ArQule has a long history of kinase drug discovery and development, having discovered and introduced nine kinase inhibitors into clinical trials. Our drug discovery efforts have been informed by our historical expertise in chemistry, our work in rational drug design and by our insight into kinase binding and regulation. We have applied this knowledge to produce significant chemical matter for a number of kinase targets and to build an extensive library of proprietary compounds with the potential to target multiple kinases in oncology and other therapeutic areas, such as rare diseases. We expect to bring further preclinical programs forward and to interrogate our library against new targets beyond kinases either directly or with collaborators.

Our proprietary pipeline of product candidates is directed toward molecular targets and biological processes with demonstrated roles in the development of both human cancers and rare, non-oncology diseases. All of these programs are being developed in targeted, biomarker-defined patient populations. By seeking out subgroups of patients that are most likely to respond to our drugs, we intend to identify small, often orphan, indications that allow for focused and efficient development. At the same time, in addition to pursuing these potentially fast-to-market strategies, we also pursue development in other indications that could allow us to expand the utility of the drugs if approved. The pipeline includes the following wholly-owned compounds:

- Derazantinib (ARQ 087), a multi-kinase inhibitor designed to preferentially inhibit the FGFR family of kinases, in a registrational trial in intrahepatic cholangiocarcinoma (iCCA) in patients with FGFR2 fusions;
- Miransertib (ARQ 092), a selective inhibitor of the AKT serine/threonine kinase, in Phase1/2 in rare Overgrowth Disease and in Phase 1 for multiple oncology indications and in the rare disease, Proteus syndrome, in partnership with the National Institutes of Health (NIH);
- ARQ 751, a next-generation inhibitor of AKT, in Phase 1 for solid tumors harboring the AKT1 or PI3K mutations;
- ARQ 531, an investigational, orally bioavailable, potent and reversible inhibitor of both wild type and C481S-mutant BTK, in Phase 1 for B-cell malignancies refractory to other therapeutic options; and
- ARQ 761, a ß-lapachone analog being evaluated as a promoter of NQO1-mediated programmed cancer cell death, in Phase 1/2 in multiple oncology indications in partnership with The University of Texas Southwest Medical Center.

Tivantinib (ARQ 197), an orally administered, small molecule inhibitor of the c-Met receptor tyrosine kinase ("MET") and its biological pathway is no longer being developed. We licensed commercial rights to tivantinib for human cancer indications to Daiichi Sankyo Co., Ltd. ("Daiichi Sankyo") in the U.S., Europe, South America and the rest of the world, excluding Japan and certain other Asian countries, where we have licensed commercial rights to Kyowa Hakko Kirin Co., Ltd. ("Kyowa Hakko Kirin").

Our METIV-HCC trial was a pivotal Phase 3 randomized, double-blind, controlled study of tivantinib as single agent therapy in previously treated patients with MET diagnostic-high, inoperable HCC conducted by Daiichi Sankyo and us. The primary endpoint was overall survival (OS) in the intent-to-treat (ITT) population, and the secondary endpoint was progression-free survival (PFS) in the same population. On February 17, 2017, we and Daiichi Sankyo announced that the METIV-HCC trial did not meet its primary endpoint of improving.

Our JET-HCC was a pivotal Phase 3, randomized, double-blind, controlled study of tivantinib as single-agent therapy in previously treated patients with MET diagnostic-high, inoperable HCC conducted by Kyowa Hakko Kirin in Japan. On March 27, 2017, we reported that our partner, Kyowa Hakko Kirin, announced top-line results of the JET-HCC Phase 3 trial of tivantinib in Japan, and that the trial did not meet its primary endpoint of improving PFS.

We have incurred a cumulative deficit of approximately $526 million from inception through September 30, 2017. We recorded a net loss for 2015 and 2016 and expect a net loss for 2017.

As previously reported, on December 18, 2008, we entered into a license, co-development and co-commercialization agreement with Daiichi Sankyo to conduct research, clinical trials and the commercialization of tivantinib in human cancer indications in the U.S., Europe, South America and the rest of the world, excluding Japan, China (including Hong Kong), South Korea and Taiwan, where Kyowa Hakko Kirin has exclusive rights for development and commercialization. On February 17, 2017, we and Daiichi Sankyo announced that the MET-IV-HCC trial did not meet its primary end point of improving OS. Our joint development of tivantinib has subsequently been discontinued. As a result, we do not anticipate receiving further royalties or milestones in connection with the agreement.

Under the terms of our tivantinib collaboration agreement with Daiichi Sankyo we shared development costs equally with our share of Phase 3 costs funded solely from milestones and royalties. In each quarter the tivantinib collaboration costs we incurred were compared with those of Daiichi Sankyo. If our costs for the quarter exceeded Daiichi Sankyo's, we recognized revenue on the amounts due to us under the contingency adjusted performance model. Revenue was calculated on a pro-rata basis using the time elapsed from inception of the agreement over the estimated duration of the development period under the agreement. If our costs for the quarter were less than those of Daiichi Sankyo, we reported the amount due to Daiichi Sankyo as contra-revenue in that quarter. To the extent that our share of Phase 3 collaboration costs exceeded the amount of milestones and royalties received, that excess was netted against milestones and royalties earned and was not reported as contra-revenue.

Our cumulative share of the Daiichi Sankyo Phase 3 costs through September 30, 2017 totaled $110.3 million. Our cumulative share of Phase 3 collaboration costs has exceeded the amount of milestones received through September 30, 2017 by $70.3 million which are not required to be repaid upon expiration of the agreement.

Revenue for this agreement was recognized using the contingency-adjusted performance model with an estimated development period through December 31, 2016. On February 17, 2017, we and Daiichi Sankyo announced that the METIV-HCC trial did not meet its primary end point of improving OS. As a result, we do not anticipate receiving further royalties or milestones in connection with the agreement.

As previously reported, on April 27, 2007, we entered into an exclusive license agreement with Kyowa Hakko Kirin to develop and commercialize tivantinib in Japan and parts of Asia. Revenue for this agreement was recognized using the contingency-adjusted performance model with an estimated development period through December 31, 2016. On March 27, 2017, we reported that our partner, Kyowa Hakko Kirin, announced top-line results of the JET-HCC Phase 3 trial of tivantinib in Japan, and that the trial did not meet its primary endpoint of improving PFS. Our joint development of tivantinib has subsequently been discontinued. As a result, we do not anticipate receiving further royalties or milestones in connection with the agreement.

LIQUIDITY AND CAPITAL RESOURCES

	September 30, 2017	December 31, 2016	Increase (decrease) $	Increase (decrease) %
		(in millions)		
Cash, cash equivalents and marketable securities-short term	$ 27.6	$ 31.1	(3.5)	(11)%
Working capital	19.8	23.2	(3.4)	(15)%

	Nine Months Ended		
	September 30, 2017	September 30, 2016	Increase (decrease)
	(in millions)		
Cash flow from:			
Operating activities	$ (20.5)	$ (16.4)	$ (4.1)
Investing activities	-	2.1	(2.1)
Financing activities	17.0	15.3	1.7

Cash flow from operating activities. Our uses of cash for operating activities have primarily consisted of salaries and wages for our employees, facility and facility-related costs for our offices and laboratories, fees paid in connection with preclinical and clinical studies, laboratory supplies and materials, and professional fees. The sources of our cash flow from operating activities have consisted primarily of payments received from our collaborators for services performed or upfront payments for future services. For the nine months ended September 30, 2017 and 2016, our net use of cash was primarily driven by payments for operating expenses which resulted in net cash outflows of $20.5 million and $16.4 million, respectively.

Cash flow from investing activities. Our net cash provided by investing activities of zero for the nine months ended September 30, 2017. Our net cash provided by investing activities of $2.1 million for the nine months ended September 30, 2016, was comprised primarily of net maturities of marketable securities. The composition and mix of cash, cash equivalents and marketable securities may change frequently as a result of our constant evaluation of conditions in financial markets, the maturity of specific investments, and our near term liquidity needs.

Cash flow from financing activities. Our net cash provided by financing activities of $17.0 million for the nine months ended September 30, 2017, was comprised of the net proceeds of $14.6 million from the loan and security agreement that we entered into on January 6, 2017 and $2.3 million from the issuance of 2 million shares of common stock in September 2017 through our "at-the-market" offering. Our net cash provided by financing activities of $15.3 million for the nine months ended September 30, 2016, was comprised of net proceeds from our February 26, 2016 stock offering of $15.2 million and $0.1 million from stock option exercises and employee stock plan purchases.

Our cash equivalents and marketable securities typically include U.S. Treasury bill funds, money market funds, commercial paper, and U.S. federal and state agency backed certificates that have investment grade ratings. Our cash equivalents and our portfolio of marketable securities are subject to market risk due to changes in interest rates. Fixed rate interest securities may have their market value adversely impacted due to a rise in interest rates, while floating rate securities may produce less income than expected if interest rates fall. Due in part to these factors, our future investment income may fall short of expectation due to changes in interest rates or we may suffer losses in principal if we are forced to sell securities that decline in market value due to changes in interest rates.

Our cash requirements may vary materially from those now planned depending upon the results of our drug discovery and development strategies, our ability to enter into additional corporate collaborations and the terms of such collaborations, results of research and development, unanticipated required capital expenditures, competitive and technological advances, acquisitions and other factors. We cannot guarantee that we will be able to develop any of our drug candidates into a commercial product. It is likely we will need to raise additional capital or incur indebtedness to continue to fund our operations in the future. Our ability to raise additional funds will depend on financial, economic and market conditions, and due to global capital and credit market conditions or for other reasons, we may be unable to raise capital when needed, or on terms favorable to us. If necessary funds are not available, we may have to delay, reduce the scope of, or eliminate some of our development programs, potentially delaying the time to market for any of our product candidates.

On February 26, 2016 we entered into definitive stock purchase agreements with certain institutional and accredited investors. In conjunction with this stock offering we issued 8,027,900 shares of our common stock and non-transferable options for 3,567,956 shares of our common stock for aggregate net proceeds of $15.2 million. Each option was exercisable for $2.50 per share and they all expired on March 22, 2017.

On January 6, 2017, we entered into a loan and security agreement in the principal amount of $15.0 million. The loan bears interest at a minimum of 7.6% per annum and the interest rate floats based upon the 30 day U.S. LIBOR rate. We have interest-only payments for 18 months, followed by an amortization period of 36 months. The maturity date of the loan is July 1, 2021.

On September 11, 2017, we sold 2.0 million shares of common stock through an at-the-market (ATM) offering and raised proceeds of approximately $2.3 million.

In October 2017, we entered into definitive securities purchase agreements with certain institutional investors. In conjunction with this stock offering we issued 13,938,651 shares of our common stock and warrants for 3,123,674 shares of our common stock for aggregate net proceeds of $15.5 million. Each warrant is exercisable for $1.75 per share and expires in four years from the date of issuance.

In November 2017, we entered into definitive securities purchase agreements with certain institutional investors. In conjunction with this stock offering the Company raised gross proceeds of $9.5 million through the sale of 8,370 shares of series A convertible preferred stock (Series A Preferred) and warrants covering 2,260 shares of Series A Preferred (Warrants). Each share of Series A Preferred together with the associated Warrant is priced at $1,135 and will automatically convert into 1,000 shares of common stock upon the adoption of an amendment to the Company's restated certificate of incorporation to increase the number of authorized shares of common stock thereunder. ArQule estimates the net proceeds from this offering will be approximately $9.3 million. The Warrants have a pre-conversion exercise price of $1,750 per share of Series A Preferred (post-conversion price of $1.75 per share of common stock), are exercisable immediately and expire approximately four years from the date of the adoption of the amendment to the Company's restated certificate of incorporation.

We anticipate that our cash, cash equivalents and marketable securities on hand at September 30, 2017 and the additional funds raised during the October 2017 common stock offering and the November 2017 preferred stock offering will be sufficient to finance our operations into the second half of 2019 which is greater than 12 months from the issuance date of these financial statements.

Our contractual obligations were comprised of the following as of September 30, 2017 (in thousands):

	Payment due by period				
Contractual Obligations	**Total**	**Less than 1 year**	**1 - 3 years**	**3 - 5 years**	**More than 5 years**
Notes payable	$ 15,900	$ 417	$ 10,000	$ 5,483	$ —
Operating lease obligations	1,472	557	915	—	—
Purchase obligations	4,762	4,762	—	—	—
Total	$ 22,134	5,736	10,915	5,483	$ —

Purchase obligations are comprised primarily of outsourced preclinical and clinical trial expenses and payments to license certain intellectual property to support our research efforts.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

A "critical accounting policy" is one which is both important to the portrayal of our financial condition and results and requires management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. For additional information, please see the discussion of our significant accounting policies in Note 2 to the Financial Statements included in our Annual Report for the fiscal year ended December 31, 2016 on Form 10-K filed with the SEC on March 9, 2017.

RESULTS OF OPERATIONS

The following are the results of operations for the three and nine months ended September 30, 2017 and 2016:

Revenue

			Increase (decrease)	
	2017	2016	$	%
	(in millions)			
For the three months ended September 30:				
Research and development revenue	$ —	$ 1.2	$ (1.2)	(100)%
For the nine months ended September 30:				
Research and development revenue	$ —	$ 3.5	$ (3.5)	(100)%

Research and development revenue in the three and nine months ended September 30, 2017 was zero due to the end of the estimated development period on December 31, 2016 for both the Daiichi Sankyo tivantinib development agreement and the Kyowa Hakko Kirin exclusive license agreement. Research and development revenue in the three months ended September 30, 2016 revenue is comprised of revenue of $0.8 million from our Daiichi Sankyo METIV-HCC trial and $0.4 million from our Kyowa Hakko Kirin JET-HCC trial.

Research and development revenue in the nine months ended September 30, 2016 revenue is comprised of revenue of $2.1 million from our Daiichi Sankyo METIV-HCC trial and $1.4 million from our Kyowa Hakko Kirin JET-HCC trial.

Research and development

			Increase (decrease)	
	2017	2016	$	%
	(in millions)			
For the three months ended September 30:				
Research and development	$ 4.6	$ 5.3	$ (0.7)	(13)%
For the nine months ended September 30:				
Research and development	$ 14.7	$ 13.8	$ 0.9	7%

Research and development expense in the quarter ended September 30, 2017 decreased by $0.7 million primarily due to $0.4 million lower outsourced clinical and product development costs for our pipeline programs, and lower labor and related costs of $0.2 million.

Research and development expense in the nine months ended September 30, 2017 increased by $0.9 million primarily due to higher outsourced clinical and product development costs for our pipeline programs of $1.3 million, partially offset by lower labor and related costs of $0.3 million.

At September 30, 2017 and 2016 we had 19 and 21 employees dedicated to our research and development program, respectively.

Overview

Our research and development expense consists primarily of salaries and related expenses for personnel, costs of contract manufacturing services, costs of facilities and equipment, fees paid to professional service providers in conjunction with our clinical trials, fees paid to research organizations in conjunction with pre-clinical animal studies, costs of materials used in research and development, consulting, license, and sponsored research fees paid to third parties and depreciation of associated laboratory equipment. We expect that our research and development expense will remain significant as we continue to develop our portfolio of oncology programs.

We have not accumulated and tracked our internal historical research and development costs or our personnel and personnel-related costs on a program-by-program basis. Our employee and infrastructure resources are allocated across several projects, and many of our costs are directed to broadly applicable research endeavors. As a result, we cannot state the costs incurred for each of our oncology programs on a program-by-program basis.

The expenses incurred by us to third parties for pre-clinical and clinical trials in the current quarter and since inception of our tivantinib program were as follows (in millions):

Oncology program	Current status	Nine Months Ended September 30, 2017	Program-to-date
Met program—Tivantinib	Phase 3	$ 0.2	$ 85.0

Under the terms of our tivantinib collaboration agreement with Daiichi Sankyo we shared development costs equally with our share of Phase 3 costs funded solely from milestones and royalties. Our cumulative share of Phase 3 collaboration costs has exceeded the amount of milestones received through September 30, 2017 by $70.3 million and is not reflected in the above table.

Our future research and development expenses in support of our current and future oncology programs will be subject to numerous uncertainties in timing and cost to completion. We test potential products in numerous pre-clinical studies for safety, toxicology, and efficacy. We may conduct multiple clinical trials for each product. As we obtain results from trials, we may elect to discontinue or delay clinical trials for certain products in order to focus our resources on more promising products. 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. It is not unusual for the pre-clinical and clinical development of each of these types of products to take nine years or more, and for total development costs to exceed $500 million for each product.

We estimate that clinical trials of the type generally needed to secure new drug approval are typically completed over the following timelines:

Clinical Phase	Estimated Completion Period
Phase 1	1 – 2 years
Phase 2	2 – 3 years
Phase 3	2 – 4 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 clinical development, including, among others, the following:

- the number of clinical sites included in the trials;
- the length of time required to enroll suitable patients;
- the number of patients that ultimately participate in the trials;
- the duration of patient follow-up to ensure the absence of long-term product-related adverse events; and
- the efficacy and safety profile of the product.

An element of our business strategy is to pursue the research and development of a broad pipeline of products. This is intended to allow us to diversify the risks associated with our research and development expenditures. As a result, we believe our future capital requirements and future financial success do not substantially depend on any one product. To the extent we are unable to build and maintain a broad pipeline of products, our dependence on the success of one or a few products increases.

Our strategy includes entering into alliance arrangements with third parties to participate in the development and commercialization of our products, such as our collaboration agreements with Daiichi Sankyo and Kyowa Hakko Kirin. In the event that third parties have control over the clinical trial process for a product, the estimated completion date would be under control of that third party rather than under our control. We cannot forecast with any degree of certainty whether our products will be subject to future collaborative arrangements or how such arrangements would affect our development plans or capital requirements.

As a result of the uncertainties discussed above, we make significant estimates in determining the duration and completion costs of our oncology programs or when and to what extent we will receive cash inflows from the commercialization and sale of a product. Our inability to complete our oncology programs in a timely manner or our failure to enter into appropriate collaborative agreements 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 product development 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.

General and administrative

			Increase (decrease)	
	2017	2016	$	%
	(in millions)			
For the three months ended September 30:				
General and administrative	$ 1.8	$ 1.8	$ -	-%
For the nine months ended September 30:				
General and administrative	$ 5.7	$ 5.8	$ (0.1)	(1)%

General and administrative expense remained constant in the three and nine months ended September 30, 2017 compared with the comparable periods in 2016.

General and administrative headcount was 14 at September 30, 2017 and September 30, 2016.

Interest income and interest expense

			Increase (decrease)	
	2017	2016	$	%
	(in thousands)			
For the three months ended September 30:				
Interest income	$ 66	$ 49	$ 17	35%
Interest expense	(400)	—	400	100%
For the nine months ended September 30:				
Interest income	$ 125	$ 135	$ (10)	(7)%
Interest expense	(1,119)	—	1,119	100%

Interest income is derived from our portfolio of cash, cash equivalents and investments and decreased in the three and nine month periods ended September 30, 2017 primarily due to a decrease in our portfolio balance. Interest expense is from the loan agreement we entered into on January 6, 2017

RECENT ACCOUNTING PRONOUNCEMENTS

For a discussion of new accounting pronouncements please read Note 9, *Recent Accounting Pronouncements* to our financial statements included in this report.

FORWARD LOOKING STATEMENTS

In addition to historical information, this report contains forward-looking statements. You can identify these forward-looking statements by their use of words such as “anticipate,” “assume,” “believe,” “estimate,” “expect,” “forecast,” “intend,” “may,” “plan,” “project,” “target,” “will” and other words and terms of similar meaning. You also can identify them by the fact that they do not relate strictly to historical or current facts. All statements which address operating performance, events or developments that the Company expects or anticipates will occur in the future, such as projections about its future results of operations, its financial condition, research, development and commercialization of its products and anticipated trends in its business are forward-looking statements.

In this report we make forward-looking statements regarding our drug development pipeline and our existing and planned clinical trials as well as projected financial results and our ability to fund operations with current cash, cash equivalents and marketable securities.

Drug development involves a high degree of risk. Only a small number of research and development programs result in the commercialization of a product. For example, pre-clinical efforts associated with our product pipeline may fail or prove disappointing because our technology platform did not produce candidates with the desired characteristics. Animal xenograft pre-clinical studies may be unpredictive of human response. Positive information about early stage clinical trial results will not ensure that later stage or larger scale clinical trials will be successful.

Furthermore, our drugs may not demonstrate promising therapeutic effects; in addition, they may not demonstrate appropriate safety profiles in ongoing or later stage or larger scale clinical trials as a result of known or as yet unidentified side effects. The results achieved in later stage trials may not be sufficient to meet applicable regulatory standards. Problems or delays may arise during clinical trials or in the course of developing, testing or manufacturing our drugs that could lead us or our partner to discontinue development.

Even if later stage clinical trials are successful, the risk exists that unexpected concerns may arise from analysis of data or from additional data or that obstacles may arise or issues be identified in connection with review of clinical data with regulatory authorities or that regulatory authorities may disagree with our view of the data or require additional data or information or additional studies. Also, the planned timing of initiation of clinical trials and the duration and conclusion of such trials for our drugs are subject to the ability of the company to enroll patients, enter into agreements with clinical trial sites and investigators, and other technical hurdles and issues that may not be resolved.

We also make forward-looking statements regarding the adequacy of our financial resources. Our capital resources may not be adequate because our cash requirements may vary materially from those now planned depending upon the results of our drug discovery and development strategies, the outcomes of our clinical trials, our ability to enter into additional corporate collaborations in the future and the terms of such collaborations, results of research and development, the need for currently unanticipated capital expenditures, competitive and technological advances, acquisitions, financial market conditions and other factors. Additionally, our corporate collaborators may terminate their agreements with us, thereby eliminating that source of funding, because we may fail to satisfy the prescribed terms of the collaborations or for other reasons.

We cannot guarantee that we will be able to develop any of our drug candidates into a commercial product generating revenues. If we experience increased losses, we may have to seek additional financing from public and private sales of our securities, including equity securities. There can be no assurance that additional funding will be available when needed or on acceptable terms.

The factors, risks and uncertainties referred to above and others are more fully described under the heading “Risk Factors” in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 filed with the SEC on February 28, 2017, as updated from time to time in our subsequent Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. The forward-looking statements contained herein represent our judgment as of the date of this report. We are not under any obligation, and we expressly disclaim any obligation, to update or alter any forward-looking statements, whether as a result of new information, future events or otherwise, except to the extent required by law.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We own financial instruments that are sensitive to market risk as part of our investment portfolio. We have implemented policies regarding the amount and credit ratings of investments. Our investment portfolio is used to preserve our capital until it is used to fund operations, including our research and development activities. Our investments are evaluated quarterly to determine the fair value of the portfolio.

Our cash equivalents and marketable securities typically include commercial paper, money market funds, and U.S. Treasury bill funds that have investment grade ratings.

Our cash equivalents and our portfolio of marketable securities are subject to market risk due to changes in interest rates. Fixed rate interest securities may have their market value adversely impacted due to a rise in interest rates, while floating rate securities may produce less income than expected if interest rates fall. Due in part to these factors, our future investment income may fall short of expectation due to changes in interest rates or we may suffer losses in principal if we are forced to sell securities that decline in market value due to changes in interest rates. Based on the type of securities we hold, we do not believe a change in interest rates would have a material impact on our financial statements. If interest rates were to increase or decrease by 1%, this would not result in a material change in the fair value of our investment portfolio.

ITEM 4. CONTROLS AND PROCEDURES

Our management, with the participation of our Chief Executive Officer (Principal Executive Officer) and President and Chief Operating Officer (Principal Financial Officer), evaluated the effectiveness of our disclosure controls and procedures as of September 30, 2017. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended ("Exchange Act"), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and financial officer, as appropriate to allow timely decisions regarding required disclosure. Our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and our management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of September 30, 2017, our Chief Executive Officer (Principal Executive Officer) and President and Chief Operating Officer (Principal Financial Officer) concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

There have been no changes in our internal control over financial reporting during the most recently completed fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

ITEM 1. — LEGAL PROCEEDINGS. None.

ITEM 1A. — RISK FACTORS. For information regarding factors that could affect our results of operations, financial condition and liquidity, see the risk factors discussion provided under "Risk Factors" in Item 1A of ArQule's Annual Report on Form 10-K for the year ended December 31, 2016 filed with the SEC on March 9, 2017, as updated from time to time in our subsequent Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. See also, "Forward-Looking Statements" included in this Quarterly Report on Form 10-Q.

ITEM 2. — UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS. None.

ITEM 3. — DEFAULTS UPON SENIOR SECURITIES. None.

ITEM 4. — MINE SAFETY DISCLOSURES. Not applicable.

ITEM 5. — OTHERS INFORMATION. None.

ITEM 6. — EXHIBITS.

EXHIBIT NO.	DESCRIPTION
3.1	Certificate of Designations dated November 7, 2017 for the Convertible Series A Preferred Stock as filed with the Secretary of State of the State of Delaware Filed as Exhibit 3.1 to the Company's Current Report on Form 8-K filed on November 8, 2017 (File No. 000-21429) and incorporated herein by reference.
4.1	Form of Warrant. Filed as Exhibit 4.1 to the Company's Current Report on Form 8-K filed on October 16, 2017 (File No. 000-21429) and incorporated herein by reference.
4.2	Form of Warrant. Filed as Exhibit 4.1 to the Company's Current Report on Form 8-K filed on November 8, 2017 (File No. 000-21429) and incorporated herein by reference.
10.1	Form of Securities Purchase Agreement. Filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed on October 16, 2017 (File No. 000-21429) and incorporated herein by reference.
10.2 +	Master Services Agreement, dated July 20, 2017, by and between the Company and ARUP Laboratories, Inc., filed herewith.
10.3 +	Scope of Work #1 to Master Services Agreement, dated July 20, 2017, by and between the Company and ARUP Laboratories, Inc., filed herewith.
10.4 +	Scope of Work #2 to Master Services Agreement, dated July 20, 2017, by and between the Company and ARUP Laboratories, Inc., filed herewith.
10.5	Form of Securities Purchase Agreement. Filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed on November 8, 2017 (File No. 000-21429) and incorporated herein by reference.
31.1	Rule 13a-14(a) Certificate of Chief Executive Officer, filed herewith.
31.2	Rule 13a-14(a) Certificate of Principal Financial Officer, filed herewith.
32	Rule 13a-14(b) Certificate of Chief Executive Officer and Chief Financial Officer, filed herewith.
101	Interactive Data File

+ Certain confidential material contained in the document has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended or Rule 24b-2 of the Securities and Exchange Act of 1934, as amended.

ARQULE, INC.

SIGNATURES

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

ArQule, Inc.

Date: November 9, 2017

/s/ PETER S. LAWRENCE
Peter S. Lawrence
President and Chief Operating Officer
(Principal Financial Officer)

/s/ ROBERT J. WEISKOPF
Robert J. Weiskopf
Chief Financial Officer and Treasurer
(Principal Accounting Officer)

Exhibit 10.2

Confidential Materials omitted and filed separately with the Securities and Exchange Commission.
******Triple asterisks denote omissions.***

EXECUTION COPY

MASTER SERVICES AGREEMENT

This Master Services Agreement (this **"Agreement"**) is entered into as of July 20, 2017 (the **"Effective Date"**) by and between **ArQule, Inc.,** a Delaware corporation having a place of business at One Wall Street, Burlington, MA 01803 (**"ArQule"**) and **ARUP Laboratories Inc.**, a Utah nonprofit organization having its principal place of business at 500 Chipeta Way, Salt Lake City, UT 84108 (**"ARUP"**). ArQule and ARUP may be referred to herein individually as a **"Party"** and collectively as the **"Parties."**

RECITALS

WHEREAS, ARUP and its Affiliates are engaged in the business of supplying specialized assay and Companion Diagnostic development and testing services;

WHEREAS, ArQule is pursuing a clinical development program of ARQ 087 in subjects with Intrahepatic Cholangiocarcinoma ("**iCCA**");

WHEREAS, pursuant to the terms of a Master Collaboration Agreement (the "**MCA**") dated as of July 20, 2017 by and between ArQule and that certain third party manufacturer of the *** set forth in Exhibit 1 hereto (the **"Supplier**"), ArQule and the Supplier have agreed to commercialize an *in vitro* diagnostic and/or companion diagnostic for the ArQule Compound (as defined below) in certain European and other countries;

WHEREAS, ArQule desires to engage and contract for the services of ARUP for the development, validation, regulatory approval and commercialization of a Companion Diagnostic assay in the United States (as defined below) that meets FDA requirements for use by ArQule in the above identified clinical development program and ARUP is willing to provide such services, on the terms set forth herein; and

WHEREAS, following validation and regulatory approval of the Companion Diagnostic test, ARUP will commercialize the test in accordance with the terms to be included in a Statement of Work to be executed by the Parties.

NOW, THEREFORE, In consideration of the above recitals and mutual covenants contained herein, the Parties agree as follows:

1. Definitions. As used in this Agreement:

1.1 "Applicable Laws" means all relevant United States federal, state and local laws, statutes, rules, and regulations including any rules, regulations or requirements of any Regulatory Authority, that are applicable to a Party's activities hereunder.

1.2 "Affiliate" means, with respect to a Party, a person or business entity that directly or indirectly controls, or is controlled by, or is under common control with, that Party. For purposes of this definition, the term "control," including the terms "controlled by" or "under common control with," means (a) owning fifty percent (50%) or more of the voting stock of a company or (b) the possession of, directly or indirectly, the capability to control the direction of the management and policies through the ownership of voting securities or control the board of directors or equivalent governing body of an organization.

1.3 "ArQule Background Patents" means any Patents Controlled by ArQule that contain one or more claims that cover ArQule Background Know-How.

1.4 "ArQule Background Know-How" means any Know-How that (a) is Controlled by ArQule as of the Effective Date and/or during the Term, (b) Covers the ArQule Compound and/or any ArQule Materials and (c) is necessary or useful for ARUP to perform the Project. For purposes of clarity, ArQule Background Know-How (i) shall not include any ArQule Inventions and (ii) shall include, without limitation, any Know-How that is specifically described as ArQule Background Know-How in any Scope of Work.

1.5 "ArQule Compound" means the proprietary compound of ArQule designated by ArQule as ARQ 087.

1.6 "ArQule Contact" means ArQule's contact person for a particular Scope of Work as identified in the Scope of Work.

1.7 "ArQule Invention" means any Invention that (a) relates to the composition, synthesis, formulation, mechanism of action and/or use of the ArQule Compound and/or (b) is a process or method of manufacture of the ArQule Compound. For purposes of clarity, ArQule Invention shall not include the Companion Diagnostic.

1.8 "ArQule Materials" means all Materials provided by ArQule to ARUP for use in the Project. For clarity, all ArQule Materials will be described in a Scope of Work.

1.9 "ARUP Background Patents" means any Patents Controlled by ARUP that contain one or more claims that Cover ARUP Background Know-How.

1.10 "ARUP Background Know-How" means any Know-How that is Controlled by ARUP as of the Effective Date and/or during the Term, and used by ARUP in the conduct of the Project. For purposes of clarity, ARUP Background Know-How (a) shall not include any ARUP Inventions, and (b) shall include, without limitation, (i) the PDP and (ii) any Know-How that is specifically described as ARUP Background Know-How in any Scope of Work.

1.11 "ARUP Companion Diagnostic" means the Companion Diagnostic incorporating the Supplier *** developed by ARUP to be used in conjunction and/or commercialized with the ArQule Compound in the Territory.

1.12 "ARUP IUO" means the diagnostic test developed by ARUP incorporating the Supplier *** for investigational use only in Clinical Trials with the ArQule Compound.

1.13 "ARUP Invention" means any Invention that (a) does not relate to (i) the composition, synthesis, formulation, mechanism of action, use or manufacture of the ArQule Compound and/or (ii) ArQule Background Know-How, and (b) relates specifically to ARUP Background Know-How including the PDP). For purposes of clarity, the Companion Diagnostic will be considered an ARUP Invention and is not considered to be related to the ArQule Compound and/or ArQule Background Know-How.

1.14 **"ARUP Invention Patents"** means any Patents that contain one or more claims that cover any ARUP Invention.

1.15 **"Companion Diagnostic"** means a diagnostic test that is intended to be commercialized for use (a) in identifying patients who may or may not be suitable for treatment with one or more prescription pharmaceutical products, or (b) otherwise in conjunction with the treatment of patients with a prescription pharmaceutical product, including a diagnostic test that meets the definition of "IVD companion diagnostic device" as set forth in FDA's Guidance for Industry and Food and Drug Administration Staff on In Vitro Companion Diagnostic Devices of August 6, 2014.

1.16 **"Confidential Information"** any confidential and/or proprietary data, information and/or Know-How of a Party that is provided by such Party (the "**Disclosing Party**") to the other Party (the "**Receiving Party**") in connection with this Agreement, whether communicated in writing, electronically or orally, including any such information relating to any Assay, diagnostic, biomarker, genetic sequence, compound, Materials, research project, clinical and preclinical data, work in process, future development, scientific, engineering, launch, manufacturing, marketing, business plan, financial or personnel matter relating to such Disclosing Party, its present or future products, sales, suppliers, customers, employees, investors and business, whether or not marked or described in writing as "confidential", "proprietary" or the like. For purposes of clarity, (a) all ArQule Inventions and ArQule Project Results shall be Confidential Information of ArQule, and (b) all ARUP Inventions, the PDP and ARUP Project Results shall be Confidential Information of ARUP. The terms and conditions of this Agreement and any Scope of Work shall be Confidential Information of ArQule and ARUP.

1.17 "**Commercially Reasonable Efforts**" means, with respect to an objective, the reasonable, diligent, good faith efforts of a Party of the type to accomplish such objective that a company in the industry of a similar size and profile as such Party would normally use to accomplish a similar objective taking into account all applicable scientific, commercial and other relevant factors.

1.18 **"Control"** or **"Controlled by"** means, with respect to any item of information, material, Patents or other intellectual property assets, that a Party owns or that a Party otherwise has the right to grant a license, sublicense or other right (including a right of reference) to such assets without violating the terms of any written agreement with any third party.

1.19 **" Covers" or Covered by"** means, with respect to a particular item or form of Intellectual Property, that such Intellectual Property cannot be practiced, used, made, or sold without infringing upon or misappropriating certain other Intellectual Property rights.

1.20 **"Deliverables"** means the items specifically designated or characterized as deliverables in a Scope of Work.

1.21 **"Drug Development Failure"** means, with respect to the ArQule Compound, that ArQule has provided ARUP with written notice that it has discontinued development of such ArQule Compound for any indication.

1.22 **"FDA"** means the United States Food and Drug Administration or any successor entity thereto.

1.23 **"Intellectual Property" or "IP"** means all intellectual property, including Patents, Know-How, discoveries, inventions, developments, trade secrets, techniques, methodologies, modifications, innovations, improvements, writings, documentation, electronic code, data and rights (whether or not protectable under state, federal or foreign patent, trademark, copyright or similar laws) or the like, whether or not written or otherwise fixed in any form or medium, regardless of the media on which contained and whether or not patentable or copyrightable; provided, that, "Intellectual Property" shall not, unless clearly indicated to the contrary, include names, logos, trademarks, trade dress and service marks.

1.24 **"Invention"** means any Know-How (including, without limitation, any new and useful process, method of manufacture or composition of matter) that is conceived or first reduced to practice by ARUP, any Affiliate of ARUP and/or any Approved Subcontractor in the conduct of the Services.

1.25 "**Joint Invention**" means any Invention that is not an ArQule Invention nor an ARUP Invention.

1.26 **"Know-How"** means any information, improvements, practices, formula, trade secrets, techniques, procedures, knowledge, skill, experience and results, including any information regarding marketing, pricing, distribution, cost, sales or manufacturing.

1.27 **"Materials"** means those materials supplied by either Party for use in connection with the Services.

1.28 "**Patent**" means any existing or future: (a) national, regional or international patent or patent application in any jurisdiction (including any provisional, divisional, continuation, continuation-in-part, non-provisional, converted provisional, or continued prosecution application, any utility model, petty patent, design patent and/or certificate of invention), (b) any extension, restoration, revalidation, reissue, re-examination and extension (including any supplementary protection certificate and the like) of any of the foregoing patents or patent applications, and (c) any ex-U.S. equivalents corresponding to any of the foregoing.

1.29 "**Product Development Program**" or "**PDP**" means ARUP's proprietary design control program, consisting of standard operating procedures utilized during general assay (including CDx) development, validation and commercialization. For clarity, the PDP (a) is the sole property of ARUP, and (b) is not a component of the Deliverables or the Results.

1.30 **"Project"** means the full range of services to be provided by ARUP under this Agreement as more fully described in a Scope of Work.

1.31 **"Regulatory Authority"** means any United States regulatory authority, including the FDA, with authority over conduct of the Services and/or the use of any Deliverables.

1.32 **"Results"** means all data and results produced or developed by ARUP in the conduct of the Services, including all Reports.

1.33 **"Services"** means the services specifically set forth in a Scope of Work.

1.34 **"Specifications"** means any procedures, process parameters, analytical tests and other attributes and written specifications for the Services and Deliverables included in a Scope of Work.

1.35 **"Supplier ***"** means ***.

2. Services

2.1 **Scope.** The details of the Services to be performed by ARUP under this Agreement shall be specified in writing on terms and in a form acceptable to the Parties (each, a "**Scope of Work**"), and subject to the terms and conditions set forth in this Agreement. An initial form of Scope of Work is attached hereto as **Exhibit A**. Each Scope of Work shall include, as appropriate, the scope of the work to be performed, time line, budget, other Deliverables, as well as a payment schedule. Each Scope of Work shall be subject to all of the terms and conditions of this Agreement, in addition to the specific details set forth in any Scope of Work. A Scope of Work may be entered into by ArQule or, as applicable, an ArQule Affiliate. Affiliates of ArQule may become a Party to this Agreement by such Affiliate executing a Scope of Work. Any such Affiliate of ArQule will be bound to the terms and conditions under this Agreement and shall have the rights and obligations applicable to ArQule under this Agreement for the respective Scope of Work. Should any provision in any exhibits or attachments hereto conflict with any of the provisions in this Agreement, this Agreement shall control unless such conflicting provision specifically states otherwise.

2.2 **Performance of Services.** ARUP shall use Commercially Reasonable Efforts, and be diligent, in the performance of Services and in meeting its obligations hereunder. The Services shall be performed by ARUP in a professional, workmanlike manner, consistent with industry standards, and in accordance with Applicable Laws. ARUP shall furnish all tools, equipment, supplies or other overhead items necessary to perform the Services required under this Agreement, unless, and only to the extent that, the applicable Scope of Work specifies otherwise, or to the extent that any Scope of Work contemplates the transfer of certain Materials or ArQule Intellectual Property as a necessary component of ARUP performing the Services. ARUP makes no representations regarding the outcome of the Project, and specifically disclaims any particular result with respect to FDA approval of the diagnostic method developed by ARUP, as a "Companion Diagnostic," under the FDA regulations, or that such method will be eligible for classification as a "Humanitarian Use Device," eligible for a "Humanitarian Device Exemption," or that any other outcome of the Project will be achieved with respect to the FDA or any other Regulatory Authority.

2.3 Change Orders. Any material change in the details of a Scope of Work or the assumptions upon which any Scope of Work is based may require changes in the scope, budget and/or timelines of Services, and shall require a written amendment to any Scope of Work (a "**Change Order**"). If at any time during the Term, either Party reasonably determines that a Change Order is necessary, such Party shall prepare a Change Order describing in reasonable detail the nature of such additional Services, and submit such Change Order to the other Party for its review and written approval. Each such Change Order shall detail the requested changes to the applicable task, responsibility, duty, budget, timeline or other matter. The Change Order shall become effective upon the execution of the Change Order by both Parties. Both Parties agree to act in good faith and promptly when considering a Change Order requested by the other Party. Change Orders shall be attached to this Agreement and incorporated herein. A Change Order may, but need not, include an increase in fees payable under any Scope of Work.

2.4 Project Management.

2.4.1 Project Manager. ARUP shall appoint one of its employees as the **"Project Manager"** for each Scope of Work. The Project Manager shall be responsible for all aspects of the Services under such Scope of Work through completion of such Services. Such Project Manager shall regularly report progress on such Scope of Work to the ArQule Contact for such Scope of Work, and coordinate with such ArQule Contact for the performance of the Services. Unless otherwise agreed, all communications between ArQule and ARUP regarding the conduct of the Services pursuant to a Scope of Work shall be addressed between such Project Manager and ArQule Contact. The Project Manager shall respond to any communication from ArQule with reasonable promptness after his/her receipt of such communication.

2.4.2 Joint Steering Committee. The Parties hereby establish a Joint Steering Committee (the "**JSC**"), which will be comprised of an equal number (not less than three (3)) of representatives of each of the Parties. The JSC will meet on dates mutually agreed to by the Parties not less than once per Calendar Quarter, in person or by teleconference which, if in person, shall alternate between the offices of the Parties. ArQule will be responsible for the costs and expenses incurred by (i) its representative in participating on the JSC and (ii) ARUP's representative in participating on the JSC, as set forth in in the Scope of Work. The JSC shall be responsible for (a) overseeing the conduct and progress of the Project; (b) ensuring the exchange of Reports and Results by the Parties; and (c) attempting to resolve any dispute that may arise between the Parties with respect to this Agreement. Except as otherwise agreed to by the Parties, the JSC shall have no authority to make any decisions binding on either of the Parties with respect to either Party's performance under this Agreement.

2.5 Timelines. The Parties shall use commercially reasonable efforts to comply with any timelines, milestones, schedules or target dates for completing the Services or any portion thereof as set forth in such Scope of Work. If at any time a Party anticipates a delay in meeting such timelines for a given Scope of Work, said Party shall promptly notify the other Party in writing of such anticipated delay and the estimated duration of such delay.

2.6 Materials. To the extent specified in a particular Scope of Work, ArQule shall promptly provide ARUP with sufficient amounts of the ArQule Materials for ARUP to perform the Services; provided, that, ARUP hereby acknowledges that the Supplier *** related to the Companion Diagnostic developed by ARUP under this Agreement will be provided by the Supplier pursuant to a separate supply agreement to be executed by and among ARUP, the Supplier and ArQule (the "***** Supply Agreement**"). ArQule acknowledges and agrees that ARUP's obligations under this Agreement are contingent upon the execution by ARUP of the *** Supply Agreement and compliance by the Supplier of its obligations to provide such Materials to ARUP in accordance with the terms of the *** Supply Agreement. Except as otherwise set forth in a Scope of Work, ARUP shall use the ArQule Materials provided by ArQule solely to perform the Services under such Scope of Work and for no other purpose, and in compliance with ArQule's instructions and Applicable Laws. ARUP shall not sell, transfer, disclose or otherwise provide access to the ArQule Materials provided by ArQule to any person or entity without the prior written consent of ArQule. Upon written request following completion or termination of the applicable Services, ARUP shall return or destroy the ArQule Materials provided by ArQule and, if destroyed, certify such destruction in writing, upon completion or termination of the applicable Services.

2.7 Records. ARUP will maintain records of all Results obtained or generated by ARUP in the course of providing Services, including all computerized records and files, in accordance with Applicable Laws and industry standards in a secure area. Upon the written request of ArQule, copies of all such records will be delivered to ArQule or to its designee in such form as is then currently in the possession of ARUP. In the event any requested records contain Confidential Information of ARUP, ARUP Background Know-How, or ARUP Background Patents (collectively, " **ARUP Proprietary Information**"), ARUP may redact such ARUP Proprietary Information from the copies provided to ArQule; provided, that, ARUP shall not redact such ARUP Proprietary Information to the extent that such information is required by ArQule for regulatory, patent application and/or patent prosecution purposes. ARUP shall retain originals of all such records for a period of *** years, or as otherwise required by Applicable Laws, whichever is longer. In no event will ARUP dispose of any such records without first giving ArQule*** days' prior written notice of its intent to do so; provided, that, ARUP may, retain copies of any records as are reasonably necessary for regulatory or insurance purposes, subject to ARUP's obligations of confidentiality under this Agreement. ArQule will reimburse ARUP for the reasonable costs and expenses incurred by ARUP for the copying and shipping of such records to ArQule. In the event ARUP generates or receives records related to the conduct of a clinical study during the term of this Agreement or any Scope of Work, ARUP will retain all such records for the longer of *** years following the completion of the clinical study, or *** years following the last approval of a marketing application in an ICH region, unless a longer retention period is required by applicable law. If ARUP is or becomes unable to comply with this retention period, ARUP will notify ArQule in writing and shall make such records accessible for ArQule's review and collection

2.8 Reports. ARUP shall keep ArQule regularly informed of the progress of the Project. Without limiting the generality of the foregoing and unless otherwise provided in a Scope of Work, ARUP shall promptly, not less than *** during the Term (and more frequently if required to keep ArQule sufficiently informed), provide ArQule with (a) reports in reasonable detail regarding the status of ARUP's conduct of the Services, (b) all not previously reported Results, Inventions and original works of authorship generated, conceived, developed and/or reduced to practice in the performance of the Services and (c) such supporting data and information as may be reasonably requested from time to time by ArQule regarding the Project (each such report, a "**Report**").

2.9 Facility Visit. ArQule's representatives may, upon reasonable prior written notice, visit the ARUP facility with reasonable frequency during normal business hours, and subject to ARUP's policies and practices related to visitors to ARUP facilities to discuss the progress of the Services and ARUP's compliance with the terms of this Agreement. Any information disclosed to ArQule representatives in writing, orally or by inspection of tangible objects in connection with any such visit shall be considered Confidential Information of ARUP and protected as such by ArQule pursuant to the terms of this Agreement. Notwithstanding the foregoing, except as otherwise agreed by the Parties in any Scope of Work, absent the prior written approval of ARUP, the number of such visits shall be limited to no more than *** per calendar year; shall not span more than *** consecutive business days; and the number of ArQule representatives onsite during such visits shall exceed no more than *** at any given time.

3. Independent Contractor Relationship; Certain Liabilities; Taxes; Subcontracting.

3.1 Independent Contractor. ARUP represents and warrants that it is an independent contractor and not the agent, employee, or franchisee of any other entity. This Agreement does not constitute a hiring by either Party and nothing in this Agreement shall be interpreted or construed as creating or establishing the relationship of employer and employee between ArQule and ARUP, or any person providing the Services on behalf of ARUP. It is the Parties' intention that ARUP have an independent contractor status and that ARUP and its employees, independent contractors, advisors or Affiliates (hereafter, collectively, "**ARUP's Workers**") shall not be considered ArQule employees for any purposes, including, but not limited to, the application of the Federal Insurance Contribution Act, the Social Security Act, the Federal Unemployment Tax Act, the provisions of the Internal Revenue Code, any applicable State Revenue and Taxation Code pertaining to income tax withholding at the source of income, and the Workers' Compensation Insurance Code. This Agreement does not create or evidence any joint venture or partnership of the Parties. ArQule shall not be liable for any obligations incurred by ARUP unless specifically authorized in writing. Neither Party shall have any authority to incur, create or assume any liability or any other obligation, express or implied, in the name of, or on behalf of, the other Party.

3.2 Waiver of Benefits. ARUP, on behalf of ARUP and ARUP's Workers, hereby waives and foregoes any right to receive benefits given by ArQule to its regular employees, including, but not limited to health insurance, paid vacation, sick leave, profit sharing or 401(k) plan benefits, stock distributions or any other ArQule employee benefit. ARUP is solely responsible for the provision of benefits to ARUP's Workers. This Section 3.1 is effective independently of the employment status of ARUP or ARUP's Workers as adjudged for taxation purposes or for any other purpose.

3.3 Taxes/Withholding. ARUP acknowledges that no income, social security or other taxes shall be withheld or accrued by ArQule for the benefit of ARUP or ARUP's Workers. ARUP will be solely responsible for all employment insurance and taxes, licensing requirements, government approvals and filings, or any other registration, authorization or permit required in connection with the performance of its obligations hereunder. ARUP is solely responsible for determining and fulfilling ARUP's Federal and State tax obligations including the filing of tax returns and payment of taxes in accordance with the applicable provisions of Federal and State law. ARUP is solely responsible for determining and fulfilling any income tax, social security, workers compensation, and any other employment-related obligation related to ARUP's engagement of ARUP's Workers.

3.4 Persons Hired by ARUP. ARUP shall be solely responsible for hiring, supervising, directing and managing all persons, except for Approved Subcontractors (as defined in Section 3.4, below), needed to provide the Services and perform the tasks and duties necessary to complete the Deliverables described in the operative Scope of Work.

3.5 Subcontracting. ARUP may not subcontract with another business or individual to perform a portion or portions of the Services without the prior written approval of ArQule, which approval shall not be unreasonably withheld (each, an "**Approved Subcontractor**"); provided, that, ARUP may subcontract and perform the Services or any part of the Services through the efforts of one or more of ARUP's medical directors, who are employees of the University of Utah. The approval by ArQule of any Approved Subcontractor shall not release ARUP from any responsibility or liability in connection with said Approved Subcontractor and shall not create a contractual or employment relationship between ArQule and the Approved Subcontractor. ARUP shall be responsible for the oversight and supervision of the work and designated activities of each Approved Subcontractor, including assuring compliance with applicable terms of this Agreement. ARUP shall ensure that all Approved Subcontractors comply with ARUP's obligations under this Agreement including, but not limited to, ARUP's obligations concerning confidentiality and ownership of intellectual property. ArQule shall have no obligation or liability to the Approved Subcontractor under this Agreement and the Approved Subcontractor shall have no rights or remedies against ArQule under this Agreement or otherwise. ArQule may, at its discretion and upon request by ARUP, directly pay an Approved Subcontractor for any Services performed pursuant to this Agreement and offset the amount of such payment against any amount owed to ARUP.

3.6 Licenses and Access to Third Party Technology. In the event ARUP concludes, in ARUP's reasonable discretion, that it is necessary to obtain and maintain a license(s) or other rights for ARUP to access or use any third-party Intellectual Property for the development, manufacture, use or commercialization of the Companion Diagnostic ("**ARUP Third Party Intellectual Property**"), ARUP will have the right, in its discretion, to negotiate a license to such ARUP Third Party Intellectual Property; provided, that, (a) to the extent that any such license agreement requires (or would be reasonably expected to require) ARUP to pay consideration greater than $*** in any one calendar year and (b) ARUP wishes to have ArQule reimburse ARUP for such consideration, ARUP shall (i) regularly inform ArQule with respect to the negotiation status of such license agreement, (ii) reasonably consult with ArQule regarding the terms of such license agreement, (iii) reasonably consider any comments from ArQule on the terms of such license agreement; (iv) obtain ArQule's written approval of such terms before executing such license agreement; and (v) subject to the foregoing, ArQule shall reimburse ARUP for the consideration paid by ARUP under any such license agreement. ARUP shall not be held responsible to the extent that ARUP is unable to obtain rights to any such ARUP Third Party Intellectual Property from the controlling third parties under economically reasonable conditions.

4. Compensation

4.1 Fees. Subject to the terms and conditions of this Agreement, ArQule shall pay ARUP the fees specified in each Scope of Work (**"Fees"**), along with Expenses, as set forth below, as ARUP's sole and complete compensation for all Services, Deliverables, and Intellectual Property rights provided by ARUP under this Agreement. Unless otherwise set forth in a Scope of Work, ARUP shall invoice ArQule within *** days of the end of each month for Services provided in such month. All invoices will be addressed and sent to: Accounts Payable, ArQule, Inc., One Wall Street, Burlington, MA 01803 or via such other method as may reasonably be requested by ArQule, including electronic invoicing and payment systems. Each invoice will include a written description of the invoiced Services with such specific detail as may be reasonably requested by ArQule. The invoice submitted by ARUP pursuant to this Section 4 shall also include a detail of all reimbursable Expenses incurred during the period covered by such invoice as described in Section 4.2.

4.2 Expenses. Solely to the extent described in the applicable Scope of Work, ArQule shall reimburse ARUP for any reasonable expenses for travel undertaken at ArQule's request, and other out-of-pocket expenses previously approved by ArQule, that are incurred by ARUP or any of its employees in performing the Services (the **"Expenses"**), on the condition that ARUP provides ArQule with invoices for such Expenses and adequate supporting documentation for such invoices.

4.3 Payments. Unless otherwise expressly provided in the applicable Scope of Work, payment to ARUP of all undisputed invoiced Fees and Expenses shall be due within *** days following ArQule's receipt of the invoice for such Fees and Expenses submitted by ARUP pursuant to Section 4.1 or 4.2 above. Payments shall be addressed to:

ARUP Laboratories Inc.
Attn: Yurika Oktavianna
500 Chipeta Way, Mail code #133
Salt Lake City, UT 84108
Tel: (801) 583-2787 ext. 2194
Email: yurika.oktavianna@aruplab.com

ARUP Tax Identification Number: 87-0403206

4.4 Disputed Amounts. For disputed invoices or the disputed portion of an invoice, ArQule shall use reasonable efforts to provide to ARUP, in writing, within *** business days, justification for the withheld payment. In the event the Parties mutually determine that a disputed amount was properly invoiced by ARUP, ArQule will promptly pay the disputed amount without additional invoicing by ARUP. ArQule and ARUP shall negotiate in a timely, good faith manner to resolve billing queries.

5. Audits

5.1 Financial Audit and Record Keeping. ARUP shall keep full and accurate records and accounts of all its Service Fees and Expenses incurred in connection with this Agreement. All records demonstrating ARUP's performance under this Agreement, including but not limited to ARUP's and any authorized Approved Subcontractors' invoices, shall be available for inspection and audit by ArQule or any independent auditors designated by ArQule at all reasonable times and upon reasonable notice during the Term of the Agreement and for *** years thereafter (" **Financial Records and Accounts**") solely for the purpose of confirming ARUP's performance under this Agreement. Upon request by ArQule and subject to ARUP's policies and practices related to visitors to ARUP facilities, ARUP shall allow ArQule or ArQule's authorized representatives, at ArQule's sole expense, to visit ARUP's facilities during normal business hours to review the Financial Records and Accounts and/or to make copies of relevant records.. If ArQule discovers that ARUP has been overcharging ArQule as a result of such audit, ARUP will refund the amount of any overcharging that is not disputed in good faith by ARUP within *** days after ArQule's demand therefor. All Financial Records and Accounts shall be deemed Confidential Information of ARUP.

5.2 Regulatory Inspections. ARUP shall promptly notify ArQule upon becoming aware of any regulatory inspections by a duly authorized representative (**"Inspector"**) of any Regulatory Authority, including, without limitation, the FDA, of which it becomes aware and which directly relate to the Services or Deliverables to be provided under a Scope of Work. ARUP shall provide ArQule with the following data as soon as practicable: (a) the inspecting entity and the purpose of the inspection, (b) the name and credential number of the Inspector, and (c) a copy of the form(s) issued by the Inspector, if any. In the event that ArQule believes that such inspection is not required by Applicable Laws or an accrediting or licensing entity providing approval, licensure, or accreditation to ARUP and and/or that the conduct of such inspection would, if permitted by ARUP, constitute a breach of ARUP's confidentiality obligations under this Agreement, ArQule shall notify ARUP of ArQule's determination sufficiently in advance of such inspection that ARUP can notify the inspecting authority of ArQule's objection. ArQule will reasonably cooperate with ARUP in enabling ARUP to communicate ArQule's objection to such inspection. ARUP shall have the primary responsibility for preparing any responses relating to the Materials and/or Services that may be required by the inspecting entity, but ArQule will provide reasonable assistance, at ArQule's expense, in aiding ARUP with respect to such responses. ARUP will consult with ArQule regarding any response to an inspecting entity relating to the Materials and/or Services. ARUP shall keep ArQule informed on such inspection and shall provide ArQule with copies of all correspondence, received or generated pursuant to any such inspection. Materials, forms and records associated with such inspection will be made available to ArQule at ARUP's premises or via webinar. Unless prohibited by Applicable Laws, ArQule shall have the right to be present at any such inspections, and where not prohibited by Applicable Laws, shall be present at such inspections. ARUP shall take any reasonable and necessary actions requested by ArQule to cure deficiencies as noted during any such inspection.

6. Intellectual Property

6.1 In General.

6.1.1 Scope of Work. The Parties hereby acknowledge and agree that (a) the rights and obligations of the Parties under this Agreement with respect to intellectual property, including the ownership and use of any and all Inventions, are set forth this Article 6; (b) while the Parties may from time to time supplement such rights and obligations in this Article 6 through a Scope of Work, such supplemental provisions shall apply only to the extent such provisions are not in conflict, or inconsistent with this Article 6; and (c) in the event of any inconsistency between this Article 6 and the intellectual property provisions in a Scope of Work, this Article 6 shall control.

6.1.2 ArQule. ArQule shall have sole and exclusive ownership of all right, title and interest on a worldwide basis in and to any and all ***. In connection therewith, ARUP hereby assigns, and shall require its employees to assign, to ArQule, all right, title and interest in and to all ***.

6.1.3 ARUP. ARUP shall have sole and exclusive ownership of all right, title and interest on a worldwide basis in and to any and all ***. In connection therewith, ArQule hereby assigns, and shall require its employees to assign, to ARUP, all right, title and interest in and to all ***, subject to the license to ARUP Inventions granted to ArQule pursuant to Section 6.3.

6.1.4 Joint Inventions. The Parties shall jointly own all Joint Inventions. Notwithstanding anything to the contrary contained herein or under Applicable Laws, the Parties hereby agree that either Party may use, license or sublicense to Affiliates or Third Parties all or any portion of its interest in the Joint Inventions for any purposes without the prior written consent of the other Party, without restriction and without the obligation to provide compensation to any other Party.

6.2 Patent Prosecution. ArQule shall be responsible, acting through patent counsel of its choice, for the filing, prosecution and maintenance of any Patent applications and Patents claiming or covering any ***, and ARUP shall be responsible, acting through patent counsel of its choice, for the filing, prosecution and maintenance of any Patent applications and Patents claiming or covering any ***; provided, that, nothing in this Agreement shall be construed as requiring either Party to file, prosecute, or a maintain a patent for an Invention Controlled by that Party. Each Party shall reasonably cooperate with the other Party in connection with the same, including, upon the request of the prosecuting Party, promptly executing any and all Patent applications, formal documents, assignments, or other instruments which the prosecuting Party deems necessary or reasonably useful for the filing, prosecution and/or maintenance of any Patent applications or Patents claiming or covering any such Inventions

6.3 Cooperation. During the Term of this Agreement, ARUP shall provide reasonable cooperation to ArQule and its attorneys and agents in the preparation and filing of all papers and other documents as may be required to obtain, perfect, sustain and enforce ArQule's rights in and to any ***, including but not limited to, joining in any proceeding to obtain letters, patents, copyrights, trademarks or other legal rights with respect to any such *** in the United States and in any and all other countries; provided, that, ArQule shall bear the expense of such proceedings. Any patent or other legal right with respect to any *** issued to ARUP personally shall be assigned by ARUP to ArQule without charge by ARUP. In the event ArQule is unable for any reason, after reasonable effort, to secure ARUP's signature on any document needed in connection with the actions specified in this Section 6.3, ARUP hereby irrevocably designates and appoints ArQule and its duly authorized officers and agents as its agent and attorney in fact, which appointment is coupled with an interest, to act for and on its behalf, for the express and sole purpose to execute, verify and file any such documents to further the purposes of this Section 6.3 with the same legal force and effect as if executed by ARUP.

6.4 Joint Invention Patents. Promptly after the determination that any Invention is a Joint Invention, the Parties will determine which Party (the "**Prosecuting Party**") will undertake the filing, prosecution and maintenance of Patents covering such Joint Invention ("**Joint Invention Patent**") with respect thereto, based on the respective expertise of the Parties. If the Parties fail to agree, the filing, prosecution and maintenance of such Joint Invention Patent shall be jointly controlled by the Parties, using patent counsel agreed upon by the Parties. All patent costs incurred in connection with the preparation, filing, prosecution and maintenance of a Joint Invention Patent shall be shared equally by the Parties. If one Party (the "**Assigning Party**") is not interested, or not willing to equally share the related patent costs, with respect to any such Joint Invention Patent in a given country, then: (a) the other Party shall become the Prosecuting Party upon giving notice to the Assigning Party of its intention to continue to seek rights for such Joint Invention Patent, (b) upon receiving written notice from the Prosecuting Party, the Assigning Party shall assign all of its rights in the Joint Invention Patent to the Prosecuting Party, and (c) the Prosecuting Party shall at its own cost and expense, file for, prosecute and maintain such Joint Invention Patent in such country in the Prosecuting Party's own name. For all Joint Invention Patents for which the Parties are sharing costs, the Prosecuting Party shall keep the other Party reasonably informed of prosecution activities with respect to the Patent application for a Joint Invention Patent. The Prosecuting Party shall provide the other Party with a copy of material communications from any Patent authority regarding such Joint Invention Patents, and shall provide drafts of any material filings or responses to be made to such Patent authorities a reasonable amount of time in advance of submitting such filings or responses so that the other Party may have an opportunity to review and comment.

6.5 Project Results. Ownership of Project Results shall be determined as follows: (a) ArQule shall own all Project Results that relate to *** **("Patient-Related Project Results")** (the "**ArQule Project Results**") and (b) ARUP shall own all Project Results, other than Patient-Related Project Results, that relate to *** ("**ARUP Project Results**"), ~~the PDP~~ and (c) all other Project Results, including the Project Results, other than Patient-Related Project Results, that would consist of, constitute or relate to information that falls within both subsections (a) and (b) above shall be jointly owned by the Parties ("**Joint Project Results**"), and each Party shall have the right to use such Joint Project Results for any and all purposes.

6.6 License Grant to ARUP. ArQule hereby grants to ARUP a fully paid, non-exclusive license under any and all ArQule Background Know-How and ArQule Background Patents to the extent necessary for ARUP to conduct the Services during the Term.

6.7 License Grant to ArQule. If any ARUP Invention is employed by, is embodied within, or otherwise materially useful or necessary to use or to practice, any ***, ARUP shall be deemed to have granted, and hereby grants, to ArQule a non-exclusive, worldwide, royalty-free, fully-paid, sublicensable, perpetual license under such ARUP Invention solely to the extent necessary to use such *** and/or practice such ***.

7. Confidentiality

7.1 Confidential Information Except to the extent expressly authorized by this Agreement or by the disclosing Party in writing, during the Term and for *** years thereafter, a Receiving Party shall maintain the Confidential Information of the Disclosing Party in strict trust and confidence and shall disclose such Confidential Information only to its Representatives and use such Confidential Information only for the purposes provided for in this Agreement. The term "**Representatives**" shall mean a Party's directors, officers, employees, agents, subcontractors, representatives, or other individuals or entities controlled by that Party. Without limiting the foregoing, (a) ARUP may use the Confidential Information received from ArQule only to the extent required to perform the Services and (b) either Party may use the Confidential Information received from the other Party to perform its obligations or to exercise its rights under this Agreement, or for the purpose of determining the receiving Party's rights and obligations with respect to such information or this Agreement, and for no other purposes. Neither Party shall use the Confidential Information for any purpose or in any manner that would constitute a violation of Applicable Laws. This Agreement hereby expressly supersedes any previous agreements between the parties with respect to use or disclosure obligations that might otherwise apply to any information that may be exchanged pursuant to this Agreement.

7.2 Additional Agreements. Each Receiving Party shall ensure that each of its Representatives who will have access to any Confidential Information of the Disclosing Party or perform any Services is under confidentiality and non-use obligations with respect to the Disclosing Party's information no less stringent than those set forth herein.

7.3 Exceptions. The obligations of confidentiality and nonuse set forth in Section 7.1 shall not apply to any specific portion of information that the Receiving Party can demonstrate by competent written proof: (a) is in the public domain or comes into the public domain through no fault of the Receiving Party; (b) is furnished to the Receiving Party by a third party that the Receiving Party does not know is subject to a duty of confidentiality with respect thereto; (c) is already known by the Receiving Party at the time of receiving such Confidential Information; or (d) is independently developed by the Receiving Party without access to or use of the Confidential Information of the Disclosing Party.

7.4 Authorized Disclosure. Notwithstanding the foregoing in this Section 7, a Receiving Party may disclose Confidential Information of the Disclosing Party to the extent such disclosure is required by Applicable Laws, or pursuant to a valid order of a court or other governmental body having jurisdiction, *provided that* the Party required to make such disclosure provides the other Party with reasonable prior written notice of such disclosure and reasonable assistance in obtaining a protective order or confidential treatment preventing or limiting the disclosure and/or requiring that the Confidential Information so disclosed be used only for the purposes for which the Applicable Laws require, or for which the order was issued.

7.5 Publication; Use of Names.

7.5.1 Publication of Results- in General. Under no circumstances may either Party use the name of the other Party or any of its personnel in any publication or any form of advertising without such other Party's prior written consent, except as necessary to comply with applicable law or regulations. For the avoidance of doubt, neither Party shall disclose, present, disseminate or produce any publication that contains information regarding the Services, Deliverables or any Confidential Information of the other Party without such other Party's prior written consent except as provided in this Section 7.5. ArQule will have the sole right to make, be responsible for, and control the timing and scope of, any publication, presentation or use, including for non-confidential discussions with a Third Party (each, a "**Publication**") of ArQule Project Results and ARUP will have the sole right to make, be responsible for and control the timing and scope of any Publication of ARUP Project Results. ArQule and its Affiliates shall not publish, present or use ARUP Project Results or any portion thereof for any Publication without ARUP's prior written consent, and ARUP and its Affiliates shall not publish, present or use ArQule Project Results or any portion thereof for any Publication without ArQule's prior written consent.

7.5.2 Publication of Joint Project Results. Any Publication of any Joint Project Results must be agreed and approved by both Parties. All Publications that include Joint Project Results shall be subject to the provisions of this Agreement relating to confidentiality and non-disclosure. At least *** days prior to submission of a Publication that includes Joint Project Results, the publishing Party shall submit to the other Party for review any proposed Publication. The other Party may review the proposed Publication and shall provide comments (if any) to the publishing Party no later than *** days prior to the proposed submission date for the Publication. Upon notice to the publishing Party that the other Party reasonably believes that one or more Patent applications should be filed to claim Inventions owned by the other Party (or Joint Inventions) prior to any Publication, the publishing Party shall delay the submission or disclosure of the Publication until such Patent application(s) have been filed; provided, that, the other Party expeditiously files any such Patent application(s); and, provided, further, that, any such delay of disclosure or submission of a Publication will not exceed *** days from the date of receipt of such notice by the publishing Party. If the other Party believes that any Publication contains Confidential Information belonging to the other Party, the other Party will notify the publishing Party, which will remove all references to such Confidential Information prior to publication, presentation or use. Notwithstanding the foregoing, to the extent ArQule reasonably determines that the Publication of data or results that constitutes Joint Project Results is necessary to accurately present the results of any clinical trial, it shall have the right to make such Publication upon written notice to ARUP but without ARUP's prior written consent.

7.6 Return of Confidential Information. Upon termination or expiration of the Agreement, or upon written request of the disclosing Party, the Receiving Party shall promptly return or destroy all documents, notes and other tangible materials representing the Disclosing Party's Confidential Information and all copies thereof; provided, however, that the Receiving Party may retain a single archival copy of the Confidential Information for the sole purpose of facilitating compliance with the surviving provisions of this Agreement. The foregoing obligation to return or destroy Confidential Information shall not apply to Confidential Information, such as that stored in routine electronic backups, the destruction or return of which is economically or technologically infeasible.

7.7 Injunctive Relief. The Parties expressly acknowledge and agree that any breach or threatened breach of this Section 7 by one Party may cause immediate and irreparable harm to the other Party that may not be adequately compensated by damages. Each Party therefore agrees that in the event of such breach or threatened breach by a Party, and in addition to any remedies available at law, the non-breaching Party shall have the right to seek equitable and injunctive relief, without bond, in connection with such a breach or threatened breach.

8. Representations and Warranties

8.1 Due Authorization. Each Party represents and warrants that (a) it has the full power and authority to enter into this Agreement, (b) this Agreement has been duly authorized, and (c) this Agreement is binding upon it.

8.2 No Inconsistent Obligations or Constraints upon ARUP. ARUP represents and warrants that (a) it is qualified and permitted to enter into this Agreement; (b) the terms of the Agreement are not inconsistent with its other contractual arrangements; (c) it has the right to grant all licenses granted to ArQule in this Agreement; and (d) it shall perform the Services in accordance with the highest standards of care and diligence practiced by recognized firms in providing services of a similar nature.

8.3 No Debarred Person. Neither ARUP nor any of ARUP's Workers is debarred pursuant to the Generic Drug Enforcement Act of 1992, 21 U.S.C. §335a, as amended, or any similar state law or regulation (collectively "**Debarred**"), excluded by the Office of Inspector General pursuant to 42 U.S.C. § 1320a-7, *et seq*. or any state agency from participation in any federal or state health care program (collectively "**Excluded**") or otherwise disqualified or restricted by the FDA pursuant to 21 C.F.R. 312.70 or any other Regulatory Authority (collectively " **Disqualified**"). ARUP further represents and certifies that, to the best of ARUP's actual knowledge as of the date of execution of this Agreement, after due inquiry, ARUP, its employees and ARUP's Workers are not under investigation or otherwise aware of any circumstances which may result in ARUP being Debarred, Excluded or Disqualified. ARUP further represents and certifies that it shall not employ or otherwise use any business or individual that is Debarred, Excluded or Disqualified to perform any portion or portions of the Services hereunder. ARUP further represents and certifies that in connection with the subject matter of this Agreement: (i) none of its ARUP, Its employees or ARUP Workers is a Foreign Official as defined in the U.S. Foreign Corrupt Practices Act, (ii) it will not make, accept or request any payment, either directly or indirectly, of money or other assets to any third party where such payment would constitute violation of any law, including the U.S. Foreign Corrupt Practices Act and the UK Bribery Act 2010, (iii) regardless of legality, it shall neither make, accept nor request any such payment for the purpose of improperly influencing the decisions or actions of any third party, and (iv) it shall report any suspected or actual violation of this Section 8.3 to ArQule upon becoming aware of the same. During the term of this Agreement, ARUP shall immediately notify Sponsor in writing, pursuant to the Notice provisions provided herein, of any change in the status of any representation or certification set forth in this Section 8.3.

8.4 No Infringement. ARUP's performance of the Services under this Agreement shall not, to the best of ARUP's knowledge, infringe the intellectual property rights of a third party. In performing the Services, neither ARUP nor any of ARUP's Workers shall knowingly make any unauthorized use of any confidential or proprietary information of any other party or knowingly infringe the intellectual property rights of any other party.

8.5 Deliverables. The Services performed and the Deliverables shall conform to the Specifications, requirements, and other terms in the applicable Scope of Work and this Agreement. In the event that the Services performed and/or the Deliverables do not conform to the Specifications, requirements, and other terms in the applicable Scope of Work and this Agreement, without limiting any other rights or remedies ArQule may have, ARUP will cooperate with ArQule to identify the failure of conformity and to correct such failure at no additional charge to ArQule. If the breach has not been fully cured within *** days after ARUP received notice thereof (or such longer period of time as ArQule may, in its discretion, give ARUP to cure the breach, by written notice to ARUP), (a) ARUP will refund all Fees and Expenses previously pre-paid to ARUP for any milestones yet to be achieved under the applicable Scope of Work, and (b) ArQule will have the right, in its discretion, to terminate the applicable Scope of Work and/or this Agreement upon written notice on the expiration of such ***-day period.

8.6 Warranty Disclaimer. EXCEPT AS EXPLICITLY SET FORTH IN THIS SECTION 8, EACH PARTY HEREBY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. ASIDE FROM THE ASSURANCES SET FORTH IN SECTION 8.5 REGARDING THE PARTIES' COOPERATION TO OBTAIN DESIRED FUNCTIONALITY WITH RESPECT TO THE DELIVERABLES, ARUP SPECIFICALLY DISCLAIMS ANY WARRANTY WITH RESPECT TO THE FUNCTIONALITY OR PERFORMANCE OF ANY DELIVERABLES AND FURTHER DISCLAIMS ANY ASSURANCE THAT THE DELIVERABLES WILL MEET ANY STANDARDS NECESSARY FOR APPROVAL BY THE FDA OR ANY OTHER REGULATORY BODY.

9 . Insurance. Throughout the term of this Agreement, ARUP and ArQule shall each secure and maintain, where appropriate, on an occurrence basis, commercial general liability insurance, professional liability insurance, employers liability insurance, and such other insurance coverage, in forms and amounts as may be reasonable and appropriate in the performance of the obligations assumed hereunder but in no event with limits less than $*** per occurrence and $*** annual aggregate. Each Party shall also secure and maintain workers compensation in accordance with all applicable statutory requirements. Upon request, each Party shall provide to the other certificates of proof of the required insurance coverage. Each Party shall indemnify and hold harmless the other Party from any claims which may arise as a result of the Party's failure to provide any of the insurance coverage required herein. ARUP and ArQule may self-insure all or any of these required coverages.

10. Indemnification; Limitation of Liability

10.1 By ARUP. ARUP shall indemnify, defend and hold harmless ArQule and its affiliates and their respective directors, officers, employees, and agents (the **"ArQule Indemnitees"**) from and against any and all costs, expenses, liabilities, damages, losses and harm (including reasonable legal expenses and attorneys' fees) arising out of or resulting from any third party suits, claims, actions, or demands (collectively, **"Claims"**) to the extent caused by: (a) breach of this Agreement by ARUP in its performance of obligations hereunder; (b) the negligence of ARUP or its officers, directors, employees, or agents within the course and scope of their employment; (c) ARUP's material breach of its warranties, or representations under this Agreement ; except in each case to the extent that a Claim arises out of or results from the negligent acts or intentional omissions of any ArQule Indemnitee or ArQule's breach of its obligations, warranties, or representations under this Agreement.

10.2 By ArQule. ArQule shall indemnify, defend and hold harmless ARUP and its directors, officers, employees, and agents (the **"ARUP Indemnitees"**) from and against any and all Claims to the extent resulting from or caused by: (a) breach of this Agreement by ArQule in the performance of its obligations hereunder; (b) the negligence of any ArQule Indemnitee within the course or scope of their employment; or (c) ArQule's material breach of its warranties or representations under this Agreement; (d) the actual or alleged infringement of any Patents of any Third Party as a result of the use by ARUP of ArQule Background Know-How or ArQule Background Patents in the conduct of the Services in accordance with any Scope of Work; or (e) the actual or alleged infringement of any Intellectual Property of any Third Party as a result of the use by ARUP of the Supplier *** to develop and commercialize the Companion Diagnostic assay in the United States as contemplated by this Agreement, except in each case to the extent that a Claim arises out of or results from the negligent acts or intentional omissions of any ARUP Indemnitee or ARUP's modification of ArQule IP or ARUP's breach of its obligations, warranties, or representations under this Agreement.

10.3 Indemnification Conditions and Procedures. Each Party's agreement to indemnify, defend and hold harmless the other Party is conditioned on the indemnified Party: (i) providing written notice to the indemnifying Party of any claim or demand for which is it seeking indemnification hereunder promptly after the indemnified Party has knowledge of such claim; (ii) permitting the indemnifying party to assume full responsibility to investigate, prepare for and defend against any such claim or demand, except that the indemnified Party may cooperate in the defense at its expense using its own counsel; (iii) assisting the indemnifying Party, at the indemnifying Party's reasonable expense, in the investigation of, preparing for and defense of any such claim or demand. Neither Party may enter into any non-monetary compromise or settlement, consent judgment or other voluntary final disposition of any such claim or demand without the indemnifying Party's written consent, such consent not to be unreasonably withheld or delayed.

1 0 . 4 Defense of Certain Infringement Claims. In the event that any action, suit or proceeding is brought against ARUP alleging the infringement of the Intellectual Property of any Third Party by reason of the use by ARUP of the Supplier *** to develop and commercialize the Companion Diagnostic assay in the United States as contemplated by this Agreement, ARUP shall notify ArQule promptly upon the earlier of (a) receipt of service of process in such action, suit or proceeding or (b) the date on which ARUP becomes aware that such action, suit or proceeding has been instituted. ArQule shall have the sole right to defend such action, suit or proceeding at its sole expense, the Supplier shall have the right to separate counsel at its own expense in any such action, suit or proceeding and the Parties shall cooperate with each other in all reasonable respects in any such action, suit or proceeding. ArQule will have the sole right to settle or otherwise resolve any such action, suit or proceeding without ARUP's prior written consent, provided that such settlement does not admit fault on the part of ARUP or result in any monetary liability on the part of ARUP. Any settlement costs and/or royalties paid in settlement of any such suit, and the payment of any damages to the Third Party, shall be borne solely by ArQule. In the event ArQule concludes, in its sole discretion, that it is unable to settle or otherwise resolve any such action, including by obtaining a license from the relevant Third Party, ArQule may terminate this Agreement by providing written notice to ARUP.

10.5 Limitation of Liability. EXCEPT FOR DAMAGES AVAILABLE FOR BREACHES OF CONFIDENTIALITY OBLIGATIONS UNDER SECTION 7, AND THE INDEMNIFICATION RIGHTS AND OBLIGATIONS UNDER SECTION 10, (A) NEITHER PARTY SHALL BE LIABLE TO THE OTHER PARTY FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, PUNITIVE OR INDIRECT DAMAGES ARISING FROM OR RELATING TO ANY BREACH OF THIS AGREEMENT, REGARDLESS OF ANY NOTICE OF THE POSSIBILITY OF SUCH DAMAGES; AND (B) NEITHER PARTY'S AGGREGATE LIABILITY TO THE OTHER FOR ANY MATTERS OR CLAIMS ARISING OUT OF THIS AGREEMENT OR THE SERVICES, OTHER THAN A CLAIM FOR FAILURE TO PAY AMOUNTS OWED, SHALL EXCEED ***.

11. Term and Termination

11.1 Term. Subject to the provision for early termination set forth below in Section 11.2 of this Agreement, this Agreement shall commence as of the Effective Date and shall continue for *** years from the Effective Date (the "**Term**"), provided that the terms of this Agreement shall continue to apply to any Scope of Work entered into prior to the expiration of the Term that expires after the Term. This Agreement will automatically be renewed for *** year if not terminated in writing by either Party within *** days of the termination date, and may be renewed for successive years if no written request for termination is sent by either Party to the other Party.

11.2 Termination.

11.2.1 Termination for Material Breach . In the event that either Party materially breaches its obligations as required hereunder, the other Party shall have the right to terminate this Agreement upon *** days' prior written notice to the defaulting Party specifying the default; provided, however, if said defaulting Party cures the default within the said *** day period, this Agreement shall continue in full force and effect as if no default had occurred. For clarity, a breach that is specific to a Scope of Work shall not serve to terminate this Agreement, but shall be addressed as set forth below. Any termination of this Agreement shall automatically terminate any Scopes of Work or related agreements that may be in effect, unless the Parties agree otherwise in writing. Either Party may terminate a Scope of Work upon *** days' notice if the other party commits a material breach of such Scope of Work and fails to cure such breach within the notice period.

11.2.2 Termination by ArQule . ArQule may terminate this Agreement upon written notice to ARUP pursuant to Section 10.4 or upon *** days' prior written notice to ARUP in the event of a Drug Development Failure.

11.3 Effects of Termination

11.3.1 Survival. Sections 1, 2.6, 2.7, 3.1, 3.2, 3.3, 3.4, 5.1, 6 (other than Section 6.6), 7, 9, 10 (solely to the extent the Claims can be attributed to action or omission during the Term), 11.3 and 12 shall survive any termination or expiration of this Agreement. Termination or expiration of this Agreement shall not affect either Party's liability for any breach of this Agreement it may have committed before such expiration or termination.

11.3.2 Return of ArQule Property. Upon the termination of this Agreement for any reason and written request by either Party, ArQule or ARUP, as the case may be shall return or destroy the Materials provided by the other Party under this Agreement, and return to the other Party, or destroy, such other Party's Confidential Information, as set forth herein, unless the applicable Scope of Work or an applicable materials transfer agreement between the parties expressly provides otherwise.

11.3.3 Compensation. Upon the expiration or termination of this Agreement or a Scope of Work, unless the applicable Scope of Work expressly provides otherwise, ArQule will pay ARUP Fees reflecting the amounts owed for Services that are completed in accordance with this Agreement prior to the effective date of such termination and the Results or Deliverables thereof delivered to ArQule. ArQule shall also reimburse ARUP for non-cancellable Expenses incurred by ARUP with respect thereto before the effective date of such termination.

12. General Provisions

12.1 Governing Law. This Agreement is made under and shall be construed according to the laws of the State of Delaware without regard to any conflict of law principles that would provide for the application of the law of another jurisdiction.

12.2 Severability. If any provision of this Agreement should be held invalid or unenforceable, the remaining provisions shall be unaffected and shall remain in full force and effect, to the extent consistent with the intent of the parties as evidenced by this Agreement as a whole.

12.3 Force Majeure. If either Party hereto is prevented from carrying out its obligations under this Agreement by events beyond its reasonable control, acts of God or government, natural disasters, including earthquakes or storms, fire, political strife, public health emergencies, terrorism, failure or delay of transportation, then such Party's performance of its obligations hereunder shall be excused during the period of such events and for a reasonable period of recovery thereafter, and the time for performance of such obligations shall be automatically extended for a period of time equal to the duration of such events; provided, however, that the Party claiming force majeure shall promptly notify the other Party of the existence of such force majeure, shall use commercially reasonable efforts to avoid or remedy such force majeure and shall continue performance hereunder with the utmost dispatch whenever such force majeure is avoided or remedied. When such circumstances arise, the Parties shall discuss what, if any, modification of the terms of this Agreement may be required in order to arrive at an equitable solution.

12.4 Resolution of Disputes.

12.4.1 In General. The Parties shall first attempt to settle any and all disputes arising out of or in connection with or relating to the execution, interpretation, performance, or nonperformance of this Agreement or any other certificate, agreement, or other instrument between, involving, or affecting the parties (including the validity, scope, and enforceability of this agreement) (each, a "**Dispute")** through good faith negotiation before resorting to litigation. The Parties shall conduct and complete such good faith negotiation involving substantive participation by senior management for each party within *** days of a Dispute notice, which shall set forth the nature of any dispute between the Parties. All Dispute notices shall be sent in accordance with the notice provision herein. Parties, upon written agreement, can adjust time limits within this Section 12.4.

12.4.2 Disputes Under * Supply Agreement**. Notwithstanding anything to the contrary in this Agreement or in the *** Supply Agreement, any Dispute that arises under the *** Supply Agreement shall be resolved in accordance with § 19 of the *** Supply Agreement, subject to the following:

(a) Each Party shall bear its own costs and expenses, including attorneys' fees, in connection with any arbitration conducted under §19 of the *** Supply Agreement; provided, that, (i) ArQule shall reimburse ARUP for the reasonable costs and expenses incurred by ARUP in connection with any such arbitration, including ARUP's reasonable attorneys' fees and costs (collectively, " **ARUP Arbitration Costs** "), solely to the extent that (A) the Dispute that is the subject of the arbitration (1) is initiated by the Supplier and (2) does not involve a claim that arises out of, or results from, the alleged breach by ARUP of this Agreement or the alleged negligent acts or intentional omissions of ARUP outside of the course of ARUP's performance under the *** Supply Agreement and (B) ARUP provides written notice to ArQule of any Dispute for which is it seeking reimbursement promptly after ARUP has knowledge of such Dispute; and (ii) ArQule shall reimburse ARUP for ARUP Arbitration Costs to the extent that the Dispute that is the subject of the arbitration is for any reason not covered by subsection (i), including any Dispute that is being defended by ARUP in good faith; provided, that, ArQule's obligation to reimburse ARUP for ARUP Arbitration Costs under this Section 12.4.2(a) shall not exceed $*** in the aggregate.

12.5 No Assignment. ARUP may not assign its rights or obligations under this Agreement without the prior written consent of ArQule, which consent may be given or withheld in ArQule's sole and absolute discretion; provided, that, ARUP may assign its rights or delegate its obligations under this Agreement without such consent to (i) any Affiliate or (ii) its successor in interest in connection with any merger, consolidation, or sale of all or substantially all of the assets of ARUP. ArQule may not transfer or assign this Agreement or any Scope of Work, or any of its rights and obligations under this Agreement or any Scope of Work, in whole or in part, without the consent of ARUP, provided that such consent shall not be unreasonably delayed, conditioned, or denied. Notwithstanding the foregoing, ArQule may transfer or assign this Agreement or any Scope of Work, or any of its rights and obligations under this Agreement or any Scope of Work, in whole in in part, (a) without the consent of ARUP to any: (i) Affiliate; (ii) wholly owned subsidiary or successor in interest; (iii) any third party with which it merges, or consolidates, or to which it transfers all or substantially all of its assets to which this Agreement relates and (b) with the prior written consent of ARUP, which will not be unreasonably withheld to any third party licensee of ARQ 087. In the case of any permitted assignment or transfer of or under this Agreement, this Agreement shall be binding upon and shall inure to the benefit of the respective permitted successors and assigns of each of the Parties hereto (if any). No person who is not a Party shall have any rights hereunder as a third-party beneficiary or otherwise.

12.6 Notices. Each Party will deliver all notices or reports permitted or required under this Agreement in writing and will be sent by personal delivery or reputable expedited delivery service with signature required. All such notices or reports will be deemed given upon receipt or refusal of delivery. Such notices shall be addressed to the Party concerned at the addresses set forth below or at such other addresses as may be furnished in writing to the other party hereto. Each Party may change its address for receipt of notice by giving notice of such change to the other Party.

If to ArQule: ArQule , Inc.
One Wall Street
Burlington, MA 01803

Attention: Ron Savage
Title: Senior Director, Preclinical Development
Tel: 781-994-0300
Email: rsavage@arqule.com
Fax Number:

With a copy to Peter S. Lawrence
Email: plawrence@arqule.com

If to ARUP:

ARUP Laboratories Inc.
500 Chipeta Way, Mail code #209
Salt Lake City, UT 84108
Attention: Karen A. Heichman, PhD
Director, PharmaDx
Tel: (801) 584-5068
Fax Number: (801) 584-5207

12.7 Remedies. The rights and remedies provided to each Party in this Agreement are cumulative and in addition to any other rights and remedies available to such Party at law or in equity.

12.8 Headings. The headings and section identifiers contained in this Agreement are for convenience of reference only, shall not be deemed to be a substantive part of this Agreement and shall not be referred to in connection with the construction or interpretation of this Agreement.

12.9 Waiver. All waivers must be in writing and signed by the Party to be charged. Any waiver or failure to enforce any provision of this Agreement on one occasion will not be deemed a waiver of any other provision or of such provision on any other occasion.

12.10 Entire Agreement; Amendments. This Agreement, including the Scopes of Work hereunder, constitutes the final, complete and exclusive agreement of the Parties with respect to the subject matter hereof and supersedes all prior and contemporaneous agreements, communications, negotiations or understandings between the Parties with respect to the matters addressed herein. No modification of or amendment to this Agreement will be effective unless in writing and signed by all Parties.

12.11 Counterparts. This Agreement may be executed in one or more counterparts (including by facsimile or .pdf), each of which shall constitute an original and all of which, when taken together, shall constitute one agreement.

Signature Page to Follow

In Witness Whereof, the Parties have executed this Master Services Agreement as of the Effective Date.

ArQule, Inc.

Signed:

/s/ Peter S. Lawrence
Peter S. Lawrence
President and Chief Operating Officer

ARUP Laboratories Inc.

Signed:

/s/ Sherrie L. Perkins
Sherrie L. Perkins, MD, PhD

Senior Vice President

Director, Research & Development

Chief, Clinical Pathology

Signature Page to Master Services Agreement

Exhibit A

Form Scope of Work

This Scope of Work is incorporated into the Master Services Agreement dated [month] [day], [year] by and between ArQule and ARUP (for the purposes of this Scope of Work, the **"Agreement"**). This Scope of Work describes Services and Deliverables to be performed and provided by ARUP pursuant to the Agreement. In the event of any conflict between the Agreement and any provision of this Scope of Work, the Agreement will control unless the Parties' intent to alter the terms of the Agreement is expressly set forth in such provision, and such alteration shall only apply to this Scope of Work and shall not be construed as an amendment to the terms of the Agreement. All capitalized terms used and not expressly defined in this Scope of Work will have the meanings given to them in the Agreement.

Approach
[DESCRIBE METHODS/PROCESSES/TASK SUMMARY of the Services – if a proposal was provided, this is most likely outlined in the proposal and can be copied here]

Deliverables
[DESCRIBE EXACTLY WHAT IT IS THAT ARQULE IS RECEIVING AS A RESULT OF THE SERVICES]

Project Results
[DESCRIBE ITEMS RESULTING FROM THE PERFORMANCE OF THE SCOPE OF WORK THAT WILL BE OWNED PURSUANT TO THE PROJECT RESULTS SECTION IN THE AGREEMENT]

Intellectual Property
Pursuant to section 6 of the Agreement, the Parties intend that the following provisions control with respect to Parties' respective rights to intellectual property.
[DESCRIBE IP RIGHTS AND OBLIGATIONS]

[optional] Obligations of ArQule
[DESCRIBE EXACTLY WHAT, IF ANYTHING, ARQULE MUST PROVIDE SO THAT ARUP CAN SUCCESSFULLY PROVIDE SERVICES]

Project Assumptions

1) **With respect to any intellectual property license reasonably necessary for ARUP to perform the Services contemplated hereunder, such license shall be readily available and will be timely procured at ArQule's expense.**

[optional] Specifications

Points of Contact

For ArQule:
ArQule
Address
Attention:
Tel:
Email:

For ARUP:
ARUP Laboratories, Inc.
500 Chipeta Way
Salt Lake City, UT 84108
Attention: Karen A. Heichman, PhD
Director, PharmaDx
Phone: (801) 584-5068
Email: karen.heichman@aruplab.com

Budget
[DESCRIBE ENTIRELY WHAT IT IS THAT ARQULE IS AGREEING TO PAY FOR WITH RESPECT TO THE SERVICES – if a proposal was provided, this is most likely outlined in the proposal and can be copied here]

Payment Schedule

[PICK ONE OF THE THREE LISTED BELOW]

Time & Materials Basis: as invoiced by ARUP at the rates set forth below; provided, however, that ARUP will obtain ArQule's prior written approval before providing more than [_____ dollars ($__.__)] worth of Services.

Rates:

Fixed Fee Basis: Total fee of [_____ dollars ($__.__)] payable in [_____ (__)] installments of [_____ dollars ($__.__)] each.

Milestone Fee Basis: Fees payable in accordance with the table immediately below and the development schedule of this Scope of Work.

Milestone	Fee (US$)

Term
The term of this Scope of Work will begin on _____ and shall terminate on _____.

ArQule, Inc.	**ARUP Laboratories, Inc.**
Signed:	Signed:
Name:	Name:
Title:	Title:
Dated:	Dated:

EXHIBIT 1

Supplier ***

–

– *** (the “Product”)
***

***

This Product is designed for *in vitro* diagnostic use only. This Product is a ready-to-use reagent (i.e. "one vial solution").

Interpretation of the results must be made within the context of the patient´s clinical history with respect to further clinical and pathologic data of the patient by a qualified pathologist.

The result should be considered in the clinical context (including therapeutical decision). Thus, this Product is not in relation to a clinical therapy, and, thus, it is not a companion diagnostic.

– Products will be delivered with minimum shelf life mentioned in the *** Supply Agreement.

Exhibit 10.3

Confidential Materials omitted and filed separately with the Securities and Exchange Commission.
******Triple asterisks denote omissions.***

Scope of Work #1

This Scope of Work (this "**Scope of Work**" or "**SOW**") is incorporated into the Master Services Agreement dated July 20, 2017 by and between ArQule and ARUP (for the purposes of this Scope of Work, the **"Agreement"**). This Scope of Work describes Services and Deliverables to be performed and provided by ARUP pursuant to the Agreement. In the event of any conflict between the Agreement and any provision of this Scope of Work, the Agreement will control unless the Parties' intent to alter the terms of the Agreement is expressly set forth in such provision, and such alteration shall only apply to this Scope of Work and shall not be construed as an amendment to the terms of the Agreement or to any other Scope of Work. All capitalized terms used and not expressly defined in this Scope of Work will have the meanings given to them in the Agreement.

Overview
The goal of this Scope of Work is to develop and validate a FGFR2 FISH assay to be used as an IOU patient selection diagnostic for the ARQ 087 compound in connection with a registrational Phase 3 trial in intrahepatic cholangiocarcinoma (the "**Phase 3 Trial**") and to further validate and seek FDA approval for such assay as a Companion Diagnostic under the FDA's Humanitarian Device Exemption (HDE) for commercialization in accordance with such regulations. The end point for the existing trial is overall response rate. The parties acknowledge that ArQule may decide to pursue a trial endpoint of progression free survival. In such case, ArQule agrees to keep ARUP apprised of its decision making, and the details of the new trial and protocol for the study will be shared with ARUP if and when made. For purposes hereof, either trial shall be known as the Phase 3 Trial. Testing to support the Phase 3 Trial is outside the scope of this SOW and will be included in a subsequent Scope of Work. For purposes of this Scope of Work #1, any reference herein to the FGFR2 FISH assay shall mean the ARUP IUO or ARUP Companion Diagnostic, as applicable.

Approach

1. ARUP will conduct its existing design control program, termed the "**Product Development Program"** or **"PDP**", to develop and validate the FGFR2 FISH assay in accordance with the FDA Quality System Regulations, 21 CFR part 820.

2. ARUP will prepare a modular application for the FGFR2 FISH assay as a companion diagnostic for the ArQule compound ARQ 087 and will use Commercially Reasonable Efforts to obtain regulatory approval for the FGFR2 FISH assay under the FDA's Humanitarian Device Exemption ("**HDE"**) Program. In the event that the FDA does not grant a Humanitarian Use Device ("**HUD**") designation or permit the transfer of such HUD designation to ARUP to enable ARUP to offer the companion diagnostic the Parties shall, at ArQule's request, amend this SOW to pursue a PMA for such companion diagnostic and ArQule will be responsible for the incremental costs and expenses related to the additional work performed by ARUP in connection therewith and in connection with the preparation and filing of any required regulatory applications, which costs and expenses will in all cases be reasonable and consistent with the billing practices and procedures used by ARUP under this Agreement. ArQule and ARUP contemplate entering into the *** Supply Agreement with the Supplier substantially contemporaneous with this SOW on terms mutually acceptable to ArQule, ARUP and the Supplier, pursuant to which the Supplier will agree to provide support to ARUP as an *** and supply ARUP with certain quantities of the Supplier *** and ArQule will agree to be responsible for all costs associated with supply of the Supplier *** to ARUP.

3. ARUP will develop, validate, and maintain the HDE assay in accordance with the FDA Quality System Regulations for Medical Devices and the HDE requirements.

4. ARUP will submit a request for, and use commercially reasonable efforts to obtain, HUD designation from the FDA for the assay being verified and validated by ARUP under the PDP design control program. Once the HUD designation has been granted to ARUP, ARUP will remain solely responsible for all interactions with the FDA's Center for Devices and Radiological Health (CDRH) regarding the assay, including but not limited to interactions such as scheduling all meetings with the CDRH, preparing and submitting meeting minutes, validation plans, the HDE application and amendments, and annual reports. ArQule will not contact CDRH about the test without providing ARUP with prior written notification and the opportunity to participate. Notwithstanding the foregoing ARUP may request that ArQule participate in any or all interactions with the FDA regarding the FGFR2 FISH assay.

5. ARUP will notify ArQule in advance of all material meetings relating to the test, whether in person or by telephone or videoconference, and all other material communications, scheduled with regulatory agencies. ArQule shall be entitled to attend and participate in such meetings with regulatory agencies, in person or by means of telecommunication. ArQule's participation may, for example, include providing regulatory authorities with the pharmaceutical development perspective, including the therapeutic and diagnostic issues related to drug clinical trials and patient specimens and clinical report forms collected in support of the application submission, as well as information on the relationship between the use of the companion diagnostic and its relevance to ARQ 087 and the treatment of patients; provided, however, that the Parties shall jointly agree on this support prior to communication to or with regulatory authorities. Prior to ARUP's submission of any filing to a regulatory authority, the Parties shall jointly review and approve such a filing. ARUP will create meeting minutes from FDA interactions and provide such to ArQule along with any FDA acknowledgements (e.g. receipt of modules).

6. Upon FDA approval of the FGFR2 FISH assay, ARUP will perform the assay in accordance with FDA regulations and make such assay publicly available for as long as requested by ArQule, provided that ArQule continues to make the annual Maintenance Payments under the Agreement. In the event that ARUP is no longer capable of performing the FDA-approved FGFR2 FISH assay for some unforeseen reason not within ARUP's reasonable control such as the termination of the *** Supply Agreement with the Supplier for supply of the *** and other than as a result of the breach of this Agreement by ARUP, ARUP will, at ArQule's request and expense, use commercially reasonable efforts to enable another United States laboratory to offer the assay, or acceptable substitute companion diagnostic for the ArQule compound ARQ 087, including by using commercially reasonable efforts to minimize any risk of interruption of the availability of the assay. Following FDA approval of the FGFR2 FISH assay, ARUP will cooperate with ArQule, at ArQule's request and expense, and pursuant to terms and conditions set forth in an additional SOW mutually acceptable to the Parties, to enable other laboratories outside the United States to offer the assay, or acceptable substitute companion diagnostic for the ArQule compound ARQ 087.

7. ARUP shall provide information regarding preanalytical aspects of the FGFR2 FISH assay and pertaining to general laboratory practices, such as specimen collection, transport, storage, preparation and handling for use with the assay. ArQule shall have the right to disseminate broadly to laboratories outside the United States such information as is necessary for such laboratories to practice these general preanalytical methods in a manner consistent with the assay performed in the Phase 3 Clinical Trial. For the avoidance of doubt, the PDP, including all related processes and documents used in the generation of the HDE assay, will remain the sole property of ARUP and may not be sub-licensed by any other laboratories for any use without ARUP's express written consent.

8. ARUP will perform Services in furtherance of the goal of this SOW substantially as set forth in the following table:

Services	Description
Project Initiation	**Project initiation** • Contracting • On-site quality audit of ARUP (2 days and up to 3 auditors) • Project charter • Project planning process • Establishment of design team and weekly team meetings • Commencement of design control activities, including initial design risk assessment activities • Establishment of design requirements including, but not limited to: product description, assay functional requirements, assay performance specifications, hardware/software requirements, manufacturing/QC specifications, regulatory requirements, draft Verification Master Plan, draft Validation Master Plan • Initiation of purchasing controls for critical components • In-sourcing of materials
Humanitarian Use Device (HUD) Request	**Preparation of HUD request** • Collection of literature to support rare disease (<8,000 in US/year) • Preparation of HUD request and submission to FDA

Services	Description
Investigational Device Exemption (IDE)	**Investigational Device Exemption activities** *Assumption: FGFR2 FISH assay will be significant risk (SR)* • Preparation of request for pre-IDE meeting to discuss IDE development and validation plan • Submission of pre-IDE meeting request to FDA • Briefing book preparation • FDA pre-IDE meeting and slide preparation • Preparation of slide deck, dialog with FDA • Fulfillment of IDE requirements including labeling, investigational plan, subject selection criteria, informed consent • Review and revision of IDE application • Submission of IDE application • Preparation of IRB application • Payment of IRB fees
ARUP IUO Development & Validation	**ARUP IUO Development and Validation** • Feasibility studies of conducting assay using ARUP standard FISH method • Establishment of assay reference range, sensitivity, specificity • Verification of ARUP IUO performance (concordance, reproducibility/precision) • Transfer of assay to clinical lab including training of operators • Preparation of quality plan • Preparation of experimental coversheets • Preparation of results, summaries • Preparation of protocol history table with itemization of protocol changes • Quality audits • Medical director approvals • Executive approvals

Services	Description
Design Control	**Implementation of Design Control (Phase 1-3)** • Design control documentation including, but not limited to, project plan, project schedule, component list, design history file, checklists, summaries • Supplier assessment and drafting of component specifications under purchasing controls • Preliminary hazard analysis and failure mode and effects analysis (FMEA); multiple and iterative • Finalization and approval of assay SOP and forms • Development of process documents (batch records) • End of phase design reviews • Preparation of MasterControl organizer • Development of Device Master Record • Design History File development and audit • Laboratory notebook, correspondence, memo and meeting minutes maintenance
HDE Application Preparation	**HDE application preparation** • Modular submission: quality/manufacturing, analytical, clinical, software • Required forms and sections including coversheet, indications for use, summary, description of disease and assay, results, summary of safety and probable benefit, product description • Development and iterative revision of labeling documents (test request form, physician instructions, product datasheet, website) • Literature review and reference collection • Development of FDA interaction history • Collection of all referenced documents (current versions; estimated 100-150) • Electronic and paper copies of modules • Document archiving

Services	Description

HDE Approval and Post-Approval Activities	**HDE approval and post-approval activities**
	• IRB application and approval
	• Build of test in ARUP's laboratory information system (LIS)
	• Validation of test build
	• Addition of test to ARUP's laboratory test directory
	• Development of test-specific website
	• Registration of test with FDA
	• Physician IRB enrollment instructions
	• Training of Client Services
	  o Test ordering information for ARUP non-clients
	  o Other test-specific topics included but not limited to IRB enrollment requirements for ordering physicians (HDE requirement), intended use, specimen requirements
	• Maintenance of test under QSR (21 CFR Part 820) and all FDA conditions of approval
	• Complaint handling
	• Medical device reporting

HDE Application Amendments	**Estimate of two (2) amendments** **Note – this does not include additional experimentation if required by FDA.*
Companion Diagnostic (CDx) Development & Validation	**Additional assay development & validation activities required for CDx** to include but not limited (*final determined in conjunction with Sponsor and FDA*): • To conduct any required bridging studies • Sensitivity • Specificity • Interference • Reproducibility (including Intra-Run, Inter-Run) • Guard-banding • Specimen stability • Reagent stability • Accuracy

Services	Description
Design Control	**Design Control (Phase 3-5)** Implementation of design control under ARUP's PDP Program portion of the Quality Management System including: • Phase 3 – Design Verification (2nd part) • Phase 4 – Design Transfer • Phase 5 – Design Validation Regulatory oversight throughout the assay lifecycle with regards to quality audits, document controls, design controls, design reviews, purchasing controls, software validation, risk management, change controls, process controls and CAPA to maintain compliance with QSR (21 CFR §820.30).

Meeting and Reporting Schedule

1. ARUP will host teleconferences with ArQule not less than *** per calendar month, with meeting minutes prepared and shared with ArQule.

2. ARUP will provide written *** reports of the progress of its activities in reasonable detail, including (i) a description of activities for the past quarter, any key accomplishments, milestones, deviations, or delays, including, to the extent applicable, mitigation plans and/or suggestions for further discussion by the Parties respective Point of Contact; and (ii) a summary statement regarding the tracking of the project against the Activities and Milestones described below.

3. ARUP will host *** meetings or will agree to otherwise meet with ArQule at least ***.

Obligations of ArQule

1. ArQule will make payments to ARUP as outlined in Exhibit B and as directed in the Agreement.

2. ArQule will make annual payments to ARUP following the one year anniversary of FDA approval of the assay for as long as ArQule requires ARUP to maintain the FDA-approved assay on its test menu ("**Maintenance Payments**").

3. ArQule will reimburse ARUP for necessary travel expenses related to work performed under this Statement of Work. Any travel expenses for which ARUP seeks reimbursement under this Statement of Work must be pre-approved by ArQule in writing.

4. ArQule will remain solely responsible for all interactions with the FDA's Center for Drug Evaluation and Research (CDER). Upon request, ARUP will assist in interactions with the FDA regarding ARQ 087 and the Phase 3 Trial.

Intellectual Property

1. The Parties hereby agree that Article 6 of the Agreement shall control the Parties' ownership of, and respective rights to, Background Know-How, Background Patents and Inventions under this Scope or Work The following provisions are intended to supplement, and not amend, Article 6 of the Agreement:

   For purposes of clarification, ARUP Background Know-How includes but is not limited to the following:

   a. PDP policy, processes, procedures, forms, strategies, best practices and know-how.

   b. Other laboratory, diagnostic or business practices inherent to a national reference laboratory or specific to ARUP.

2. **Academic and Research Use FGFR2 FISH Data**
   Publications or presentations pertaining to the FGFR2 FISH data will be handled on a case-by-case basis. Each party has a right to review any proposed disclosures of data generated under this SOW pertaining to the FGFR2 FISH assay, including but not limited to publications, presentations or press releases for the purpose of protecting against disclosure of confidential information that would be prejudicial to the rights of the reviewing party. The disclosing party must provide the other party a minimum of *** days to review the proposed disclosure and to provide input, provided that if no feedback is provided within *** days, the proposed publication shall be deemed approved.

Points of Contact:

For ArQule:
ArQule, Inc.
One Wall Street, Burlington, MA 01803
Attention: Ron Savage
Title: Senior Director, Preclinical Development
Tel: 781-994-0300
Email: rsavage@arqule.com

With a copy to Peter S. Lawrence
Email: plawrence@arqule.com

For ARUP:
ARUP Laboratories, Inc.
500 Chipeta Way
Salt Lake City, UT 84108
Attention: Karen A. Heichman, PhD
Director, PharmaDx
Phone: (801) 584-5068
Email: karen.heichman@aruplab.com

Confidential Materials omitted and filed separately with the Securities and Exchange Commission.
******Triple asterisks denote omissions.***

Exhibit B - Activities, Budget and Payment Schedule

Milestone Fee Basis: Fees payable in accordance with the table immediately below. All milestones to be invoiced upon ArQule's acceptance of Milestone Achievement. All ARUP invoiced milestones are non-refundable. Timelines in the table below assume a July 1, 2017 start date of the Agreement and are meant to be estimates.

Milestone Payment Schedule

Milestone		Cost	
1 7/1/2017	**Project Initiation*** *Evidence of milestone achievement – Execution of Master Services Agreement including SOW #1*	$	***
2 9/1/2017	**Humanitarian Use Device Exemption (HUD)*** *Evidence of milestone achievement – Notification from FDA of receipt of HUD request*	$	***
3a 8/1/2017	**Investigational Device Exemption (IDE)*** *Evidence of milestone achievement – Submission of request for pre-IDE meeting to CDRH and acknowledgement of delivery*	$	***
3b 4/1/2018	**IDE application** *Evidence of milestone achievement – Notification from CDRH of successful IDE application*	$	***
Subtotal of Initiation Activities		$	***
4a 8/1/2017	**ARUP IUO Analytical Development and Validation*** *First 50% of activity* *Evidence of milestone achievement – ArQule's review and acceptance of development and validation plan.*	$	***
4b 2/1/2018	**ARUP IUO Analytical Development and Validation*** *Second 50% of activity* *Evidence of milestone achievement – ArQule's review and acceptance of ARUP IUO validation report.*	$	***
5a 7/1/2017	**Design Control for ARUP IUO(Phases 1-3)*** *First 50% of activity* *Evidence of milestone achievement – ArQule's review and acceptance of design control plans and Project Charter*	$	***

5b 2/1/2018	**Design Control for ARUP IUO (Phases 1-3)*** *Second 50% of activity* *Evidence of milestone achievement – completion of ARUP IUO validation*	$	***
Subtotal of ARUP IUO Verification and Design Controls		$	***
6a 6/1/2018	**HDE Application Preparation*** *First 50% of activity* *Payable upon commencement of application preparation.*	$	***
6b TBD	**HDE Application Preparation*** *Second 50% of activity* *Evidence of milestone achievement – evidence of receipt by CDRH*	$	***
6c TBD	**HDE Application Amendments*** (if required) Each amendment is $*** with a **% project management fee (estimated that two (2) amendments may be needed) *Evidence of milestone achievement – Acknowledgement of receipt by CDRH*	*$*	*** **
Subtotal of HDE Application Costs		$	***
7a 2/1/2018	**Companion Diagnostic (CDx) Development and Validation*** *First 50% of activity* *Evidence of milestone achievement – ArQule's review and acceptance of validation plan*	$	***
7b 2/1/2019	**Companion Diagnostic (CDx) Development and Validation*** *Second 50% of activity* *Evidence of milestone achievement – ArQule's review and acceptance of validation report*	$	***

8a 2/1/2018	**Design Control (Phases 3-5)*** *First 50% of activity* *Evidence of milestone achievement – ArQule's review and acceptance of validation plan*	$	***
8b 2/1/2019	**Design Control (Phases 3-5)*** *Second 50% of activity* *Evidence of milestone achievement – completion of Phase 5 Design Validation summary*	$	***
9 3/1/2019	**Development of the final CDx test procedure (SOP)***	$	***
10 3/1/2019	**Submission Plan Preparation***	$	***
Subtotal of CDx Validation and Design Controls		$	***
11 TBD	**Registration of the test with FDA*** *Evidence of milestone achievement – Acknowledgement of registration receipt by the FDA*	$	***
12 TBD	**Preparation of IRB (post-approval)*** *Evidence of milestone achievement – Acknowledgement of submission by the University of Utah IRB*	$	***
13 TBD	**Development and Maintenance of Website for Test*** *Evidence of milestone achievement – Release of Test on ARUP's Test Directory*	$	***
Total Milestone Costs (not including optional costs)		$	***

*Costs include a ***% project management fee
**Optional costs not included in subtotal

Additional Costs
Additional costs are described in the table below and are to be invoiced upon ArQule's acceptance of evidence of achievement.

Additional Costs

Type	Details	Cost
Travel	**Travel to meetings including** • Pre-submission meetings • Travel to ArQule up to *** yearly • Travel must be in accordance with ArQule's Travel Policy *Evidence of achievement – Receipts attached to invoice*	TBD
License agreement (if required)	**Third-party license agreement if required to practice the FGFR2 FISH assay** • Upfront license fee • Royalties • Other fees	TBD
Assay Annual Maintenance Fee	**Annual assay maintenance** • Training of personnel • Troubleshooting • Instrument service contract • Instrument preventive maintenance • Proficiency testing (CAP requirement) • Annual device report to FDA • Reagent procurement, qualification and performance monitoring of critical component suppliers *Evidence of achievement – Acknowledgement of annual device report submission to FDA*	$ ***

Term
The term of this Scope of Work will begin on July 20, 2017 and shall terminate on completion of all activities described in this Scope of Work, unless earlier terminated by the Parties in accordance with the Agreement.

Confidential Materials omitted and filed separately with the Securities and Exchange Commission.
******Triple asterisks denote omissions.***

ArQule, Inc.		**ARUP Laboratories, Inc.**	
Signed:	/s/ Peter S. Lawrence	Signed:	/s/ Sherrie L. Perkins
Name:	Peter S. Lawrence	Name:	Sherrie L. Perkins MD PhD
Title:	President and Chief Operating Officer	Title:	SVP Research
Dated:	July 20, 2017	Dated:	July 20, 2017

Exhibit 10.4

Confidential Materials omitted and filed separately with the Securities and Exchange Commission.
******Triple asterisks denote omissions.***

Scope of Work #2

This Scope of Work is incorporated into the Master Services Agreement dated July 20, 2017 by and between ArQule and ARUP (for the purposes of this Scope of Work, the **"Agreement"**). This Scope of Work describes Services and Deliverables to be performed and provided by ARUP pursuant to the Agreement. In the event of any conflict between the Agreement and any provision of this Scope of Work, the Agreement will control unless the Parties' intent to alter the terms of the Agreement is expressly set forth in such provision, and such alteration shall apply only to this Scope of Work and shall not be construed as an amendment to the terms of the Agreement or to any other Scope of Work. All capitalized terms used and not expressly defined in this Scope of Work will have the meanings given to them in the Agreement.

Overview
The goals of this Scope of Work (SOW) are the performance of clinical specimen testing to support ArQule's registrational Phase 3 trial with ARQ 087 in subjects with FGFR2 gene fusion positive inoperable or advanced intrahepatic cholangiocarcinoma (the "Phase 3 Trial") and the development of a clinical module to be included in the HDE application for the companion diagnostic for ARQ 087, the FGFR2 FISH assay (as more fully described in SOW #1). The end point for the existing trial is overall response rate. The parties acknowledge that ArQule may decide to pursue a trial endpoint of progression free survival. In such case, ArQule agrees to keep ARUP apprised of its decision making, and the details of the new trial and protocol for the study will be shared with ARUP if and when made. For purposes hereof, either trial shall be known as the Phase 3 Trial. This SOW functions in support of SOW #1 by contributing to the clinical understanding of the assay. SOW #1 functions to support this SOW, since it covers the development, and analytical validation of the FGFR2 FISH assay that is used for the clinical testing.

Approach

1. ARUP will utilize the FGFR2 FISH assay developed and validated in SOW#1 to test FFPE clinical specimens from subjects with intrahepatic cholangiocarcinoma (iCCA) in support of the Phase 3 Trial.

2. The testing will be conducted in the CLIA/CAP clinical laboratory, using clinical instruments, reagents and operators trained in the use of the PDP.

3. The results of the tests will be transmitted to the ordering physicians and/or ArQule's designated third-party partner (such as a CRO) so that the results may be used for clinical trial enrollment.

4. The clinical trial testing data will also be transmitted to ArQule or an ArQule designated facility.

5. ARUP will provide Deliverables as described below and will perform Activities as set forth in the following table.

Activity	Description
Clinical Study Set-Up	**Clinical Study Set-Up** • Client set-up in ARUP's LIS • Database setup • Coordination of shipping manifest • Coordination of chain-of-custody documents • Development of communication (DTA) and specimen analysis plans (SAP) • ArQule to approve ARUP input to Laboratory Manual • ArQule to approve ARUP input so consistent with its CRF

Activity	Description
Clinical Specimen Testing	**Clinical Specimen Testing** • Testing of clinical trial specimens from The Phase 3 Trial • Transmit patient results to CRO with an estimated turnaround time of 7-10 days from time of receipt at ARUP • Estimate *** specimens and ***% repeat rate • *** summary testing report (number of specimens received/tested/repeated/reported, positivity rates, invalid/indeterminate, deviations) • Project management (***%)
Clinical Module Preparation	**Clinical Module Preparation** • Clinical trial protocol • Summary of subject selection and exclusion criteria, study population demographics, study period • Summary of study • Description of the objective of the study • Description of the design of the study • Description of how data were collected and analyzed • Summary of results (number of specimens received/tested/ repeated/reported, positivity rates, invalid/indeterminate) • Summary of findings and conclusions (deviations, nonconformances, CAPAs) • Project management (***%)
Data Transfer(s)	**Data Transfer(s)** • Transfer clinical trial testing data to ArQule or an ArQule designated facility • Project management (***%)
Return of Specimens	**Return of Specimens** • Transfer clinical trial specimens to ArQule or an ArQule designated facility • Storage of specimens until approval or upon request by ArQule (if sooner) • Project management (***%)

Deliverables

1. Operating team members from ARUP and ArQule will be in regular contact to ensure the timely and proper functioning of patient testing and sharing of results from such testing.

2. ARUP will develop a communications Data Transfer Agreement ("**DTA**") and Clinical Specimen Analysis Plan ("**SAP**") for approval by ArQule. ARUP will provide input to ArQule for the Case Report Form and Laboratory Manual pertaining to diagnostic information required and specimen requirements, respectively.

3. ARUP will transmit patient results to ordering physicians in accordance with CLIA/CAP practices.

4. ARUP will transfer clinical trial testing data to ArQule or an ArQule designated facility. Frequency, format and content of data transfer to be defined in the DTA.

5. ARUP will provide a *** testing summary report.

   *** testing summary report will include the following: number of samples received, number of test reports delivered, number of test failures/repeats/other deviations, overall percentage of mutation positive to mutation negative samples analyzed for the designated ***.

6. ARUP will provide a study summary report to ArQule based on the timelines to be defined in the SAP or within *** months following last patient, first visit (LPFV).

Meeting and Reporting Schedule

1. ARUP will host *** teleconferences with ArQule, with meeting minutes prepared and shared with ArQule.

2. ARUP will communicate to ArQule all deviations from the assay technical procedure, retesting of clinical specimens and error corrections.

3. ArQule will monitor ARUP's clinical testing site up to *** times per year. Monitoring visits will be independent of QA audits.

Obligations of ArQule

1. ArQule will be responsible for collection and shipping of clinical specimens to ARUP, including obtaining consent from all participants.

2. ArQule will be responsible for shipping charges associated with return of specimens to ArQule or an ArQule designated facility.

3. ArQule will be responsible for underwriting the Supplier ***, either by pass-through from ARUP or via contracting directly with the Supplier.

4. ArQule will be responsible for underwriting any third-party licenses or royalties required to conduct the service as provided in the Agreement.

5. ArQule will make payments to ARUP as outlined in Exhibit B and as directed in the Agreement.

Assumptions

1. Clinical specimen testing is contingent upon both Parties' approval of the Clinical Specimen Analysis Plan and subsequent amendments, if necessary.

2. Patient test results will be transmitted to ordering physicians via facsimile.

3. Clinical specimen data transfers are contingent upon both Parties' approval of the Data Transfer Agreement and subsequent amendments, if necessary.

4. ArQule will be invoiced *** for testing and specimen storage for the actual number of specimens tested and/or retested. Project management (***%) will be invoiced ***.

Intellectual Property

1. **ARUP Background Intellectual Property (IP)**
   As between ArQule and ARUP, any ARUP Background IP, shall remain the sole property of ARUP. By way of clarification and not limitation, ARUP Background IP includes but is not limited to the following:

   a. ***. Such information will be available to regulatory authorities directly, if necessary for approval of the clinical trial or for commercialization of the assay.

   b. PDP policy, processes, procedures, forms, strategies, best practices and know-how, except as noted in the MSA.

   c. Other laboratory, diagnostic or business practices inherent to a national reference laboratory or specific to ARUP.

2. **ArQule Background IP**
   As between ArQule and ARUP, any and all ArQule Background IP shall remain the sole property of ArQule.

Points of Contact:

For ArQule:
ArQule, Inc.
One Wall Street, Burlington, MA 01803
Attention: Ron Savage
Title: Senior Director, Preclinical Development
Tel: 781-994-0300
Email: rsavage@arqule.com

With a copy to Peter S. Lawrence
Email: plawrence@arqule.com

For ARUP:
ARUP Laboratories, Inc.
500 Chipeta Way
Salt Lake City, UT 84108
Attention: Karen A. Heichman, PhD
Director, PharmaDx
Phone: (801) 584-5068
Email: karen.heichman@aruplab.com

Activities, Budget and Payment Schedule

Milestone Fee Basis: Fees payable in accordance with the table immediately below.

Milestone	Activities	Cost
1	Clinical Study Set-Up Fee	
	• Study set-up	$ ***
	• Database set-up	$ ***
	Upfront payment, to be invoiced upon execution of the SOW	**$** ***
2a	Clinical Testing	
	• Testing fees for clinical trial (est.***specimens at $***/specimen*, ***% repeat rate)	$ ***
	• Specimen storage at $***/specimen (est. ***)	$ ***
	• *** testing summary report	included
	• Project management (***%)	$ ***
	*Testing, storage and project management fees due ***. Sponsor only billed for actual services performed.*	
	Price assumes ArQule will provide * to ARUP free of charge. Price assumes ArQule will pay any third-party royalties or license fees associated with the testing services.*	**$** ***
2b	Data Transfers	
	• Estimate *** study data transfers at $*** each for budgeting purposes. Additional transfers at $***/transfer	$ ***
	• Project management (***%)	$ ***
	Evidence of milestone achievement – Execution of Data Transfer, to be invoiced upon ArQule's acceptance of the transfer.	**$** ***
2c	Clinical testing report, documentation, archiving/storage	
	• Document preparation	$ ***
	• Project management (***%)	$ ***
	Due upon acceptance of draft clinical testing summary by ArQule	**$** ***
3	Clinical Module Preparation	
	• Module preparation and submission	$ ***
	• Project management (***%)	$ ***
	Evidence of milestone achievement – ArQule's review and acceptance of draft clinical module	**$** ***
4	Specimen return	
	• Estimate *** return shipments at $***/box	$ ***
	• Project management (***%)	$ ***
	Evidence of milestone achievement – ArQule's (or designee's) receipt of return shipment	**$** ***
	TOTAL MILESTONE COSTS	**$** ***

Term

The term of this Scope of Work will begin on July 20, 2017 and shall terminate on completion of all activities described in this Scope of Work, unless earlier terminated by the Parties in accordance with the Agreement.

ArQule, Inc.		**ARUP Laboratories, Inc.**	
Signed:	/s/ Peter S. Lawrence	Signed:	/s/ Sherrie L. Perkins
Name:	Peter S. Lawrence	Name:	Sherrie L. Perkins MD PhD
Title:	President and Chief Operating Officer	Title:	SVP Research
Dated: July 20, 2017		Dated: July 20, 2017	

Exhibit 31.1

CERTIFICATE OF THE CHIEF EXECUTIVE OFFICER

I, Paolo Pucci, certify that:

1. I have reviewed this quarterly report on Form 10-Q of ArQule, 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, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 9, 2017

/s/ PAOLO PUCCI
Paolo Pucci
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATE OF THE PRINCIPAL FINANCIAL OFFICER

I, Peter S. Lawrence, certify that:

1. I have reviewed this quarterly report on Form 10-Q of ArQule, 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, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 9, 2017

/s/ PETER S. LAWRENCE
Peter S. Lawrence
President and Chief Operating Officer
(Principal Financial Officer)

Exhibit 32

ARQULE, INC.

CERTIFICATE OF THE CHIEF EXECUTIVE OFFICER AND

PRINCIPAL FINANCIAL OFFICER

The undersigned, Paolo Pucci Chief Executive Officer (Principal Executive Officer) of ArQule, Inc. (the "Company") and Peter S. Lawrence, President and Chief Operating Officer (Principal Financial Officer), of the Company, both duly elected and currently serving, hereby certify that, to the best of his or her knowledge:

1. the quarterly report on Form 10-Q for the period ending September 30, 2017, filed on behalf of the Company pursuant to the Securities Exchange Act of 1934 (the "Exchange Act") and containing the financial statements of the Company, fully complies with the requirements of section 13(a) of the Exchange Act; and

2. the information contained in such quarterly report fairly presents, in all material respects, the financial condition and results of operations of the Company for the dates and periods covered by such quarterly report.

This certification accompanies the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2017, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (the "2002 Act") and shall not be deemed filed by the Company for purposes of Section 18 of the Exchange Act.

This certification is being made for the exclusive purpose of compliance by the Principal Executive Officer and Principal Financial Officer of the Company with the requirements of Section 906 of the 2002 Act, and may not be disclosed, distributed or used by any person for any reason other than as specifically required by law.

IN WITNESS WHEREOF, the undersigned have executed this Certificate as of the 9th day of November 2017.

/s/ PAOLO PUCCI
Name: Paolo Pucci
Title: Chief Executive Officer
(Principal Executive Officer)

/s/ PETER S. LAWRENCE
Name: Peter S. Lawrence
Title: President and Chief Operating Officer
(Principal Financial Officer)