

REPROS THERAPEUTICS INC.

FORM 10-Q (Quarterly Report)

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

FORM 10-Q

(Mark One)

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

For the quarterly period ended June 30, 2017

or

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

For the transition period from _____ to _____

Commission file number: 001-15281

REPROS THERAPEUTICS INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware
(State or other jurisdiction of
incorporation or
organization)

2408 Timberloch Place, Suite B-7
The Woodlands, Texas 77380
(Address of principal executive offices
and zip code)

76-0233274
(IRS Employer
Identification No.)

(281) 719-3400
(Registrant's telephone number,
including area code)

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T 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, smaller reporting company or emerging growth company. See definition of "accelerated filer", "large accelerated filer", "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging Growth Company

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

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

As of August 7, 2017, there were outstanding 37,615,350 shares of Common Stock, par value \$.001 per share, of the Registrant.

REPROS THERAPEUTICS INC.

For the Quarter Ended June 30, 2017

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FACTORS AFFECTING FORWARD-LOOKING STATEMENTS

This quarterly report on Form 10-Q includes "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. The words "may," "anticipate," "believe," "expect," "estimate," "project," "suggest," "intend" and similar expressions are intended to identify forward-looking statements. Such statements are subject to certain risks, uncertainties and assumptions. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those anticipated, believed, expected, estimated, projected, suggested or intended. These risks and uncertainties include risks associated with the success of the clinical trials for Proellex ®; the progress of the Company's enclomiphene product candidate; uncertainty related to the Company's ability to obtain approval of the Company's products by the Food and Drug Administration and regulatory bodies in other jurisdictions, including the European Medicines Agency; uncertainty relating to the Company's patent portfolio; and other risks and uncertainties described in the Company's filings with the Securities and Exchange Commission. For additional discussion of such risks, uncertainties and assumptions, see "Part I. Financial Information - Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources" included elsewhere in this quarterly report on Form 10-Q and "Item 1A. Risk Factors" to Part I of Form 10-K for the fiscal year ended December 31, 2016.

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

The following unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America for interim financial information and with the instructions to Form 10-Q and Rule 10-01 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by accounting principles generally accepted in the United States of America for complete financial statements. In the opinion of management, all adjustments (which include only normal recurring adjustments) considered necessary for a fair statement of the interim periods presented have been included. The year-end balance sheet data was derived from audited financial statements, but does not include all the disclosures required by accounting principles generally accepted in the United States of America. Operating results for the three and six month periods ended June 30, 2017 are not necessarily indicative of the results that may be expected for the year ending December 31, 2017. For further information, refer to the financial statements and footnotes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2016.

REPROS THERAPEUTICS INC. AND SUBSIDIARY
CONDENSED CONSOLIDATED BALANCE SHEETS
(unaudited and in thousands except share and per share amounts)

	<u>June 30, 2017</u>	<u>December 31, 2016</u>
ASSETS		
Current assets		
Cash and cash equivalents	\$ 3,768	\$ 8,688
Restricted cash	916	-
Prepaid expenses and other current assets	268	66
Total current assets	<u>4,952</u>	<u>8,754</u>
Fixed assets, net	1	3
Non-current restricted cash	916	-
Total assets	<u>\$ 5,869</u>	<u>\$ 8,757</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable	\$ 1,457	\$ 1,880
Accrued expenses	1,275	779
Total current liabilities	<u>2,732</u>	<u>2,659</u>
Long-term liabilities		
Accrued severance	916	-
Warrant liability	2,530	-
Total liabilities	<u>6,178</u>	<u>2,659</u>
Commitment & Contingencies (note 8)		
Stockholders' Equity		
Undesignated Preferred Stock, \$.001 par value, 5,000,000 shares authorized, none issued and outstanding	-	-
Common Stock, \$.001 par value, 75,000,000 shares authorized, 32,571,109 and 25,938,602 shares issued, respectively; 32,458,759 and 25,826,252 shares outstanding, respectively, as of June 30, 2017 and December 31, 2016	33	26
Additional paid-in capital	328,676	326,981
Cost of treasury stock, 112,350 shares	(1,380)	(1,380)
Accumulated deficit	(327,638)	(319,529)
Total stockholders' equity	<u>(309)</u>	<u>6,098</u>
Total liabilities and stockholders' equity	<u>\$ 5,869</u>	<u>\$ 8,757</u>

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

REPROS THERAPEUTICS INC. AND SUBSIDIARY

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(unaudited and in thousands except per share amounts)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Revenues and other income				
Interest income	\$ 7	\$ 15	\$ 14	\$ 31
Total revenues and other income	<u>7</u>	<u>15</u>	<u>14</u>	<u>\$ 31</u>
Expenses				
Research and development	1,140	3,243	3,214	7,009
General and administrative	906	1,052	4,749	2,147
Change in fair value of warrant liability	160	-	160	-
Total expenses	<u>2,206</u>	<u>4,295</u>	<u>8,123</u>	<u>9,156</u>
Net loss	<u>\$ (2,199)</u>	<u>\$ (4,280)</u>	<u>\$ (8,109)</u>	<u>\$ (9,125)</u>
Loss per share – basic and diluted	<u>\$ (0.08)</u>	<u>\$ (0.18)</u>	<u>\$ (0.30)</u>	<u>\$ (0.38)</u>
Shares used in loss per share calculation:				
Basic	28,398	24,319	27,340	24,319
Diluted	28,398	24,319	27,340	24,319

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

REPROS THERAPEUTICS INC. AND SUBSIDIARY

CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(unaudited and in thousands except share and per share amounts)

	Common Stock		Additional Paid-in Capital	Treasury Stock		Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount		Shares	Amount		
Balance at December 31, 2016	25,938,602	\$ 26	\$ 326,981	112,350	\$ (1,380)	\$ (319,529)	\$ 6,098
Stock based compensation	-	-	563	-	-	-	563
Issuance of 849,157 shares of common stock pursuant to the Equity Distribution Agreement at a weighted average price of \$1.20, net of offering costs of \$32	849,157	1	1,020	-	-	-	1,021
Issuance of 2,744,125 shares of common stock at \$0.60 per share, Series A and Series B warrants, and pre-funded Series C warrants at \$0.60 per share in the May Public Offering, net of offering costs of \$508	2,744,125	3	(1,213)	-	-	-	(1,210)
Exercise of 2,245,875 Series C Warrants to purchase common stock for cash at \$0.001 per share	2,245,875	2	1,277	-	-	-	1,279
Net Number Cashless Exercise of 210,000 Series B Warrants to purchase common stock	715,575	1	48	-	-	-	49
Issuance of 50,000 shares of restricted common stock	50,000	-	-	-	-	-	-
Issuance of 27,775 shares of common stock for vested RSUs	27,775	-	-	-	-	-	-
Net Loss	-	-	-	-	-	(8,109)	(8,109)
Balance at June 30, 2017	<u>32,571,109</u>	<u>\$ 33</u>	<u>\$ 328,676</u>	<u>112,350</u>	<u>\$ (1,380)</u>	<u>\$ (327,638)</u>	<u>\$ (309)</u>
Balance at December 31, 2015	24,430,461	\$ 24	\$ 322,179	112,350	\$ (1,380)	\$ (302,256)	\$ 18,567
Stock based compensation	-	-	1,037	-	-	-	1,037
Exercise of 1,333 Series A warrants to purchase common stock for cash at \$0.01 per share	1,333	-	-	-	-	-	-
Net Loss	-	-	-	-	-	(9,125)	(9,125)
Balance at June 30, 2016	<u>24,431,794</u>	<u>\$ 24</u>	<u>\$ 323,216</u>	<u>112,350</u>	<u>\$ (1,380)</u>	<u>\$ (311,381)</u>	<u>\$ 10,479</u>

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

REPROS THERAPEUTICS INC. AND SUBSIDIARY
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(unaudited and in thousands)

	Six Months Ended June 30,	
	2017	2016
Cash Flows from Operating Activities		
Net loss	\$ (8,109)	\$ (9,125)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	2	3
Noncash stock-based compensation	563	1,037
Change in fair value of warrant liability	160	-
Increase in prepaid expenses and other current assets	(202)	(166)
Increase (decrease) in accounts payable and accrued expenses	989	(632)
Net cash used in operating activities	(6,597)	\$ (8,883)
Cash Flows from Investing Activities		
Capital expenditures	-	-
Net cash used in investing activities	-	-
Cash Flows from Financing Activities		
Issuance of common stock and warrants, net of offering costs	3,507	-
Proceeds from exercise of stock warrants	2	-
Net cash provided by financing activities	3,509	-
Net decrease in cash, cash equivalents and restricted cash	(3,088)	(8,883)
Cash, cash equivalents and restricted cash at beginning of period	8,688	21,393
Cash, cash equivalents and restricted cash at end of period	\$ 5,600	\$ 12,510
Noncash transactions:		
Settlement of warrant liability due to cashless warrant exercises	\$ (49)	-

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

REPOS THERAPEUTICS INC. AND SUBSIDIARY

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

June 30, 2017

(Unaudited)

NOTE 1 — Organization, Operations, Liquidity and Recent Developments

Repos Therapeutics Inc. (the “Company,” “RPRX,” “Repos,” or “we,” “us” or “our”) was organized on August 20, 1987. We are a biopharmaceutical company focused on the development of new drugs to treat hormonal and reproductive system disorders.

We are developing Proellex®, an orally administered selective blocker of the progesterone receptor in women, for the treatment of uterine fibroids and endometriosis. Uterine fibroids and endometriosis affect millions of women of reproductive age. Proellex® has shown statistically significant results in previous Phase 2 studies for uterine fibroids and endometriosis. We completed a low dose escalating study as permitted by the Food and Drug Administration (“FDA”) in late 2011, to determine both signals of efficacy and safety for low oral doses of the drug. There was no evidence of elevations of liver enzymes over baseline, suggesting these lower doses avoid the type of adverse events seen at much higher doses in earlier studies. On March 17, 2014, we announced that the FDA indicated that we may proceed to conduct Phase 1 and Phase 2 studies of low dose oral Proellex® for uterine fibroids and endometriosis while remaining on partial clinical hold. This guidance indicated that the highest allowed dose will be 12 mg daily. On December 29, 2014, we announced that we have initiated a Phase 2B study for low dose oral Proellex® in the treatment of uterine fibroids. This study was fully enrolled in January 2016 and on November 14, 2016, we announced positive clinical data from this study after two 18-week courses of treatment as compared to placebo. On April 10, 2017, the Company announced that it had a meeting with the FDA to discuss the progress and next steps in the development of Proellex® for the treatment of uterine fibroids. Shortly before the meeting, the Company was notified that the meeting would be a type C/Guidance meeting, rather than a type B/End of phase 2 meeting as previously anticipated. At the meeting, the FDA confirmed that Proellex® will continue on the current partial clinical hold while they consult with liver experts within the FDA regarding previously disclosed effects on the liver. On July 17, 2017, the Company announced that it received preliminary feedback from the FDA on the oral Proellex® clinical development program. The Proellex® program will remain on partial clinical hold, and based upon the FDA’s review of all the existing liver function safety data, the FDA has indicated that the Company will be required to compile a large pre-approval safety data base to support future development. The Company expects to receive final guidance during the third quarter of 2017.

The Company has an active Investigational New Drug Application (“IND”) for the vaginal delivery of Proellex® for the treatment of uterine fibroids. Since the clinical hold relates only to oral delivery of Proellex®, this IND has no clinical hold issues. In the first quarter of 2012, we initiated a Phase 2 vaginal administration study for the treatment of uterine fibroids and subsequently reported the final study results in January 2013. We held an end of Phase 2 meeting with the FDA in May 2013, to discuss a Phase 3 study design for vaginally delivered Proellex as a treatment for uterine fibroids. The FDA recommended that a Phase 2B study should be conducted prior to commencing a Phase 3 program. On December 29, 2014, we announced that we have initiated a Phase 2B study for vaginally delivered Proellex® in the treatment of uterine fibroids. This study was fully enrolled in January 2016 and on November 14, 2016, we announced positive clinical data from this study after two 18-week courses of treatment as compared to placebo. In light of the FDA guidance on the oral Proellex® development program, the Company is assessing increasing its focus on the vaginal delivery of Proellex®.

We are also developing enclomiphene, a single isomer of clomiphene citrate which is an orally active proprietary small molecule compound. Enclomiphene is for the treatment of secondary hypogonadism in overweight men wishing to restore normal testicular function. Men with secondary hypogonadism exhibit low testosterone levels due to under stimulated testes but they are generally fertile. Enclomiphene is designed to treat the underlying mechanism, insufficient stimulation of the testes by the pituitary, which causes secondary hypogonadism. Secondary hypogonadism due to being overweight or obese is the single greatest cause of hypogonadism in general.

On February 2, 2015, we announced that we electronically submitted our New Drug Applications (“NDA”) to the FDA for enclomiphene. The FDA accepted the NDA for review on April 1, 2015 and later assigned a Prescription Drug User Fee (“PDUFA”) goal date of November 30, 2015. In addition, the Division of Bone, Reproductive and Urologic Products (the “Division”) of the FDA scheduled an advisory committee meeting to review the NDA for November 3, 2015. However, the Division subsequently cancelled the scheduled advisory committee meeting due to questions that arose late in the review regarding the bioanalytical method validation that could affect interpretability of certain pivotal study data. On December 1, 2015, we announced that we had received a Complete Response Letter (“CRL”) from the FDA. A CRL informs companies that an NDA cannot be approved in its present form. In the CRL, the FDA stated that, based on recent scientific developments, the design of the enclomiphene Phase 3 studies is no longer adequate to demonstrate clinical benefit and recommended that Repros conduct an additional Phase 3 study or studies to support approval in the target population. The FDA also noted concerns regarding study entry criteria, titration and bioanalytical method validation in the Phase 3 program.

Subsequently, on February 4, 2016, the Company attended a meeting with the FDA reviewers and senior leaders to discuss resolution of issues identified during the NDA review. The meeting covered a broad range of topics surrounding the NDA data as well as emerging agency and expert thinking regarding the treatment of hypogonadism. The Company believes based on the meeting that the FDA is not closed to considering secondary hypogonadism as an indication. Additionally, in January 2016, the Company initiated a Phase 2 double-blind, placebo controlled, proof of concept study, ZA-205, in obese secondary hypogonadal men to assess the impact of enclomiphene on metabolic parameters and quality of life under a diet and exercise regimen. This study was fully enrolled in February 2016 and on August 15, 2016, we reported six month interim results from this study.

Additionally, on September 12, 2016, we reported that we successfully submitted a European centralized marketing authorization application (“MAA”) for enclomiphene for the treatment of secondary hypogonadism. This MAA was subsequently accepted by the European Medicines Agency (“EMA”) which, as previously reported, has assigned the United Kingdom as the primary rapporteur and France as the co-rapporteur for the application review. As part of the ongoing review process, the Company has filed responses to the EMAs questions in the third quarter of 2017.

On December 6, 2016, the Company participated in the industry presentation at the Bone, Reproductive and Urologic Drugs’ Advisory Committee meeting. The advisory panel provided the FDA with advice regarding a clinical and regulatory path to approval for products, such as enclomiphene, in subjects with obesity-related hypogonadism who wish to maintain spermatogenesis. The panel voted 16 to 5 that the achievement of testosterone improvement while maintaining evidence of spermatogenesis was not sufficient, in and of itself, to provide evidence of clinical benefit. At the meeting, numerous panel members suggested that an additional endpoint related to symptoms should be assessed.

Liquidity

On August 9, 2016, we entered into an Equity Distribution Agreement (the “Equity Distribution Agreement”) with Ladenburg Thalmann & Co. Inc. (“Ladenburg”), pursuant to which we may issue and sell from time to time through Ladenburg, as sales agent and/or principal, shares of our common stock having an aggregate offering price of up to \$10 million (the “ATM Shares”). Ladenburg is not required to sell on our behalf any specific number or dollar amount of the ATM Shares, but Ladenburg, upon acceptance of written instructions from us, agreed to use its commercially reasonable efforts consistent with its customary trading and sales practices, to sell the ATM Shares up to the amount specified, and otherwise in accordance with the terms of a placement notice delivered to Ladenburg. Ladenburg receives a commission of 3% of the gross sales price of all ATM Shares sold through it under the Equity Distribution Agreement. Effective May 9, 2017, the Company terminated the Sales Agreement and the related ATM Program. During the three and six month periods ended June 30, 2017, we sold 21,100 and 849,157 ATM Shares, respectively, at a weighted average share price of \$1.17 and \$1.20, respectively, for proceeds of approximately \$25,000 and \$1,021,000, respectively, net of expenses including approximately \$1,000 and \$32,000, respectively, in commissions to Ladenburg.

On May 23, 2017, the Company sold 2,744,125 shares of common stock and pre-funded Series C Warrants to purchase up to 2,245,875 shares of common stock in an underwritten public offering to certain investors (the “May Public Offering”). Each share of common stock was sold at a price of \$0.60 and each Series C Warrant was issued with an exercise price of \$0.60 per share of common stock, \$0.60 of which was pre-funded at closing and \$0.001 was payable upon exercise. This May Public Offering also included the issuance of Series A Warrants to purchase 3,742,500 shares of our common stock at an initial exercise price of \$0.84 per share and Series B Warrants to purchase 2,495,000 shares of our common stock at an initial exercise price of \$0.92 per share. Each share of common stock and each pre-funded Series C Warrant to purchase a share of common stock were sold together with a Series A Warrant to purchase 0.75 share of common stock and a Series B Warrant to purchase 0.50 share of common stock. The net proceeds to the Company from the sale of common stock and warrants, after deducting underwriting discounts and commissions and other offering expenses, were approximately \$2.5 million. For further discussion of the May Public Offering, see Note 6 to the financial statements included herein.

As of June 30, 2017, we had accumulated losses of \$327.6 million, approximately \$3.8 million in cash and cash equivalents, and accounts payable and accrued expenses of approximately \$3.6 million, in the aggregate. Included in our accrued expenses is \$1.8 million related to the accrued severance payments due Mr. Podolski upon his termination, which are anticipated to be paid in the first quarter of 2018 and 2019 with our restricted cash of \$1.8 million. We anticipate that our current liquidity will be sufficient to continue the development of our product candidates and meet our obligations as they become due through the end of 2017. We continue to explore potential additional financing alternatives, including corporate partnering opportunities, that would provide sufficient funds to enable us to continue to develop our two product candidates through FDA approval; however, there can be no assurance that we will be successful in raising any such additional funds on a timely basis or at all. The foregoing matters raise substantial doubt about our ability to continue as a going concern.

Basis of Presentation

These financial statements are unaudited; however, in the opinion of management, these statements reflect all adjustments necessary for a fair statement of the results for the periods reported. All such adjustments are of a normal recurring nature unless disclosed otherwise. These financial statements, including notes, have been prepared in accordance with the applicable rules of the SEC and do not include all of the information and disclosures required by U.S. GAAP for complete financial statements.

These interim financial statements should be read in conjunction with the financial statements and notes thereto included in our 2016 Annual Report on Form 10-K. The results of operations for the three and six month periods ended June 30, 2017 are not necessarily indicative of the results to be expected for the full year.

Changes in Accounting Policies

In November 2016, the FASB issued ASU No. 2016-18, “Statement of Cash Flows (Topic 230): Restricted Cash”. The new standard requires restricted cash to be included with cash and cash equivalents when reconciling the beginning and ending amounts on the statement of cash flows, and requires additional disclosures in the notes to the financial statements. ASU 2016-18 is effective for fiscal years beginning after December 15, 2017 and interim periods within those fiscal years and early adoption is permitted. The Company adopted this standard during the quarter ended March 31, 2017. See Note 2 to the financial statements included herein.

In March 2016, the FASB issued ASU 2016-09, Compensation—Stock Compensation (ASC Topic 718): Improvements to Employee Share-Based Payment Accounting. The new standard simplifies the accounting for stock-based compensation, including amendments on how both taxes related to stock-based compensation and cash payments made to taxing authorities are recorded. ASU 2016-09 is effective for annual reporting periods beginning on or after December 15, 2016, and interim periods within those annual periods and early application is permitted, with any adjustments reflected as of the beginning of the fiscal year of adoption. The Company adopted ASU 2016-09 effective January 1, 2017. The adoption of this standard did not have a material effect on the Company’s financial statements.

In November 2015, the FASB issued ASU No. 2015-17, “Balance Sheet Classification of Deferred Taxes” (“ASU 2015-17”), which requires entities to present deferred tax assets and deferred tax liabilities as noncurrent in a classified balance sheet. The ASU simplifies the current guidance in ASC Topic 740, Income Taxes, which requires entities to separately present deferred tax assets and liabilities as current and noncurrent in a classified balance sheet. ASU 2015-17 is effective for fiscal years beginning after December 15, 2016, and interim periods within those annual periods. The Company adopted ASU 2015-07 effective January 1, 2017. The adoption of this standard did not have a material effect on the Company’s financial statements.

New Accounting Pronouncements Not Yet Adopted

In July 2017, the FASB issued ASU No. 2017-11, “(Part I) Accounting or Certain Financial Instruments with Down Round Features” (“ASU 2017-11”), which changes the classification analysis of certain equity-linked financial instruments with down round features. When determining whether certain financial instruments should be classified as liabilities or equity instruments, a down round feature will no longer preclude equity classification when assessing whether the instrument is indexed to an entity’s own stock. ASU 2017-11 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The Company is currently evaluating the impact of this standard on its consolidated financial statements.

In February 2016, FASB issued ASU 2016-02, Leases (ASC Topic 842), which supersedes ASC Topic 840, Leases. The new standard is intended to increase transparency and comparability of organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. The new guidance is effective for financial statements issued for annual reporting periods beginning after December 15, 2018, and early application is permitted. The Company is currently evaluating the impact of this standard on its consolidated financial statements.

In May 2014, the FASB issued Accounting Standards Update 2014-09, “Revenue from Contracts with Customers” (“ASU 2014-09”). ASU 2014-09 is a comprehensive new revenue recognition model requiring a company to recognize revenue to depict the transfer of goods or services to a customer at an amount reflecting the consideration it expects to receive in exchange for those goods or services. In adopting ASU 2014-09, companies may use either a full retrospective or a modified retrospective approach. Additionally, this guidance requires improved disclosures regarding the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. On July 9, 2015, the FASB voted to delay the effective date of this standard by one year. This deferral resulted in ASU 2014-09 being effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017, with early adoption being permitted for annual periods beginning after December 15, 2016. Entities have the option of using either a full retrospective or a modified retrospective approach to adopt the guidance. The Company is currently assessing the effects this guidance may have on its consolidated financial statements, as well as the method of transition that the Company will use in adopting the new standard.

NOTE 2 — Cash, Cash Equivalents and Restricted Cash

As of June 30, 2017, the Company maintained \$1.8 million as restricted cash. The funds are being held in accordance with the Release Agreement entered into with Mr. Podolski on February 1, 2017.

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the balance sheets that sum to the total of the same such amounts shown in the statements of cash flows (in thousands):

	June 30, 2017	June 30, 2016
Cash and cash equivalents	\$ 3,768	\$ 12,510
Restricted cash, current	916	—
Restricted cash, noncurrent	916	—
Total	<u>\$ 5,600</u>	<u>\$ 12,510</u>

NOTE 3 — Accrued Expenses

Accrued expenses consist of the following (in thousands):

	<u>June 30, 2017</u>	<u>December 31, 2016</u>
Current accrued expenses:		
Personnel related costs	\$ 1,108	\$ 512
Research and development costs	70	174
Other	97	93
Total current accrued expenses	<u>\$ 1,275</u>	<u>\$ 779</u>
Long-term accrued expenses:		
Accrued severance	\$ 916	\$ —
Total long-term accrued expenses	<u>\$ 916</u>	<u>\$ —</u>

NOTE 4 — Loss Per Share

Basic loss per share is computed by dividing net loss by the weighted average number of shares of common stock outstanding during the period. Diluted loss per share is computed using the average shares outstanding for the period and applying the treasury stock method to potentially dilutive outstanding options, restricted stock units and warrants. In all applicable periods, all potential common stock equivalents were anti-dilutive and, accordingly, were not included in the computation of diluted loss per share.

The following table presents information necessary to calculate loss per share for the three and six month periods ended June 30, 2017 and 2016 (in thousands, except per share amounts):

	<u>Three Months Ended June 30,</u>		<u>Six Months Ended June 30,</u>	
	<u>2017</u>	<u>2016</u>	<u>2017</u>	<u>2016</u>
Net loss	\$ (2,199)	\$ (4,280)	\$ (8,109)	\$ (9,125)
Average common shares outstanding	28,398	24,319	27,340	24,319
Basic and diluted loss per share	\$ (0.08)	\$ (0.18)	\$ (0.30)	\$ (0.38)

Potential common stock of 2,758,080 common shares underlying stock options and restricted stock units and common shares underlying 6,027,500 stock purchase warrants for the period ended June 30, 2017, were excluded from the above calculation of diluted loss per share because they were anti-dilutive. Potential common stock of 2,664,024 underlying stock options for the period ended June 30, 2016, were also excluded from the above calculation of diluted loss per share because they were anti-dilutive.

NOTE 5 — Stock-Based Compensation

On February 1, 2017, the Board of Directors (the “Board”) granted Larry Dillaha, the Company’s then interim President and Chief Executive Officer a grant of 50,000 stock options to vest upon the successful completion of certain milestones. Additionally, the Board awarded to Katherine Anderson, the Company’s Chief Financial Officer, 10,000 restricted shares of common stock per month on the first day of each month beginning February 1, 2017 and ending on July 1, 2017, to vest on the last day of the month of grant. On February 13, 2017, the Board awarded Michael Wyllie, a non-employee director of the Company, and Larry Dillaha, a grant of 50,000 stock options each. Both option awards will vest upon the successful completion of certain milestones. On February 13, 2017, the Board awarded each board member a grant of 40,000 restricted stock units, to settle in shares of the Company’s common stock and to vest in equal monthly installments over the three years following the date of grant. Additionally, during the six month period ended June 30, 2017, 356,502 stock options either expired or were forfeited.

NOTE 6 — Stockholders’ Equity

Offerings

On August 9, 2016, we entered into an Equity Distribution Agreement (the “Equity Distribution Agreement”) with Ladenburg Thalmann & Co. Inc. (“Ladenburg”), pursuant to which we may issue and sell from time to time through Ladenburg, as sales agent and/or principal, shares of our common stock having an aggregate offering price of up to \$10 million (the “ATM Shares”). Ladenburg is not required to sell on our behalf any specific number or dollar amount of the ATM Shares, but Ladenburg, upon acceptance of written instructions from us, agreed to use its commercially reasonable efforts consistent with its customary trading and sales practices, to sell the ATM Shares up to the amount specified, and otherwise in accordance with the terms of a placement notice delivered to Ladenburg. Ladenburg receives a commission of 3% of the gross sales price of all ATM Shares sold through it under the Equity Distribution Agreement. Effective May 9, 2017, the Company terminated the Sales Agreement and the related ATM Program.

The table below summarizes our ATM Shares sold during the three and six month periods ended June 30, 2017 (in thousands, except share and per share amounts):

	Three Months Ended June 30, 2017	Six Months Ended June 30, 2017
ATM Shares sold	21,100	849,157
Weighted average share price	\$ 1.17	\$ 1.20
Net proceeds, net of offering costs	\$ 25	\$ 1,021
Offering commissions to Ladenburg	\$ 1	\$ 32

On May 23, 2017, the Company sold 2,744,125 shares of common stock and pre-funded Series C Warrants to purchase up to 2,245,875 shares of common stock in an underwritten public offering to certain investors (the “May Public Offering”). Each share of common stock was sold at a price of \$0.60 and each Series C Warrant was issued with an exercise price of \$0.60 per share of common stock, \$0.60 of which was pre-funded at closing and \$0.001 was payable upon exercise. This May Public Offering also included the issuance of Series A Warrants to purchase 3,742,500 shares of our common stock at an initial exercise price of \$0.84 per share and Series B Warrants to purchase 2,495,000 shares of our common stock at an initial exercise price of \$0.92 per share. Each share of common stock and each pre-funded Series C Warrant to purchase a share of common stock were sold together with a Series A Warrant to purchase 0.75 share of common stock and a Series B Warrant to purchase 0.50 share of common stock. The net proceeds to the Company from the sale of common stock and warrants, after deducting underwriting discounts and commissions and other offering expenses, were approximately \$2.5 million.

The Series A warrants are exercisable, subject to certain limitations, upon issuance and expire five years from issuance and the Series B and Series C warrants are exercisable, subject to certain limitations, upon issuance and expire two years from issuance. The Series A and Series B warrants contain anti-dilution provisions that reduce the exercise price of the warrants if certain dilutive issuances occur, subject to a floor of \$0.17 per share. Each of the warrants contain a cashless exercise provision in the event there is no effective registration statement covering the shares to be issued upon exercise of the warrants and a net cash settlement feature at the option of the warrant holder in certain limited circumstances in which the Company fails to timely deliver registered common shares upon a warrant exercise. Additionally, beginning 30 days after the issuance date, a Series B warrant holder is permitted to effect a cashless exercise and receive a net number of shares equal to the product of (i) 200% of the applicable warrant exercise percentage of the initial warrant amount and (ii) the quotient obtained by dividing (a) the difference obtained by subtracting (x) the market price, from (y) the initial exercise price of the Series B Warrants by (b) the market price (the “Net Number Cashless Exercise”).

Due to the net cash settlement feature at the option of the warrant holder discussed above, the Series A and Series B warrants are classified as liabilities under the caption “Warrant liability” in the accompanying balance sheets and recorded at estimated fair value at issuance with any subsequent change in fair value of the outstanding warrants since issuance reflected in “Change in fair value of warrant liability” in the accompanying statements of operations. Additionally, for the period ended June 30, 2017, any share settlement of the warrant liability upon a warrant exercise is reflected as a noncash settlement of the pro-rata share of the warrant liability and issuance of common stock. See Note 7 to the financial statements included herein for discussion regarding the fair value of the warrants.

The following table reflects the warrant activity of the Company for the six month period ended June 30, 2017:

	Series A Warrants	Series B Warrants	Series C Warrants	Shares of Common Stock Issued
Balance, December 31, 2016	—	—	—	
Issuance of warrants	3,742,500	2,495,000	2,245,875	
Series C Warrants exercised to purchase common stock for cash at \$0.001 per share	—	—	(2,245,875)	2,245,875
Net Number Cashless Exercise of Series B Warrants for the issuance of 715,575 shares of common stock	—	(210,000)	—	715,575
Balance, June 30, 2017	<u>3,742,500</u>	<u>2,285,000</u>	<u>—</u>	

Through August 11, 2017, an additional 1,832,834 Series B Warrants were exercised under the cashless alternative provision and as a result the Company has issued 5,455,730 shares of common stock.

On July 24, 2017, the Company filed a shelf registration statement on Form S-3 (File No. 333-219428, the “July 2017 Registration Statement”) to permit the continued exercise of the Series A Warrants and Series B Warrants following the expiration, on that date, of the Company’s prior Registration Statement on Form S-3, as amended (File No. 333-197253). The July 2017 Registration Statement was declared effective by the SEC on August 4, 2017. Between the expiration of the prior registration statement and the effectiveness of the July 2017 Registration Statement, exercises of the Series A Warrants and Series B Warrants continued to be permitted under the prior registration statement pursuant to Rule 415(a)(5) under the Securities Act of 1933, as amended.

NOTE 7 — Fair Value Measurements

The FASB has established a framework for measuring fair value in generally accepted accounting principles. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurements) and the lowest priority to unobservable inputs (level 3 measurements). The three levels of the fair value hierarchy are described as follows:

Level 1. Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets.

Level 2. Inputs to the valuation methodology include:

- Quoted prices for similar assets or liabilities in active markets
- Quoted prices for identical or similar assets or liabilities in inactive markets

- Inputs other than quoted prices that are observable for the asset or liability
- Inputs that are derived principally from or corroborated by observable market data by correlation or other means

If the asset or liability has a specified (contractual) term, the level 2 input must be observable for substantially the full term of the asset or liability.

Level 3. Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

The table below presents our assets and liabilities that are measured at fair value on a recurring basis at June 30, 2017 and are categorized using the fair value hierarchy (in thousands):

	Total	Level 1	Level 2	Level 3
Cash and cash equivalents	\$ 3,768	\$ 3,768	\$ —	\$ —
Restricted cash	\$ 1,832	\$ 1,832	\$ —	\$ —
Warrant liability	\$ (2,530)	\$ —	\$ (2,530)	\$ —

The table below presents our assets and liabilities that are measured at fair value on a recurring basis at December 31, 2016 and are categorized using the fair value hierarchy (in thousands):

	Total	Level 1	Level 2	Level 3
Cash and cash equivalents	\$ 8,688	\$ 8,688	\$ —	\$ —

All cash and cash equivalents and restricted cash as of June 30, 2017 and December 31, 2016 were held in accounts backed by U.S. government securities.

On May 23, 2017, as a result of the May Public Offering (described in Note 6 to the financial statements included herein), the Company issued Series A, Series B and Series C warrants that include a net cash settlement feature at the option of the warrant holder in certain limited circumstances in which the Company fails to timely deliver registered common shares upon a warrant exercise. All Series C warrants were exercised in June 2017. The Series A and Series B warrants are classified as liabilities under the caption "Warrant liability" in the accompanying balance sheets and recorded at estimated fair value at issuance with any subsequent change in fair value of the outstanding warrants since issuance reflected in "Change in fair value of warrant liability" in the accompanying statements of operations. The fair value of the Series A and Series B warrant liability at the issue date was \$2,419,000 after giving effect to anti-dilution adjustments under the assumption that the anti-dilution mechanism contained in the Series A and Series B warrants was in effect. The following summarizes the change in the Warrant liability for the six months ended June 30, 2017 (in thousands):

	Series A Warrants	Series B Warrants	Total
Warrant liability at date of issue	\$ (1,831)	\$ (588)	\$ (2,419)
Share settlement due to warrant exercises	-	49	49
Change in fair value	(157)	(3)	(160)
Warrant liability at June 30, 2017	<u>\$ (1,988)</u>	<u>\$ (542)</u>	<u>\$ (2,530)</u>

The Company will continue to adjust the Warrant liability for changes in fair value of the outstanding warrants until the earlier of the exercise of the warrants, modification of the warrants, or expiration of the warrants.

The fair value of the Company's warrant liability recorded in the Company's financial statements was determined using the Monte Carlo simulation valuation method with the quoted market price of the Company's common stock, market volatility of the Company's stock, no dividend yield, an expected life based on the remaining contractual term of the outstanding warrants and a risk free interest rate based on USD overnight indexed swaps with a maturity equivalent to the warrants' expected life.

The Company calculated the estimated fair value of the Series A and Series B warrants on the issuance date and at June 30, 2017 using the following weighted average assumptions:

	Issue Date	June 30, 2017
	(May 23, 2017)	
Risk-free interest rate	1.46%	1.82%
Contractual term	3.3 years	3.8 years
Expected volatility	85.8%	98.7%

NOTE 8 — Commitments and Contingencies

None.

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

The following discussion contains forward-looking statements, within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act") that involve risk and uncertainties. Any statements contained in this quarterly report that are not statements of historical fact may be forward-looking statements. When we use the words "may," "anticipates," "believes," "plans," "expects" and similar expressions, we are identifying forward-looking statements. Forward-looking statements involve risks and uncertainties which may cause our actual results, performance or achievements to be materially different from those expressed or implied by forward-looking statements. The following discussion of financial condition should be read in conjunction with the accompanying consolidated financial statements and related notes.

Repros Therapeutics Inc.

The Company was organized on August 20, 1987. We are a biopharmaceutical company focused on the development of new drugs to treat hormonal and reproductive system disorders.

We are developing Proellex®, an orally administered selective blocker of the progesterone receptor in women, for the treatment of uterine fibroids and endometriosis. Uterine fibroids and endometriosis affect millions of women of reproductive age. Proellex® has shown statistically significant results in previous Phase 2 studies for uterine fibroids and endometriosis. We completed a low dose escalating study as permitted by the Food and Drug Administration ("FDA") in late 2011, to determine both signals of efficacy and safety for low oral doses of the drug. There was no evidence of elevations of liver enzymes over baseline, suggesting these lower doses avoid the type of adverse events seen at much higher doses in earlier studies. On March 17, 2014, we announced that the FDA indicated that we may proceed to conduct Phase 1 and Phase 2 studies of low dose oral Proellex® for uterine fibroids and endometriosis while remaining on partial clinical hold. This guidance indicated that the highest allowed dose will be 12 mg daily. On December 29, 2014, we announced that we have initiated a Phase 2B study for low dose oral Proellex® in the treatment of uterine fibroids. This study was fully enrolled in January 2016 and on November 14, 2016, we announced positive clinical data from this study after two 18-week courses of treatment as compared to placebo. On April 10, 2017, the Company announced they had a meeting with the FDA to discuss the progress and next steps in the development of Proellex® for the treatment of uterine fibroids. Shortly before the meeting, the Company was notified that the meeting would be a type C/Guidance meeting, rather than a type B/End of phase 2 meeting as previously anticipated. At the meeting, the FDA confirmed that Proellex® will continue on the current partial clinical hold while they consult with liver experts within the FDA regarding previously disclosed effects on the liver. On July 17, 2017, the Company announced that it received preliminary feedback from the FDA on the oral Proellex® clinical development program. The Proellex® program will remain on partial clinical hold, and based upon the FDA's review of all the existing liver function safety data, the FDA has indicated that the Company will be required to compile a large pre-approval safety data base to support future development. The Company expects to receive final guidance during the third quarter of 2017.

The Company has an active Investigational New Drug Application ("IND") for the vaginal delivery of Proellex® for the treatment of uterine fibroids. Since the clinical hold relates only to oral delivery of Proellex®, this IND has no clinical hold issues. In the first quarter of 2012, we initiated a Phase 2 vaginal administration study for the treatment of uterine fibroids and subsequently reported the final study results in January 2013. We held an end of Phase 2 meeting with the FDA in May 2013, to discuss a Phase 3 study design for vaginally delivered Proellex as a treatment for uterine fibroids. The FDA recommended that a Phase 2B study should be conducted prior to commencing a Phase 3 program. On December 29, 2014, we announced that we have initiated a Phase 2B study for vaginally delivered Proellex® in the treatment of uterine fibroids. This study was fully enrolled in January 2016 and on November 14, 2016, we announced positive clinical data from this study after two 18-week courses of treatment as compared to placebo. In light of the FDA guidance on the oral Proellex® development program, the Company is assessing increasing its focus on the vaginal delivery of Proellex®.

We are also developing enclomiphene, a single isomer of clomiphene citrate which is an orally active proprietary small molecule compound. Enclomiphene is for the treatment of secondary hypogonadism in overweight men wishing to restore normal testicular function. Men with secondary hypogonadism exhibit low testosterone levels due to under stimulated testes but they are generally fertile. Enclomiphene is designed to treat the underlying mechanism, insufficient stimulation of the testes by the pituitary, which causes secondary hypogonadism. Secondary hypogonadism due to being overweight or obese is the single greatest cause of hypogonadism in general.

In December 2011, we completed a Phase 2B study of enclomiphene in men with secondary hypogonadism, but naïve to testosterone treatment, at the recommendation of the FDA. Top line results of this study demonstrated that enclomiphene was generally well tolerated compared to placebo and that there were no drug related serious adverse events that led to discontinuation. We met with the FDA in May 2012 to discuss the design of pivotal Phase 3 efficacy studies for enclomiphene as well as the components of the overall drug development program required for a New Drug Application (“NDA”) submission and agreed on registration requirements for enclomiphene oral therapy for the treatment of secondary hypogonadism. In July 2012, we announced that we reached an agreement with the FDA for the design of the pivotal efficacy studies for enclomiphene for the treatment of secondary hypogonadism. The pivotal studies were conducted under a Special Protocol Assessment (“SPA”). We have completed both Phase 3 pivotal efficacy studies. On March 27, 2013, we announced that the top-line results from our first pivotal Phase 3 study, ZA-301, met both co-primary endpoints mandated by the FDA, and we announced on September 16, 2013, that we met both co-primary endpoints in the second pivotal study, ZA-302. Additionally, on September 16, 2013, we announced the results from ZA-300, a six-month safety study. This study identified no new safety issues. On October 22, 2013, we announced that we received guidance from the FDA instructing the Company to request a meeting to discuss the adequacy of studies ZA-301 and ZA-302. In addition to this guidance, the FDA further noted that they would allow us to run head-to-head studies against approved testosterone replacement products. These head-to-head studies, ZA-304 and ZA-305, were initiated in January 2014 and subsequently completed in September and August 2014, respectively. Both of these head-to-head studies achieved superiority for both co-primary endpoints and most secondary endpoints as compared to the approved testosterone replacement product. On October 21, 2014, we announced the results from ZA-303, a 52 week, single-blind, placebo-controlled Phase 3 study to evaluate the effects on bone mineral density. In this study, no new safety signals were identified, including no evidence of negative effects on bone mineral density. On February 2, 2015, we announced that we electronically submitted our NDA to the FDA for enclomiphene. The FDA accepted the NDA for review on April 1, 2015 and later assigned a Prescription Drug User Fee (“PDUFA”) goal date of November 30, 2015. In addition, the Division of Bone, Reproductive and Urologic Products (the “Division”) of the FDA scheduled an advisory committee meeting to review the NDA for November 3, 2015. However, the Division subsequently cancelled the scheduled advisory committee meeting due to questions that arose late in the review regarding the bioanalytical method validation that could affect interpretability of certain pivotal study data. On December 1, 2015, we announced that we had received a Complete Response Letter (“CRL”) from the FDA. A CRL informs companies that an NDA cannot be approved in its present form. In the CRL, the FDA stated that, based on recent scientific developments, the design of the enclomiphene Phase 3 studies is no longer adequate to demonstrate clinical benefit and recommended that Repros conduct an additional Phase 3 study or studies to support approval in the target population. The FDA also noted concerns regarding study entry criteria, titration and bioanalytical method validation in the Phase 3 program.

Subsequently, on February 4, 2016, the Company attended a meeting with the FDA reviewers and senior leaders to discuss resolution of issues identified during the NDA review. The meeting covered a broad range of topics surrounding the NDA data as well as emerging agency and expert thinking regarding the treatment of hypogonadism. The Company believes based on the meeting that the FDA is not closed to considering secondary hypogonadism as an indication. Additionally, in January 2016, the Company initiated a Phase 2 double-blind, placebo controlled, proof of concept study, ZA-205, in obese secondary hypogonadal men to assess the impact of enclomiphene on metabolic parameters and quality of life under a diet and exercise regimen. This study was fully enrolled in February 2016 and on August 15, 2016, we reported six month interim results from this study.

Additionally, on September 12, 2016, we reported that we successfully submitted a European centralized marketing authorization application (“MAA”) for enclomiphene for the treatment of secondary hypogonadism. This MAA was subsequently accepted by the European Medicines Agency (“EMA”) which, as previously reported, has assigned the United Kingdom as the primary rapporteur and France as the co-rapporteur for the application review. As part of the ongoing review process, the Company has filed responses to the EMAs questions in the third quarter of 2017.

On December 6, 2016, the Company participated in the industry presentation at the Bone, Reproductive and Urologic Drugs’ Advisory Committee meeting. The advisory panel provided the FDA with advice regarding a clinical and regulatory path to approval for products, such as enclomiphene, in subjects with obesity-related hypogonadism who wish to maintain spermatogenesis. The panel voted 16 to 5 that the achievement of testosterone improvement while maintaining evidence of spermatogenesis was not sufficient, in and of itself, to provide evidence of clinical benefit. At the meeting, numerous panel members suggested that an additional endpoint related to symptoms should be assessed.

Liquidity

On August 9, 2016, we entered into an Equity Distribution Agreement (the “Equity Distribution Agreement”) with Ladenburg Thalmann & Co. Inc. (“Ladenburg”), pursuant to which we may issue and sell from time to time through Ladenburg, as sales agent and/or principal, shares of our common stock having an aggregate offering price of up to \$10 million (the “ATM Shares”). Ladenburg is not required to sell on our behalf any specific number or dollar amount of the ATM Shares, but Ladenburg, upon acceptance of written instructions from us, agreed to use its commercially reasonable efforts consistent with its customary trading and sales practices, to sell the ATM Shares up to the amount specified, and otherwise in accordance with the terms of a placement notice delivered to Ladenburg. Ladenburg receives a commission of 3% of the gross sales price of all ATM Shares sold through it under the Equity Distribution Agreement. Effective May 9, 2017, the Company terminated the Sales Agreement and the related ATM Program. During the three and six month period ended June 30, 2017, we sold 21,100 and 849,157 ATM Shares, respectively, at a weighted average share price of \$1.17 and \$1.20, respectively, for proceeds of approximately \$25,000 and \$1,021,000, respectively, net of expenses including approximately \$1,000 and \$32,000, respectively, in commissions to Ladenburg. Effective May 9, 2017, the Company terminated the Sales Agreement and the related ATM Program.

On May 23, 2017, the Company sold 2,744,125 shares of common stock and pre-funded Series C Warrants to purchase up to 2,245,875 shares of common stock in an underwritten public offering to certain investors (the “May Public Offering”). Each share of common stock was sold at a price of \$0.60 and each Series C Warrant was issued with an exercise price of \$0.60 per share of common stock, \$0.60 of which was pre-funded at closing and \$0.001 was payable upon exercise. This May Public Offering also included the issuance of Series A Warrants to purchase 3,742,500 shares of our common stock at an initial exercise price of \$0.84 per share and Series B Warrants to purchase 2,495,000 shares of our common stock at an initial exercise price of \$0.92 per share. Each share of common stock and each pre-funded Series C Warrant to purchase a share of common stock were sold together with a Series A Warrant to purchase 0.75 share of common stock and a Series B Warrant to purchase 0.50 share of common stock. The net proceeds to the Company from the sale of common stock and warrants, after deducting underwriting discounts and commissions and other offering expenses, were approximately \$2.5 million.

As of June 30, 2017, we had accumulated losses of \$327.6 million, approximately \$3.8 million in cash and cash equivalents, and accounts payable and accrued expenses of approximately \$3.6 million, in the aggregate. Included in our accrued expenses is \$1.8 million related to the accrued severance payments due Mr. Podolski upon his termination, which are anticipated to be paid in the first quarter of 2018 and 2019 with our restricted cash of \$1.8 million. We anticipate that our current liquidity will be sufficient to continue the development of our product candidates and meet our obligations as they become due through the end of 2017. We continue to explore potential additional financing alternatives, including corporate partnering opportunities, that would provide sufficient funds to enable us to continue to develop our two product candidates through FDA approval; however, there can be no assurance that we will be successful in raising any such additional funds on a timely basis or at all. The foregoing matters raise substantial doubt about our ability to continue as a going concern.

Proellex®

Product Overview

Proellex®, our product candidate for female reproductive health, is a new chemical entity that acts as a selective blocker of the progesterone receptor and is being developed for the treatment of symptoms associated with uterine fibroids and endometriosis. The National Uterine Fibroids Foundation estimates that 80% of all women in the U.S. have uterine fibroids, and one in four of these women have symptoms severe enough to require treatment. According to the Endometriosis Association, endometriosis affects 6.3 million women in the U.S. and Canada and millions more worldwide.

The current standards of care for uterine fibroids and endometriosis consist of surgery or short-term treatment with gonadotropin-releasing hormone (“GnRH”) agonists drugs, such as Lupron®. GnRH agonists induce a low estrogen, menopausal-like state and promote bone loss and are not recommended for use for more than six months without add-back hormonal therapy.

We have conducted numerous studies with Proellex® dosing approximately 900 women with the drug. All Proellex® studies completed to date exhibited strong efficacy signals, whether in uterine fibroids or endometriosis. In a 120 patient study of Proellex® as a treatment of uterine fibroids conducted in the United States (roughly 40 subjects per arm), both a 12.5 and 25 mg dose of Proellex® were compared to placebo. In this study each of the 12.5 and 25 mg doses achieved highly statistically significant results when compared to placebo when menstrual bleeding was assessed ($p < 0.0001$). The two doses also achieved highly statistically significant improvement in quality of life measures using the Uterine Fibroid Symptom Quality of Life questionnaire developed and validated by Georgetown University and used in the development of device like treatments of uterine fibroids such as uterine artery embolization. There was no statistical difference in efficacy measures between the two doses. Importantly, in the Phase 2 U.S. trial, a significant percentage of women stopped menstruating (amenorrhea). Over 80% of women on both the 12.5 and 25 mg doses exhibited amenorrhea during the three month trial, whereas all women on placebo exhibited at least one menses. The key symptom of uterine fibroids is excessive menstrual bleeding. The induction of amenorrhea continues to be the primary endpoint in our uterine fibroids clinical studies.

Up until the summer of 2009, all side effects exhibited in the studies were considered manageable and the benefit of Proellex® far outweighed the risk. However, in Phase 3 efficacy and larger Phase 3 safety studies in diverse populations, a small number of subjects exhibited serious adverse effects associated with elevated liver enzymes. As a result of these findings, we elected to stop the trials and the FDA subsequently placed Proellex® on full clinical hold. All women that experienced elevated liver enzymes and returned for follow-up visits returned to baseline conditions with no overnight hospitalization necessary. An analysis of all the subjects that experienced such serious adverse effects showed that the effect only occurred in a small percentage of subjects that were exposed to the 50 mg dose of the drug for any period of time. Based on these findings, we petitioned the FDA to allow us to conduct a low dose study to demonstrate both safety and signals of efficacy in low oral doses of Proellex®, up to 12 mg administered daily. The FDA upgraded the full clinical hold to a partial hold to allow the low dose study to be conducted. In addition, we are exploring vaginal delivery as an alternative administrative route to bypass first-pass liver effects and reduce systemic exposure.

Low Dose Oral Study

Pursuant to the terms of the partial clinical hold currently in place as a result of the liver toxicity exhibited by Proellex®, the FDA allowed us to run a single study to test low oral doses of Proellex® for signals of safety and efficacy. The study tested five different doses of Proellex® (1, 3, 6, 9 and 12 mg), with 1 mg being the first dose tested. Each dose was then compared to placebo with weekly assessments of liver function during both the placebo and drug period. Subjects were dosed with the active drug for 10 weeks, which allowed for adequate time to determine the impact of a given dose on trends in liver function. Each dose was tested in up to 12 different subjects and assessment of pharmacokinetic parameters was obtained at the start of dosing and the end of the dosing period to determine overall and maximum drug exposure for a given dose. We also monitored changes in menstrual bleeding patterns and ovulation as well as changes in endometrial thickness. The FDA required that an independent Drug Safety Monitoring Board be established and that the informed consent clearly state the liver toxicity previously experienced with Proellex®. We have completed this study and have announced that there was no evidence of elevations of liver enzymes over baseline, suggesting these lower doses avoid the type of adverse events seen at much higher doses in earlier studies.

On July 16, 2012, we announced that we held a teleconference with the FDA to discuss the development of low dose oral Proellex® as a treatment for endometriosis. Subsequently, on October 8, 2012, we announced that the FDA has agreed to reclassify the full clinical hold to a partial clinical hold on low dose oral Proellex® to allow us to conduct a Phase 2 study in the treatment of endometriosis. We initiated this 60 subject, four month active dosing study in November 2012 and it was fully enrolled in January 2016. On September 7, 2016, we announced positive clinical data for the first course of treatment in this Phase 2 study.

On October 31, 2013, the Company held a meeting with the FDA to discuss the clinical development plan for low dose oral Proellex® in the treatment of uterine fibroids. During the meeting, the FDA provided guidance for endpoints it believed acceptable for the treatment of uterine fibroids in an efficacy study and instructed the Company to submit a request for lifting the full clinical hold. The Company has followed the FDA's recommendations and submitted the study protocol and the request for the full hold lift. Additionally, on March 17, 2014, we announced that the FDA indicated that we may proceed to conduct Phase 1 and Phase 2 studies of low dose oral Proellex® for endometriosis and uterine fibroids while remaining on partial clinical hold. This guidance indicated that the highest allowed dose will be 12 mg daily. On December 29, 2014, we announced that we have initiated a Phase 2B study for low dose oral Proellex® in the treatment of uterine fibroids. This study was fully enrolled in January 2016 and on November 14, 2016, we announced positive clinical data from this study after two 18-week courses of treatment as compared to placebo. On January 30, 2017, we announced the FDA has granted the Company an end of phase 2 meeting to discuss the phase 3 requirements for Proellex in the treatment of uterine fibroids. Subsequently, on April 10, 2017, the Company announced that it had a meeting with the FDA to discuss the progress and next steps in the development of Proellex® for the treatment of uterine fibroids. Shortly before the meeting, the Company was notified that the meeting would be a type C/guidance meeting, rather than a type B/end of phase 2 meeting as previously anticipated. At the meeting, the FDA confirmed that Proellex® will continue on the current partial clinical hold while they consult with liver experts within the FDA regarding previously disclosed effects on the liver. Further, the FDA agreed to accept additional information from the Company and its panel of liver experts for consideration by the FDA's internal advisory liver team. On July 17, 2017, the Company announced that it received preliminary feedback from the FDA on the oral Proellex® clinical development program. The Proellex® program will remain on partial clinical hold, and based upon the FDA's review of all the existing liver function safety data, the FDA has indicated that the Company will be required to compile a large pre-approval safety data base to support future development. The Company expects to receive final guidance during the third quarter of 2017.

Vaginal Administration

We are assessing vaginal administration of Proellex® to avoid first pass liver effects and achieve higher reproductive tract concentrations of the drug while minimizing systemic exposure. We reported results from two in vivo animal studies which confirmed reduced maximum circulating concentrations of the drug when administered vaginally, as well as efficacy signals at substantially lower doses than oral administration. The Company has an active IND for the vaginal delivery of Proellex® for the treatment of uterine fibroids. Since the clinical hold relates only to the oral delivery of Proellex®, this IND has no clinical hold issues. In the first quarter of 2012, we initiated a Phase 2 vaginal administration study for the treatment of uterine fibroids. In January 2013, we reported the final study results which indicated the 12 mg dose achieved statistically significant improvement in menstrual bleeding, uterine fibroid symptoms and reduction in fibroid volume even with the low number of subjects enrolled into the study (n=12 @ 12 mg). Based on these findings, the Company believes the 12 mg dose is appropriate for further development. We held an end of Phase 2 meeting with the FDA in May 2013, to discuss a Phase 3 study design for the vaginally delivered Proellex as a treatment for uterine fibroids. The FDA recommended that a Phase 2B study should be conducted prior to commencing a Phase 3 program. On December 29, 2014, we announced that we have initiated a Phase 2B study for vaginally delivered Proellex® in the treatment of uterine fibroids. This study was fully enrolled in January 2016 and on November 14, 2016, we announced positive clinical data from this study after two 18-week courses of treatment as compared to placebo. In light of the FDA guidance on the oral Proellex® development program, the Company is assessing increasing its focus on the vaginal delivery of Proellex®.

Enclomiphene

Product Overview

We are developing enclomiphene, a single isomer of clomiphene citrate which is an orally active proprietary small molecule compound. Enclomiphene is for the treatment of secondary hypogonadism in overweight men wishing to restore normal testicular function. Men with secondary hypogonadism exhibit low testosterone levels due to under stimulated testes but they are generally fertile. Enclomiphene is designed to treat the underlying mechanism, insufficient stimulation of the testes by the pituitary, which causes secondary hypogonadism. Secondary hypogonadism due to being overweight or obese is the single greatest cause of hypogonadism in general.

Testosterone is an important male hormone. Testosterone deficiency in men is linked to several negative physical and mental conditions, including loss of muscle tone, reduced sexual desire and deterioration of memory and certain other cognitive functions. Testosterone production normally decreases as men age and this decline can be accelerated by obesity, sometimes leading to testosterone deficiency. The leading therapy for low testosterone is AndroGel®, a commercially available testosterone replacement marketed by AbbVie Inc. (“AbbVie”) for the treatment of low testosterone, which we believe has had and continues to have significant sales in North America.

Based on our own clinical trial screening data, we believe over 70% of men that have low testosterone suffer from secondary hypogonadism, a pituitary defect which is characterized by suboptimal levels of LH (luteinizing hormone) and FSH (follicle stimulating hormone). LH and FSH are the pituitary hormones that stimulate testicular testosterone and sperm production, respectively. Men with secondary hypogonadism can be readily distinguished from those that have primary testicular failure via assessment of the levels of secretions of pituitary hormones, as men with primary testicular failure experience elevated secretions of pituitary hormones. In secondary hypogonadism, the low levels of LH and FSH fail to provide adequate hormone signaling to the testes, causing testosterone levels to drop to a level where we believe pituitary secretions fall under the influence of estrogen, which is enhanced in obese men, thus further suppressing the testicular stimulation from the pituitary.

Enclomiphene acts centrally to restore testicular function and, hence, normal testosterone in the body. The administration of exogenous testosterone can restore serum testosterone levels, but does not restore testicular function and thereby generally leads to the cessation of, or significant reduction in, sperm production. Enclomiphene, by contrast, restores levels of both LH and FSH, which stimulate testicular testosterone and sperm production, respectively.

Treatment for Secondary Hypogonadism in Men Wishing to Preserve Testicular Function (Reproductive Status)

On November 8, 2010, we held a Type B meeting with the FDA to discuss whether the FDA would review our protocols for a Phase 3 trial of enclomiphene in men with secondary hypogonadism under an SPA. In the meeting, the FDA recommended that a Phase 2B study in men with secondary hypogonadism but naïve to testosterone treatment be conducted if we desired the protocols to be reviewed under an SPA. The FDA further opined that such Phase 2B study would provide for a more solid data base for design of Phase 3 studies and eventual approval of such studies under an SPA.

We completed the Phase 2B trial which consisted of four arms; placebo, two doses of enclomiphene and topical testosterone. In this study, at baseline the men exhibited morning testosterone less than 250 ng/dl and there was no statistical difference between the groups in testosterone at baseline. At the end of the three month dosing period, median morning testosterone levels were placebo, 196 ng/dl, 12.5 mg enclomiphene, 432 ng/dl, 25 mg enclomiphene, 416 ng/dl and Testim®, 393 ng/dl. A comparison of final median morning testosterone in all three of the active arms to placebo showed them to be highly statistically different and there was no statistical difference observed between these active arms. This trial also showed that enclomiphene was able to maintain sperm counts in men being treated for their low testosterone levels, whereas Testim® resulted in suppressed sperm levels.

On July 9, 2012, we announced that we reached an agreement with the FDA for the design of the pivotal efficacy studies for enclomiphene for the treatment of secondary hypogonadism. The pivotal studies were conducted under an SPA. On March 27, 2013, we announced that the top-line results from our first pivotal Phase 3 study, ZA-301, met both co-primary endpoints mandated by the FDA and we announced on September 16, 2013, that we met both co-primary endpoints in the second pivotal study, ZA-302.

The 500 subject, six month, open label safety study, ZA-300, completed enrollment in February 2013 at 28 U.S. clinical sites. On September 16, 2013, we reported top-line results of this study. Additionally, we completed enrollment into a one year, 150 subject DEXA study, ZA-303, in January 2013 at 10 U.S. clinical sites. On October 21, 2014, we announced that this study identified no new safety signals, including no evidence of negative effects on bone mineral density.

On October 22, 2013, we announced that we received guidance from the FDA instructing the Company to request a meeting to discuss the adequacy of studies ZA-301 and ZA-302. In addition to this guidance, the FDA further noted they would allow us to run head-to-head studies against approved testosterone replacement products. These head-to-head studies, ZA-304 and ZA-305, were initiated in January 2014 and subsequently completed in September and August 2014, respectively. Both of these head-to-head studies achieved superiority for both co-primary endpoints and most secondary endpoints as compared to the approved testosterone replacement product.

On February 2, 2015, we announced that we electronically submitted our NDA to the FDA for enclomiphene. The FDA accepted the NDA for review on April 1, 2015 and later assigned a PDUFA goal date of November 30, 2015. In addition, the Division of the FDA scheduled an advisory committee meeting to review the NDA for November 3, 2015. However, the Division subsequently cancelled the scheduled advisory committee meeting due to questions that arose late in the review regarding the bioanalytical method validation that could affect interpretability of certain pivotal study data. On December 1, 2015, we announced that we had received a CRL from the FDA. A CRL informs companies that an NDA cannot be approved in its present form. In the CRL, the FDA stated that, based on recent scientific developments, the design of the enclomiphene Phase 3 studies is no longer adequate to demonstrate clinical benefit and recommended that Repros conduct an additional Phase 3 study or studies to support approval in the target population. The FDA also noted concerns regarding study entry criteria, titration and bioanalytical method validation in the Phase 3 program. Subsequently, on February 4, 2016, the Company attended a meeting with the FDA reviewers and senior leaders to discuss resolution of issues identified during the NDA review. The meeting covered a broad range of topics surrounding the NDA data as well as emerging agency and expert thinking regarding the treatment of hypogonadism. The Company believes based on the meeting that the FDA is not closed to considering secondary hypogonadism as an indication. Additionally, in January 2016, the Company initiated a Phase 2 double-blind, placebo controlled, proof of concept study, ZA-205, in obese secondary hypogonadal men to assess the impact of enclomiphene on metabolic parameters and quality of life under a diet and exercise regimen. This study was fully enrolled in February 2016 and on August 15, 2016, we reported six month interim results from this study.

Additionally, on September 12, 2016, we reported that we successfully submitted a European centralized marketing authorization application (“MAA”) for enclomiphene for the treatment of secondary hypogonadism. This MAA was subsequently accepted by the European Medicines Agency (“EMA”) which, as previously reported, has assigned the United Kingdom as the primary rapporteur and France as the co-rapporteur for the application review. As part of the ongoing review process, the Company has filed responses to the EMAs questions in the third quarter of 2017.

On December 6, 2016, the Company participated in the industry presentation at the Bone, Reproductive and Urologic Drugs’ Advisory Committee meeting. The advisory panel provided the FDA with advice regarding a clinical and regulatory path to approval for products, such as enclomiphene, in subjects with obesity-related hypogonadism who wish to maintain spermatogenesis. The panel voted 16 to 5 that the achievement of testosterone improvement while maintaining evidence of spermatogenesis was not sufficient, in and of itself, to provide evidence of clinical benefit. At the meeting, numerous panel members suggested that an additional endpoint related to symptoms should be assessed.

Business Strategy

The Company is assessing increasing its focus on the vaginal delivery of Proellex® in the treatment of uterine fibroids. We anticipate that our current liquidity will be sufficient to continue the development of our product candidates and meet our obligations as they become due through the end of 2017. We continue to explore potential additional financing alternatives, including corporate partnering opportunities, that would provide sufficient funds to enable us to continue to develop our two product candidates through FDA approval; however, there can be no assurance that we will be successful in raising any such additional funds on a timely basis or at all.

Corporate Information

We were organized as a Delaware corporation in August 1987. Our principal executive offices are located at 2408 Timberloch Place, Suite B-7, The Woodlands, Texas, 77380, and our telephone number is (281) 719-3400. We maintain an internet website at www.reprosr.com. The information on our website or any other website is not incorporated by reference into this quarterly report and does not constitute a part of this quarterly report. Our Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K and all amendments to such reports are made available free of charge through the Investor Relations section of our website as soon as reasonably practicable after they have been filed or furnished with the Securities and Exchange Commission.

General

We currently have nine full-time employees. We utilize the services of contract research organizations, contract manufacturers and various consultants to assist us in performing clinical and regulatory services for the clinical development of our products. We are substantially dependent on our various contract groups to adequately perform the activities required to obtain regulatory approval of our products.

We have accumulated net operating losses through June 30, 2017 and the value of the tax asset associated with these accumulated net operating losses may be substantially diminished in value due to various tax regulations, including change in control provisions in the tax code. Additionally, during 2013, the Company completed an analysis of its section 382 limit. Based on this analysis, the Company concluded that the amount of net operating loss (“NOL”) carryforwards and the credits available to offset taxable income is limited under section 382. See “Critical Accounting Policies and the Use of Estimates – Income Taxes,” below.

Losses have resulted principally from costs incurred in conducting clinical trials for our product candidates, in research and development activities related to efforts to develop our products and from the associated administrative costs required to support those efforts. There can be no assurance that we will be able to successfully complete the transition from a development stage company to the successful introduction of commercially viable products. Our ability to achieve profitability will depend on, among other things, successfully completing the clinical development of our products in a reasonable time frame and at a reasonable cost, obtaining regulatory approvals, establishing marketing, sales and manufacturing capabilities or collaborative arrangements with others that possess such capabilities, and, if applicable, continuing to raise sufficient funds to finance our activities. There can be no assurance that we will be able to achieve profitability.

Critical Accounting Policies and the Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Accrued Expenses

We estimate accrued expenses as part of our process of preparing financial statements. Examples of areas in which subjective judgments may be required include costs associated with services provided by contract organizations for clinical trials, preclinical development and manufacturing of clinical materials. We accrue for costs incurred as the services are being provided by monitoring the status of the trials or services provided and the invoices received from our external service providers. In the case of clinical trials, a portion of the estimated cost normally relates to the projected cost to treat a patient in our trials, and we recognize this cost over the estimated term of the study based on the number of patients enrolled in the trial on an ongoing basis, beginning with patient enrollment. As actual costs become known to us, we adjust our accruals. To date, our estimates have not differed significantly from the actual costs incurred. However, subsequent changes in estimates may result in a material change in our accruals, which could also materially affect our balance sheet and results of operations.

Research and Development Expenses

Research and development, or R&D, expenses include salaries and related employee expenses, contracted regulatory affairs activities, insurance coverage for clinical trials and prior product sales, contracted research and consulting fees, facility costs and internal research and development supplies. We expense research and development costs in the period they are incurred. These costs consist of direct and indirect costs associated with specific projects as well as fees paid to various entities that perform research on our behalf.

Warrant Liability

In May 2017, we sold shares of common stock and pre-funded Series C Warrants to purchase common stock in an underwritten public offering which also included the issuance of Series A and Series B Warrants to purchase common stock. Due to a net cash settlement feature at the option of the warrant holder in each of the Series A and Series B warrants, the warrants are classified as liabilities under the caption “Warrant liability” in the accompanying balance sheets and recorded at estimated fair value at issuance with any subsequent change in fair value of the outstanding warrants since issuance reflected in “Change in fair value of warrant liability” in the accompanying statements of operations. Additionally, for the period ended June 30, 2017, any share settlement of the Warrant liability upon a warrant exercise is reflected as a noncash settlement of the pro-rata share of the Warrant liability and issuance of common stock.

We used the Monte Carlo simulation valuation method to estimate the fair value of the Series A and Series B warrants. The Monte Carlo simulation valuation method utilizes the quoted market price of the Company’s common stock, market volatility of the Company’s stock, no dividend yield, an expected life based on the remaining contractual term of the outstanding warrants and a risk-free interest rate. The risk-free interest rate is based on USD overnight indexed swaps with a maturity equivalent to the warrants’ expected life.

Stock-Based Compensation

We had one stock-based compensation plan at June 30, 2017, the 2011 Equity Incentive Plan. Accounting for stock-based compensation generally requires the recognition of the cost of employee services for stock-based compensation based on the grant date fair value of the equity or liability instruments issued. We use the Black-Scholes option pricing model to estimate the fair value of our stock options. Expected volatility is determined using historical volatilities based on historical stock prices for a period equal to the expected term. The expected volatility assumption is adjusted if future volatility is expected to vary from historical experience. The expected term of options represents the period of time that options granted are expected to be outstanding and falls between the options’ vesting and contractual expiration dates. The Company’s historical stock option exercise experience does not provide a reasonable basis upon which to estimate expected term. As such, the simplified method was used to calculate the expected term. The risk-free interest rate is based on the yield at the date of grant of a zero-coupon U.S. Treasury bond whose maturity period equals the option’s expected term.

Income Taxes

Our losses from inception to date have resulted principally from costs incurred in conducting clinical trials and in research and development activities related to efforts to develop our products and from the associated administrative costs required to support those efforts. We have recorded a deferred tax asset for our NOLs; however, as the Company has incurred losses since inception, and since there is no certainty of future profits, a valuation allowance has been provided in full on our deferred tax assets in the accompanying consolidated financial statements. Additionally, during 2013, the Company completed an analysis of its section 382 limit. Based on this analysis, the Company concluded that the amount of NOL carryforwards and the credits available to offset taxable income is limited under section 382. Accordingly, if the Company generates taxable income in any year in excess of its then annual limitation, the Company may be required to pay federal income taxes even though it has unexpired NOL carryforwards. Additionally, because U.S. tax laws limit the time during which NOLs and tax credit carryforwards may be applied against future taxable income and tax liabilities, the Company may not be able to take full advantage of its NOLs and tax credit carryforwards for federal income tax purposes. Future public and private stock placements may create additional limitations on the Company's NOLs, credits and other tax attributes.

Changes in Accounting Policies

In November 2016, the FASB issued ASU No. 2016-18, "Statement of Cash Flows (Topic 230): Restricted Cash". The new standard requires restricted cash to be included with cash and cash equivalents when reconciling the beginning and ending amounts on the statement of cash flows, and requires additional disclosures in the notes to the financial statements. ASU 2016-18 is effective for fiscal years beginning after December 15, 2017 and interim periods within those fiscal years and early adoption is permitted. The Company adopted this standard during the quarter ended March 31, 2017. See Note 2 to the financial statements included herein.

In March 2016, the FASB issued ASU 2016-09, Compensation—Stock Compensation (ASC Topic 718): Improvements to Employee Share-Based Payment Accounting. The new standard simplifies the accounting for stock-based compensation, including amendments on how both taxes related to stock-based compensation and cash payments made to taxing authorities are recorded. ASU 2016-09 is effective for annual reporting periods beginning on or after December 15, 2016, and interim periods within those annual periods and early application is permitted, with any adjustments reflected as of the beginning of the fiscal year of adoption. The Company adopted ASU 2016-09 effective January 1, 2017. The adoption of this standard did not have a material effect on the Company's financial statements.

In November 2015, the FASB issued ASU No. 2015-17, "Balance Sheet Classification of Deferred Taxes" ("ASU 2015-17"), which requires entities to present deferred tax assets and deferred tax liabilities as noncurrent in a classified balance sheet. The ASU simplifies the current guidance in ASC Topic 740, Income Taxes, which requires entities to separately present deferred tax assets and liabilities as current and noncurrent in a classified balance sheet. ASU 2015-17 is effective for fiscal years beginning after December 15, 2016, and interim periods within those annual periods. The Company adopted ASU 2015-07 effective January 1, 2017. The adoption of this standard did not have a material effect on the Company's financial statements.

New Accounting Pronouncements Not Yet Adopted

In July 2017, the FASB issued ASU No. 2017-11, "(Part I) Accounting or Certain Financial Instruments with Down Round Features" ("ASU 2017-11"), which changes the classification analysis of certain equity-linked financial instruments with down round features. When determining whether certain financial instruments should be classified as liabilities or equity instruments, a down round feature will no longer preclude equity classification when assessing whether the instrument is indexed to an entity's own stock. ASU 2017-11 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The Company is currently evaluating the impact of this standard on its consolidated financial statements.

In February 2016, FASB issued ASU 2016-02, Leases (ASC Topic 842), which supersedes ASC Topic 840, Leases. The new standard is intended to increase transparency and comparability of organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. The new guidance is effective for financial statements issued for annual reporting periods beginning after December 15, 2018, and early application is permitted. The Company is currently evaluating the impact of this standard on its consolidated financial statements.

In May 2014, the FASB issued Accounting Standards Update 2014-09, "Revenue from Contracts with Customers" ("ASU 2014-09"). ASU 2014-09 is a comprehensive new revenue recognition model requiring a company to recognize revenue to depict the transfer of goods or services to a customer at an amount reflecting the consideration it expects to receive in exchange for those goods or services. In adopting ASU 2014-09, companies may use either a full retrospective or a modified retrospective approach. Additionally, this guidance requires improved disclosures regarding the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. On July 9, 2015, the FASB voted to delay the effective date of this standard by one year. This deferral resulted in ASU 2014-09 being effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017, with early adoption being permitted for annual periods beginning after December 15, 2016. Entities have the option of using either a full retrospective or a modified retrospective approach to adopt the guidance. The Company is currently assessing the effects this guidance may have on its consolidated financial statements, as well as the method of transition that the Company will use in adopting the new standard.

Results of Operations

Comparison of the three and six month periods ended June 30, 2017 and 2016

Revenues and Other Income

Total revenues and other income decreased to \$7,000 for the three month period ended June 30, 2017 as compared to \$15,000 for the same period in the prior year. Total revenues and other income decreased to \$14,000 for the six month period ended June 30, 2017 as compared to \$31,000 for the same period in the prior year. The decrease in revenues and other income in both periods is primarily due to lower cash balances during the three and six month periods ended June 30, 2017 as compared to the comparable periods in the prior year.

Research and Development Expenses

R&D expenses include contracted services relating to our clinical product development activities which include preclinical studies, clinical trials, expenses associated with our patent portfolio, regulatory affairs, including FDA filing fees, and bulk manufacturing scale-up activities and bulk active ingredient purchases for preclinical and clinical trials primarily relating to our two products in clinical development, which are Proellex® and enclomiphene. Research and development expenses also include internal operating expenses relating to our general research and development activities. R&D expenses decreased 65%, or \$2.1 million, to \$1.1 million for the three month period ended June 30, 2017, as compared to \$3.2 million for the same period in the prior year. Our primary R&D expenses for the three month periods ended June 30, 2017 and 2016 are shown in the following table (in thousands):

Research and Development	Three months ended June 30 ,		Variance	Change (%)
	2017	2016		
Proellex® clinical development	\$ 129	\$ 990	\$ (861)	(87)%
Enclomiphene clinical development	211	1,000	(789)	(79)%
Payroll and benefits	569	710	(141)	(20)%
Operating and occupancy	231	543	(312)	(57)%
Total	\$ 1,140	\$ 3,243	\$ (2,103)	(65)%

The clinical development expenses related to Proellex® decreased for the three month period ended June 30, 2017, as compared to the prior year period, due to decreased expenses associated with our Phase 2b clinical trials for the treatment of uterine fibroids and endometriosis. The clinical development expenses related to enclomiphene decreased for the three month period ended June 30, 2017, as compared to the prior year period, due to decreased expenses associated with our Phase 2 proof of concept study, ZA-205.

Payroll and benefits expenses decreased 20%, or approximately \$141,000, to \$569,000 for the three month period ended June 30, 2017, as compared to \$710,000 for the same period in the prior year. Salaries for the three month period ended June 30, 2017 were \$357,000 as compared to \$425,000 for the same period in the prior year. Also during the three month period ended June 30, 2017, the Company incurred \$169,000 in severance expense related to a reduction in its workforce. As a result of this reduction in workforce, non-cash stock-based compensation decreased \$197,000 for the three month period ended June 30, 2017, as compared to the same period in the prior year.

Operating and occupancy expenses decreased 57%, or approximately \$312,000, to \$231,000 for the three month period ended June 30, 2017 as compared to \$543,000 for the same period in the prior year, primarily due to decreased legal expenses and other outside services.

R&D expenses decreased 54%, or approximately \$3.8 million, to \$3.2 million for the six month period ended June 30, 2017, as compared to \$7.0 million for the same period in the prior year. Our primary R&D expenses for the six month periods ended June 30, 2017 and 2016 are shown in the following table (in thousands):

Research and Development	Six months ended June 30,		Variance	Change (%)
	2017	2016		
Proellex® clinical development	\$ 649	\$ 2,146	\$ (1,497)	(70)%
Enclomiphene clinical development	541	2,181	(1,640)	(75)%
Payroll and benefits	1,207	1,422	(215)	(15)%
Operating and occupancy	817	1,260	(443)	(35)%
Total	\$ 3,214	\$ 7,009	\$ (3,795)	(54)%

For the six month period ended June 30, 2017, as compared to the same period in 2016, R&D expenses related to the clinical development of Proellex® decreased 70%, or approximately \$1.5 million, primarily due to decreased expenses associated with our Phase 2b clinical trials for the treatment of uterine fibroids and endometriosis. R&D expenses related to the clinical development of enclomiphene decreased 75%, or approximately \$1.6 million, due to decreased expenses associated with our Phase 2 proof of concept study, ZA-205.

Payroll and benefits expenses decreased 15%, or approximately \$215,000, to \$1.2 million for the six month period ended June 30, 2017, as compared to \$1.4 million for the same period in the prior year. Salaries for the six month period ended June 30, 2017 were \$764,000, as compared to \$847,000 for the same period in the prior year. Included in payroll and benefits expense is a charge for non-cash stock-based compensation of \$97,000 for the six month period ended June 30, 2017, as compared to a charge of \$370,000 for the same period in the prior year. Also during the six month period ended June 30, 2017, the Company incurred \$169,000 in severance expense related to a reduction in its workforce.

Operating and occupancy expenses decreased 35%, or approximately \$443,000, to \$817,000 for the six month period ended June 30, 2017, as compared to \$1.3 million for the same period in the prior year, primarily due to decreased legal expenses and outside services.

Through June 30, 2017 we have incurred approximately \$72.0 million for the development of Proellex® and approximately \$74.1 million for the development of enclomiphene. These accumulated costs exclude any internal operating expenses and expenses associated with the patent portfolio.

General and Administrative Expenses

General and administrative (“G&A”) expenses decreased 14%, or approximately \$146,000, to \$906,000 for the three month period ended June 30, 2017 as compared to \$1.1 million for the same period in the prior year. Our primary G&A expenses for the three month periods ended June 30, 2017 and 2016 are shown in the following table (in thousands):

General and Administrative	Three months ended June 30,		Variance	Change (%)
	2017	2016		
Payroll and benefits	\$ 450	\$ 637	\$ (187)	(29)%
Operating and occupancy	456	415	41	10%
Total	\$ 906	\$ 1,052	\$ (146)	(14)%

G&A payroll and benefits expenses include salaries, bonuses, non-cash stock-based compensation expense, fringe benefits, recruiting fees and severance pay. Included in payroll and benefits expense is a charge for non-cash stock-based compensation of \$147,000 for the three month period ended June 30, 2017 as compared to a charge of \$344,000 for the same period in the prior year. Additionally, salaries for the three month period ended June 30, 2017 were \$232,000 as compared to \$257,000 for the same period in the prior year.

G&A operating and occupancy expenses, which include expenses to operate as a public company, increased 10%, or approximately \$41,000, to \$456,000 for the three month period ended June 30, 2017 as compared to \$415,000 for the same period in the prior year primarily due to an increase in consulting fees.

G&A expenses increased 121%, or approximately \$2.6 million, to \$4.8 million for the six month period ended June 30, 2017, as compared to \$2.2 million for the same period in the prior year. Our primary G&A expenses for the six month periods ended June 30, 2017 and 2016 are shown in the following table (in thousands):

General and Administrative	Six months ended June 30,		Variance	Change (%)
	2017	2016		
Payroll and benefits	\$ 3,863	\$ 1,256	\$ 2,607	208%
Operating and occupancy	886	891	(5)	(1)%
Total	\$ 4,749	\$ 2,147	\$ 2,602	121%

G&A payroll and benefits expenses include salaries, bonuses, non-cash stock-based compensation expense, severance pay, recruiting fees and fringe benefits. Included in payroll and benefits expense is a charge for non-cash stock-based compensation of \$465,000 for the six month period ended June 30, 2017, as compared to a charge of \$667,000 for the same period in the prior year. Additionally, salaries for the six month period ended June 30, 2017 were \$469,000, as compared to \$514,000 for the same period in the prior year. Also included in payroll and benefits for the six month period ended June 30, 2017, was a charge of \$2.8 million related to the departure of Mr. Podolski.

G&A operating and occupancy expenses, which include expenses to operate as a public company, decreased approximately \$5,000, to \$886,000 for the six month period ended June 30, 2017, as compared to \$891,000 for the same period in the prior year.

Change in Fair Value of Warrant Liability

As a result of the May Public Offering (described in Note 6 to the financial statements included herein), the Company issued Series A, Series B and Series C warrants that include a net cash settlement feature at the option of the warrant holder in certain limited circumstances in which the Company fails to timely deliver registered common shares upon a warrant exercise. All Series C warrants were exercised in June 2017. The Series A and Series B warrants are classified as liabilities under the caption “Warrant liability” in the accompanying balance sheets and recorded at estimated fair value at issuance with any subsequent change in fair value of the outstanding warrants since issuance reflected in “Change in fair value of warrant liability” in the accompanying statements of operations. For a detailed discussion on the change in fair value of warrant liability, see Note 7 to the financial statements included herein.

Off-Balance Sheet Arrangements

As of June 30, 2017, we did not have any off-balance sheet arrangements.

Liquidity and Capital Resources

Since our inception, we have financed our operations primarily with proceeds from private placements and public offerings of equity securities and with funds received under collaborative agreements.

On August 9, 2016, we entered into an Equity Distribution Agreement (the “Equity Distribution Agreement”) with Ladenburg Thalmann & Co. Inc. (“Ladenburg”), pursuant to which we may issue and sell from time to time through Ladenburg, as sales agent and/or principal, shares of our common stock having an aggregate offering price of up to \$10 million (the “ATM Shares”). Ladenburg is not required to sell on our behalf any specific number or dollar amount of the ATM Shares, but Ladenburg, upon acceptance of written instructions from us, agreed to use its commercially reasonable efforts consistent with its customary trading and sales practices, to sell the ATM Shares up to the amount specified, and otherwise in accordance with the terms of a placement notice delivered to Ladenburg. Ladenburg receives a commission of 3% of the gross sales price of all ATM Shares sold through it under the Equity Distribution Agreement. Effective May 9, 2017, the Company terminated the Sales Agreement and the related ATM Program. During the three and six month period ended June 30, 2017, we sold 21,100 and 849,157 ATM Shares, respectively, at a weighted average share price of \$1.17 and \$1.20, respectively, for proceeds of approximately \$25,000 and \$1,021,000, respectively, net of expenses including approximately \$1,000 and \$32,000, respectively, in commissions to Ladenburg. Effective May 9, 2017, the Company terminated the Sales Agreement and the related ATM Program.

On May 23, 2017, the Company sold 2,744,125 shares of common stock and pre-funded Series C Warrants to purchase up to 2,245,875 shares of common stock in an underwritten public offering to certain investors (the “May Public Offering”). Each share of common stock was sold at a price of \$0.60 and each Series C Warrant was issued with an exercise price of \$0.60 per share of common stock, \$0.60 of which was pre-funded at closing and \$0.001 was payable upon exercise. This May Public Offering also included the issuance of Series A Warrants to purchase 3,742,500 shares of our common stock at an initial exercise price of \$0.84 per share and Series B Warrants to purchase 2,495,000 shares of our common stock at an initial exercise price of \$0.92 per share. Each share of common stock and each pre-funded Series C Warrant to purchase a share of common stock were sold together with a Series A Warrant to purchase 0.75 share of common stock and a Series B Warrant to purchase 0.50 share of common stock. The net proceeds to the Company from the sale of common stock and warrants, after deducting underwriting discounts and commissions and other offering expenses, were approximately \$2.5 million.

Our primary use of cash to date has been in operating activities to fund research and development, including preclinical studies and clinical trials, and general and administrative expenses. We had cash and cash equivalents of approximately \$3.8 million as of June 30, 2017 as compared to \$8.7 million as of December 31, 2016. All cash and cash equivalents as of June 30, 2017 and December 31, 2016 were held in an account backed by U.S. government securities.

Net cash of approximately \$6.6 million and \$8.9 million was used in operating activities during the six month periods ended June 30, 2017 and 2016, respectively. The major use of cash for operating activities for the six month period ended June 30, 2017 was to fund our clinical development programs and associated administrative costs. No cash was used in investing activities during the six month period ended June 30, 2017. Cash provided by financing activities for the six month period ended June 30, 2017 was approximately \$3.5 million primarily from sale of 2,744,125 shares of common stock and pre-funded Series C Warrants to purchase up to 2,245,875 shares of common stock in the May Public Offering at an offering price of \$0.50 per share, net of related underwriting discounts and commissions and other offering costs and the sale of 849,157 ATM Shares at a weighted average share price of \$1.20, net of related offering costs.

We have experienced negative cash flows from operations since inception. We will require substantial funds for R&D, including preclinical studies and clinical trials of our product candidates, and to commence sales and marketing efforts, if appropriate, if the FDA or other regulatory approvals are obtained. We anticipate that our current liquidity will be sufficient to continue the development of our product candidates and meet our obligations as they become due through the end of 2017. We continue to explore potential additional financing alternatives, including corporate partnering opportunities, that would provide sufficient funds to enable us to continue to develop our two product candidates through FDA approval; however, there can be no assurance that we will be successful in raising any such additional funds on a timely basis or at all. Our capital requirements will depend on many factors, which are discussed in detail in “Item 1A., Risk Factors” of Form 10-K for the fiscal year ended December 31, 2016. The uncertainties relating to the foregoing matters raise substantial doubt about our ability to continue as a going concern.

Our results of operations may vary significantly from quarter to quarter and year to year, and depend on, among other factors, our ability to raise additional capital on acceptable terms or at all, our ability to be successful in our clinical trials, the regulatory approval process in the United States and other foreign jurisdictions and the ability to complete strategic licenses and product development agreements. The timing of our revenues may not match the timing of our associated product development expenses. To date, R&D expenses have usually exceeded revenue in any particular period and/or fiscal year.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Risk. We had cash and cash equivalents of approximately \$3.8 million at June 30, 2017 which is held in an account backed by U.S. government securities. Although this cash account is subject to fluctuations in interest rates and market conditions, no significant gain or loss on this account is expected to be recognized in earnings. We do not invest in derivative securities.

Item 4. Controls and Procedures

Disclosure Controls and Procedures

Based on their evaluation as of the end of the period covered by this Quarterly Report on Form 10-Q, our Principal Executive Officer and Principal Financial Officer have concluded that our disclosure controls and procedures (as defined in Rule 13a-15(e)) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), were effective as of June 30, 2017.

Changes in Internal Control over Financial Reporting

In connection with the evaluation described above, we identified no change in internal control over financial reporting that occurred during the quarter ended June 30, 2017 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings

See Note 8 of the Notes to the Condensed Consolidated Financial Statements.

Item 1A. Risk Factors

Except as follows, there were no material changes from the risk factors previously disclosed in the registrant's Form 10-K for the fiscal year ended December 31, 2016 in response to "Item 1A. Risk Factors" to Part I of Form 10-K.

Our inability to comply with the listing requirements of the NASDAQ Capital Market could result in our common stock being delisted, which could affect our common stock's market price and liquidity and reduce our ability to raise capital.

We are required to meet certain qualitative and financial tests to maintain the listing of our common stock on the NASDAQ Capital Market. As of March 31, 2017, our stockholders' equity was \$1.6 million. As a result, we did not comply with the NASDAQ's \$2.5 million minimum stockholders' equity requirement under NASDAQ Listing Rule 5550(b)(1). Further, as of March 31, 2017, we did not meet the alternative compliance standards relating to the market value of listed securities or net income from continuing operations. On May 11, 2017, we received a letter from NASDAQ notifying us of our noncompliance with the minimum stockholders' equity requirement.

The Company is evaluating various courses of actions to regain compliance and has submitted to NASDAQ a plan to regain compliance. On July 19, 2017, the Company was notified by NASDAQ that the Company's common stock will remain listed on NASDAQ through at least September 30, 2017, during which time the Company will seek to take actions to regain compliance. If, prior to such date, the Company does not regain compliance, but provides additional information as to a plan to do so, the Company may be eligible for an extension of the September 30 date, through early November. However, there can be no assurance that the Company will be granted this additional time, or that the Company will ultimately be able to regain compliance.

In addition to the Company's non-compliance with the minimum stockholders' equity requirement, on June 14, 2017 the Company received a notification letter from NASDAQ advising the Company that for 30 consecutive business days preceding the date of this notification letter, the closing bid price of the Company's common stock had been below the \$1.00 per share minimum required for continued listing on the NASDAQ Capital Market pursuant to NASDAQ Marketplace Rule 5550(a)(2), and that the Company thus did not comply with NASDAQ's minimum bid price rule.

This notification letter also stated that the Company will be provided 180 calendar days, or until December 11, 2017, to regain compliance with the minimum bid price rule. To do so, the closing bid price of the Company's common stock must be at or above \$1.00 per share for a minimum of ten consecutive business days prior to that date.

If by December 11, 2017 the Company cannot demonstrate compliance with the minimum bid price rule, the Company may be eligible for additional time. To qualify, the NASDAQ staff will determine whether or not the Company meets the NASDAQ Capital Market initial listing criteria set forth in NASDAQ Marketplace Rule 5550, except for the minimum bid price rule. If the Company meets the initial listing criteria (with the exception of the minimum bid price rule) and provides written notice of its intention to cure the deficiency during the second compliance period, the NASDAQ staff will inform the Company that it has been granted an additional 180 calendar day compliance period.

If the Company is not able to regain compliance or, in the case of the minimum bid price requirement, is not eligible for an additional 180-day compliance period, the NASDAQ staff will provide written notice that the Company's securities will be subject to delisting. At that time, the Company may appeal the NASDAQ staff's determination to delist its securities to a NASDAQ Listing Qualifications Panel. There can be no assurance that the Company will be able to maintain its NASDAQ listing.

If we do not regain compliance with the continued listing requirements for the NASDAQ Capital Market within specified periods and subject to permitted extensions (if any), our common stock may be recommended for delisting (subject to any appeal we would file). If our common stock is delisted, it could be more difficult to buy or sell our common stock and to obtain accurate quotations, and the price of our common stock could suffer a material decline. Delisting would also impair our ability to raise capital.

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

None

Item 3. Defaults Upon Senior Securities.

None

Item 4. Mine Safety Disclosures.

None

Item 5. Other Information

None

Item 6. Exhibits

- 10.1* Severance Agreement and General Release, dated June 26, 2017, between the Company and Jaye Thompson.
 - 10.2* Series A Warrant to Purchase Common Stock, entered into on May 23, 2017 by the Company and various warrant holders identified in a schedule to such exhibit.
 - 10.3* Series B Warrant to Purchase Common Stock, entered into on May 23, 2017 by the Company and various warrant holders identified in a schedule to such exhibit.
 - 10.4* Pre-Funded Series C Warrant, entered into on May 23, 2017 by the Company and various warrant holders identified in a schedule to such exhibit.
 - 31.1* Certification Pursuant to Rule 13(a)-14(a) or 15(d)-14(a) of the Exchange Act, As Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (Principal Executive Officer).
 - 31.2* Certification Pursuant to Rule 13(a)-14(a) or 15(d)-14(a) of the Exchange Act, As Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (Principal Financial Officer).
 - 32.1** Certification Furnished Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Principal Executive Officer) (This exhibit shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section. Further, this exhibit shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended.)
 - 32.2** Certification Furnished Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Principal Financial Officer) (This exhibit shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section. Further, this exhibit shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended.)
 - 101.INS* XBRL Instance Document
 - 101.SCH* XBRL Taxonomy Extension Schema Document
 - 101.CAL* XBRL Taxonomy Extension Calculation Linkbase Document
 - 101.DEF* XBRL Taxonomy Extension Definition Linkbase Document
 - 101.LAB* XBRL Taxonomy Extension Label Linkbase Document
 - 101.PRE* XBRL Taxonomy Extension Presentation Linkbase Document
- * Filed herewith.
** Furnished herewith.

SIGNATURES

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

REPROS THERAPEUTICS INC.

Date: August 14, 2017

By: /s/ Larry M. Dillaha, M.D.
Larry M. Dillaha, M. D.
President and Chief Executive Officer
(Principal Executive Officer)

Date: August 14, 2017

By: /s/ Katherine A. Anderson
Katherine A. Anderson
Chief Financial Officer
(Principal Financial Officer)

SEVERANCE AGREEMENT AND GENERAL RELEASE

This Severance Agreement and General Release (“Agreement and Release”) is made and entered into by Jaye Thompson, PhD (“Employee”) and Repros Therapeutics Inc. (“Company”).

In consideration of the mutual promises set forth in this Agreement and Release, Employee and the Company agree as follows:

1. **Payment by the Company**. As consideration for this Agreement and Release, and in accordance with the Employment Agreement entered into on March 25, 2013, between the Company and Employee, the Company shall pay to Employee the gross sum of \$135,416.67 (“Severance Payment”), less applicable taxes and withholdings, which reflects all amounts due under section 6(a) of the Employment Agreement plus an additional one-half month of pay. \$125,000.00 of the Severance Payment will be paid in accordance with section 6(a) of the Employment Agreement and \$10,416.67 of the Severance Payment will be paid upon receipt of the fully executed Agreement and Release, subject to the revocation period described in Section 3(h) below. In addition, and as set forth in sections 4 and 6(a) of the Employment Agreement, the Company shall continue to provide benefits up through the date of termination and for a six month period in the kind and amounts provided for in the Employment Agreement for the Employee and her family.

2. **Release by Employee**. In consideration of the Company’s payment to Employee of the Severance Payment as described in this Agreement and Release, and in lieu of any other benefits, as a full and final settlement, Employee releases and discharges the Company and all of the Company’s past, present, and future officers, directors, principals, agents, employees, parents, shareholders, partners, subsidiaries, holding companies, affiliates, predecessors, successors, assigns, insurers, compensation and benefit plans and administrators, trustees, fiduciaries, and insurers of such compensation and benefit plans, from any and all claims and causes of action (except for claims arising specifically from a breach of this Agreement and Release), whether known or unknown, arising out of or related to Employee’s employment with the Company and any other events or transactions involving the Company which precede the date of this Agreement and Release. The entities released in the foregoing sentence shall be referred to collectively as the “Released Parties.” The claims and causes of action released by Employee include, but are not limited to, the following: contract claims; claims for salary, benefits, bonuses, severance pay, or vacation pay; claims or causes of action pertaining to any and all negligence and tort claims; claims for medical bills; all matters in law, in equity, or pursuant to statute, including damages, attorneys’ fees, costs, and expenses; and, without limiting the generality of the foregoing, to all claims, including, but not limited to, claims arising under Title VII of the Civil Rights Act of 1964, as amended; the Civil Rights Act of 1991; the Americans with Disabilities Act; 42 U.S.C. § 1981; the Age Discrimination in Employment Act; the Older Workers Benefit Protection Act; the Employee Retirement Income Security Act; the Genetic Information Nondiscrimination Act; Chapter 21 *et seq.* of the Texas Labor Code; Chapter 451 of the Texas Labor Code; or any other federal, state, or local law, statute, or ordinance affecting Employee’s employment with the Company; claims arising pursuant to any law, statute, ordinance, rule, or regulation, including, but not limited to, the previously mentioned federal law claims and claims under state law; and any and all other claims that were ever made the basis of, or could have been made the basis of, any claims against the Released Parties in any legal proceeding.

This Agreement and Release does not apply to any claims or rights that may arise after the date that Employee signs this Agreement and Release, to vested rights under the Company's employee benefit plans, if any, and as applicable, or to claims that the controlling law clearly states may not be released by settlement.

3. **Age Discrimination in Employment Act and Older Workers' Benefit Protection Act Release .**

ADDITIONALLY, THIS AGREEMENT AND RELEASE SPECIFICALLY WAIVES ALL OF JAYE THOMPSON'S RIGHTS AND CLAIMS ARISING UNDER THE AGE DISCRIMINATION IN EMPLOYMENT ACT OF 1967 (29 U.S.C. § 621 *et seq.* , AS AMENDED), AND THE OLDER WORKERS BENEFIT PROTECTION ACT, AS AMENDED. IN CONNECTION WITH THIS WAIVER, Employee acknowledges and agrees to the following:

(a) I am waiving any and all rights or claims under the Age Discrimination in Employment Act in exchange for consideration that is in addition to anything of value to which I already am entitled.

(b) I have had ample opportunity to consult with an attorney prior to executing this Agreement and Release. The Company advised me and encouraged me in writing herein to consult with an attorney prior to signing this Agreement and Release.

(c) I have carefully read and fully understand all of the provisions and effects of this Agreement and Release and I knowingly and voluntarily (of my own free will) entered into all of the terms set forth in this Agreement and Release.

(d) I knowingly and voluntarily intend to be legally bound by all of the terms set forth in this Agreement and Release.

(e) I relied solely and completely upon my own judgment and/or the advice of my attorney in entering into this Agreement and Release.

(f) I further understand that I have been given at least forty-five (45) days to consider the terms of this Agreement and Release before signing it. The parties agree, however, that any changes to the terms or conditions of this Agreement and Release (whether material or immaterial) will not restart the running of the forty-five (45) day period.

(g) If I sign this Agreement and Release prior to the end of the forty-five (45) day time period, I certify that, in accordance with 29 C.F.R. § 1625.22(e) (6), I knowingly and voluntarily decided to sign the Agreement and Release after considering it less than forty-five (45) days and my decision to do so was not induced by the Released Parties through fraud, misrepresentation, or a threat to withdraw or alter the offer prior to the expiration of the forty-five (45) day time period. I have not been asked by the Released Parties to shorten my time period for consideration of whether to sign this Agreement and Release. If I decide to sign this Agreement and Release prior to the end of the forty-five (45) day time period, the Released Parties may expedite the processing of benefits provided to me in exchange for signing this Agreement and Release, subject to sections (h) and (i) below.

(h) I understand that I may change my mind and revoke this Agreement and Release at any time within seven days after I sign it by sending notice of revocation to the attention of Kathi Anderson by fax **or** certified mail, return receipt requested, to Repros Therapeutics Inc., 2408 Timberloch Pl., Suite B7, The Woodlands, Texas 77380, facsimile: (281) 719-3446. I understand that this Agreement and Release shall not become effective or enforceable until after the seven (7) day revocation period has expired and that I will receive no benefits until the eighth (8th) day after I sign this Agreement and Release at the earliest, assuming I have not revoked this Agreement and Release.

(i) I understand that following the seven (7) day revocation period, this Agreement and Release will be final and binding. I promise that I will not pursue any claim that I have settled by this Agreement and Release. If I break this promise, I agree to pay all of the Released Parties' costs and expenses (including reasonable attorney's fees) related to the defense of any such claims settled hereunder. Although I am releasing claims that I may have under the Older Workers Benefit Protection Act and the Age Discrimination in Employment Act which precede the date of this Agreement and Release, I understand that I may challenge the knowing and voluntary nature of this Agreement and Release under the Older Workers Benefit Protection Act and the Age Discrimination in Employment Act before a court, the EEOC, or any other federal, state, or local agency charged with the enforcement of any employment laws. I understand, however, that if I pursue a claim against the Released Parties under the Older Workers Benefit Protection Act and/or the Age Discrimination in Employment Act, a court has the discretion to determine whether the Released Parties are entitled to restitution, recoupment, or set off (hereinafter "reduction") against a monetary award obtained by me in the court proceedings. A reduction never can exceed the amount I recover, or the consideration I received for signing this Agreement and Release, whichever is less. I also recognize that the Released Parties may be entitled to recover costs and attorneys' fees incurred by them as specifically authorized under applicable law.

(j) I am, through this Agreement and Release, releasing the Released Parties from any and all claims I may have against the Released Parties, relating to my employment and separation, including claims arising under the Age Discrimination in Employment Act of 1967 (29 U.S.C. § 621, *et seq.*). My initials below, following the present paragraph of this Agreement and Release, evidence my understanding and voluntary waiver of all claims against the Released Parties which precede the date of this Agreement and Release, including, but not limited to, those pursuant to the Age Discrimination in Employment Act, the Texas Labor Code, and the Older Workers Benefit Protection Act.

Initials: /s/ JT

4. **No Filing of Lawsuit or Other Claim**. Employee agrees, promises, and covenants that neither she, nor any person, organization, or other entity acting on her behalf, has or will file a lawsuit, charge, claim, sue, cause or permit to be filed, charged or claimed, or participate as a party in any action for damages against any of the Released Parties involving any matter occurring in the past up to the date of this Agreement and Release or involving any claims, demands, causes of action, obligations, damages, or liabilities which are the subject of this Agreement and Release and which precede the date of this Agreement and Release.

5. **Acknowledgments**. Employee acknowledges and agrees that she has: (i) received all compensation due to her as a result of services performed for the Company including, but not limited to, all overtime and commission payments; (ii) reported to the Company any and all work-related injuries incurred by her during her employment with the Company; and (iii) been properly provided any leave of absence because of her health condition, a family member's health condition, or workplace injury, and has not been subjected to any improper treatment, conduct, retaliation, or actions due to a request for or taking such leave.

6. **No Admission of Liability**. Neither this Agreement and Release, nor anything contained herein shall be construed as an admission by any of the Released Parties that they have in any respect violated or abridged any federal, state, or local law or any right or obligation that they, collectively or individually, may owe or may have owed to Employee. This Agreement and Release will not be admissible in any proceedings other than a proceeding for breach of the terms contained herein.

7. **Confidentiality of Agreement and Release**. Except as may be required by law, Employee agrees that she shall keep the existence and terms of this Agreement and Release and terms of settlement confidential and that she will not disclose, directly or indirectly, such terms to third persons, except that Employee may disclose the terms of this Agreement and Release to her legal advisors, accountants, and/or spouse, and as to all such persons to whom disclosure is made, the disclosure must be made with the condition that the persons receiving such information maintain the information in strict confidence. Except as may be required by law, Employee specifically agrees not to disclose the terms of this Agreement and Release to any present or former employees or contractors of the Company or the Released Parties. Except as required by law, Employee agrees to make no comment, either generally or specifically, regarding the Severance Payment or the other terms of the Agreement and Release. Nothing in this Section is intended to preclude the parties from disclosing the existence and terms of this Agreement and Release as necessary to enforce its terms or in connection with a claim for breach of this Agreement and Release.

8. **Indemnification**. Employee agrees to pay any taxes found to be owed from payments of the Severance Payment described above in Section 1 of this Agreement and Release, if any.

9. **Reports to Government Entities**. Nothing in this Agreement and Release, including the Confidentiality of Agreement and Release clause, restricts or prohibits Employee from initiating communications directly with, responding to any inquiries from, providing testimony before, providing confidential information to, reporting possible violations of law or regulation to, or from filing a claim or assisting with an investigation directly with a self-regulatory authority or a government agency or entity, including the U.S. Equal Employment Opportunity Commission, the Department of Labor, the National Labor Relations Board, the Department of Justice, the Securities and Exchange Commission, the Congress, and any agency Inspector General (collectively, the "Regulators"), or from making other disclosures that are protected under the whistleblower provisions of state or federal law or regulation. However, to the maximum extent permitted by law, Employee is waiving her right to receive any individual monetary relief from Company or any of the Released Parties resulting from such claims or conduct, regardless of whether Employee or another party has filed them, and in the event Employee obtains such monetary relief, Company will be entitled to an offset for the payments made pursuant to this Agreement and Release. This Agreement and Release does not limit Employee's right to receive an award from any Regulator that provides awards for providing information relating to a potential violation of law. Employee does not need the prior authorization of Company to engage in conduct protected by this paragraph, and Employee does not need to notify Company that she has engaged in such conduct.

Please take notice that federal law provides criminal and civil immunity to federal and state claims for trade secret misappropriation to individuals who disclose a trade secret to their attorney, a court, or a government official in certain, confidential circumstances that are set forth at 18 U.S.C. §§ 1833(b)(1) and 1833(b)(2), related to the reporting or investigation of a suspected violation of the law, or in connection with a lawsuit for retaliation for reporting a suspected violation of the law.

10. **Entire Agreement.** Employee and the Company acknowledge that this Agreement and Release constitutes the entire agreement between them and supersedes all prior written and oral agreements, save and except for the Key Management Proprietary Information and Inventions and Noncompetition Agreement dated April 1, 2013 (the “Noncompete Agreement”), as amended below in this Sections 10, and remains in full force and effect at the time of and following the execution of this Agreement and Release. Employee and the Company hereby agree to amend the Noncompete Agreement by deleting the following language from the second paragraph of Section 7 of the Noncompete Agreement: “, or so engaged by the Company within the then prior six (6) month period”. To avoid any doubt, Employee shall not solicit, recruit, or hire any person who is currently employed by the Company for the term of 12 months from the date of the termination of her employment with the Company. This Agreement and Release may not be modified, altered, or changed except by a written agreement signed by both Employee and a duly authorized representative of the Company. If any provision of this Agreement and Release is held to be invalid, the remaining provisions shall not be affected.

11. **Governing Law.** This Agreement and Release shall be governed by the laws of the State of Texas. The parties also agree that the state and federal courts located in the State of Texas shall have personal jurisdiction over them to hear all disputes arising under this Agreement and Release.

Jaye Thompson indicates her acceptance by signing below:

/s/ Jaye Thompson

Date: June 26, 2017

Repros Therapeutics Inc. indicates its acceptance by signing below:

By: /s/ Kathi Anderson

Title: Chief Financial Officer

Date: June 26, 2017

EXHIBIT A

DISCLOSURE NOTICE

The following information is provided in accordance with federal law to assist you in deciding whether to sign the Severance Agreement and General Release (“Agreement and Release”) to which this document is attached.

1. Termination Program. You are being terminated in connection with an employment termination program affecting employees in the Company’s Texas workforce. This group of employees is considered your “Decisional Unit.” See Exhibit A-1 for information regarding your Decisional Unit.
2. Eligibility Factors (Termination). In determining who would be selected for termination from your Decisional Unit, the Company eliminated all CRA positions and further eliminated positions based on job functions.
3. Eligibility Factors (Severance). All employees selected for termination are eligible for severance benefits if they sign the Release.
4. Time Limits. To receive severance benefits, you must sign the Agreement and Release and return it to Repros Therapeutics Inc., Attn: Kathi Anderson, 2408 Timberloch Pl., Suite B7, The Woodlands, Texas 77380, by the forty-sixth (46) day after receipt of the Agreement and Release, and not revoke the Agreement and Release. The Company cannot provide you with severance benefits if you do not timely return the Agreement and Release. You will have seven (7) days to revoke (cancel) the acceptance of the Release and Agreement. If you revoke (cancels) the Release, you will not receive any severance benefits.
5. Job Titles and Ages. The job titles and ages (as of May 19, 2017) of the employees in the Decisional Unit who were and were not selected for termination and the offer of consideration for signing an Agreement and Release appear in Exhibit A-1 on the next page.

EXHIBIT A-1

**EMPLOYEES SELECTED FOR TERMINATION
AND THE OFFER OF CONSIDERATION FOR SIGNING A RELEASE**

TITLE	AGE
Admin Assistant	27
Clinical Data Specialist	30
Clinical Data Specialist	26
Clinical Regulatory Associate	56
CRA	31
CRA	35
CRA	52
CRA	62
Executive Director of Clinical & Regulatory Affairs	63
Senior Scientist	56
Sr. VP of Clinical and Regulatory	51

**EMPLOYEES NOT SELECTED FOR TERMINATION
AND THE OFFER OF CONSIDERATION FOR SIGNING A RELEASE**

TITLE	AGE
Chief Financial Officer	59
Chief Medical Officer	69
Clinical Contracts Manager	36
Clinical Trial Director	51
Director of Data Management	63
Office Manager	55
President and CEO	53
QA Specialist	27
Regulatory Affairs Associate	34
Statistician	36

REPROS THERAPEUTICS, INC.

SERIES A WARRANT TO PURCHASE COMMON STOCK

Warrant No.: A-1

Number of shares of Common Stock: 1,808,750

Date of Issuance: May 23, 2017 (" **Issuance Date** ")

Repros Therapeutics, Inc., a Delaware corporation (the "**Company**"), hereby certifies that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B, the registered holder hereof or its permitted assigns (the "**Holder**"), is entitled, subject to the terms set forth below, to purchase from the Company, at the Exercise Price (as defined below) then in effect, at any time or times on or after May 23, 2017 (the "**Initial Exercisability Date**"), but not after 11:59 p.m., New York time, on the Expiration Date, (as defined below), One Million Eight Hundred Eight Thousand Seven Hundred Fifty (1,808,750) fully paid nonassessable shares of Common Stock, subject to adjustment as provided herein (the "**Warrant Shares**"). Except as otherwise defined herein, capitalized terms in this Warrant to Purchase Common Stock (including any Warrants to Purchase Common Stock issued in exchange, transfer or replacement hereof, this "**Warrant**"), shall have the meanings set forth in Section 18. This Warrant is one of the Warrants to Purchase Common Stock (the "**Registered Warrants**") issued pursuant to (i) Section 1 of that certain Underwriting Agreement, dated as of May 18, 2017 (the "**Subscription Date**"), by and among the Company and the underwriter(s) referred to therein, as amended from time to time (the "**Underwriting Agreement**") and (ii) the Company's Registration Statement on Form S-3 (File number 333-197253) (the "**Registration Statement**").

1. **EXERCISE OF WARRANT.** (a) **Mechanics of Exercise.** Subject to the terms and conditions hereof (including, without limitation, the limitations set forth in Section 1(f)), this Warrant may be exercised by the Holder at any time or times on or after the Issuance Date, in whole or in part, by (i) delivery of a written notice, in the form attached hereto as Exhibit A (the "**Exercise Notice**"), of the Holder's election to exercise this Warrant and (ii) (A) payment to the Company of an amount equal to the applicable Exercise Price multiplied by the number of Warrant Shares as to which this Warrant is being exercised (the "**Aggregate Exercise Price**") in cash by wire transfer of immediately available funds or (B) if the provisions of Section 1(d) are applicable, by notifying the Company that this Warrant is being exercised pursuant to a Cashless Exercise (as defined in Section 1(d)). The Holder shall not be required to deliver the original Warrant in order to effect an exercise hereunder. Execution and delivery of the Exercise Notice with respect to less than all of the Warrant Shares shall have the same effect as cancellation of the original Warrant and issuance of a new Warrant evidencing the right to purchase the remaining number of Warrant Shares. Within one (1) Trading Day following the date on which the Company has received the Exercise Notice, the Company shall transmit by facsimile or electronic mail an acknowledgment of confirmation of receipt of the Exercise Notice to the Holder and the Company's transfer agent (the "**Transfer Agent**"). On or before the earlier of (i) the third (3rd) Trading Day following the date on which the Company has received the Exercise Notice and (ii) the number of Trading Days comprising the Standard Settlement Period following the date of exercise, so long as the Holder delivers the Aggregate Exercise Price (or notice of a Cashless Exercise) on or prior to the second (2nd) Trading Day following the date on which the Company has received the Exercise Notice (the "**Share Delivery Date**"), the Company shall (X) provided that the Transfer Agent is participating in The Depository Trust Company ("**DTC**") Fast Automated Securities Transfer Program, credit such aggregate number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the Holder's or its designee's balance account with DTC through its Deposit / Withdrawal At Custodian system, or (Y) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, issue and dispatch by overnight courier to the address as specified in the Exercise Notice, a certificate, registered in the Company's share register in the name of the Holder or its designee, for the number of Warrant Shares to which the Holder is entitled pursuant to such exercise. The Company shall be responsible for all fees and expenses of the Transfer Agent and all fees and expenses with respect to the issuance of Warrant Shares via DTC, if any. Upon delivery of the Exercise Notice, assuming that the payment of the aggregate Exercise Price (other than in the case of a Cashless Exercise) is received on or prior to the Share Delivery Date, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date such Warrant Shares are credited to the Holder's DTC account or the date of delivery of the certificates evidencing such Warrant Shares, as the case may be. If this Warrant is submitted in connection with any exercise pursuant to this Section 1(a) and the number of Warrant Shares represented by this Warrant submitted for exercise is greater than the number of Warrant Shares being acquired upon an exercise, then the Company shall as soon as practicable and in no event later than three (3) Trading Days after any exercise and at its own expense, issue a new Warrant (in accordance with Section 7(d)) representing the right to purchase the number of Warrant Shares issuable immediately prior to such exercise under this Warrant, less the number of Warrant Shares with respect to which this Warrant is exercised. No fractional Warrant Shares are to be issued upon the exercise of this Warrant, but rather the number of Warrant Shares to be issued shall be rounded up to the nearest whole number. The Company shall pay any and all taxes which may be payable with respect to the issuance and delivery of Warrant Shares upon exercise of this Warrant. The Company's obligations to issue and deliver Warrant Shares in accordance with the terms and subject to the conditions hereof are absolute and unconditional, irrespective of any action or inaction by the Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination.

(b) Exercise Price. For purposes of this Warrant, " **Exercise Price** " means \$0.84 per share, subject to adjustment as provided herein.

(c) Company's Failure to Timely Deliver Securities. If the Company shall fail for any reason or for no reason to issue to the Holder on or prior to the Share Delivery Date either (I) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, a certificate for the number of shares of Common Stock to which the Holder is entitled and register such shares of Common Stock on the Company's share register or if the Transfer Agent is participating in the DTC Fast Automated Securities Transfer Program, to credit the Holder's balance account with DTC, for such number of shares of Common Stock to which the Holder is entitled upon the Holder's exercise of this Warrant or (II) if the Registration Statement on Form S-3 (File number 333-197253), or other applicable effective registration statement under the 1933 Act (the " **Registration Statement** ") covering the issuance of the Warrant Shares that are the subject of the Exercise Notice (the " **Unavailable Warrant Shares** ") is not available for the issuance or resale of such Unavailable Warrant Shares and the Company fails to promptly (x) so notify the Holder and (y) deliver the Warrant Shares electronically without any restrictive legend by crediting such aggregate number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the Holder's or its designee's balance account with DTC through its Deposit / Withdrawal At Custodian system (the event described in the immediately foregoing clause (II) is hereinafter referred to as a " **Notice Failure** " and together with the event described in clause (I) above, an " **Exercise Failure** "), and if on or after such Trading Day the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of shares of Common Stock issuable upon such exercise that the Holder anticipated receiving from the Company (a " **Buy-In** "), then the Company shall, within three (3) Trading Days after the Holder's request and in the Holder's discretion, either (i) pay cash to the Holder in an amount equal to the Holder's total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (the " **Buy-In Price** "), at which point the Company's obligation to deliver such certificate (and to issue such shares of Common Stock) or credit the Holder's balance account with DTC for such shares of Common Stock shall terminate, or (ii) promptly honor its obligation to deliver to the Holder a certificate or certificates representing such shares of Common Stock or credit the Holder's balance account with DTC, as applicable, and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock, times (B) any trading price of the Common Stock selected by the Holder in writing as in effect at any time during the period beginning on the applicable date of delivery of an Exercise Notice and ending on the applicable Share Delivery Date. Nothing shall limit the Holder's right to pursue any other remedies available to it hereunder, at law or in equity, including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock (or to electronically deliver such shares of Common Stock) upon the exercise of this Warrant as required pursuant to the terms hereof.

(d) Cashless Exercise. Notwithstanding anything contained herein to the contrary, if a registration statement covering the issuance or resale of the Unavailable Warrant Shares is not available for the issuance or resale of such Unavailable Warrant Shares, the Holder may, in its sole discretion, exercise this Warrant in whole or in part and, in lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise in payment of the Aggregate Exercise Price, elect instead to receive upon such exercise the " **Net Number** " of shares of Common Stock determined according to the following formula (a " **Cashless Exercise** "):

$$\text{Net Number} = \frac{(A \times B) - (A \times C)}{B}$$

For purposes of the foregoing formula:

A= the total number of shares with respect to which this Warrant is then being exercised.

- B= the last Weighted Average Price immediately preceding the time of delivery of the Exercise Notice giving rise to the applicable “cashless exercise”, as set forth in the applicable Exercise Notice (to clarify, the “last Weighted Average Price” will be the last Weighted Average Price as calculated over an entire Trading Day such that, in the event that this Warrant is exercised at a time that the trading market is open, the prior Trading Day’s Weighted Average Price shall be used in this calculation);
- C= the Exercise Price then in effect for the applicable Warrant Shares at the time of such exercise.

If shares of Common Stock are issued pursuant to this Section 1(d), the parties acknowledge and agree that in accordance with Section 3(a)(9) of the 1933 Act, such shares of Common Stock shall take on the registered characteristics of this Warrant, and the holding period of this Warrant may be tacked on to the holding period of such shares of Common Stock. Unless the SEC specifically prohibits the foregoing position, the Company agrees not to take any position contrary to this Section 1(d).

(e) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall promptly issue to the Holder the number of Warrant Shares that are not disputed and resolve such dispute in accordance with Section 12.

(f) Limitations on Exercises.

(i) Beneficial Ownership. Notwithstanding anything to the contrary contained herein, the Company shall not effect the exercise of any portion of this Warrant, and the Holder shall not have the right to exercise any portion of this Warrant, pursuant to the terms and conditions of this Warrant and any such exercise shall be null and void and treated as if never made, to the extent that after giving effect to such exercise, the Holder together with the other Attribution Parties collectively would beneficially own in excess of 4.99% (the “**Maximum Percentage**”) of the number of shares of Common Stock outstanding immediately after giving effect to such exercise. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by the Holder and the other Attribution Parties shall include the number of shares of Common Stock held by the Holder and all other Attribution Parties plus the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which the determination of such sentence is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (A) exercise of the remaining, unexercised portion of this Warrant beneficially owned by the Holder or any of the other Attribution Parties and (B) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company (including, without limitation, any convertible notes or convertible preferred stock or warrants, including the other Registered Warrants or Other Warrants) beneficially owned by the Holder or any other Attribution Party subject to a limitation on conversion or exercise analogous to the limitation contained in this Section 1(f)(i). For purposes of this Section 1(f)(i), beneficial ownership shall be calculated in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended (the “**1934 Act**”). For purposes of this Warrant, in determining the number of outstanding shares of Common Stock the Holder may acquire upon the exercise of this Warrant without exceeding the Maximum Percentage, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company's most recent Annual Report on Form 10-K, Quarterly Report on Form 10-Q, Current Report on Form 8-K or other public filing with the Securities and Exchange Commission (the “**SEC**”), as the case may be, (y) a more recent public announcement by the Company or (3) any other written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding (the “**Reported Outstanding Share Number**”). The Company shall have no obligation to verify or confirm the accordance of such determination. If the Company receives an Exercise Notice from the Holder at a time when the actual number of outstanding shares of Common Stock is less than the Reported Outstanding Share Number, the Company shall (i) notify the Holder in writing of the number of shares of Common Stock then outstanding and, to the extent that such Exercise Notice would otherwise cause the Holder's beneficial ownership, as determined pursuant to this Section 1(f)(i), to exceed the Maximum Percentage, the Holder must notify the Company of a reduced number of Warrant Shares to be purchased pursuant to such Exercise Notice (the number of shares by which such purchase is reduced, the “**Reduction Shares**”) and (ii) as soon as reasonably practicable, the Company shall return to the Holder any exercise price paid by the Holder for the Reduction Shares. For any reason at any time, upon the written or oral request of the Holder, the Company shall within one (1) Business Day confirm orally and in writing or by electronic mail to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder and any other Attribution Party since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of shares of Common Stock to the Holder upon exercise of this Warrant results in the Holder and the other Attribution Parties being deemed to beneficially own, in the aggregate, more than the Maximum Percentage of the number of outstanding shares of Common Stock (as determined under Section 13(d) of the 1934 Act), the number of shares so issued by which the Holder's and the other Attribution Parties' aggregate beneficial ownership exceeds the Maximum Percentage (the “**Excess Shares**”) shall be deemed null and void and shall be cancelled ab initio, and the Holder shall not have the power to vote or to transfer the Excess Shares. As soon as reasonably practicable after the issuance of the Excess Shares has been deemed null and void, the Company shall return to the Holder the exercise price paid by the Holder for the Excess Shares. Upon delivery of a written notice to the Company, the Holder may from time to time increase or decrease the Maximum Percentage to any other percentage not in excess of 9.99% as specified in such notice; provided that (i) any such increase in the Maximum Percentage will not be effective until the sixty-first (61st) day after such notice is delivered to the Company and (ii) any such increase or decrease will apply only to the Holder and the other Attribution Parties and not to any other holder of Registered Warrants that is not an Attribution Party of the Holder. For purposes of clarity, the shares of Common Stock issuable pursuant to the terms of this Warrant in excess of the Maximum Percentage shall not be deemed to be beneficially owned by the Holder for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the 1934 Act. No prior inability to exercise this Warrant pursuant to this paragraph shall have any effect on the applicability of the provisions of this paragraph with respect to any subsequent determination of exercisability. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 1(f)(i) to the extent necessary to correct this paragraph or any portion of this paragraph which may be defective or inconsistent with the intended beneficial ownership limitation contained in this Section 1(f)(i) or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitation contained in this paragraph may not be waived and shall apply to a successor holder of this Warrant.

(ii) Intentionally Omitted.

(g) Insufficient Authorized Shares. If at any time while this Warrant remains outstanding the Company does not have a sufficient number of authorized and unreserved shares of Common Stock to satisfy its obligation to reserve for issuance upon exercise of this Warrant at least a number of shares of Common Stock equal to 100% of the number of shares of Common Stock as shall from time to time be necessary to effect the exercise of all of this Warrant then outstanding (the "**Required Reserve Amount**" and the failure to have such sufficient number of authorized and unreserved shares of Common Stock, an "**Authorized Share Failure**"), then the Company shall immediately take all action necessary to increase the Company's authorized shares of Common Stock to an amount sufficient to allow the Company to reserve the Required Reserve Amount for this Warrant then outstanding. Without limiting the generality of the foregoing sentence, as soon as practicable after the date of the occurrence of an Authorized Share Failure, but in no event later than sixty (60) days after the occurrence of such Authorized Share Failure, the Company shall hold a meeting of its stockholders for the approval of an increase in the number of authorized shares of Common Stock. In connection with such meeting, the Company shall provide each stockholder with a proxy statement and shall use its best efforts to solicit its stockholders' approval of such increase in authorized shares of Common Stock and to cause its board of directors to recommend to the stockholders that they approve such proposal. Notwithstanding the foregoing, if any such time of an Authorized Share Failure, the Company is able to obtain the written consent of a majority of the shares of its issued and outstanding shares of Common Stock to approve the increase in the number of authorized shares of Common Stock, the Company may satisfy this obligation by obtaining such consent and submitting for filing with the SEC an Information Statement on Schedule 14C. In the event that upon any exercise of this Warrant, the Company does not have sufficient authorized shares to deliver in satisfaction of such exercise, then unless the Holder elects to void such attempted exercise, the Holder may require the Company to pay to the Holder within three (3) Trading Days of the applicable exercise or attempted exercise, cash in an amount equal to the product of (i) the number of Warrant Shares that the Company is unable to deliver pursuant to this Section 1(g), and (ii) the difference determined by subtracting (x) the Exercise Price then in effect at the time of such exercise or attempted exercise, and (y) the last Weighted Average Price immediately preceding the time of the exercise or attempted exercise (to clarify, the "last Weighted Average Price" will be the last Weighted Average Price as calculated over an entire Trading Day such that, in the event that this Warrant is exercised at a time that the trading market is open, the prior Trading Day's Weighted Average Price shall be used in this calculation).

2. ADJUSTMENT OF EXERCISE PRICE AND NUMBER OF WARRANT SHARES. The Exercise Price and the number of Warrant Shares shall be adjusted from time to time as follows:

(a) Adjustment Upon Issuance of Shares of Common Stock. If and whenever on or after the Subscription Date the Company issues or sells, or in accordance with this Section 2 is deemed to have issued or sold, any shares of Common Stock (including the issuance or sale of shares of Common Stock owned or held by or for the account of the Company, but excluding shares of Common Stock deemed to have been issued or sold by the Company as or in connection with any Excluded Securities, for a consideration per share (the " **New Issuance Price** ") less than a price (the " **Applicable Price** ") equal to the Exercise Price in effect immediately prior to such issue or sale or deemed issuance or sale (the foregoing a " **Dilutive Issuance** "), then immediately after such Dilutive Issuance, the Exercise Price then in effect shall be reduced to an amount equal to the New Issuance Price. For purposes of determining the adjusted Exercise Price under this Section 2(a), the following shall be applicable:

(i) Issuance of Options. If the Company in any manner grants or sells any Options and the lowest price per share for which one share of Common Stock is issuable upon the exercise of any such Option or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option is less than the Applicable Price, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the granting or sale of such Option for such price per share. For purposes of this Section 2(a)(i), the "lowest price per share for which one share of Common Stock is issuable upon the exercise of any such Options or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option" shall be equal to the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to any one share of Common Stock upon the granting or sale of the Option, upon exercise of the Option and upon conversion, exercise or exchange of any Convertible Security issuable upon exercise of such Option less any consideration paid or payable by the Company with respect to such one share of Common Stock upon the granting or sale of such Option, upon exercise of such Option and upon conversion exercise or exchange of any Convertible Security issuable upon exercise of such Option. No further adjustment of the Exercise Price shall be made upon the actual issuance of such shares of Common Stock or of such Convertible Securities upon the exercise of such Options or upon the actual issuance of such shares of Common Stock upon conversion, exercise or exchange of such Convertible Securities.

(ii) Issuance of Convertible Securities. If the Company in any manner issues or sells any Convertible Securities and the lowest price per share for which one share of Common Stock is issuable upon the conversion, exercise or exchange thereof is less than the Applicable Price, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the issuance or sale of such Convertible Securities for such price per share. For the purposes of this Section 2(a)(ii), the "lowest price per share for which one share of Common Stock is issuable upon the conversion, exercise or exchange thereof" shall be equal to the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to any one share of Common Stock upon the issuance or sale of the Convertible Security and upon conversion, exercise or exchange of such Convertible Security less any consideration paid or payable by the Company with respect to such one share of Common Stock upon the issuance or sale of such Convertible Security and upon conversion, exercise or exchange of such Convertible Security. No further adjustment of the Exercise Price shall be made upon the actual issuance of such shares of Common Stock upon conversion, exercise or exchange of such Convertible Securities, and if any such issue or sale of such Convertible Securities is made upon exercise of any Options for which adjustment of this Warrant has been or is to be made pursuant to other provisions of this Section 2(a), no further adjustment of the Exercise Price shall be made by reason of such issue or sale.

(iii) Change in Option Price or Rate of Conversion. If the purchase price provided for in any Options, the additional consideration, if any, payable upon the issue, conversion, exercise or exchange of any Convertible Securities, or the rate at which any Convertible Securities are convertible into or exercisable or exchangeable for shares of Common Stock increases or decreases at any time, the Exercise Price in effect at the time of such increase or decrease shall be adjusted to the Exercise Price, which would have been in effect at such time had such Options or Convertible Securities provided for such increased or decreased purchase price, additional consideration or increased or decreased conversion rate, as the case may be, at the time initially granted, issued or sold. For purposes of this Section 2(a)(iii), if the terms of any Option or Convertible Security that was outstanding as of the Subscription Date are increased or decreased in the manner described in the immediately preceding sentence, then such Option or Convertible Security and the shares of Common Stock deemed issuable upon exercise, conversion or exchange thereof shall be deemed to have been issued as of the date of such increase or decrease. No adjustment pursuant to this Section 2(a) shall be made if such adjustment would result in an increase of the Exercise Price then in effect.

(iv) Calculation of Consideration Received. In case any Option is issued in connection with the issue or sale of other securities of the Company, together comprising one integrated transaction, (x) the Options will be deemed to have been issued for the Option Value of such Options and (y) the other securities issued or sold in such integrated transaction shall be deemed to have been issued or sold for the difference of (I) the aggregate consideration received by the Company less any consideration paid or payable by the Company pursuant to the terms of such other securities of the Company, less (II) the Option Value. If any shares of Common Stock, Options or Convertible Securities are issued or sold or deemed to have been issued or sold for cash, the consideration other than cash received therefor will be deemed to be the net amount received by the Company therefor. If any shares of Common Stock, Options or Convertible Securities are issued or sold for a consideration other than cash, the amount of such consideration received by the Company will be the fair value of such consideration, except where such consideration consists of publicly traded securities, in which case the amount of consideration received by the Company will be the Closing Sale Price of such publicly traded securities on the date of receipt. If any shares of Common Stock, Options or Convertible Securities are issued to the owners of the non-surviving entity in connection with any merger in which the Company is the surviving entity, the amount of consideration therefor will be deemed to be the fair value of such portion of the net assets and business of the non-surviving entity as is attributable to such shares of Common Stock, Options or Convertible Securities, as the case may be. The fair value of any consideration other than cash or publicly traded securities will be determined jointly by the Company and the Required Holders. If such parties are unable to reach agreement within ten (10) days after the occurrence of an event requiring valuation (the "**Valuation Event**"), the fair value of such consideration will be determined within five (5) Business Days after the tenth (10th) day following the Valuation Event by an independent, reputable appraiser jointly selected by the Company and the Required Holders. The determination of such appraiser shall be final and binding upon all parties absent manifest error and the fees and expenses of such appraiser shall be borne by the Company.

(v) Record Date. If the Company takes a record of the holders of shares of Common Stock for the purpose of entitling them (A) to receive a dividend or other distribution payable in shares of Common Stock, Options or in Convertible Securities or (B) to subscribe for or purchase shares of Common Stock, Options or Convertible Securities, then such record date will be deemed to be the date of the issuance or sale of the shares of Common Stock deemed to have been issued or sold upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase, as the case may be.

(vi) No Readjustments. For the avoidance of doubt, in the event the Exercise Price has been adjusted pursuant to this Section 2(a) and the Dilutive Issuance that triggered such adjustment does not occur, is not consummated, is unwound or is cancelled after the facts for any reason whatsoever, in no event shall the Exercise Price be readjusted to the Exercise Price that would have been in effect if such Dilutive Issuance had not occurred or been consummated.

(b) Exercise Floor Price. No adjustment to the Exercise Price pursuant to Section 2 of this Warrant shall cause the Exercise Price to be less than \$0.17 (the "**Exercise Floor Price**"). For the avoidance of doubt, if a Dilutive Issuance would cause the Exercise Price to be lower than the Exercise Floor Price but for the immediately preceding sentence, then the Exercise Price shall be equal to the Exercise Floor Price.

(c) Voluntary Adjustment By Company. The Company may at any time during the term of this Warrant, with the prior written consent of the Required Holders, reduce the then current Exercise Price to any amount and for any period of time deemed appropriate by the Board of Directors of the Company.

(d) Adjustment Upon Subdivision or Combination of Common Stock. If the Company at any time on or after the Subscription Date subdivides (by any stock split, stock dividend, recapitalization or otherwise) one or more classes of its outstanding shares of Common Stock into a greater number of shares, the Exercise Price in effect immediately prior to such subdivision will be proportionately reduced and the number of Warrant Shares will be proportionately increased. If the Company at any time on or after the Subscription Date combines (by combination, reverse stock split or otherwise) one or more classes of its outstanding shares of Common Stock into a smaller number of shares, the Exercise Price in effect immediately prior to such combination will be proportionately increased and the number of Warrant Shares will be proportionately decreased. Any adjustment under this Section 2(d) shall become effective at the close of business on the date the subdivision or combination becomes effective.

(e) Number of Warrant Shares. Simultaneously with any adjustment to the Exercise Price pursuant to this Section 2, the number of Warrant Shares that may be purchased upon exercise of this Warrant shall be increased or decreased proportionately, so that after such adjustment the aggregate Exercise Price payable hereunder for the adjusted number of Warrant Shares shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment (without regard to any limitations on exercise contained herein).

(f) Other Events. If any event occurs of the type contemplated by the provisions of this Section 2 but not expressly provided for by such provisions (including, without limitation, the granting of stock appreciation rights, phantom stock rights or other rights with equity features), then the Company's Board of Directors will make an appropriate adjustment in the Exercise Price and the number of Warrant Shares, as mutually determined by the Company's Board of Directors and the Required Holders, so as to protect the rights of the Holder; provided that no such adjustment pursuant to this Section 2(f) will increase the Exercise Price or decrease the number of Warrant Shares as otherwise determined pursuant to this Section 2.

3. RIGHTS UPON DISTRIBUTION OF ASSETS. From the Subscription Date through and including the Expiration Date if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property, options, evidence of indebtedness or any other assets by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a " **Distribution** "), at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Maximum Percentage) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, that to the extent that the Holder's right to participate in any such Distribution would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Distribution to such extent (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Distribution (and beneficial ownership) to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time or times as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such Distribution (and any Distributions declared or made on such initial Distribution or on any subsequent Distribution held similarly in abeyance) to the same extent as if there had been no such limitation).

4. PURCHASE RIGHTS; FUNDAMENTAL TRANSACTIONS.

(a) Purchase Rights. From the Subscription Date and through and including the Expiration Date, in addition to any adjustments pursuant to Section 2 above, if at any time the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of Common Stock (the " **Purchase Rights** "), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Maximum Percentage) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, that to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Purchase Right to such extent (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Purchase Right (and beneficial ownership) to such extent) and such Purchase Right to such extent shall be held in abeyance for the benefit of the Holder until such time or times as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase Right or on any subsequent Purchase Right held similarly in abeyance) to the same extent as if there had been no such limitation).

(b) **Fundamental Transactions**. From the Subscription Date and through and including the Expiration Date, the Company shall not enter into or be party to a Fundamental Transaction unless the Successor Entity assumes in writing all of the obligations of the Company under this Warrant and the other Transaction Documents in accordance with the provisions of this Section 4(b) pursuant to written agreements in form and substance reasonably satisfactory to the Required Holders and approved by the Required Holders prior to such Fundamental Transaction, including agreements, if so requested by the Holder, to deliver to each holder of the Registered Warrants in exchange for such Registered Warrants a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant, including, without limitation, an adjusted exercise price equal to the value for the shares of Common Stock reflected by the terms of such Fundamental Transaction, and exercisable for a corresponding number of shares of capital stock equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and reasonably satisfactory to the Required Holders, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such adjustments to the number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the occurrence or consummation of such Fundamental Transaction). Any security issuable or potentially issuable to the Holder pursuant to the terms of this Warrant on the consummation of a Fundamental Transaction shall be registered and freely tradable by the Holder without any restriction or limitation or the requirement to be subject to any holding period pursuant to any applicable securities laws. Upon the occurrence or consummation of any Fundamental Transaction, and it shall be a required condition to the occurrence or consummation of any Fundamental Transaction that, the Company and the Successor Entity or Successor Entities, jointly and severally, shall succeed to, and the Company shall cause any Successor Entity or Successor Entities to jointly and severally succeed to, and be added to the term "Company" under this Warrant (so that from and after the date of such Fundamental Transaction, each and every provision of this Warrant referring to the "Company" shall refer instead to each of the Company and the Successor Entity or Successor Entities, jointly and severally), and the Company and the Successor Entity or Successor Entities, jointly and severally, may exercise every right and power of the Company prior thereto and shall assume all of the obligations of the Company prior thereto under this Warrant with the same effect as if the Company and such Successor Entity or Successor Entities, jointly and severally, had been named as the Company in this Warrant, and, solely at the request of the Holder, if the Successor Entity and/or Successor Entities is a publicly traded corporation whose common stock is quoted on or listed for trading on an Eligible Market, shall deliver (in addition to and without limiting any right under this Warrant) to the Holder in exchange for this Warrant a security of the Successor Entity and/or Successor Entities evidenced by a written instrument substantially similar in form and substance to this Warrant and exercisable for a corresponding number of shares of capital stock of the Successor Entity and/or Successor Entities (the "**Successor Capital Stock**") equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction (such corresponding number of shares of Successor Capital Stock to be delivered to the Holder shall be equal to the greater of (A) the quotient of (i) the aggregate dollar value of all consideration (including cash consideration and any consideration other than cash ("**Non-Cash Consideration**"), in such Fundamental Transaction, as such values are set forth in any definitive agreement for the Fundamental Transaction that has been executed at the time of the first public announcement of the Fundamental Transaction or, if no such value is determinable from such definitive agreement, as determined in accordance with Section 12 with the term "Non-Cash Consideration" being substituted for the term "Exercise Price") that the Holder would have been entitled to receive upon the happening of such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction, had this Warrant been exercised immediately prior to such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction (without regard to any limitations on the exercise of this Warrant) (the "**Aggregate Consideration**") divided by (ii) the per share Closing Sale Price of such Successor Capital Stock on the Trading Day immediately prior to the consummation or occurrence of the Fundamental Transaction and (B) the product of (i) the Aggregate Consideration and (ii) the highest exchange ratio pursuant to which any stockholder of the Company may exchange shares of Common Stock for Successor Capital Stock) (provided, however, to the extent that the Holder's right to receive any such shares of publicly traded common stock (or their equivalent) of the Successor Entity would result in the Holder and its other Attribution Parties exceeding the Maximum Percentage, if applicable, then the Holder shall not be entitled to receive such shares to such extent (and shall not be entitled to beneficial ownership of such shares of publicly traded common stock (or their equivalent) of the Successor Entity as a result of such consideration to such extent) and the portion of such shares shall be held in abeyance for the Holder until such time or times, as its right thereto would not result in the Holder and its other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be delivered such shares to the extent as if there had been no such limitation), and such security shall be reasonably satisfactory to the Holder, and with an identical exercise price to the Exercise Price hereunder (such adjustments to the number of shares of capital stock and such exercise price being for the purpose of protecting after the consummation or occurrence of such Fundamental Transaction the economic value of this Warrant that was in effect immediately prior to the consummation or occurrence of such Fundamental Transaction, as elected by the Holder solely at its option). Upon occurrence or consummation of the Fundamental Transaction, and it shall be a required condition to the occurrence or consummation of such Fundamental Transaction that, the Company and the Successor Entity or Successor Entities shall deliver to the Holder confirmation that there shall be issued upon exercise of this Warrant at any time after the occurrence or consummation of the Fundamental Transaction, as elected by the Holder solely at its option, shares of Common Stock, Successor Capital Stock or, in lieu of the shares of Common Stock or Successor Capital Stock (or other securities, cash, assets or other property purchasable upon the exercise of this Warrant prior to such Fundamental Transaction), such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights), which for purposes of clarification may continue to be shares of Common Stock, if any, that the Holder would have been entitled to receive upon the happening of such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction, had this Warrant been exercised immediately prior to such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction (without regard to any limitations on the exercise of this Warrant), as adjusted in accordance with the provisions of this Warrant. In addition to and not in substitution for any other rights hereunder, prior to the occurrence or consummation of any Fundamental Transaction pursuant to which holders of shares of Common Stock are entitled to receive securities, cash, assets or other property with respect to or in exchange for shares of Common Stock (a "**Corporate Event**"), the Company shall make appropriate provision to insure that, and any applicable Successor Entity or Successor Entities shall ensure that, and it shall be a required condition to the occurrence or consummation of such Corporate Event that, the Holder will thereafter have the right to receive upon exercise of this Warrant at any time after the occurrence or consummation of the Corporate Event, shares of Common Stock or Successor Capital Stock or, if so elected by the Holder, in lieu of the shares of Common Stock (or other securities, cash, assets or other property) purchasable upon the exercise of this Warrant prior to such Corporate Event (but not in lieu of such items still issuable under Sections 3 and 4(a), which shall continue to be receivable on the shares of Common Stock or on the such shares of stock, securities, cash, assets or any other property otherwise receivable with respect to or in exchange for shares of Common Stock), such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights and any shares of Common Stock) which the Holder would have been entitled to receive upon the occurrence or consummation of such Corporate Event or the record, eligibility or other determination date for the event resulting in such Corporate Event, had this Warrant been exercised immediately prior to such Corporate Event or the record, eligibility or other determination date for the event resulting in such Corporate Event (without regard to any limitations on exercise of this Warrant). Provision made pursuant to the preceding sentence shall be in a form and substance reasonably satisfactory to the Holder. The provisions of this Section 4(b) shall apply

similarly and equally to successive Fundamental Transactions and Corporate Events.

(c) Notwithstanding the foregoing, in the event of Fundamental Transaction, at the request of the Holder delivered at any time commencing on the earliest to occur of (x) the public disclosure of any Fundamental Transaction, (y) the consummation of any Fundamental Transaction and (z) the Holder first becoming aware of any Fundamental Transaction through the date that is ninety (90) days after the public disclosure of the consummation of such Fundamental Transaction by the Company pursuant to a Current Report on Form 8-K filed with the SEC, the Company or the Successor Entity (as the case may be) shall purchase this Warrant from the Holder on the date of such request by paying to the Holder cash in an amount equal to the Black Scholes Value. Payment of such amounts shall be made by the Company (or at the Company's direction) to the Holder on or prior to the later of (x) the second (2nd) Trading Day after the date of such request and (y) the date of consummation of such Fundamental Transaction.

5. NONCIRCUMVENTION. The Company hereby covenants and agrees that the Company will not, by amendment of its Certificate of Incorporation or Bylaws, or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, and will at all times in good faith carry out all of the provisions of this Warrant and take all action as may be required to protect the rights of the Holder. Without limiting the generality of the foregoing, the Company (i) shall not increase the par value of any shares of Common Stock receivable upon the exercise of this Warrant above the Exercise Price then in effect, (ii) shall take all such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable shares of Common Stock upon the exercise of this Warrant, and (iii) shall, so long as any of the Registered Warrants are outstanding, take all action necessary to reserve and keep available out of its authorized and unissued shares of Common Stock, solely for the purpose of effecting the exercise of the Registered Warrants, 100% of the number of shares of Common Stock as shall from time to time be necessary to effect the exercise of the Registered Warrants then outstanding (without regard to any limitations on exercise).

6. WARRANT HOLDER NOT DEEMED A STOCKHOLDER. Except as otherwise specifically provided herein, the Holder, solely in such Person's capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in such Person's capacity as the Holder of this Warrant, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which such Person is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a stockholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company. Notwithstanding this Section 6, if not filed with the SEC, the Company shall provide the Holder with copies of the same notices and other information given to the stockholders of the Company generally, contemporaneously with the giving thereof to the stockholders.

7. REISSUANCE OF WARRANTS.

(a) Transfer of Warrant. Subject to the terms hereof, if this Warrant is to be transferred, the Holder shall surrender this Warrant to the Company, whereupon the Company will forthwith issue and deliver upon the order of the Holder a new Warrant (in accordance with Section 7(d)), registered as the Holder may request, representing the right to purchase the number of Warrant Shares being transferred by the Holder and, if less than the total number of Warrant Shares then underlying this Warrant is being transferred, a new Warrant (in accordance with Section 7(d)) to the Holder representing the right to purchase the number of Warrant Shares not being transferred.

(b) Lost, Stolen or Mutilated Warrant. Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and, in the case of loss, theft or destruction, of any indemnification undertaking by the Holder to the Company in customary form and, in the case of mutilation, upon surrender and cancellation of this Warrant, the Company shall execute and deliver to the Holder a new Warrant (in accordance with Section 7(d)) representing the right to purchase the Warrant Shares then underlying this Warrant.

(c) Exchangeable for Multiple Warrants. This Warrant is exchangeable, upon the surrender hereof by the Holder at the principal office of the Company, for a new Warrant or Warrants (in accordance with Section 7(d)) representing in the aggregate the right to purchase the number of Warrant Shares then underlying this Warrant, and each such new Warrant will represent the right to purchase such portion of such Warrant Shares as is designated by the Holder at the time of such surrender; provided, however, that no Registered Warrants for fractional Warrant Shares shall be given.

(d) Issuance of New Warrants. Whenever the Company is required to issue a new Warrant pursuant to the terms of this Warrant, such new Warrant (i) shall be of like tenor with this Warrant, (ii) shall represent, as indicated on the face of such new Warrant, the right to purchase the Warrant Shares then underlying this Warrant (or in the case of a new Warrant being issued pursuant to Section 7(a) or Section 7(c), the Warrant Shares designated by the Holder which, when added to the number of shares of Common Stock underlying the other new Warrants issued in connection with such issuance, does not exceed the number of Warrant Shares then underlying this Warrant), (iii) shall have an issuance date, as indicated on the face of such new Warrant which is the same as the Issuance Date, and (iv) shall have the same rights and conditions as this Warrant.

8. NOTICES. Whenever notice is required to be given under this Warrant, unless otherwise provided herein, such notice shall be given at its last address as it shall appear upon the warrant register of the Company. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Warrant, including in reasonable detail a description of such action and the reason therefor. Without limiting the generality of the foregoing, the Company will give written notice to the Holder (i) immediately upon any adjustment of the Exercise Price, setting forth in reasonable detail, and certifying, the calculation of such adjustment and (ii) at least ten (10) days prior to the date on which the Company closes its books or takes a record (A) with respect to any dividend or distribution upon the shares of Common Stock, (B) with respect to any grants, issuances or sales of any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property to holders of shares of Common Stock or (C) for determining rights to vote with respect to any Fundamental Transaction, dissolution or liquidation; provided in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to the Holder.

9. AMENDMENT AND WAIVER. Except as otherwise provided herein, the provisions of this Warrant may be amended or waived and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the holders of a majority of the Registered Warrants and, so long as the Lead Investor holds any Registered Warrants, the Lead Investor .

10. GOVERNING LAW; JURISDICTION; JURY TRIAL. This Warrant shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Warrant shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. The Company hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to the Company at its principal executive office and agrees that such service shall constitute good and sufficient service of process and notice thereof. The Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed or operate to preclude the Holder from bringing suit or taking other legal action against the Company in any other jurisdiction to collect on the Company's obligations to the Holder, to realize on any collateral or any other security for such obligations, or to enforce a judgment or other court ruling in favor of the Holder. **THE COMPANY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS WARRANT OR ANY TRANSACTION CONTEMPLATED HEREBY.**

11. CONSTRUCTION; HEADINGS. This Warrant shall be deemed to be jointly drafted by the Company and all the Buyers and shall not be construed against any Person as the drafter hereof. The headings of this Warrant are for convenience of reference and shall not form part of, or affect the interpretation of, this Warrant.

12. DISPUTE RESOLUTION. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall submit the disputed determinations or arithmetic calculations via facsimile or electronic mail within two (2) Business Days of receipt of the Exercise Notice giving rise to such dispute, as the case may be, to the Holder. If the Holder and the Company are unable to agree upon such determination or calculation of the Exercise Price or the Warrant Shares within three (3) Business Days of such disputed determination or arithmetic calculation being submitted to the Holder, then the Company shall, within two (2) Business Days submit via facsimile or electronic mail (a) the disputed determination of the Exercise Price to an independent, reputable investment bank selected by the Company and reasonably acceptable to the Holder or (b) the disputed arithmetic calculation of the Warrant Shares to the Company's independent, outside accountant. The Company shall cause at its expense the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Holder of the results no later than ten (10) Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

13. REMEDIES, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF. The remedies provided in this Warrant shall be cumulative and in addition to all other remedies available under this Warrant and the other Transaction Documents, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Holder to pursue actual damages for any failure by the Company to comply with the terms of this Warrant. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Holder and that the remedy at law for any such breach may be inadequate. The Company therefore agrees that, in the event of any such breach or threatened breach, the holder of this Warrant shall be entitled, in addition to all other available remedies, to an injunction restraining any breach, without the necessity of showing economic loss and without any bond or other security being required.

14. TRANSFER. This Warrant and the Warrant Shares may be offered for sale, sold, transferred, pledged or assigned without the consent of the Company.

15. SEVERABILITY. If any provision of this Warrant is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Warrant so long as this Warrant as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

16. **DISCLOSURE**. Upon receipt or delivery by the Company of any notice in accordance with the terms of this Warrant, unless the Company has in good faith determined that the matters relating to such notice do not constitute material, nonpublic information relating to the Company or its Subsidiaries (as defined in the Securities Purchase Agreement), the Company shall within one (1) Business Day after any such receipt or delivery publicly disclose such material, nonpublic information on a Current Report on Form 8-K or otherwise. In the event that the Company believes that a notice contains material, nonpublic information relating to the Company or its Subsidiaries, the Company so shall indicate to the Holder contemporaneously with delivery of such notice, and in the absence of any such indication, the Holder shall be allowed to presume that all matters relating to such notice do not constitute material, nonpublic information relating to the Company or its Subsidiaries.

17. **COMPANY OPTIONAL REDEMPTION**. If at any time after the date hereof, (i) the Closing Bid Price of the Common Stock is equal to or greater than \$1.75 per share (as adjusted for stock splits, stock combinations and the like occurring from and after the Issuance Date) (the “**Trigger Price**”) for a period of thirty (30) consecutive Trading Days following the applicable date of determination (the thirty (30) consecutive Trading Days on which the condition in this clause (i) is satisfied are referred to herein as the “**Measuring Period**”), (ii) no Equity Conditions Failure shall have occurred, and (iii) the aggregate dollar trading volume (as reported on Bloomberg) of the Common Stock on the applicable Eligible Market for each Trading Day during the Measuring Period exceeds \$225,000 per day (the foregoing conditions in clause (i) through (iii) above, collectively, the “**Redemption Conditions**”), then the Company shall have the right to purchase the entire then-remaining portion of this Warrant from the Holder as set forth below (a “**Company Redemption**”). The Company may exercise its right to purchase the entire then-remaining portion of this Warrant under this Section 17 by delivering (provided that all of the Redemption Conditions are then satisfied), on the first (1st) Trading Day immediately following the satisfaction of all the Redemption Conditions, a written notice thereof by via e-mail to the Holder (the “**Redemption Notice**”) and the date the Holder receives such notice by facsimile is referred to as the “**Redemption Notice Date**”). The Redemption Notice shall be irrevocable. The Redemption Notice shall (1) state the Trading Day selected for the Company Redemption in accordance with this Section 17, which Trading Day shall be at least twenty (20) Trading Days but not more than sixty (60) Trading Days following the Redemption Notice Date (the “**Redemption Date**”), (2) contain a certification from the Chief Executive Officer of the Company that there has been no Equity Conditions Failure and (3) contain a certification from the Chief Executive Officer of the Company that the Company has simultaneously taken the same action with respect to all of the Other Warrants that are then eligible to be purchased by the Company. On the Redemption Date, the Company shall pay \$0.01 for this Warrant (the “**Redemption Price**”) to the Holder on the Redemption Date by wire transfer of immediately available funds to an account specified by the Holder. Notwithstanding anything contained in this Section 17 to the contrary, if (I) any shares of Common Stock trade for a price less than the Trigger Price on any day Trading Day during the period commencing on the Redemption Notice Date and ending on the Trading Day immediately preceding the Redemption Date; (II) the aggregate dollar trading volume (as reported on Bloomberg) of the Common Stock on the applicable Eligible Market on any day Trading Day during the period commencing on the Redemption Notice Date and ending on the Trading Day immediately preceding the Redemption Date is less than \$225,000; or (III) an Equity Conditions Failure occurs on any day during the period commencing on the Redemption Notice Date and ending on the Redemption Date which has not been waived in writing by the Holder, then, in any case, the applicable Redemption Notice delivered to the Holder shall be null and void ab initio and the Company Redemption shall not occur. If the Company elects to cause a Company Redemption of the entire then-remaining portion of this Warrant pursuant to this Section 17, then it must simultaneously take the same action with respect to all of the Other Warrants that are then eligible to be purchased. Notwithstanding the foregoing, the Holder may exercise all or any portion of this Warrant at any time and from time to time after the Redemption Notice Date until the Holder’s receipt of the Redemption Price from the Company and any such exercise of this Warrant shall not reduce the Redemption Price.

18. CERTAIN DEFINITIONS. For purposes of this Warrant, the following terms shall have the following meanings:

(a) " **1933 Act** " means the Securities Act of 1933, as amended.

(b) " **Affiliate** " means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that "control" of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

(c) " **Approved Stock Plan** " means any employee benefit plan which has been approved by the Board of Directors of the Company, pursuant to which the Company's securities may be issued to any employee, officer or director for services provided to the Company.

(d) " **Attribution Parties** " means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Issuance Date, directly or indirectly managed or advised by the Holder's investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Holder or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a Group together with the Holder or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company's Common Stock would or could be aggregated with the Holder's and the other Attribution Parties for purposes of Section 13(d) of the 1934 Act. For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage.

(e) " **Black Scholes Value** " means the value of this Warrant calculated using the greater of the Black-Scholes Option Pricing Model obtained from the "OV" function on Bloomberg, as a put option or a call option, determined as of the day immediately following the public announcement of the applicable Fundamental Transaction, or, if the Fundamental Transaction is not publicly announced, the date the Fundamental Transaction is consummated, for pricing purposes and reflecting (i) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of this Warrant as of such date of request, (ii) an expected volatility equal to the greater of 100% and the 100 day volatility obtained from the HVT function on Bloomberg as of the day immediately following the public announcement of the applicable Fundamental Transaction, or, if the Fundamental Transaction is not publicly announced, the date the Fundamental Transaction is consummated, (iii) the underlying price per share used in such calculation shall be the sum of the price per share being offered in cash, if any, plus the value of any non-cash consideration, if any, being offered in the Fundamental Transaction, (iv) a zero cost of borrow and (v) a 360 day annualization factor.

(f) "**Bloomberg**" means Bloomberg Financial Markets.

(g) "**Business Day**" means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(h) "**Closing Bid Price**" and "**Closing Sale Price**" means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or the last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last closing bid price or last trade price, respectively, of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last closing bid price or last trade price, respectively, of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price or last trade price, respectively, is reported for such security by Bloomberg, the average of the bid prices, or the ask prices, respectively, of any market makers for such security as reported in the OTC Link or "pink sheets" by OTC Markets Group Inc. (formerly Pink OTC Markets Inc.). If the Closing Bid Price or the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Bid Price or the Closing Sale Price, as the case may be, of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

(i) "**Common Stock**" means (i) the Company's Class A common stock, par value \$0.001 per share, and (ii) any share capital into which such Common Stock shall have been changed or any share capital resulting from a reclassification of such Common Stock.

(j) "**Convertible Securities**" means any stock or securities (other than Options) directly or indirectly convertible into or exercisable or exchangeable for shares of Common Stock, other than Excluded Securities.

(k) "**Eligible Market**" means the Principal Market, the NYSE MKT LLC, The NASDAQ Global Select Market, The NASDAQ Global Market, The New York Stock Exchange, Inc., the OTC QX market or the OTC QB market.

(l) "**Equity Conditions**" means: (i) on each day during the period beginning one month prior to the applicable date of determination and ending on and including the applicable date of determination all Warrant Shares (assuming a cashless exercise in full of this Warrant) shall be eligible for sale without restriction under Rule 144 (including, without limitation, volume restrictions) and without the need for current public information required by Rule 144(c)(1) (or Rule 144(i)(2), if applicable) and without the need for registration under any applicable federal or state securities laws (disregarding any limitation on exercise of the Warrants); (ii) on each day during the period beginning three months prior to the applicable date of determination and ending on and including the applicable date of determination (the "**Equity Conditions Measuring Period**"), the Common Stock (including all Warrant Shares) is listed or designated for quotation (as applicable) on an Eligible Market and shall not have been suspended from trading on an Eligible Market (other than suspensions of not more than two (2) days and occurring prior to the applicable date of determination due to business announcements by the Company) nor shall delisting or suspension by an Eligible Market be pending or have been threatened either (A) in writing by such Eligible Market or (B) by falling below the minimum listing maintenance requirements of the Eligible Market on which the Common Stock is then listed or designated for quotation (as applicable); (iii) on each day during the Equity Conditions Measuring Period, the Company shall have delivered all shares of Common Stock issuable upon exercise of this Warrant on a timely basis as set forth in Section 1(a) hereof; (iv) any shares of Common Stock to be issued in connection with the event requiring determination may be issued in full without violating Section 1(f) hereof; (v) any shares of Common Stock to be issued in connection with the event requiring determination may be issued in full without violating the rules or regulations of the Eligible Market on which the Common Stock is then listed or designated for quotation (as applicable); (vi) on each day during the Equity Conditions Measuring Period, no public announcement of a pending, proposed or intended Fundamental Transaction shall have occurred which has not been abandoned, terminated or consummated; (vii) the Company shall have no knowledge of any fact that would reasonably be expected to cause the Warrant Shares (assuming a cashless exercise in full of this Warrant) to not be eligible for sale without restriction pursuant to Rule 144 (including, without limitation, volume restrictions) and without the need for current public information required by Rule 144(c)(1) (or Rule 144(i)(2), if applicable) or any applicable state securities laws (disregarding any limitation on exercise of the Warrants); (viii) the Holder shall not be in possession of any material, non-public information provided to any of them by the Company, any of its affiliates or any of their respective employees, officers, representatives, agents or the like; and (ix) on each day during the Equity Conditions Measuring Period, the Company otherwise shall have been in compliance with each, and shall not have breached any, provision, covenant, representation or warranty of the Underwriting Agreement.

(m) "**Equity Conditions Failure**" means that on any day during the period commencing twenty (20) Trading Days prior to the Redemption Notice Date through the Redemption Date, the Equity Conditions have not been satisfied (or waived in writing by the Holder).

(n) " **Excluded Securities** " means : (i) any shares of Common Stock or standard options issued to directors, officers or employees of the Company for services rendered to the Company in their capacity as such pursuant to an Approved Stock Plan (as defined above), provided that (A) all such issuances (taking into account the shares of Common Stock issuable upon exercise of such options) after the Subscription Date pursuant to this clause (i) do not, in the aggregate, exceed more than 5% of the Common Stock issued and outstanding immediately prior to the Subscription Date in any twelve (12) month period and (B) the exercise price of any such options is not lowered, none of such options are amended to increase the number of shares issuable thereunder and none of the terms or conditions of any such options are otherwise materially changed in any manner that adversely affects the holders of Registered Warrants; (ii) any shares of Common Stock issued or issuable upon exercise of the Registered Warrants or the Other Warrants; provided, that the terms of such Registered Warrants and Other Warrants are not amended, modified or changed on or after the Subscription Date, (iii) any shares of Common Stock issued or issuable upon exercise of any Options or Convertible Securities which are outstanding on the day immediately preceding the Subscription Date; provided, that the terms of such Options or Convertible Securities are not amended, modified or changed on or after the Subscription Date, or (iv) securities issued pursuant to acquisitions or strategic transactions approved by a majority of the disinterested directors of the Company, provided that any such issuance shall only be to a Person (or to the equityholders of a Person) which is, itself or through its subsidiaries, an operating company or an owner of an asset in a business synergistic with or complementary to the business of the Company and shall provide to the Company additional benefits in addition to the investment of funds, but shall not include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities.

(o) " **Expiration Date** " means the date sixty (60) months after the Initial Exercisability Date or, if such date falls on a day other than a Business Day or on which trading does not take place on the Principal Market (a " **Holiday** "), the next day that is not a Holiday.

(p) " **Fundamental Transaction** " means (A) that the Company shall, directly or indirectly, including through Subsidiaries, Affiliates or otherwise, in one or more related transactions, (i) consolidate or merge with or into (whether or not the Company is the surviving corporation) another Subject Entity, or (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company or any of its "significant subsidiaries" (as defined in Rule 1-02 of Regulation S-X) to one or more Subject Entities, or (iii) make, or allow one or more Subject Entities to make, or allow the Company to be subject to or have its Common Stock be subject to or party to one or more Subject Entities making, a purchase, tender or exchange offer that is accepted by the holders of at least either (x) 50% of the outstanding shares of Common Stock, (y) 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all Subject Entities making or party to, or Affiliated with any Subject Entities making or party to, such purchase, tender or exchange offer were not outstanding; or (z) such number of shares of Common Stock such that all Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such purchase, tender or exchange offer, become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding shares of Common Stock, or (iv) consummate a stock purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with one or more Subject Entities whereby all such Subject Entities, individually or in the aggregate, acquire, either (x) at least 50% of the outstanding shares of Common Stock, (y) at least 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all the Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such stock purchase agreement or other business combination were not outstanding; or (z) such number of shares of Common Stock such that the Subject Entities become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding shares of Common Stock, or (v) reorganize, recapitalize or reclassify its Common Stock, (B) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, allow any Subject Entity individually or the Subject Entities in the aggregate to be or become the "beneficial owner" (as defined in Rule 13d-3 under the 1934 Act), directly or indirectly, whether through acquisition, purchase, assignment, conveyance, tender, tender offer, exchange, reduction in outstanding Common Stock, merger, consolidation, business combination, reorganization, recapitalization, spin-off, scheme of arrangement, reorganization, recapitalization or reclassification or otherwise in any manner whatsoever, of either (x) at least 50% of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock, (y) at least 50% of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock not held by all such Subject Entities as of the Subscription Date calculated as if any shares of Common Stock held by all such Subject Entities were not outstanding, or (z) a percentage of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock or other equity securities of the Company sufficient to allow such Subject Entities to effect a statutory short form merger or other transaction requiring other stockholders of the Company to surrender their shares of Common Stock without approval of the stockholders of the Company or (C) directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, the issuance of or the entering into any other instrument or transaction structured in a manner to circumvent, or that circumvents, the intent of this definition in which case this definition shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this definition to the extent necessary to correct this definition or any portion of this definition which may be defective or inconsistent with the intended treatment of such instrument or transaction.

(q) "**Group**" means a "group" as that term is used in Section 13(d) of the 1934 Act and as defined in Rule 13d-5 thereunder.

(r) Intentionally Omitted.

(s) "**Initial Warrant Amount**" means the maximum number of Warrant Shares initially issuable upon a cash exercise of this Warrant on the Issuance Date (without regard to any restrictions or limitation on exercise contained herein, including pursuant to Section 1(f)).

(t) "**Lead Investor**" means Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B.

(u) "**Option Value**" means the value of an Option calculated using the greater of the Black-Scholes Option Pricing Model obtained from the "OV" function on Bloomberg, as a put option or a call option, determined as of (A) the Trading Day prior to the public announcement of the issuance of the applicable Option, if the issuance of such Option is publicly announced or (B) the Trading Day immediately following the issuance of the applicable Option if the issuance of such Option is not publicly announced, for pricing purposes and reflecting (i) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of the applicable Option as of the applicable date of determination, (ii) an expected volatility equal to the greater of 100% and the 100 day volatility obtained from the HVT function on Bloomberg as of (A) the Trading Day immediately following the public announcement of the applicable Option if the issuance of such Option is publicly announced or (B) the Trading Day immediately following the issuance of the applicable Option if the issuance of such Option is not publicly announced, (iii) the underlying price per share used in such calculation shall be the highest Weighted Average Price of the Common Stock during the period beginning on the Trading Day prior to the execution of definitive documentation relating to the issuance of the applicable Option and ending on (A) the Trading Day immediately following the public announcement of such issuance, if the issuance of such Option is publicly announced or (B) the Trading Day immediately following the issuance of the applicable Option if the issuance of such Option is not publicly announced, (iv) a zero cost of borrow and (v) a 360 day annualization factor.

(v) "**Options**" means any rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities.

(w) "**Other Warrants**" means the Series A Warrants issued by the Company on the Issuance Date pursuant to the Underwriting Agreement.

(x) "**Parent Entity**" of a Person means an entity that, directly or indirectly, controls the applicable Person, including such entity whose common stock or common shares or equivalent equity security is quoted or listed on an Eligible Market (or, if so elected by the Required Holders, any other market, exchange or quotation system), or, if there is more than one such Person or such entity, the Person or such entity designated by the Required Holders or in the absence of such designation, such Person or entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

(y) "**Person**" means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.

(z) "**Principal Market**" means The NASDAQ Capital Market.

(aa) "**Required Holders**" means the holders of the Registered Warrants representing at least a majority of the shares of Common Stock underlying the Registered Warrants then outstanding and shall include the Lead Investor so long as the Lead Investor or any of its Affiliates holds any Registered Warrants.

(bb) "**Standard Settlement Period**" means the standard settlement period, expressed in a number of Trading Days, on the Company's primary Eligible Market with respect to the Common Stock as in effect on the date of delivery of the applicable Exercise Notice.

(cc) "**Subject Entity**" means any Person, Persons or Group or any Affiliate or associate of any such Person, Persons or Group.

(dd) "**Successor Entity**" means one or more Person or Persons (or, if so elected by the Holder, the Company or Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or one or more Person or Persons (or, if so elected by the Holder, the Company or the Parent Entity) with which such Fundamental Transaction shall have been entered into.

(ee) "**Trading Day**" means any day on which the Common Stock is traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the Common Stock is then traded.

(ff) "**Warrant Exercise Percentage**" means, with respect to any exercise of this Warrant, the quotient determined by dividing (x) the number of Warrants being exercised (without any restrictions or limitation on exercise contained herein, including pursuant to Section 1(f)) and (y) the Initial Warrant Amount.

(gg) "**Weighted Average Price**" means, for any security as of any date, the dollar volume-weighted average price for such security on the Principal Market during the period beginning at 9:30:01 a.m., New York time (or such other time as the Principal Market publicly announces is the official open of trading), and ending at 4:00:00 p.m., New York time (or such other time as the Principal Market publicly announces is the official close of trading), as reported by Bloomberg through its "Volume at Price" function or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30:01 a.m., New York time (or such other time as such market publicly announces is the official open of trading), and ending at 4:00:00 p.m., New York time (or such other time as such market publicly announces is the official close of trading), as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for such security as reported in the OTC Link or "pink sheets" by OTC Markets Group Inc. (formerly Pink OTC Markets Inc.). If the Weighted Average Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Weighted Average Price of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12 with the term "Weighted Average Price" being substituted for the term "Exercise Price." All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

[Signature Page Follows]

IN WITNESS WHEREOF, the Company has caused this Warrant to Purchase Common Stock to be duly executed as of the Issuance Date set out above.

REPROS THERAPEUTICS, INC.

By: /s/ Larry M. Dillaha, M.D.
Name: Larry M. Dillaha, M.D.
Title: President and Chief Executive Officer

EXERCISE NOTICE

TO BE EXECUTED BY THE REGISTERED HOLDER TO EXERCISE THIS
WARRANT TO PURCHASE COMMON STOCK

REPROS THERAPEUTICS, INC.

The undersigned holder hereby exercises the right to purchase _____ shares of Common Stock (" **Warrant Shares** ") of Repros Therapeutics, Inc., a Delaware corporation (t he " **Company** "), evidenced by the attached Warrant to Purchase Common Stock (the " **Warrant** "). Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Warrant.

1. Form of Exercise Price. The Holder intends that payment of the Exercise Price shall be made as: _____ a " Cash Exercise " with respect to _____ Warrant Shares; and/or _____ a "Cashless Exercise" with respect to _____ Warrant Shares, resulting in a delivery obligation by the Company to the Holder of _____ shares of Common Stock representing the applicable Net Number.

2. Payment of Exercise Price. The holder shall pay the Aggregate Exercise Price in the sum of \$ _____ to the Company in accordance with the terms of the Warrant.

3. Delivery of Warrant Shares. The Company shall deliver to Holder, or its designee or agent as specified below, _____ shares of Common Stock in accordance with the terms of the Warrant. Delivery shall be made to Holder, or for its benefit, as follows:

Check here if requesting delivery as a certificate to the following name and to the following address:

Issue to: _____

Check here if requesting delivery by Deposit/Withdrawal at Custodian as follows:

DTC Participant: _____

DTC Number: _____

Account Number: _____

Date: _____,

Name of Registered Holder

By: _____

Name:

Title:

Tax ID: _____

Facsimile: _____

E-mail Address: _____

ACKNOWLEDGMENT

The Company hereby acknowledges this Exercise Notice and hereby directs Computershare Trust Company, N.A. to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated May 23, 2017 from the Company and acknowledged and agreed to by directs Computershare Trust Company, N.A.

REPROS THERAPEUTICS, INC.

By: _____
Name:
Title:

Schedule to Exhibit 10.2

Additional Series A Warrants (other than as set forth below and for the warrant number, these additional Series A Warrants are identical to the Series A Warrant to which this schedule is attached).

Name of Holder	Number of Shares of Common Stock
Hudson Bay Master Fund Ltd	1,808,750
KBB Asset Management	26,250
Iroquois Master Fund, Ltd.	22,500
Iroquois Capital Investment Group, LLC	22,500
Warberg Warrant Fund V	36,500
Greenfield Investment Services, LLC.	11,250
Sterne Agee & Leach, Inc. C/F John L Sommer IRA	1,500
Kevin P McCarthy	1,500
Sterne Agee & Leach, Inc. C/F Randy Payne IRA	1,500
Robert Dunn & Judy Dunn JTWROS	1,500

REPROS THERAPEUTICS, INC.

SERIES B WARRANT TO PURCHASE COMMON STOCK

Warrant No.: B-1

Number of shares of Common Stock: 1,205,833

Date of Issuance: May 23, 2017 (" **Issuance Date** ")

Repros Therapeutics, Inc., a Delaware corporation (the "**Company**"), hereby certifies that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B, the registered holder hereof or its permitted assigns (the "**Holder**"), is entitled, subject to the terms set forth below, to purchase from the Company, at the Exercise Price (as defined below) then in effect, at any time or times on or after May 23, 2017 (the "**Initial Exercisability Date**"), but not after 11:59 p.m., New York time, on the Expiration Date, (as defined below), One Million Two Hundred Five Thousand Eight Hundred Thirty-Three (1,205,833) fully paid nonassessable shares of Common Stock, subject to adjustment as provided herein (the "**Warrant Shares**"). Except as otherwise defined herein, capitalized terms in this Warrant to Purchase Common Stock (including any Warrants to Purchase Common Stock issued in exchange, transfer or replacement hereof, this "**Warrant**"), shall have the meanings set forth in Section 18. This Warrant is one of the Warrants to Purchase Common Stock (the "**Registered Warrants**") issued pursuant to (i) Section 1 of that certain Underwriting Agreement, dated as of May 18, 2017 (the "**Subscription Date**"), by and among the Company and the underwriter(s) referred to therein, as amended from time to time (the "**Underwriting Agreement**") and (ii) the Company's Registration Statement on Form S-3 (File number 333-197253) (the "**Registration Statement**").

1. **EXERCISE OF WARRANT.** (a) **Mechanics of Exercise.** Subject to the terms and conditions hereof (including, without limitation, the limitations set forth in Section 1(f)), this Warrant may be exercised by the Holder at any time or times on or after the Issuance Date, in whole or in part, by (i) delivery of a written notice, in the form attached hereto as Exhibit A (the "**Exercise Notice**"), of the Holder's election to exercise this Warrant and (ii) (A) payment to the Company of an amount equal to the applicable Exercise Price multiplied by the number of Warrant Shares as to which this Warrant is being exercised (the "**Aggregate Exercise Price**") in cash by wire transfer of immediately available funds or (B) if the provisions of Section 1(d) are applicable, by notifying the Company that this Warrant is being exercised pursuant to a Cashless Exercise (as defined in Section 1(d)). The Holder shall not be required to deliver the original Warrant in order to effect an exercise hereunder. Execution and delivery of the Exercise Notice with respect to less than all of the Warrant Shares shall have the same effect as cancellation of the original Warrant and issuance of a new Warrant evidencing the right to purchase the remaining number of Warrant Shares. Within one (1) Trading Day following the date on which the Company has received the Exercise Notice, the Company shall transmit by facsimile or electronic mail an acknowledgment of confirmation of receipt of the Exercise Notice to the Holder and the Company's transfer agent (the "**Transfer Agent**"). On or before the earlier of (i) the third (3rd) Trading Day following the date on which the Company has received the Exercise Notice and (ii) the number of Trading Days comprising the Standard Settlement Period following the date of exercise, so long as the Holder delivers the Aggregate Exercise Price (or notice of a Cashless Exercise) on or prior to the second (2nd) Trading Day following the date on which the Company has received the Exercise Notice (the "**Share Delivery Date**"), the Company shall (X) provided that the Transfer Agent is participating in The Depository Trust Company ("**DTC**") Fast Automated Securities Transfer Program, credit such aggregate number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the Holder's or its designee's balance account with DTC through its Deposit / Withdrawal At Custodian system, or (Y) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, issue and dispatch by overnight courier to the address as specified in the Exercise Notice, a certificate, registered in the Company's share register in the name of the Holder or its designee, for the number of Warrant Shares to which the Holder is entitled pursuant to such exercise. The Company shall be responsible for all fees and expenses of the Transfer Agent and all fees and expenses with respect to the issuance of Warrant Shares via DTC, if any. Upon delivery of the Exercise Notice, assuming that the payment of the aggregate Exercise Price (other than in the case of a Cashless Exercise) is received on or prior to the Share Delivery Date, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date such Warrant Shares are credited to the Holder's DTC account or the date of delivery of the certificates evidencing such Warrant Shares, as the case may be. If this Warrant is submitted in connection with any exercise pursuant to this Section 1(a) and the number of Warrant Shares represented by this Warrant submitted for exercise is greater than the number of Warrant Shares being acquired upon an exercise, then the Company shall as soon as practicable and in no event later than three (3) Trading Days after any exercise and at its own expense, issue a new Warrant (in accordance with Section 7(d)) representing the right to purchase the number of Warrant Shares issuable immediately prior to such exercise under this Warrant, less the number of Warrant Shares with respect to which this Warrant is exercised. No fractional Warrant Shares are to be issued upon the exercise of this Warrant, but rather the number of Warrant Shares to be issued shall be rounded up to the nearest whole number. The Company shall pay any and all taxes which may be payable with respect to the issuance and delivery of Warrant Shares upon exercise of this Warrant. The Company's obligations to issue and deliver Warrant Shares in accordance with the terms and subject to the conditions hereof are absolute and unconditional, irrespective of any action or inaction by the Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination.

(b) Exercise Price. For purposes of this Warrant, " **Exercise Price** " means \$0.92 per share, subject to adjustment as provided herein.

(c) Company's Failure to Timely Deliver Securities. If the Company shall fail for any reason or for no reason to issue to the Holder on or prior to the Share Delivery Date either (I) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, a certificate for the number of shares of Common Stock to which the Holder is entitled and register such shares of Common Stock on the Company's share register or if the Transfer Agent is participating in the DTC Fast Automated Securities Transfer Program, to credit the Holder's balance account with DTC, for such number of shares of Common Stock to which the Holder is entitled upon the Holder's exercise of this Warrant or (II) if the Registration Statement on Form S-3 (File number 333-197253), or other applicable effective registration statement under the 1933 Act (the " **Registration Statement** ") covering the issuance of the Warrant Shares that are the subject of the Exercise Notice (the " **Unavailable Warrant Shares** ") is not available for the issuance or resale of such Unavailable Warrant Shares and the Company fails to promptly (x) so notify the Holder and (y) deliver the Warrant Shares electronically without any restrictive legend by crediting such aggregate number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the Holder's or its designee's balance account with DTC through its Deposit / Withdrawal At Custodian system (the event described in the immediately foregoing clause (II) is hereinafter referred as a " **Notice Failure** " and together with the event described in clause (I) above, an " **Exercise Failure** "), and if on or after such Trading Day the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of shares of Common Stock issuable upon such exercise that the Holder anticipated receiving from the Company (a " **Buy-In** "), then the Company shall, within three (3) Trading Days after the Holder's request and in the Holder's discretion, either (i) pay cash to the Holder in an amount equal to the Holder's total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (the " **Buy-In Price** "), at which point the Company's obligation to deliver such certificate (and to issue such shares of Common Stock) or credit the Holder's balance account with DTC for such shares of Common Stock shall terminate, or (ii) promptly honor its obligation to deliver to the Holder a certificate or certificates representing such shares of Common Stock or credit the Holder's balance account with DTC, as applicable, and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock, times (B) any trading price of the Common Stock selected by the Holder in writing as in effect at any time during the period beginning on the applicable date of delivery of an Exercise Notice and ending on the applicable Share Delivery Date. Nothing shall limit the Holder's right to pursue any other remedies available to it hereunder, at law or in equity, including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock (or to electronically deliver such shares of Common Stock) upon the exercise of this Warrant as required pursuant to the terms hereof.

(d) Cashless Exercise. Notwithstanding anything contained herein to the contrary, if a registration statement covering the issuance or resale of the Unavailable Warrant Shares is not available for the issuance or resale of such Unavailable Warrant Shares, the Holder may, in its sole discretion, exercise this Warrant in whole or in part and, in lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise in payment of the Aggregate Exercise Price, elect instead to receive upon such exercise the " **Net Number** " of shares of Common Stock determined according to the following formula:

$$\text{Net Number} = \frac{(A \times B) - (A \times C)}{B}$$

For purposes of the foregoing formula:

A= the total number of shares with respect to which this Warrant is then being exercised.

B= the last Weighted Average Price immediately preceding the time of delivery of the Exercise Notice giving rise to the applicable “cashless exercise”, as set forth in the applicable Exercise Notice (to clarify, the “last Weighted Average Price” will be the last Weighted Average Price as calculated over an entire Trading Day such that, in the event that this Warrant is exercised at a time that the trading market is open, the prior Trading Day’s Weighted Average Price shall be used in this calculation);

C= the Exercise Price then in effect for the applicable Warrant Shares at the time of such exercise.

Notwithstanding the foregoing, at any time on any date after the thirtieth (30th) calendar day following the Issuance Date and prior to the Expiration Date, the Holder may, in its sole discretion, exercise this Warrant in whole or in part and, in lieu of the foregoing or of making any cash payment otherwise contemplated to be made to the Company upon such exercise in payment of the Aggregate Exercise Price, elect instead to receive upon such exercise a number of shares of Common Stock equal to the Alternate Net Number.

If shares of Common Stock are issued pursuant to this Section 1(d) (each such exercise, a “**Cashless Exercise**”), the parties acknowledge and agree that in accordance with Section 3(a)(9) of the 1933 Act, such shares of Common Stock shall take on the registered characteristics of this Warrant, and the holding period of this Warrant may be tacked on to the holding period of such shares of Common Stock. Unless the SEC specifically prohibits the foregoing position, the Company agrees not to take any position contrary to this Section 1(d).

(e) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall promptly issue to the Holder the number of Warrant Shares that are not disputed and resolve such dispute in accordance with Section 12.

(f) Limitations on Exercises.

(i) Beneficial Ownership. Notwithstanding anything to the contrary contained herein, the Company shall not effect the exercise of any portion of this Warrant, and the Holder shall not have the right to exercise any portion of this Warrant, pursuant to the terms and conditions of this Warrant and any such exercise shall be null and void and treated as if never made, to the extent that after giving effect to such exercise, the Holder together with the other Attribution Parties collectively would beneficially own in excess of 4.99% (the “**Maximum Percentage**”) of the number of shares of Common Stock outstanding immediately after giving effect to such exercise. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by the Holder and the other Attribution Parties shall include the number of shares of Common Stock held by the Holder and all other Attribution Parties plus the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which the determination of such sentence is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (A) exercise of the remaining, unexercised portion of this Warrant beneficially owned by the Holder or any of the other Attribution Parties and (B) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company (including, without limitation, any convertible notes or convertible preferred stock or warrants, including the other Registered Warrants or Other Warrants) beneficially owned by the Holder or any other Attribution Party subject to a limitation on conversion or exercise analogous to the limitation contained in this Section 1(f)(i). For purposes of this Section 1(f)(i), beneficial ownership shall be calculated in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended (the “**1934 Act**”). For purposes of this Warrant, in determining the number of outstanding shares of Common Stock the Holder may acquire upon the exercise of this Warrant without exceeding the Maximum Percentage, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company’s most recent Annual Report on Form 10-K, Quarterly Report on Form 10-Q, Current Report on Form 8-K or other public filing with the Securities and Exchange Commission (the “**SEC**”), as the case may be, (y) a more recent public announcement by the Company or (3) any other written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding (the “**Reported Outstanding Share Number**”). The Company shall have no obligation to verify or confirm the accordance of such determination. If the Company receives an Exercise Notice from the Holder at a time when the actual number of outstanding shares of Common Stock is less than the Reported Outstanding Share Number, the Company shall (i) notify the Holder in writing of the number of shares of Common Stock then outstanding and, to the extent that such Exercise Notice would otherwise cause the Holder’s beneficial ownership, as determined pursuant to this Section 1(f)(i), to exceed the Maximum Percentage, the Holder must notify the Company of a reduced number of Warrant Shares to be purchased pursuant to such Exercise Notice (the number of shares by which such purchase is reduced, the “**Reduction Shares**”) and (ii) as soon as reasonably practicable, the Company shall return to the Holder any exercise price paid by the Holder for the Reduction Shares. For any reason at any time, upon the written or oral request of the Holder, the Company shall within one (1) Business Day confirm orally and in writing or by electronic mail to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder and any other Attribution Party since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of shares of Common Stock to the Holder upon exercise of this Warrant results in the Holder and the other Attribution Parties being deemed to beneficially own, in the aggregate, more than the Maximum Percentage of the number of outstanding shares of Common Stock (as determined under Section 13(d) of the 1934 Act), the number of shares so issued by which the Holder’s and the other Attribution Parties’ aggregate beneficial ownership exceeds the Maximum Percentage (the “**Excess Shares**”) shall be deemed null and void and shall be cancelled ab initio, and the Holder shall not have the power to vote or to transfer the Excess Shares. As soon as reasonably practicable after the issuance of the Excess Shares has been deemed null and void, the Company shall return to the Holder the exercise price paid by the Holder for the Excess Shares. Upon delivery of a written notice to the Company, the Holder may from time to time increase or decrease the Maximum Percentage to any other percentage not in excess of 9.99% as specified in such notice; provided that (i) any such increase in the Maximum Percentage will not be effective until the sixty-first (61st) day after such notice is delivered to the Company and (ii) any such increase or decrease will apply only to the Holder and the other Attribution Parties and not to any other holder of Registered Warrants that is not an Attribution Party of the Holder. For purposes of clarity, the shares of Common Stock issuable pursuant to the terms of this Warrant in excess of the Maximum Percentage shall not be deemed to be beneficially owned by the Holder for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the 1934 Act. No prior inability to exercise this Warrant pursuant to this paragraph shall have any effect on the applicability of the provisions of this paragraph with respect to any subsequent determination of exercisability. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 1(f)(i) to the extent necessary to correct this paragraph or any portion of this paragraph which may be defective or inconsistent with the intended beneficial ownership limitation contained in this Section 1(f)(i) or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitation contained in this paragraph may not be waived and shall apply to a successor holder of this Warrant.



(ii) Intentionally Omitted.

(g) Insufficient Authorized Shares. If at any time while this Warrant remains outstanding the Company does not have a sufficient number of authorized and unreserved shares of Common Stock to satisfy its obligation to reserve for issuance upon exercise of this Warrant at least a number of shares of Common Stock equal to 100% of the number of shares of Common Stock as shall from time to time be necessary to effect the exercise of all of this Warrant then outstanding (the "**Required Reserve Amount**" and the failure to have such sufficient number of authorized and unreserved shares of Common Stock, an "**Authorized Share Failure**"), then the Company shall immediately take all action necessary to increase the Company's authorized shares of Common Stock to an amount sufficient to allow the Company to reserve the Required Reserve Amount for this Warrant then outstanding. Without limiting the generality of the foregoing sentence, as soon as practicable after the date of the occurrence of an Authorized Share Failure, but in no event later than sixty (60) days after the occurrence of such Authorized Share Failure, the Company shall hold a meeting of its stockholders for the approval of an increase in the number of authorized shares of Common Stock. In connection with such meeting, the Company shall provide each stockholder with a proxy statement and shall use its best efforts to solicit its stockholders' approval of such increase in authorized shares of Common Stock and to cause its board of directors to recommend to the stockholders that they approve such proposal. Notwithstanding the foregoing, if any such time of an Authorized Share Failure, the Company is able to obtain the written consent of a majority of the shares of its issued and outstanding shares of Common Stock to approve the increase in the number of authorized shares of Common Stock, the Company may satisfy this obligation by obtaining such consent and submitting for filing with the SEC an Information Statement on Schedule 14C. In the event that upon any exercise of this Warrant, the Company does not have sufficient authorized shares to deliver in satisfaction of such exercise, then unless the Holder elects to void such attempted exercise, the Holder may require the Company to pay to the Holder within three (3) Trading Days of the applicable exercise or attempted exercise, cash in an amount equal to the product of (i) the number of Warrant Shares that the Company is unable to deliver pursuant to this Section 1(g), and (ii) the difference determined by subtracting (x) the Exercise Price then in effect at the time of such exercise or attempted exercise, and (y) the last Weighted Average Price immediately preceding the time of the exercise or attempted exercise (to clarify, the "last Weighted Average Price" will be the last Weighted Average Price as calculated over an entire Trading Day such that, in the event that this Warrant is exercised at a time that the trading market is open, the prior Trading Day's Weighted Average Price shall be used in this calculation.

2. ADJUSTMENT OF EXERCISE PRICE AND NUMBER OF WARRANT SHARES. The Exercise Price and the number of Warrant Shares shall be adjusted from time to time as follows:

(a) Adjustment Upon Issuance of Shares of Common Stock. If and whenever on or after the Subscription Date the Company issues or sells, or in accordance with this Section 2 is deemed to have issued or sold, any shares of Common Stock (including the issuance or sale of shares of Common Stock owned or held by or for the account of the Company, but excluding shares of Common Stock deemed to have been issued or sold by the Company as or in connection with any Excluded Securities, for a consideration per share (the " **New Issuance Price** ") less than a price (the " **Applicable Price** ") equal to the Exercise Price in effect immediately prior to such issue or sale or deemed issuance or sale (the foregoing a " **Dilutive Issuance** "), then immediately after such Dilutive Issuance, the Exercise Price then in effect shall be reduced to an amount equal to the New Issuance Price. For purposes of determining the adjusted Exercise Price under this Section 2(a), the following shall be applicable:

(i) Issuance of Options. If the Company in any manner grants or sells any Options and the lowest price per share for which one share of Common Stock is issuable upon the exercise of any such Option or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option is less than the Applicable Price, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the granting or sale of such Option for such price per share. For purposes of this Section 2(a)(i), the "lowest price per share for which one share of Common Stock is issuable upon the exercise of any such Options or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option" shall be equal to the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to any one share of Common Stock upon the granting or sale of the Option, upon exercise of the Option and upon conversion, exercise or exchange of any Convertible Security issuable upon exercise of such Option less any consideration paid or payable by the Company with respect to such one share of Common Stock upon the granting or sale of such Option, upon exercise of such Option and upon conversion exercise or exchange of any Convertible Security issuable upon exercise of such Option. No further adjustment of the Exercise Price shall be made upon the actual issuance of such shares of Common Stock or of such Convertible Securities upon the exercise of such Options or upon the actual issuance of such shares of Common Stock upon conversion, exercise or exchange of such Convertible Securities.

(ii) Issuance of Convertible Securities. If the Company in any manner issues or sells any Convertible Securities and the lowest price per share for which one share of Common Stock is issuable upon the conversion, exercise or exchange thereof is less than the Applicable Price, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the issuance or sale of such Convertible Securities for such price per share. For the purposes of this Section 2(a)(ii), the "lowest price per share for which one share of Common Stock is issuable upon the conversion, exercise or exchange thereof" shall be equal to the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to any one share of Common Stock upon the issuance or sale of the Convertible Security and upon conversion, exercise or exchange of such Convertible Security less any consideration paid or payable by the Company with respect to such one share of Common Stock upon the issuance or sale of such Convertible Security and upon conversion, exercise or exchange of such Convertible Security. No further adjustment of the Exercise Price shall be made upon the actual issuance of such shares of Common Stock upon conversion, exercise or exchange of such Convertible Securities, and if any such issue or sale of such Convertible Securities is made upon exercise of any Options for which adjustment of this Warrant has been or is to be made pursuant to other provisions of this Section 2(a), no further adjustment of the Exercise Price shall be made by reason of such issue or sale.

(iii) Change in Option Price or Rate of Conversion. If the purchase price provided for in any Options, the additional consideration, if any, payable upon the issue, conversion, exercise or exchange of any Convertible Securities, or the rate at which any Convertible Securities are convertible into or exercisable or exchangeable for shares of Common Stock increases or decreases at any time, the Exercise Price in effect at the time of such increase or decrease shall be adjusted to the Exercise Price, which would have been in effect at such time had such Options or Convertible Securities provided for such increased or decreased purchase price, additional consideration or increased or decreased conversion rate, as the case may be, at the time initially granted, issued or sold. For purposes of this Section 2(a)(iii), if the terms of any Option or Convertible Security that was outstanding as of the Subscription Date are increased or decreased in the manner described in the immediately preceding sentence, then such Option or Convertible Security and the shares of Common Stock deemed issuable upon exercise, conversion or exchange thereof shall be deemed to have been issued as of the date of such increase or decrease. No adjustment pursuant to this Section 2(a) shall be made if such adjustment would result in an increase of the Exercise Price then in effect.

(iv) Calculation of Consideration Received. In case any Option is issued in connection with the issue or sale of other securities of the Company, together comprising one integrated transaction, (x) the Options will be deemed to have been issued for the Option Value of such Options and (y) the other securities issued or sold in such integrated transaction shall be deemed to have been issued or sold for the difference of (I) the aggregate consideration received by the Company less any consideration paid or payable by the Company pursuant to the terms of such other securities of the Company, less (II) the Option Value. If any shares of Common Stock, Options or Convertible Securities are issued or sold or deemed to have been issued or sold for cash, the consideration other than cash received therefor will be deemed to be the net amount received by the Company therefor. If any shares of Common Stock, Options or Convertible Securities are issued or sold for a consideration other than cash, the amount of such consideration received by the Company will be the fair value of such consideration, except where such consideration consists of publicly traded securities, in which case the amount of consideration received by the Company will be the Closing Sale Price of such publicly traded securities on the date of receipt. If any shares of Common Stock, Options or Convertible Securities are issued to the owners of the non-surviving entity in connection with any merger in which the Company is the surviving entity, the amount of consideration therefor will be deemed to be the fair value of such portion of the net assets and business of the non-surviving entity as is attributable to such shares of Common Stock, Options or Convertible Securities, as the case may be. The fair value of any consideration other than cash or publicly traded securities will be determined jointly by the Company and the Required Holders. If such parties are unable to reach agreement within ten (10) days after the occurrence of an event requiring valuation (the "**Valuation Event**"), the fair value of such consideration will be determined within five (5) Business Days after the tenth (10th) day following the Valuation Event by an independent, reputable appraiser jointly selected by the Company and the Required Holders. The determination of such appraiser shall be final and binding upon all parties absent manifest error and the fees and expenses of such appraiser shall be borne by the Company.

(v) Record Date. If the Company takes a record of the holders of shares of Common Stock for the purpose of entitling them (A) to receive a dividend or other distribution payable in shares of Common Stock, Options or in Convertible Securities or (B) to subscribe for or purchase shares of Common Stock, Options or Convertible Securities, then such record date will be deemed to be the date of the issuance or sale of the shares of Common Stock deemed to have been issued or sold upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase, as the case may be.

(vi) No Readjustments. For the avoidance of doubt, in the event the Exercise Price has been adjusted pursuant to this Section 2(a) and the Dilutive Issuance that triggered such adjustment does not occur, is not consummated, is unwound or is cancelled after the facts for any reason whatsoever, in no event shall the Exercise Price be readjusted to the Exercise Price that would have been in effect if such Dilutive Issuance had not occurred or been consummated.

(b) Exercise Floor Price. No adjustment to the Exercise Price pursuant to Section 2 of this Warrant shall cause the Exercise Price to be less than \$0.17 (the "**Exercise Floor Price**"). For the avoidance of doubt, if a Dilutive Issuance would cause the Exercise Price to be lower than the Exercise Floor Price but for the immediately preceding sentence, then the Exercise Price shall be equal to the Exercise Floor Price.

(c) Voluntary Adjustment By Company. The Company may at any time during the term of this Warrant, with the prior written consent of the Required Holders, reduce the then current Exercise Price to any amount and for any period of time deemed appropriate by the Board of Directors of the Company.

(d) Adjustment Upon Subdivision or Combination of Common Stock. If the Company at any time on or after the Subscription Date subdivides (by any stock split, stock dividend, recapitalization or otherwise) one or more classes of its outstanding shares of Common Stock into a greater number of shares, the Exercise Price in effect immediately prior to such subdivision will be proportionately reduced and the number of Warrant Shares will be proportionately increased. If the Company at any time on or after the Subscription Date combines (by combination, reverse stock split or otherwise) one or more classes of its outstanding shares of Common Stock into a smaller number of shares, the Exercise Price in effect immediately prior to such combination will be proportionately increased and the number of Warrant Shares will be proportionately decreased. Any adjustment under this Section 2(d) shall become effective at the close of business on the date the subdivision or combination becomes effective.

(e) Number of Warrant Shares. Simultaneously with any adjustment to the Exercise Price pursuant to this Section 2, the number of Warrant Shares that may be purchased upon exercise of this Warrant shall be increased or decreased proportionately, so that after such adjustment the aggregate Exercise Price payable hereunder for the adjusted number of Warrant Shares shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment (without regard to any limitations on exercise contained herein).

(f) Other Events. If any event occurs of the type contemplated by the provisions of this Section 2 but not expressly provided for by such provisions (including, without limitation, the granting of stock appreciation rights, phantom stock rights or other rights with equity features), then the Company's Board of Directors will make an appropriate adjustment in the Exercise Price and the number of Warrant Shares, as mutually determined by the Company's Board of Directors and the Required Holders, so as to protect the rights of the Holder; provided that no such adjustment pursuant to this Section 2(f) will increase the Exercise Price or decrease the number of Warrant Shares as otherwise determined pursuant to this Section 2.

3. RIGHTS UPON DISTRIBUTION OF ASSETS. From the Subscription Date through and including the Expiration Date if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property, options, evidence of indebtedness or any other assets by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a " **Distribution** "), at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Maximum Percentage) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, that to the extent that the Holder's right to participate in any such Distribution would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Distribution to such extent (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Distribution (and beneficial ownership) to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time or times as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such Distribution (and any Distributions declared or made on such initial Distribution or on any subsequent Distribution held similarly in abeyance) to the same extent as if there had been no such limitation).

4. PURCHASE RIGHTS; FUNDAMENTAL TRANSACTIONS.

(a) Purchase Rights. From the Subscription Date and through and including the Expiration Date, in addition to any adjustments pursuant to Section 2 above, if at any time the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of Common Stock (the " **Purchase Rights** "), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Maximum Percentage) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, that to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Purchase Right to such extent (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Purchase Right (and beneficial ownership) to such extent) and such Purchase Right to such extent shall be held in abeyance for the benefit of the Holder until such time or times as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase Right or on any subsequent Purchase Right held similarly in abeyance) to the same extent as if there had been no such limitation).

(b) **Fundamental Transactions**. From the Subscription Date and through and including the Expiration Date, the Company shall not enter into or be party to a Fundamental Transaction unless the Successor Entity assumes in writing all of the obligations of the Company under this Warrant and the other Transaction Documents in accordance with the provisions of this Section 4(b) pursuant to written agreements in form and substance reasonably satisfactory to the Required Holders and approved by the Required Holders prior to such Fundamental Transaction, including agreements, if so requested by the Holder, to deliver to each holder of the Registered Warrants in exchange for such Registered Warrants a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant, including, without limitation, an adjusted exercise price equal to the value for the shares of Common Stock reflected by the terms of such Fundamental Transaction, and exercisable for a corresponding number of shares of capital stock equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and reasonably satisfactory to the Required Holders, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such adjustments to the number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the occurrence or consummation of such Fundamental Transaction). Any security issuable or potentially issuable to the Holder pursuant to the terms of this Warrant on the consummation of a Fundamental Transaction shall be registered and freely tradable by the Holder without any restriction or limitation or the requirement to be subject to any holding period pursuant to any applicable securities laws. Upon the occurrence or consummation of any Fundamental Transaction, and it shall be a required condition to the occurrence or consummation of any Fundamental Transaction that, the Company and the Successor Entity or Successor Entities, jointly and severally, shall succeed to, and the Company shall cause any Successor Entity or Successor Entities to jointly and severally succeed to, and be added to the term "Company" under this Warrant (so that from and after the date of such Fundamental Transaction, each and every provision of this Warrant referring to the "Company" shall refer instead to each of the Company and the Successor Entity or Successor Entities, jointly and severally), and the Company and the Successor Entity or Successor Entities, jointly and severally, may exercise every right and power of the Company prior thereto and shall assume all of the obligations of the Company prior thereto under this Warrant with the same effect as if the Company and such Successor Entity or Successor Entities, jointly and severally, had been named as the Company in this Warrant, and, solely at the request of the Holder, if the Successor Entity and/or Successor Entities is a publicly traded corporation whose common stock is quoted on or listed for trading on an Eligible Market, shall deliver (in addition to and without limiting any right under this Warrant) to the Holder in exchange for this Warrant a security of the Successor Entity and/or Successor Entities evidenced by a written instrument substantially similar in form and substance to this Warrant and exercisable for a corresponding number of shares of capital stock of the Successor Entity and/or Successor Entities (the "**Successor Capital Stock**") equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction (such corresponding number of shares of Successor Capital Stock to be delivered to the Holder shall be equal to the greater of (A) the quotient of (i) the aggregate dollar value of all consideration (including cash consideration and any consideration other than cash ("**Non-Cash Consideration**"), in such Fundamental Transaction, as such values are set forth in any definitive agreement for the Fundamental Transaction that has been executed at the time of the first public announcement of the Fundamental Transaction or, if no such value is determinable from such definitive agreement, as determined in accordance with Section 12 with the term "Non-Cash Consideration" being substituted for the term "Exercise Price") that the Holder would have been entitled to receive upon the happening of such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction, had this Warrant been exercised immediately prior to such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction (without regard to any limitations on the exercise of this Warrant) (the "**Aggregate Consideration**") divided by (ii) the per share Closing Sale Price of such Successor Capital Stock on the Trading Day immediately prior to the consummation or occurrence of the Fundamental Transaction and (B) the product of (i) the Aggregate Consideration and (ii) the highest exchange ratio pursuant to which any stockholder of the Company may exchange shares of Common Stock for Successor Capital Stock) (provided, however, to the extent that the Holder's right to receive any such shares of publicly traded common stock (or their equivalent) of the Successor Entity would result in the Holder and its other Attribution Parties exceeding the Maximum Percentage, if applicable, then the Holder shall not be entitled to receive such shares to such extent (and shall not be entitled to beneficial ownership of such shares of publicly traded common stock (or their equivalent) of the Successor Entity as a result of such consideration to such extent) and the portion of such shares shall be held in abeyance for the Holder until such time or times, as its right thereto would not result in the Holder and its other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be delivered such shares to the extent as if there had been no such limitation), and such security shall be reasonably satisfactory to the Holder, and with an identical exercise price to the Exercise Price hereunder (such adjustments to the number of shares of capital stock and such exercise price being for the purpose of protecting after the consummation or occurrence of such Fundamental Transaction the economic value of this Warrant that was in effect immediately prior to the consummation or occurrence of such Fundamental Transaction, as elected by the Holder solely at its option). Upon occurrence or consummation of the Fundamental Transaction, and it shall be a required condition to the occurrence or consummation of such Fundamental Transaction that, the Company and the Successor Entity or Successor Entities shall deliver to the Holder confirmation that there shall be issued upon exercise of this Warrant at any time after the occurrence or consummation of the Fundamental Transaction, as elected by the Holder solely at its option, shares of Common Stock, Successor Capital Stock or, in lieu of the shares of Common Stock or Successor Capital Stock (or other securities, cash, assets or other property purchasable upon the exercise of this Warrant prior to such Fundamental Transaction), such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights), which for purposes of clarification may continue to be shares of Common Stock, if any, that the Holder would have been entitled to receive upon the happening of such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction, had this Warrant been exercised immediately prior to such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction (without regard to any limitations on the exercise of this Warrant), as adjusted in accordance with the provisions of this Warrant. In addition to and not in substitution for any other rights hereunder, prior to the occurrence or consummation of any Fundamental Transaction pursuant to which holders of shares of Common Stock are entitled to receive securities, cash, assets or other property with respect to or in exchange for shares of Common Stock (a "**Corporate Event**"), the Company shall make appropriate provision to insure that, and any applicable Successor Entity or Successor Entities shall ensure that, and it shall be a required condition to the occurrence or consummation of such Corporate Event that, the Holder will thereafter have the right to receive upon exercise of this Warrant at any time after the occurrence or consummation of the Corporate Event, shares of Common Stock or Successor Capital Stock or, if so elected by the Holder, in lieu of the shares of Common Stock (or other securities, cash, assets or other property) purchasable upon the exercise of this Warrant prior to such Corporate Event (but not in lieu of such items still issuable under Sections 3 and 4(a), which shall continue to be receivable on the shares of Common Stock or on the such shares of stock, securities, cash, assets or any other property otherwise receivable with respect to or in exchange for shares of Common Stock), such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights and any shares of Common Stock) which the Holder would have been entitled to receive upon the occurrence or consummation of such Corporate Event or the record, eligibility or other determination date for the event resulting in such Corporate Event, had this Warrant been exercised immediately prior to such Corporate Event or the record, eligibility or other determination date for the event resulting in such Corporate Event (without regard to any limitations on exercise of this Warrant). Provision made pursuant to the preceding sentence shall be in a form and substance reasonably satisfactory to the Holder. The provisions of this Section 4(b) shall apply

similarly and equally to successive Fundamental Transactions and Corporate Events.

(c) Notwithstanding the foregoing, in the event of Fundamental Transaction, at the request of the Holder delivered at any time commencing on the earliest to occur of (x) the public disclosure of any Fundamental Transaction, (y) the consummation of any Fundamental Transaction and (z) the Holder first becoming aware of any Fundamental Transaction through the date that is ninety (90) days after the public disclosure of the consummation of such Fundamental Transaction by the Company pursuant to a Current Report on Form 8-K filed with the SEC, the Company or the Successor Entity (as the case may be) shall purchase this Warrant from the Holder on the date of such request by paying to the Holder cash in an amount equal to the Black Scholes Value. Payment of such amounts shall be made by the Company (or at the Company's direction) to the Holder on or prior to the later of (x) the second (2nd) Trading Day after the date of such request and (y) the date of consummation of such Fundamental Transaction.

5. NONCIRCUMVENTION. The Company hereby covenants and agrees that the Company will not, by amendment of its Certificate of Incorporation or Bylaws, or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, and will at all times in good faith carry out all of the provisions of this Warrant and take all action as may be required to protect the rights of the Holder. Without limiting the generality of the foregoing, the Company (i) shall not increase the par value of any shares of Common Stock receivable upon the exercise of this Warrant above the Exercise Price then in effect, (ii) shall take all such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable shares of Common Stock upon the exercise of this Warrant, and (iii) shall, so long as any of the Registered Warrants are outstanding, take all action necessary to reserve and keep available out of its authorized and unissued shares of Common Stock, solely for the purpose of effecting the exercise of the Registered Warrants, 100% of the number of shares of Common Stock as shall from time to time be necessary to effect the exercise of the Registered Warrants then outstanding (without regard to any limitations on exercise).

6. WARRANT HOLDER NOT DEEMED A STOCKHOLDER. Except as otherwise specifically provided herein, the Holder, solely in such Person's capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in such Person's capacity as the Holder of this Warrant, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which such Person is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a stockholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company. Notwithstanding this Section 6, if not filed with the SEC, the Company shall provide the Holder with copies of the same notices and other information given to the stockholders of the Company generally, contemporaneously with the giving thereof to the stockholders.

7. REISSUANCE OF WARRANTS.

(a) Transfer of Warrant. Subject to the terms hereof, if this Warrant is to be transferred, the Holder shall surrender this Warrant to the Company, whereupon the Company will forthwith issue and deliver upon the order of the Holder a new Warrant (in accordance with Section 7(d)), registered as the Holder may request, representing the right to purchase the number of Warrant Shares being transferred by the Holder and, if less than the total number of Warrant Shares then underlying this Warrant is being transferred, a new Warrant (in accordance with Section 7(d)) to the Holder representing the right to purchase the number of Warrant Shares not being transferred.

(b) Lost, Stolen or Mutilated Warrant. Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and, in the case of loss, theft or destruction, of any indemnification undertaking by the Holder to the Company in customary form and, in the case of mutilation, upon surrender and cancellation of this Warrant, the Company shall execute and deliver to the Holder a new Warrant (in accordance with Section 7(d)) representing the right to purchase the Warrant Shares then underlying this Warrant.

(c) Exchangeable for Multiple Warrants. This Warrant is exchangeable, upon the surrender hereof by the Holder at the principal office of the Company, for a new Warrant or Warrants (in accordance with Section 7(d)) representing in the aggregate the right to purchase the number of Warrant Shares then underlying this Warrant, and each such new Warrant will represent the right to purchase such portion of such Warrant Shares as is designated by the Holder at the time of such surrender; provided, however, that no Registered Warrants for fractional Warrant Shares shall be given.

(d) Issuance of New Warrants. Whenever the Company is required to issue a new Warrant pursuant to the terms of this Warrant, such new Warrant (i) shall be of like tenor with this Warrant, (ii) shall represent, as indicated on the face of such new Warrant, the right to purchase the Warrant Shares then underlying this Warrant (or in the case of a new Warrant being issued pursuant to Section 7(a) or Section 7(c), the Warrant Shares designated by the Holder which, when added to the number of shares of Common Stock underlying the other new Warrants issued in connection with such issuance, does not exceed the number of Warrant Shares then underlying this Warrant), (iii) shall have an issuance date, as indicated on the face of such new Warrant which is the same as the Issuance Date, and (iv) shall have the same rights and conditions as this Warrant.

8. NOTICES. Whenever notice is required to be given under this Warrant, unless otherwise provided herein, such notice shall be given at its last address as it shall appear upon the warrant register of the Company. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Warrant, including in reasonable detail a description of such action and the reason therefor. Without limiting the generality of the foregoing, the Company will give written notice to the Holder (i) immediately upon any adjustment of the Exercise Price, setting forth in reasonable detail, and certifying, the calculation of such adjustment and (ii) at least ten (10) days prior to the date on which the Company closes its books or takes a record (A) with respect to any dividend or distribution upon the shares of Common Stock, (B) with respect to any grants, issuances or sales of any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property to holders of shares of Common Stock or (C) for determining rights to vote with respect to any Fundamental Transaction, dissolution or liquidation; provided in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to the Holder.

9. AMENDMENT AND WAIVER. Except as otherwise provided herein, the provisions of this Warrant may be amended or waived and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of holders of a majority of the Registered Warrants and, so long as the Lead Investor holds any Registered Warrants, the Lead Investor.

10. GOVERNING LAW; JURISDICTION; JURY TRIAL. This Warrant shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Warrant shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. The Company hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to the Company at its principal executive office and agrees that such service shall constitute good and sufficient service of process and notice thereof. The Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed or operate to preclude the Holder from bringing suit or taking other legal action against the Company in any other jurisdiction to collect on the Company's obligations to the Holder, to realize on any collateral or any other security for such obligations, or to enforce a judgment or other court ruling in favor of the Holder. **THE COMPANY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS WARRANT OR ANY TRANSACTION CONTEMPLATED HEREBY.**

11. CONSTRUCTION; HEADINGS. This Warrant shall be deemed to be jointly drafted by the Company and all the Buyers and shall not be construed against any Person as the drafter hereof. The headings of this Warrant are for convenience of reference and shall not form part of, or affect the interpretation of, this Warrant.

12. DISPUTE RESOLUTION. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall submit the disputed determinations or arithmetic calculations via facsimile or electronic mail within two (2) Business Days of receipt of the Exercise Notice giving rise to such dispute, as the case may be, to the Holder. If the Holder and the Company are unable to agree upon such determination or calculation of the Exercise Price or the Warrant Shares within three (3) Business Days of such disputed determination or arithmetic calculation being submitted to the Holder, then the Company shall, within two (2) Business Days submit via facsimile or electronic mail (a) the disputed determination of the Exercise Price to an independent, reputable investment bank selected by the Company and reasonably acceptable to the Holder or (b) the disputed arithmetic calculation of the Warrant Shares to the Company's independent, outside accountant. The Company shall cause at its expense the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Holder of the results no later than ten (10) Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

13. REMEDIES, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF. The remedies provided in this Warrant shall be cumulative and in addition to all other remedies available under this Warrant and the other Transaction Documents, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Holder to pursue actual damages for any failure by the Company to comply with the terms of this Warrant. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Holder and that the remedy at law for any such breach may be inadequate. The Company therefore agrees that, in the event of any such breach or threatened breach, the holder of this Warrant shall be entitled, in addition to all other available remedies, to an injunction restraining any breach, without the necessity of showing economic loss and without any bond or other security being required.

14. TRANSFER. This Warrant and the Warrant Shares may be offered for sale, sold, transferred, pledged or assigned without the consent of the Company.

15. SEVERABILITY. If any provision of this Warrant is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Warrant so long as this Warrant as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

16. **DISCLOSURE.** Upon receipt or delivery by the Company of any notice in accordance with the terms of this Warrant, unless the Company has in good faith determined that the matters relating to such notice do not constitute material, nonpublic information relating to the Company or its Subsidiaries (as defined in the Securities Purchase Agreement), the Company shall within one (1) Business Day after any such receipt or delivery publicly disclose such material, nonpublic information on a Current Report on Form 8-K or otherwise. In the event that the Company believes that a notice contains material, nonpublic information relating to the Company or its Subsidiaries, the Company so shall indicate to the Holder contemporaneously with delivery of such notice, and in the absence of any such indication, the Holder shall be allowed to presume that all matters relating to such notice do not constitute material, nonpublic information relating to the Company or its Subsidiaries.

17. **COMPANY OPTIONAL REDEMPTION.** If at any time after the date hereof, (i) the Closing Bid Price of the Common Stock is equal to or greater than \$1.75 per share (as adjusted for stock splits, stock combinations and the like occurring from and after the Issuance Date) (the “**Trigger Price**”) for a period of thirty (30) consecutive Trading Days following the applicable date of determination (the thirty (30) consecutive Trading Days on which the condition in this clause (i) is satisfied are referred to herein as the “**Measuring Period**”), (ii) no Equity Conditions Failure shall have occurred, and (iii) the aggregate dollar trading volume (as reported on Bloomberg) of the Common Stock on the applicable Eligible Market for each Trading Day during the Measuring Period exceeds \$225,000 per day (the foregoing conditions in clause (i) through (iii) above, collectively, the “**Redemption Conditions**”), then the Company shall have the right to purchase the entire then-remaining portion of this Warrant from the Holder as set forth below (a “**Company Redemption**”). The Company may exercise its right to purchase the entire then-remaining portion of this Warrant under this Section 17 by delivering (provided that all of the Redemption Conditions are then satisfied), on the first (1st) Trading Day immediately following the satisfaction of all the Redemption Conditions, a written notice thereof by via e-mail to the Holder (the “**Redemption Notice**”) and the date the Holder receives such notice by facsimile is referred to as the “**Redemption Notice Date**”). The Redemption Notice shall be irrevocable. The Redemption Notice shall (1) state the Trading Day selected for the Company Redemption in accordance with this Section 17, which Trading Day shall be at least five (5) Trading Days but not more than sixty (60) Trading Days following the Redemption Notice Date (the “**Redemption Date**”), (2) contain a certification from the Chief Executive Officer of the Company that there has been no Equity Conditions Failure and (3) contain a certification from the Chief Executive Officer of the Company that the Company has simultaneously taken the same action with respect to all of the Other Warrants that are then eligible to be purchased by the Company. On the Redemption Date, the Company shall pay \$0.01 for this Warrant (the “**Redemption Price**”) to the Holder on the Redemption Date by wire transfer of immediately available funds to an account specified by the Holder. Notwithstanding anything contained in this Section 17 to the contrary, if (I) any shares of Common Stock trade for a price less than the Trigger Price on any day Trading Day during the period commencing on the Redemption Notice Date and ending on the Trading Day immediately preceding the Redemption Date; (II) the aggregate dollar trading volume (as reported on Bloomberg) of the Common Stock on the applicable Eligible Market on any day Trading Day during the period commencing on the Redemption Notice Date and ending on the Trading Day immediately preceding the Redemption Date is less than \$225,000; or (III) an Equity Conditions Failure occurs on any day during the period commencing on the Redemption Notice Date and ending on the Redemption Date which has not been waived in writing by the Holder, then, in any case, the applicable Redemption Notice delivered to the Holder shall be null and void ab initio and the Company Redemption shall not occur. If the Company elects to cause a Company Redemption of the entire then-remaining portion of this Warrant pursuant to this Section 17, then it must simultaneously take the same action with respect to all of the Other Warrants that are then eligible to be purchased. Notwithstanding the foregoing, the Holder may exercise all or any portion of this Warrant at any time and from time to time after the Redemption Notice Date until the Holder’s receipt of the Redemption Price from the Company and any such exercise of this Warrant shall not reduce the Redemption Price.

18. CERTAIN DEFINITIONS. For purposes of this Warrant, the following terms shall have the following meanings:

(a) "**1933 Act**" means the Securities Act of 1933, as amended.

(b) "**Affiliate**" means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that "control" of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

(c) "**Alternate Net Number**" means, with respect to any given exercise hereunder, the product of (i) 200% of the applicable Warrant Exercise Percentage of the Initial Warrant Amount and (ii) the quotient obtained by dividing (A) the difference obtained by subtracting (x) the Market Price, from (y) the Exercise Price as of the Subscription Date (as adjusted for stock splits, stock dividends, stock combinations, recapitalizations or other similar events) by (B) the Market Price.

(d) "**Approved Stock Plan**" means any employee benefit plan which has been approved by the Board of Directors of the Company, pursuant to which the Company's securities may be issued to any employee, officer or director for services provided to the Company.

(e) "**Attribution Parties**" means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Issuance Date, directly or indirectly managed or advised by the Holder's investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Holder or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a Group together with the Holder or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company's Common Stock would or could be aggregated with the Holder's and the other Attribution Parties for purposes of Section 13(d) of the 1934 Act. For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage.

(f) "**Black Scholes Value**" means the value of this Warrant calculated using the greater of the Black-Scholes Option Pricing Model obtained from the "OV" function on Bloomberg, as a put option or a call option, determined as of the day immediately following the public announcement of the applicable Fundamental Transaction, or, if the Fundamental Transaction is not publicly announced, the date the Fundamental Transaction is consummated, for pricing purposes and reflecting (i) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of this Warrant as of such date of request, (ii) an expected volatility equal to the greater of 100% and the 100 day volatility obtained from the HVT function on Bloomberg as of the day immediately following the public announcement of the applicable Fundamental Transaction, or, if the Fundamental Transaction is not publicly announced, the date the Fundamental Transaction is consummated, (iii) the underlying price per share used in such calculation shall be the sum of the price per share being offered in cash, if any, plus the value of any non-cash consideration, if any, being offered in the Fundamental Transaction, (iv) a zero cost of borrow and (v) a 360 day annualization factor.

(g) "**Bloomberg**" means Bloomberg Financial Markets.

(h) "**Business Day**" means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(i) "**Closing Bid Price**" and "**Closing Sale Price**" means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or the last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last closing bid price or last trade price, respectively, of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last closing bid price or last trade price, respectively, of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price or last trade price, respectively, is reported for such security by Bloomberg, the average of the bid prices, or the ask prices, respectively, of any market makers for such security as reported in the OTC Link or "pink sheets" by OTC Markets Group Inc. (formerly Pink OTC Markets Inc.). If the Closing Bid Price or the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Bid Price or the Closing Sale Price, as the case may be, of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

(j) "**Common Stock**" means (i) the Company's Class A common stock, par value \$0.001 per share, and (ii) any share capital into which such Common Stock shall have been changed or any share capital resulting from a reclassification of such Common Stock.

(k) "**Convertible Securities**" means any stock or securities (other than Options) directly or indirectly convertible into or exercisable or exchangeable for shares of Common Stock, other than Excluded Securities.

(l) "**Eligible Market**" means the Principal Market, the NYSE MKT LLC, The NASDAQ Global Select Market, The NASDAQ Global Market, The New York Stock Exchange, Inc., the OTC QX market or the OTC QB market.

(m) "**Equity Conditions**" means: (i) on each day during the period beginning one month prior to the applicable date of determination and ending on and including the applicable date of determination all Warrant Shares (assuming a cashless exercise in full of this Warrant) shall be eligible for sale without restriction under Rule 144 (including, without limitation, volume restrictions) and without the need for current public information required by Rule 144(c)(1) (or Rule 144(i)(2), if applicable) and without the need for registration under any applicable federal or state securities laws (disregarding any limitation on exercise of the Warrants); (ii) on each day during the period beginning three months prior to the applicable date of determination and ending on and including the applicable date of determination (the "**Equity Conditions Measuring Period**"), the Common Stock (including all Warrant Shares) is listed or designated for quotation (as applicable) on an Eligible Market and shall not have been suspended from trading on an Eligible Market (other than suspensions of not more than two (2) days and occurring prior to the applicable date of determination due to business announcements by the Company) nor shall delisting or suspension by an Eligible Market be pending or have been threatened either (A) in writing by such Eligible Market or (B) by falling below the minimum listing maintenance requirements of the Eligible Market on which the Common Stock is then listed or designated for quotation (as applicable); (iii) on each day during the Equity Conditions Measuring Period, the Company shall have delivered all shares of Common Stock issuable upon exercise of this Warrant on a timely basis as set forth in Section 1(a) hereof; (iv) any shares of Common Stock to be issued in connection with the event requiring determination may be issued in full without violating Section 1(f) hereof; (v) any shares of Common Stock to be issued in connection with the event requiring determination may be issued in full without violating the rules or regulations of the Eligible Market on which the Common Stock is then listed or designated for quotation (as applicable); (vi) on each day during the Equity Conditions Measuring Period, no public announcement of a pending, proposed or intended Fundamental Transaction shall have occurred which has not been abandoned, terminated or consummated; (vii) the Company shall have no knowledge of any fact that would reasonably be expected to cause the Warrant Shares (assuming a cashless exercise in full of this Warrant) to not be eligible for sale without restriction pursuant to Rule 144 (including, without limitation, volume restrictions) and without the need for current public information required by Rule 144(c)(1) (or Rule 144(i)(2), if applicable) or any applicable state securities laws (disregarding any limitation on exercise of the Warrants); (viii) the Holder shall not be in possession of any material, non-public information provided to any of them by the Company, any of its affiliates or any of their respective employees, officers, representatives, agents or the like; and (ix) on each day during the Equity Conditions Measuring Period, the Company otherwise shall have been in compliance with each, and shall not have breached any, provision, covenant, representation or warranty of the Underwriting Agreement.

(n) “ **Equity Conditions Failure** ” means that on any day during the period commencing twenty (20) Trading Days prior to the Redemption Notice Date through the Redemption Date, the Equity Conditions have not been satisfied (or waived in writing by the Holder).

(o) “ **Excluded Securities** ” means: (i) any shares of Common Stock or standard options issued to directors, officers or employees of the Company for services rendered to the Company in their capacity as such pursuant to an Approved Stock Plan (as defined above), provided that (A) all such issuances (taking into account the shares of Common Stock issuable upon exercise of such options) after the Subscription Date pursuant to this clause (i) do not, in the aggregate, exceed more than 5% of the Common Stock issued and outstanding immediately prior to the Subscription Date in any twelve (12) month period and (B) the exercise price of any such options is not lowered, none of such options are amended to increase the number of shares issuable thereunder and none of the terms or conditions of any such options are otherwise materially changed in any manner that adversely affects the holders of Registered Warrants; (ii) any shares of Common Stock issued or issuable upon exercise of the Registered Warrants or the Other Warrants; provided, that the terms of such Registered Warrants and Other Warrants are not amended, modified or changed on or after the Subscription Date, (iii) any shares of Common Stock issued or issuable upon exercise of any Options or Convertible Securities which are outstanding on the day immediately preceding the Subscription Date; provided, that the terms of such Options or Convertible Securities are not amended, modified or changed on or after the Subscription Date, or (iv) securities issued pursuant to acquisitions or strategic transactions approved by a majority of the disinterested directors of the Company, provided that any such issuance shall only be to a Person (or to the equityholders of a Person) which is, itself or through its subsidiaries, an operating company or an owner of an asset in a business synergistic with or complementary to the business of the Company and shall provide to the Company additional benefits in addition to the investment of funds, but shall not include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities.

(p) “ **Expiration Date** ” means the date twenty-four (24) months after the Initial Exercisability Date or, if such date falls on a day other than a Business Day or on which trading does not take place on the Principal Market (a “ **Holiday** ”), the next day that is not a Holiday.

(q) “ **Fundamental Transaction** ” means (A) that the Company shall, directly or indirectly, including through Subsidiaries, Affiliates or otherwise, in one or more related transactions, (i) consolidate or merge with or into (whether or not the Company is the surviving corporation) another Subject Entity, or (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company or any of its "significant subsidiaries" (as defined in Rule 1-02 of Regulation S-X) to one or more Subject Entities, or (iii) make, or allow one or more Subject Entities to make, or allow the Company to be subject to or have its Common Stock be subject to or party to one or more Subject Entities making, a purchase, tender or exchange offer that is accepted by the holders of at least either (x) 50% of the outstanding shares of Common Stock, (y) 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all Subject Entities making or party to, or Affiliated with any Subject Entities making or party to, such purchase, tender or exchange offer were not outstanding; or (z) such number of shares of Common Stock such that all Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such purchase, tender or exchange offer, become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding shares of Common Stock, or (iv) consummate a stock purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with one or more Subject Entities whereby all such Subject Entities, individually or in the aggregate, acquire, either (x) at least 50% of the outstanding shares of Common Stock, (y) at least 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all the Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such stock purchase agreement or other business combination were not outstanding; or (z) such number of shares of Common Stock such that the Subject Entities become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding shares of Common Stock, or (v) reorganize, recapitalize or reclassify its Common Stock, (B) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, allow any Subject Entity individually or the Subject Entities in the aggregate to be or become the "beneficial owner" (as defined in Rule 13d-3 under the 1934 Act), directly or indirectly, whether through acquisition, purchase, assignment, conveyance, tender, tender offer, exchange, reduction in outstanding Common Stock, merger, consolidation, business combination, reorganization, recapitalization, spin-off, scheme of arrangement, reorganization, recapitalization or reclassification or otherwise in any manner whatsoever, of either (x) at least 50% of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock, (y) at least 50% of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock not held by all such Subject Entities as of the Subscription Date calculated as if any shares of Common Stock held by all such Subject Entities were not outstanding, or (z) a percentage of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock or other equity securities of the Company sufficient to allow such Subject Entities to effect a statutory short form merger or other transaction requiring other stockholders of the Company to surrender their shares of Common Stock without approval of the stockholders of the Company or (C) directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, the issuance of or the entering into any other instrument or transaction structured in a manner to circumvent, or that circumvents, the intent of this definition in which case this definition shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this definition to the extent necessary to correct this definition or any portion of this definition which may be defective or inconsistent with the intended treatment of such instrument or transaction.

(r) "**Group**" means a "group" as that term is used in Section 13(d) of the 1934 Act and as defined in Rule 13d-5 thereunder.

(s) Intentionally Omitted.

(t) "**Initial Warrant Amount**" means the maximum number of Warrant Shares initially issuable upon a cash exercise of this Warrant on the Issuance Date (without regard to any restrictions or limitation on exercise contained herein, including pursuant to Section 1(f)).

(u) "**Lead Investor**" means Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B.

(v) "**Market Price**" means, as of any date, the lower of (i) the lowest Closing Bid Price of the Common Stock on the 10 Trading Days immediately prior to such date and (ii) the lowest Weighted Average Price of the Common Stock on the 10 Trading Days immediately prior to such date.

(w) "**Option Value**" means the value of an Option calculated using the greater of the Black-Scholes Option Pricing Model obtained from the "OV" function on Bloomberg, as a put option or a call option, determined as of (A) the Trading Day prior to the public announcement of the issuance of the applicable Option, if the issuance of such Option is publicly announced or (B) the Trading Day immediately following the issuance of the applicable Option if the issuance of such Option is not publicly announced, for pricing purposes and reflecting (i) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of the applicable Option as of the applicable date of determination, (ii) an expected volatility equal to the greater of 100% and the 100 day volatility obtained from the HVT function on Bloomberg as of (A) the Trading Day immediately following the public announcement of the applicable Option if the issuance of such Option is publicly announced or (B) the Trading Day immediately following the issuance of the applicable Option if the issuance of such Option is not publicly announced, (iii) the underlying price per share used in such calculation shall be the highest Weighted Average Price of the Common Stock during the period beginning on the Trading Day prior to the execution of definitive documentation relating to the issuance of the applicable Option and ending on (A) the Trading Day immediately following the public announcement of such issuance, if the issuance of such Option is publicly announced or (B) the Trading Day immediately following the issuance of the applicable Option if the issuance of such Option is not publicly announced, (iv) a zero cost of borrow and (v) a 360 day annualization factor.

(x) "**Options**" means any rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities.

(y) "**Other Warrants**" means the Series A Warrants issued by the Company on the Issuance Date pursuant to the Underwriting Agreement.

(z) "**Parent Entity**" of a Person means an entity that, directly or indirectly, controls the applicable Person, including such entity whose common stock or common shares or equivalent equity security is quoted or listed on an Eligible Market (or, if so elected by the Required Holders, any other market, exchange or quotation system), or, if there is more than one such Person or such entity, the Person or such entity designated by the Required Holders or in the absence of such designation, such Person or entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

(aa) "**Person**" means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.

(bb) "**Principal Market**" means The NASDAQ Capital Market.

(cc) "**Required Holders**" means the holders of the Registered Warrants representing at least a majority of the shares of Common Stock underlying the Registered Warrants then outstanding and shall include the Lead Investor so long as the Lead Investor or any of its Affiliates holds any Registered Warrants.

(dd) "**Standard Settlement Period**" means the standard settlement period, expressed in a number of Trading Days, on the Company's primary Eligible Market with respect to the Common Stock as in effect on the date of delivery of the applicable Exercise Notice.

(ee) "**Subject Entity**" means any Person, Persons or Group or any Affiliate or associate of any such Person, Persons or Group.

(ff) "**Successor Entity**" means one or more Person or Persons (or, if so elected by the Holder, the Company or Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or one or more Person or Persons (or, if so elected by the Holder, the Company or the Parent Entity) with which such Fundamental Transaction shall have been entered into.

(gg) "**Trading Day**" means any day on which the Common Stock is traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the Common Stock is then traded.

(hh) "**Warrant Exercise Percentage**" means, with respect to any exercise of this Warrant, the quotient determined by dividing (x) the number of Warrants being exercised (without any restrictions or limitation on exercise contained herein, including pursuant to Section 1(f)) and (y) the Initial Warrant Amount.

(ii) " **Weighted Average Price** " means, for any security as of any date, the dollar volume-weighted average price for such security on the Principal Market during the period beginning at 9:30:01 a.m., New York time (or such other time as the Principal Market publicly announces is the official open of trading), and ending at 4:00:00 p.m., New York time (or such other time as the Principal Market publicly announces is the official close of trading), as reported by Bloomberg through its "Volume at Price" function or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30:01 a.m., New York time (or such other time as such market publicly announces is the official open of trading), and ending at 4:00:00 p.m., New York time (or such other time as such market publicly announces is the official close of trading), as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for such security as reported in the OTC Link or "pink sheets" by OTC Markets Group Inc. (formerly Pink OTC Markets Inc.). If the Weighted Average Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Weighted Average Price of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12 with the term "Weighted Average Price" being substituted for the term "Exercise Price." All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

[Signature Page Follows]

IN WITNESS WHEREOF, the Company has caused this Warrant to Purchase Common Stock to be duly executed as of the Issuance Date set out above.

REPROS THERAPEUTICS, INC.

By: /s/ Larry M. Dillaha, M.D.

Name: Larry M. Dillaha, M.D.

Title: President and Chief Executive Officer

EXERCISE NOTICE

TO BE EXECUTED BY THE REGISTERED HOLDER TO EXERCISE THIS
WARRANT TO PURCHASE COMMON STOCK

REPROS THERAPEUTICS, INC.

The undersigned holder hereby exercises the right to purchase _____ shares of Common Stock (" **Warrant Shares** ") of Repros Therapeutics, Inc., a Delaware corporation (t he " **Company** "), evidenced by the attached Warrant to Purchase Common Stock (the " **Warrant** "). Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Warrant.

1. Form of Exercise Price. The Holder intends that payment of the Exercise Price shall be made as: _____ a " Cash Exercise " with respect to _____ Warrant Shares; and/or _____ a " Cashless Exercise " with respect to _____ Warrant Shares, resulting in a delivery obligation by the Company to the Holder of _____ shares of Common Stock representing the applicable Net Number or Alternate Net Number.

2. Payment of Exercise Price. In the event that the holder has elected a Cash Exercise with respect to some or all of the Warrant Shares to be issued pursuant hereto, the holder shall pay the Aggregate Exercise Price in the sum of \$ _____ to the Company in accordance with the terms of the Warrant.

3. Delivery of Warrant Shares. The Company shall deliver to Holder, or its designee or agent as specified below, _____ shares of Common Stock in accordance with the terms of the Warrant. Delivery shall be made to Holder, or for its benefit, as follows:

Check here if requesting delivery as a certificate to the following name and to the following address:

Issue to: _____

Check here if requesting delivery by Deposit/Withdrawal at Custodian as follows:

DTC Participant: _____

DTC Number: _____

Account Number: _____

Date: _____,

Name of Registered Holder

By: _____

Name:

Title:

Tax ID: _____

Facsimile: _____

E-mail Address: _____

ACKNOWLEDGMENT

The Company hereby acknowledges this Exercise Notice and hereby directs Computershare Trust Company, N.A. to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated May 23, 2017 from the Company and acknowledged and agreed to by directs Computershare Trust Company, N.A.

REPROS THERAPEUTICS, INC.

By: _____
Name:
Title:

Schedule to Exhibit 10.3

Additional Series B Warrants (other than as set forth below and for the warrant number, these additional Series B Warrants are identical to the Series B Warrant to which this schedule is attached).

Name of Holder	Number of Shares of Common Stock
Hudson Bay Master Fund Ltd	1,205,834
KBB Asset Management	17,500
Iroquois Master Fund, Ltd.	15,000
Iroquois Capital Investment Group, LLC	15,000
Warberg Warrant Fund V	24,333
Greenfield Investment Services, LLC.	7,500
Sterne Agee & Leach, Inc. C/F John L Sommer IRA	1,000
Kevin P McCarthy	1,000
Sterne Agee & Leach, Inc. C/F Randy Payne IRA	1,000
Robert Dunn & Judy Dunn JTWROS	1,000

REPROS THERAPEUTICS, INC.

PRE-FUNDED WARRANT TO PURCHASE COMMON STOCK

Warrant No.: C-1

Number of shares of Common Stock: 1,122,937

Date of Issuance: May 23, 2017 (" **Issuance Date** ")

Repros Therapeutics, Inc., a Delaware corporation (the "**Company**"), hereby certifies that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B, the registered holder hereof or its permitted assigns (the "**Holder**"), is entitled, subject to the terms set forth below, to purchase from the Company, at the Exercise Price (as defined below) then in effect, at any time or times on or after May 23, 2017 (the "**Initial Exercisability Date**"), but not after 11:59 p.m., New York time, on the Expiration Date, (as defined below), One Million One Hundred Twenty-Two Thousand Nine Hundred Thirty-Seven (1,122,937) fully paid nonassessable shares of Common Stock, subject to adjustment as provided herein (the "**Warrant Shares**"). Except as otherwise defined herein, capitalized terms in this Warrant to Purchase Common Stock (including any Warrants to Purchase Common Stock issued in exchange, transfer or replacement hereof, this "**Warrant**"), shall have the meanings set forth in Section 18. This Warrant is one of the Warrants to Purchase Common Stock (the "**Registered Warrants**") issued pursuant to (i) Section 1 of that certain Underwriting Agreement, dated as of May 18, 2017 (the "**Subscription Date**"), by and among the Company and the underwriter(s) referred to therein, as amended from time to time (the "**Underwriting Agreement**") and (ii) the Company's Registration Statement on Form S-3 (File number 333-197253) (the "**Registration Statement**").

Notwithstanding anything herein to the contrary, the Aggregate Exercise Price (as defined below) of this Warrant, except for a nominal exercise price of \$0.001 per Warrant Share, was pre-funded to the Company on or prior to the initial Issuance Date and, consequently, no additional consideration (other than the nominal exercise price of \$0.001 per Warrant Share) shall be required to be paid by the Holder to any Person to effect any exercise of this Warrant.

1. **EXERCISE OF WARRANT.** (a) Mechanics of Exercise. Subject to the terms and conditions hereof (including, without limitation, the limitations set forth in Section 1(f)), this Warrant may be exercised by the Holder at any time or times on or after the Issuance Date, in whole or in part, by (i) delivery of a written notice, in the form attached hereto as Exhibit A (the "**Exercise Notice**"), of the Holder's election to exercise this Warrant and (ii) (A) payment to the Company of an amount equal to the applicable Exercise Price multiplied by the number of Warrant Shares as to which this Warrant is being exercised (the "**Aggregate Exercise Price**") in cash by wire transfer of immediately available funds or (B) if the provisions of Section 1(d) are applicable, by notifying the Company that this Warrant is being exercised pursuant to a Cashless Exercise (as defined in Section 1(d)). The Holder shall not be required to deliver the original Warrant in order to effect an exercise hereunder. Execution and delivery of the Exercise Notice with respect to less than all of the Warrant Shares shall have the same effect as cancellation of the original Warrant and issuance of a new Warrant evidencing the right to purchase the remaining number of Warrant Shares. Within one (1) Trading Day following the date on which the Company has received the Exercise Notice, the Company shall transmit by facsimile or electronic mail an acknowledgment of confirmation of receipt of the Exercise Notice to the Holder and the Company's transfer agent (the "**Transfer Agent**"). On or before the earlier of (i) the third (3rd) Trading Day following the date on which the Company has received the Exercise Notice and (ii) the number of Trading Days comprising the Standard Settlement Period following the date of exercise, so long as the Holder delivers the Aggregate Exercise Price (or notice of a Cashless Exercise) on or prior to the second (2nd) Trading Day following the date on which the Company has received the Exercise Notice (the "**Share Delivery Date**"), the Company shall (X) provide that the Transfer Agent is participating in The Depository Trust Company ("**DTC**") Fast Automated Securities Transfer Program, credit such aggregate number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the Holder's or its designee's balance account with DTC through its Deposit / Withdrawal At Custodian system, or (Y) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, issue and dispatch by overnight courier to the address as specified in the Exercise Notice, a certificate, registered in the Company's share register in the name of the Holder or its designee, for the number of Warrant Shares to which the Holder is entitled pursuant to such exercise. The Company shall be responsible for all fees and expenses of the Transfer Agent and all fees and expenses with respect to the issuance of Warrant Shares via DTC, if any. Upon delivery of the Exercise Notice, assuming that the payment of the aggregate Exercise Price (other than in the case of a Cashless Exercise) is received on or prior to the Share Delivery Date, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date such Warrant Shares are credited to the Holder's DTC account or the date of delivery of the certificates evidencing such Warrant Shares, as the case may be. If this Warrant is submitted in connection with any exercise pursuant to this Section 1(a) and the number of Warrant Shares represented by this Warrant submitted for exercise is greater than the number of Warrant Shares being acquired upon an exercise, then the Company shall as soon as practicable and in no event later than three (3) Trading Days after any exercise and at its own expense, issue a new Warrant (in accordance with Section 7(d)) representing the right to purchase the number of Warrant Shares issuable immediately prior to such exercise under this Warrant, less the number of Warrant Shares with respect to which this Warrant is exercised. No fractional Warrant Shares are to be issued upon the exercise of this Warrant, but rather the number of Warrant Shares to be issued shall be rounded up to the nearest whole number. The Company shall pay any and all taxes which may be payable with respect to the issuance and delivery of Warrant Shares upon exercise of this Warrant. The Company's obligations to issue and deliver Warrant Shares in accordance with the terms and subject to the conditions hereof are absolute and unconditional, irrespective of any action or inaction by the Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination.

(b) Exercise Price. For purposes of this Warrant, " **Exercise Price** " means \$0.60 per share, subject to adjustment as provided herein.

(c) Company's Failure to Timely Deliver Securities. If the Company shall fail for any reason or for no reason to issue to the Holder on or prior to the Share Delivery Date either (I) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, a certificate for the number of shares of Common Stock to which the Holder is entitled and register such shares of Common Stock on the Company's share register or if the Transfer Agent is participating in the DTC Fast Automated Securities Transfer Program, to credit the Holder's balance account with DTC, for such number of shares of Common Stock to which the Holder is entitled upon the Holder's exercise of this Warrant or (II) if the Registration Statement on Form S-3 (File number 333-197253), or other applicable effective registration statement under the 1933 Act (the " **Registration Statement** ") covering the issuance of the Warrant Shares that are the subject of the Exercise Notice (the " **Unavailable Warrant Shares** ") is not available for the issuance or resale of such Unavailable Warrant Shares and the Company fails to promptly (x) so notify the Holder and (y) deliver the Warrant Shares electronically without any restrictive legend by crediting such aggregate number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the Holder's or its designee's balance account with DTC through its Deposit / Withdrawal At Custodian system (the event described in the immediately foregoing clause (II) is hereinafter referred as a " **Notice Failure** " and together with the event described in clause (I) above, an " **Exercise Failure** "), and if on or after such Trading Day the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of shares of Common Stock issuable upon such exercise that the Holder anticipated receiving from the Company (a " **Buy-In** "), then the Company shall, within three (3) Trading Days after the Holder's request and in the Holder's discretion, either (i) pay cash to the Holder in an amount equal to the Holder's total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (the " **Buy-In Price** "), at which point the Company's obligation to deliver such certificate (and to issue such shares of Common Stock) or credit the Holder's balance account with DTC for such shares of Common Stock shall terminate, or (ii) promptly honor its obligation to deliver to the Holder a certificate or certificates representing such shares of Common Stock or credit the Holder's balance account with DTC, as applicable, and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock, times (B) any trading price of the Common Stock selected by the Holder in writing as in effect at any time during the period beginning on the applicable date of delivery of an Exercise Notice and ending on the applicable Share Delivery Date. Nothing shall limit the Holder's right to pursue any other remedies available to it hereunder, at law or in equity, including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock (or to electronically deliver such shares of Common Stock) upon the exercise of this Warrant as required pursuant to the terms hereof.

(d) Cashless Exercise. Notwithstanding anything contained herein to the contrary, if a registration statement covering the issuance or resale of the Unavailable Warrant Shares is not available for the issuance or resale of such Unavailable Warrant Shares, the Holder may, in its sole discretion, exercise this Warrant in whole or in part and, in lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise in payment of the Aggregate Exercise Price, elect instead to receive upon such exercise the " **Net Number** " of shares of Common Stock determined according to the following formula (a " **Cashless Exercise** "):

$$\text{Net Number} = \frac{(A \times B) - (A \times C)}{B}$$

For purposes of the foregoing formula:

A= the total number of shares with respect to which this Warrant is then being exercised.

B= the last Weighted Average Price immediately preceding the time of delivery of the Exercise Notice giving rise to the applicable "cashless exercise", as set forth in the applicable Exercise Notice (to clarify, the "last Weighted Average Price" will be the last Weighted Average Price as calculated over an entire Trading Day such that, in the event that this Warrant is exercised at a time that the trading market is open, the prior Trading Day's Weighted Average Price shall be used in this calculation);

C= \$0.001 (as adjusted for stock splits, stock dividends, stock combinations, recapitalizations and similar events).

If shares of Common Stock are issued pursuant to this Section 1(d), the parties acknowledge and agree that in accordance with Section 3(a)(9) of the 1933 Act, such shares of Common Stock shall take on the registered characteristics of this Warrant, and the holding period of this Warrant may be tacked on to the holding period of such shares of Common Stock. Unless the SEC specifically prohibits the foregoing position, the Company agrees not to take any position contrary to this Section 1(d).

(e) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall promptly issue to the Holder the number of Warrant Shares that are not disputed and resolve such dispute in accordance with Section 12.

(f) Limitations on Exercises.

(i) Beneficial Ownership. Notwithstanding anything to the contrary contained herein, the Company shall not effect the exercise of any portion of this Warrant, and the Holder shall not have the right to exercise any portion of this Warrant, pursuant to the terms and conditions of this Warrant and any such exercise shall be null and void and treated as if never made, to the extent that after giving effect to such exercise, the Holder together with the other Attribution Parties collectively would beneficially own in excess of 4.99% (the "**Maximum Percentage**") of the number of shares of Common Stock outstanding immediately after giving effect to such exercise. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by the Holder and the other Attribution Parties shall include the number of shares of Common Stock held by the Holder and all other Attribution Parties plus the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which the determination of such sentence is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (A) exercise of the remaining, unexercised portion of this Warrant beneficially owned by the Holder or any of the other Attribution Parties and (B) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company (including, without limitation, any convertible notes or convertible preferred stock or warrants, including the other Registered Warrants or Other Warrants) beneficially owned by the Holder or any other Attribution Party subject to a limitation on conversion or exercise analogous to the limitation contained in this Section 1(f)(i). For purposes of this Section 1(f)(i), beneficial ownership shall be calculated in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended (the "**1934 Act**"). For purposes of this Warrant, in determining the number of outstanding shares of Common Stock the Holder may acquire upon the exercise of this Warrant without exceeding the Maximum Percentage, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company's most recent Annual Report on Form 10-K, Quarterly Report on Form 10-Q, Current Report on Form 8-K or other public filing with the Securities and Exchange Commission (the "**SEC**"), as the case may be, (y) a more recent public announcement by the Company or (3) any other written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding (the "**Reported Outstanding Share Number**"). The Company shall have no obligation to verify or confirm the accordance of such determination. If the Company receives an Exercise Notice from the Holder at a time when the actual number of outstanding shares of Common Stock is less than the Reported Outstanding Share Number, the Company shall (i) notify the Holder in writing of the number of shares of Common Stock then outstanding and, to the extent that such Exercise Notice would otherwise cause the Holder's beneficial ownership, as determined pursuant to this Section 1(f)(i), to exceed the Maximum Percentage, the Holder must notify the Company of a reduced number of Warrant Shares to be purchased pursuant to such Exercise Notice (the number of shares by which such purchase is reduced, the "**Reduction Shares**") and (ii) as soon as reasonably practicable, the Company shall return to the Holder any exercise price paid by the Holder for the Reduction Shares. For any reason at any time, upon the written or oral request of the Holder, the Company shall within one (1) Business Day confirm orally and in writing or by electronic mail to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder and any other Attribution Party since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of shares of Common Stock to the Holder upon exercise of this Warrant results in the Holder and the other Attribution Parties being deemed to beneficially own, in the aggregate, more than the Maximum Percentage of the number of outstanding shares of Common Stock (as determined under Section 13(d) of the 1934 Act), the number of shares so issued by which the Holder's and the other Attribution Parties' aggregate beneficial ownership exceeds the Maximum Percentage (the "**Excess Shares**") shall be deemed null and void and shall be cancelled ab initio, and the Holder shall not have the power to vote or to transfer the Excess Shares. As soon as reasonably practicable after the issuance of the Excess Shares has been deemed null and void, the Company shall return to the Holder the exercise price paid by the Holder for the Excess Shares. Upon delivery of a written notice to the Company, the Holder may from time to time increase or decrease the Maximum Percentage to any other percentage not in excess of 9.99% as specified in such notice; provided that (i) any such increase in the Maximum Percentage will not be effective until the sixty-first (61st) day after such notice is delivered to the Company and (ii) any such increase or decrease will apply only to the Holder and the other Attribution Parties and not to any other holder of Registered Warrants that is not an Attribution Party of the Holder. For purposes of clarity, the shares of Common Stock issuable pursuant to the terms of this Warrant in excess of the Maximum Percentage shall not be deemed to be beneficially owned by the Holder for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the 1934 Act. No prior inability to exercise this Warrant pursuant to this paragraph shall have any effect on the applicability of the provisions of this paragraph with respect to any subsequent determination of exercisability. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 1(f)(i) to the extent necessary to correct this paragraph or any portion of this paragraph which may be defective or inconsistent with the intended beneficial ownership limitation contained in this Section 1(f)(i) or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitation contained in this paragraph may not be waived and shall apply to a

successor holder of this Warrant.

(ii) Intentionally Omitted.

(g) Insufficient Authorized Shares. If at any time while this Warrant remains outstanding the Company does not have a sufficient number of authorized and unreserved shares of Common Stock to satisfy its obligation to reserve for issuance upon exercise of this Warrant at least a number of shares of Common Stock equal to 100% of the number of shares of Common Stock as shall from time to time be necessary to effect the exercise of all of this Warrant then outstanding (the "**Required Reserve Amount**" and the failure to have such sufficient number of authorized and unreserved shares of Common Stock, an "**Authorized Share Failure**"), then the Company shall immediately take all action necessary to increase the Company's authorized shares of Common Stock to an amount sufficient to allow the Company to reserve the Required Reserve Amount for this Warrant then outstanding. Without limiting the generality of the foregoing sentence, as soon as practicable after the date of the occurrence of an Authorized Share Failure, but in no event later than sixty (60) days after the occurrence of such Authorized Share Failure, the Company shall hold a meeting of its stockholders for the approval of an increase in the number of authorized shares of Common Stock. In connection with such meeting, the Company shall provide each stockholder with a proxy statement and shall use its best efforts to solicit its stockholders' approval of such increase in authorized shares of Common Stock and to cause its board of directors to recommend to the stockholders that they approve such proposal. Notwithstanding the foregoing, if any such time of an Authorized Share Failure, the Company is able to obtain the written consent of a majority of the shares of its issued and outstanding shares of Common Stock to approve the increase in the number of authorized shares of Common Stock, the Company may satisfy this obligation by obtaining such consent and submitting for filing with the SEC an Information Statement on Schedule 14C. In the event that upon any exercise of this Warrant, the Company does not have sufficient authorized shares to deliver in satisfaction of such exercise, then unless the Holder elects to void such attempted exercise, the Holder may require the Company to pay to the Holder within three (3) Trading Days of the applicable exercise or attempted exercise, cash in an amount equal to the product of (i) the number of Warrant Shares that the Company is unable to deliver pursuant to this Section 1(g), and (ii) the difference determined by subtracting (x) the Exercise Price then in effect at the time of such exercise or attempted exercise, and (y) the last Weighted Average Price immediately preceding the time of the exercise or attempted exercise (to clarify, the "last Weighted Average Price" will be the last Weighted Average Price as calculated over an entire Trading Day such that, in the event that this Warrant is exercised at a time that the trading market is open, the prior Trading Day's Weighted Average Price shall be used in this calculation.

2. ADJUSTMENT OF EXERCISE PRICE AND NUMBER OF WARRANT SHARES. The Exercise Price and the number of Warrant Shares shall be adjusted from time to time as follows:

(a) Adjustment Upon Subdivision or Combination of Common Stock. If the Company at any time on or after the Subscription Date subdivides (by any stock split, stock dividend, recapitalization or otherwise) one or more classes of its outstanding shares of Common Stock into a greater number of shares, the Exercise Price in effect immediately prior to such subdivision will be proportionately reduced and the number of Warrant Shares will be proportionately increased. If the Company at any time on or after the Subscription Date combines (by combination, reverse stock split or otherwise) one or more classes of its outstanding shares of Common Stock into a smaller number of shares, the Exercise Price in effect immediately prior to such combination will be proportionately increased and the number of Warrant Shares will be proportionately decreased. Any adjustment under this Section 2(d) shall become effective at the close of business on the date the subdivision or combination becomes effective.

3. RIGHTS UPON DISTRIBUTION OF ASSETS. From the Subscription Date through and including the Expiration Date if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property, options, evidence of indebtedness or any other assets by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a " **Distribution** "), at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Maximum Percentage) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided , however , that to the extent that the Holder's right to participate in any such Distribution would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Distribution to such extent (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Distribution (and beneficial ownership) to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time or times as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such Distribution (and any Distributions declared or made on such initial Distribution or on any subsequent Distribution held similarly in abeyance) to the same extent as if there had been no such limitation).

4. PURCHASE RIGHTS; FUNDAMENTAL TRANSACTIONS.

(a) Purchase Rights. From the Subscription Date and through and including the Expiration Date, in addition to any adjustments pursuant to Section 2 above, if at any time the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of Common Stock (the " **Purchase Rights** "), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Maximum Percentage) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided , however , that to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Purchase Right to such extent (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Purchase Right (and beneficial ownership) to such extent) and such Purchase Right to such extent shall be held in abeyance for the benefit of the Holder until such time or times as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase Right or on any subsequent Purchase Right held similarly in abeyance) to the same extent as if there had been no such limitation).

(b) **Fundamental Transactions**. From the Subscription Date and through and including the Expiration Date, the Company shall not enter into or be party to a Fundamental Transaction unless the Successor Entity assumes in writing all of the obligations of the Company under this Warrant and the other Transaction Documents in accordance with the provisions of this Section 4(b) pursuant to written agreements in form and substance reasonably satisfactory to the Required Holders and approved by the Required Holders prior to such Fundamental Transaction, including agreements, if so requested by the Holder, to deliver to each holder of the Registered Warrants in exchange for such Registered Warrants a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant, including, without limitation, an adjusted exercise price equal to the value for the shares of Common Stock reflected by the terms of such Fundamental Transaction, and exercisable for a corresponding number of shares of capital stock equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and reasonably satisfactory to the Required Holders, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such adjustments to the number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the occurrence or consummation of such Fundamental Transaction). Any security issuable or potentially issuable to the Holder pursuant to the terms of this Warrant on the consummation of a Fundamental Transaction shall be registered and freely tradable by the Holder without any restriction or limitation or the requirement to be subject to any holding period pursuant to any applicable securities laws. Upon the occurrence or consummation of any Fundamental Transaction, and it shall be a required condition to the occurrence or consummation of any Fundamental Transaction that, the Company and the Successor Entity or Successor Entities, jointly and severally, shall succeed to, and the Company shall cause any Successor Entity or Successor Entities to jointly and severally succeed to, and be added to the term "Company" under this Warrant (so that from and after the date of such Fundamental Transaction, each and every provision of this Warrant referring to the "Company" shall refer instead to each of the Company and the Successor Entity or Successor Entities, jointly and severally), and the Company and the Successor Entity or Successor Entities, jointly and severally, may exercise every right and power of the Company prior thereto and shall assume all of the obligations of the Company prior thereto under this Warrant with the same effect as if the Company and such Successor Entity or Successor Entities, jointly and severally, had been named as the Company in this Warrant, and, solely at the request of the Holder, if the Successor Entity and/or Successor Entities is a publicly traded corporation whose common stock is quoted on or listed for trading on an Eligible Market, shall deliver (in addition to and without limiting any right under this Warrant) to the Holder in exchange for this Warrant a security of the Successor Entity and/or Successor Entities evidenced by a written instrument substantially similar in form and substance to this Warrant and exercisable for a corresponding number of shares of capital stock of the Successor Entity and/or Successor Entities (the "**Successor Capital Stock**") equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction (such corresponding number of shares of Successor Capital Stock to be delivered to the Holder shall be equal to the greater of (A) the quotient of (i) the aggregate dollar value of all consideration (including cash consideration and any consideration other than cash ("**Non-Cash Consideration**"), in such Fundamental Transaction, as such values are set forth in any definitive agreement for the Fundamental Transaction that has been executed at the time of the first public announcement of the Fundamental Transaction or, if no such value is determinable from such definitive agreement, as determined in accordance with Section 12 with the term "Non-Cash Consideration" being substituted for the term "Exercise Price") that the Holder would have been entitled to receive upon the happening of such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction, had this Warrant been exercised immediately prior to such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction (without regard to any limitations on the exercise of this Warrant) (the "**Aggregate Consideration**") divided by (ii) the per share Closing Sale Price of such Successor Capital Stock on the Trading Day immediately prior to the consummation or occurrence of the Fundamental Transaction and (B) the product of (i) the Aggregate Consideration and (ii) the highest exchange ratio pursuant to which any stockholder of the Company may exchange shares of Common Stock for Successor Capital Stock) (provided, however, to the extent that the Holder's right to receive any such shares of publicly traded common stock (or their equivalent) of the Successor Entity would result in the Holder and its other Attribution Parties exceeding the Maximum Percentage, if applicable, then the Holder shall not be entitled to receive such shares to such extent (and shall not be entitled to beneficial ownership of such shares of publicly traded common stock (or their equivalent) of the Successor Entity as a result of such consideration to such extent) and the portion of such shares shall be held in abeyance for the Holder until such time or times, as its right thereto would not result in the Holder and its other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be delivered such shares to the extent as if there had been no such limitation), and such security shall be reasonably satisfactory to the Holder, and with an identical exercise price to the Exercise Price hereunder (such adjustments to the number of shares of capital stock and such exercise price being for the purpose of protecting after the consummation or occurrence of such Fundamental Transaction the economic value of this Warrant that was in effect immediately prior to the consummation or occurrence of such Fundamental Transaction, as elected by the Holder solely at its option). Upon occurrence or consummation of the Fundamental Transaction, and it shall be a required condition to the occurrence or consummation of such Fundamental Transaction that, the Company and the Successor Entity or Successor Entities shall deliver to the Holder confirmation that there shall be issued upon exercise of this Warrant at any time after the occurrence or consummation of the Fundamental Transaction, as elected by the Holder solely at its option, shares of Common Stock, Successor Capital Stock or, in lieu of the shares of Common Stock or Successor Capital Stock (or other securities, cash, assets or other property purchasable upon the exercise of this Warrant prior to such Fundamental Transaction), such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights), which for purposes of clarification may continue to be shares of Common Stock, if any, that the Holder would have been entitled to receive upon the happening of such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction, had this Warrant been exercised immediately prior to such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction (without regard to any limitations on the exercise of this Warrant), as adjusted in accordance with the provisions of this Warrant. In addition to and not in substitution for any other rights hereunder, prior to the occurrence or consummation of any Fundamental Transaction pursuant to which holders of shares of Common Stock are entitled to receive securities, cash, assets or other property with respect to or in exchange for shares of Common Stock (a "**Corporate Event**"), the Company shall make appropriate provision to insure that, and any applicable Successor Entity or Successor Entities shall ensure that, and it shall be a required condition to the occurrence or consummation of such Corporate Event that, the Holder will thereafter have the right to receive upon exercise of this Warrant at any time after the occurrence or consummation of the Corporate Event, shares of Common Stock or Successor Capital Stock or, if so elected by the Holder, in lieu of the shares of Common Stock (or other securities, cash, assets or other property) purchasable upon the exercise of this Warrant prior to such Corporate Event (but not in lieu of such items still issuable under Sections 3 and 4(a), which shall continue to be receivable on the shares of Common Stock or on the such shares of stock, securities, cash, assets or any other property otherwise receivable with respect to or in exchange for shares of Common Stock), such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights and any shares of Common Stock) which the Holder would have been entitled to receive upon the occurrence or consummation of such Corporate Event or the record, eligibility or other determination date for the event resulting in such Corporate Event, had this Warrant been exercised immediately prior to such Corporate Event or the record, eligibility or other determination date for the event resulting in such Corporate Event (without regard to any limitations on exercise of this Warrant). Provision made pursuant to the preceding sentence shall be in a form and substance reasonably satisfactory to the Holder. The provisions of this Section 4(b) shall apply

similarly and equally to successive Fundamental Transactions and Corporate Events.

(c) Notwithstanding the foregoing, in the event of Fundamental Transaction, at the request of the Holder delivered at any time commencing on the earliest to occur of (x) the public disclosure of any Fundamental Transaction, (y) the consummation of any Fundamental Transaction and (z) the Holder first becoming aware of any Fundamental Transaction through the date that is ninety (90) days after the public disclosure of the consummation of such Fundamental Transaction by the Company pursuant to a Current Report on Form 8-K filed with the SEC, the Company or the Successor Entity (as the case may be) shall purchase this Warrant from the Holder on the date of such request by paying to the Holder cash in an amount equal to the Black Scholes Value. Payment of such amounts shall be made by the Company (or at the Company's direction) to the Holder on or prior to the later of (x) the second (2nd) Trading Day after the date of such request and (y) the date of consummation of such Fundamental Transaction.

5. NONCIRCUMVENTION. The Company hereby covenants and agrees that the Company will not, by amendment of its Certificate of Incorporation or Bylaws, or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, and will at all times in good faith carry out all of the provisions of this Warrant and take all action as may be required to protect the rights of the Holder. Without limiting the generality of the foregoing, the Company (i) shall not increase the par value of any shares of Common Stock receivable upon the exercise of this Warrant above the Exercise Price then in effect, (ii) shall take all such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable shares of Common Stock upon the exercise of this Warrant, and (iii) shall, so long as any of the Registered Warrants are outstanding, take all action necessary to reserve and keep available out of its authorized and unissued shares of Common Stock, solely for the purpose of effecting the exercise of the Registered Warrants, 100% of the number of shares of Common Stock as shall from time to time be necessary to effect the exercise of the Registered Warrants then outstanding (without regard to any limitations on exercise).

6. WARRANT HOLDER NOT DEEMED A STOCKHOLDER. Except as otherwise specifically provided herein, the Holder, solely in such Person's capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in such Person's capacity as the Holder of this Warrant, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which such Person is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a stockholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company. Notwithstanding this Section 6, if not filed with the SEC, the Company shall provide the Holder with copies of the same notices and other information given to the stockholders of the Company generally, contemporaneously with the giving thereof to the stockholders.

7. REISSUANCE OF WARRANTS.

(a) Transfer of Warrant. Subject to the terms hereof, if this Warrant is to be transferred, the Holder shall surrender this Warrant to the Company, whereupon the Company will forthwith issue and deliver upon the order of the Holder a new Warrant (in accordance with Section 7(d)), registered as the Holder may request, representing the right to purchase the number of Warrant Shares being transferred by the Holder and, if less than the total number of Warrant Shares then underlying this Warrant is being transferred, a new Warrant (in accordance with Section 7(d)) to the Holder representing the right to purchase the number of Warrant Shares not being transferred.

(b) Lost, Stolen or Mutilated Warrant. Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and, in the case of loss, theft or destruction, of any indemnification undertaking by the Holder to the Company in customary form and, in the case of mutilation, upon surrender and cancellation of this Warrant, the Company shall execute and deliver to the Holder a new Warrant (in accordance with Section 7(d)) representing the right to purchase the Warrant Shares then underlying this Warrant.

(c) Exchangeable for Multiple Warrants. This Warrant is exchangeable, upon the surrender hereof by the Holder at the principal office of the Company, for a new Warrant or Warrants (in accordance with Section 7(d)) representing in the aggregate the right to purchase the number of Warrant Shares then underlying this Warrant, and each such new Warrant will represent the right to purchase such portion of such Warrant Shares as is designated by the Holder at the time of such surrender; provided, however, that no Registered Warrants for fractional Warrant Shares shall be given.

(d) Issuance of New Warrants. Whenever the Company is required to issue a new Warrant pursuant to the terms of this Warrant, such new Warrant (i) shall be of like tenor with this Warrant, (ii) shall represent, as indicated on the face of such new Warrant, the right to purchase the Warrant Shares then underlying this Warrant (or in the case of a new Warrant being issued pursuant to Section 7(a) or Section 7(c), the Warrant Shares designated by the Holder which, when added to the number of shares of Common Stock underlying the other new Warrants issued in connection with such issuance, does not exceed the number of Warrant Shares then underlying this Warrant), (iii) shall have an issuance date, as indicated on the face of such new Warrant which is the same as the Issuance Date, and (iv) shall have the same rights and conditions as this Warrant.

8. NOTICES. Whenever notice is required to be given under this Warrant, unless otherwise provided herein, such notice shall be given at its last address as it shall appear upon the warrant register of the Company. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Warrant, including in reasonable detail a description of such action and the reason therefor. Without limiting the generality of the foregoing, the Company will give written notice to the Holder (i) immediately upon any adjustment of the Exercise Price, setting forth in reasonable detail, and certifying, the calculation of such adjustment and (ii) at least ten (10) days prior to the date on which the Company closes its books or takes a record (A) with respect to any dividend or distribution upon the shares of Common Stock, (B) with respect to any grants, issuances or sales of any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property to holders of shares of Common Stock or (C) for determining rights to vote with respect to any Fundamental Transaction, dissolution or liquidation; provided in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to the Holder.

9. AMENDMENT AND WAIVER. Except as otherwise provided herein, the provisions of this Warrant may be amended or waived and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the holders of a majority of the Registered Warrants and, so long as the Lead Investor holds any Registered Warrants, the Lead Investor .

10. GOVERNING LAW; JURISDICTION; JURY TRIAL. This Warrant shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Warrant shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. The Company hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to the Company at its principal executive office and agrees that such service shall constitute good and sufficient service of process and notice thereof. The Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed or operate to preclude the Holder from bringing suit or taking other legal action against the Company in any other jurisdiction to collect on the Company's obligations to the Holder, to realize on any collateral or any other security for such obligations, or to enforce a judgment or other court ruling in favor of the Holder. **THE COMPANY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS WARRANT OR ANY TRANSACTION CONTEMPLATED HEREBY.**

11. CONSTRUCTION; HEADINGS. This Warrant shall be deemed to be jointly drafted by the Company and all the Buyers and shall not be construed against any Person as the drafter hereof. The headings of this Warrant are for convenience of reference and shall not form part of, or affect the interpretation of, this Warrant.

12. DISPUTE RESOLUTION. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall submit the disputed determinations or arithmetic calculations via facsimile or electronic mail within two (2) Business Days of receipt of the Exercise Notice giving rise to such dispute, as the case may be, to the Holder. If the Holder and the Company are unable to agree upon such determination or calculation of the Exercise Price or the Warrant Shares within three (3) Business Days of such disputed determination or arithmetic calculation being submitted to the Holder, then the Company shall, within two (2) Business Days submit via facsimile or electronic mail (a) the disputed determination of the Exercise Price to an independent, reputable investment bank selected by the Company and reasonably acceptable to the Holder or (b) the disputed arithmetic calculation of the Warrant Shares to the Company's independent, outside accountant. The Company shall cause at its expense the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Holder of the results no later than ten (10) Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

13. REMEDIES, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF. The remedies provided in this Warrant shall be cumulative and in addition to all other remedies available under this Warrant and the other Transaction Documents, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Holder to pursue actual damages for any failure by the Company to comply with the terms of this Warrant. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Holder and that the remedy at law for any such breach may be inadequate. The Company therefore agrees that, in the event of any such breach or threatened breach, the holder of this Warrant shall be entitled, in addition to all other available remedies, to an injunction restraining any breach, without the necessity of showing economic loss and without any bond or other security being required.

14. TRANSFER. This Warrant and the Warrant Shares may be offered for sale, sold, transferred, pledged or assigned without the consent of the Company.

15. SEVERABILITY. If any provision of this Warrant is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Warrant so long as this Warrant as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

16. DISCLOSURE. Upon receipt or delivery by the Company of any notice in accordance with the terms of this Warrant, unless the Company has in good faith determined that the matters relating to such notice do not constitute material, nonpublic information relating to the Company or its Subsidiaries (as defined in the Securities Purchase Agreement), the Company shall within one (1) Business Day after any such receipt or delivery publicly disclose such material, nonpublic information on a Current Report on Form 8-K or otherwise. In the event that the Company believes that a notice contains material, nonpublic information relating to the Company or its Subsidiaries, the Company so shall indicate to the Holder contemporaneously with delivery of such notice, and in the absence of any such indication, the Holder shall be allowed to presume that all matters relating to such notice do not constitute material, nonpublic information relating to the Company or its Subsidiaries.

17. Intentionally Omitted

18. CERTAIN DEFINITIONS. For purposes of this Warrant, the following terms shall have the following meanings:

(a) " **1933 Act** " means the Securities Act of 1933, as amended.

(b) " **Affiliate** " means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that "control" of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

(c) " **Attribution Parties** " means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Issuance Date, directly or indirectly managed or advised by the Holder's investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Holder or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a Group together with the Holder or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company's Common Stock would or could be aggregated with the Holder's and the other Attribution Parties for purposes of Section 13(d) of the 1934 Act. For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage.

(d) "**Black Scholes Value**" means the value of this Warrant calculated using the greater of the Black-Scholes Option Pricing Model obtained from the "OV" function on Bloomberg, as a put option or a call option, determined as of the day immediately following the public announcement of the applicable Fundamental Transaction, or, if the Fundamental Transaction is not publicly announced, the date the Fundamental Transaction is consummated, for pricing purposes and reflecting (i) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of this Warrant as of such date of request, (ii) an expected volatility equal to the greater of 100% and the 100 day volatility obtained from the HVT function on Bloomberg as of the day immediately following the public announcement of the applicable Fundamental Transaction, or, if the Fundamental Transaction is not publicly announced, the date the Fundamental Transaction is consummated, (iii) the underlying price per share used in such calculation shall be the sum of the price per share being offered in cash, if any, plus the value of any non-cash consideration, if any, being offered in the Fundamental Transaction, (iv) a zero cost of borrow and (v) a 360 day annualization factor.

(e) "**Bloomberg**" means Bloomberg Financial Markets.

(f) "**Business Day**" means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(g) "**Closing Bid Price**" and "**Closing Sale Price**" means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or the last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last closing bid price or last trade price, respectively, of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last closing bid price or last trade price, respectively, of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price or last trade price, respectively, is reported for such security by Bloomberg, the average of the bid prices, or the ask prices, respectively, of any market makers for such security as reported in the OTC Link or "pink sheets" by OTC Markets Group Inc. (formerly Pink OTC Markets Inc.). If the Closing Bid Price or the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Bid Price or the Closing Sale Price, as the case may be, of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

(h) "**Common Stock**" means (i) the Company's Class A common stock, par value \$0.001 per share, and (ii) any share capital into which such Common Stock shall have been changed or any share capital resulting from a reclassification of such Common Stock.

(i) "**Convertible Securities**" means any stock or securities (other than Options) directly or indirectly convertible into or exercisable or exchangeable for shares of Common Stock, other than Excluded Securities.

(j) "**Eligible Market**" means the Principal Market, the NYSE MKT LLC, The NASDAQ Global Select Market, The NASDAQ Global Market, The New York Stock Exchange, Inc., the OTC QX market or the OTC QB market.

(k) "**Expiration Date**" means the date twenty four (24) months after the Initial Exercisability Date or, if such date falls on a day other than a Business Day or on which trading does not take place on the Principal Market (a "**Holiday**"), the next day that is not a Holiday.

(l) "**Fundamental Transaction**" means (A) that the Company shall, directly or indirectly, including through Subsidiaries, Affiliates or otherwise, in one or more related transactions, (i) consolidate or merge with or into (whether or not the Company is the surviving corporation) another Subject Entity, or (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company or any of its "significant subsidiaries" (as defined in Rule 1-02 of Regulation S-X) to one or more Subject Entities, or (iii) make, or allow one or more Subject Entities to make, or allow the Company to be subject to or have its Common Stock be subject to or party to one or more Subject Entities making, a purchase, tender or exchange offer that is accepted by the holders of at least either (x) 50% of the outstanding shares of Common Stock, (y) 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all Subject Entities making or party to, or Affiliated with any Subject Entities making or party to, such purchase, tender or exchange offer were not outstanding; or (z) such number of shares of Common Stock such that all Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such purchase, tender or exchange offer, become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding shares of Common Stock, or (iv) consummate a stock purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with one or more Subject Entities whereby all such Subject Entities, individually or in the aggregate, acquire, either (x) at least 50% of the outstanding shares of Common Stock, (y) at least 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all the Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such stock purchase agreement or other business combination were not outstanding; or (z) such number of shares of Common Stock such that the Subject Entities become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding shares of Common Stock, or (v) reorganize, recapitalize or reclassify its Common Stock, (B) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, allow any Subject Entity individually or the Subject Entities in the aggregate to be or become the "beneficial owner" (as defined in Rule 13d-3 under the 1934 Act), directly or indirectly, whether through acquisition, purchase, assignment, conveyance, tender, tender offer, exchange, reduction in outstanding Common Stock, merger, consolidation, business combination, reorganization, recapitalization, spin-off, scheme of arrangement, reorganization, recapitalization or reclassification or otherwise in any manner whatsoever, of either (x) at least 50% of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock, (y) at least 50% of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock not held by all such Subject Entities as of the Subscription Date calculated as if any shares of Common Stock held by all such Subject Entities were not outstanding, or (z) a percentage of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock or other equity securities of the Company sufficient to allow such Subject Entities to effect a statutory short form merger or other transaction requiring other stockholders of the Company to surrender their shares of Common Stock without approval of the stockholders of the Company or (C) directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, the issuance of or the entering into any other instrument or transaction structured in a manner to circumvent, or that circumvents, the intent of this definition in which case this definition shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this definition to the extent necessary to correct this definition or any portion of this definition which may be defective or inconsistent with the intended treatment of such instrument or transaction.

(m) "**Group**" means a "group" as that term is used in Section 13(d) of the 1934 Act and as defined in Rule 13d-5 thereunder.

(n) "**Lead Investor**" means Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B.

(o) "**Option Value**" means the value of an Option calculated using the greater of the Black-Scholes Option Pricing Model obtained from the "OV" function on Bloomberg, as a put option or a call option, determined as of (A) the Trading Day prior to the public announcement of the issuance of the applicable Option, if the issuance of such Option is publicly announced or (B) the Trading Day immediately following the issuance of the applicable Option if the issuance of such Option is not publicly announced, for pricing purposes and reflecting (i) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of the applicable Option as of the applicable date of determination, (ii) an expected volatility equal to the greater of 100% and the 100 day volatility obtained from the HVT function on Bloomberg as of (A) the Trading Day immediately following the public announcement of the applicable Option if the issuance of such Option is publicly announced or (B) the Trading Day immediately following the issuance of the applicable Option if the issuance of such Option is not publicly announced, (iii) the underlying price per share used in such calculation shall be the highest Weighted Average Price of the Common Stock during the period beginning on the Trading Day prior to the execution of definitive documentation relating to the issuance of the applicable Option and ending on (A) the Trading Day immediately following the public announcement of such issuance, if the issuance of such Option is publicly announced or (B) the Trading Day immediately following the issuance of the applicable Option if the issuance of such Option is not publicly announced, (iv) a zero cost of borrow and (v) a 360 day annualization factor.

(p) "**Options**" means any rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities.

(q) "**Other Warrants**" means the Pre-Funded Warrants issued by the Company on the Issuance Date pursuant to the Underwriting Agreement.

(r) "**Parent Entity**" of a Person means an entity that, directly or indirectly, controls the applicable Person, including such entity whose common stock or common shares or equivalent equity security is quoted or listed on an Eligible Market (or, if so elected by the Required Holders, any other market, exchange or quotation system), or, if there is more than one such Person or such entity, the Person or such entity designated by the Required Holders or in the absence of such designation, such Person or entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

(s) "**Person**" means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.

(t) "**Principal Market**" means The NASDAQ Capital Market.

(u) "**Required Holders**" means the holders of the Registered Warrants representing at least a majority of the shares of Common Stock underlying the Registered Warrants then outstanding and shall include the Lead Investor so long as the Lead Investor or any of its Affiliates holds any Registered Warrants.

(v) "**Standard Settlement Period**" means the standard settlement period, expressed in a number of Trading Days, on the Company's primary Eligible Market with respect to the Common Stock as in effect on the date of delivery of the applicable Exercise Notice.

(w) "**Subject Entity**" means any Person, Persons or Group or any Affiliate or associate of any such Person, Persons or Group.

(x) "**Successor Entity**" means one or more Person or Persons (or, if so elected by the Holder, the Company or Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or one or more Person or Persons (or, if so elected by the Holder, the Company or the Parent Entity) with which such Fundamental Transaction shall have been entered into.

(y) " **Trading Day** " means any day on which the Common Stock is traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the Common Stock is then traded.

(z) " **Weighted Average Price** " means, for any security as of any date, the dollar volume-weighted average price for such security on the Principal Market during the period beginning at 9:30:01 a.m., New York time (or such other time as the Principal Market publicly announces is the official open of trading), and ending at 4:00:00 p.m., New York time (or such other time as the Principal Market publicly announces is the official close of trading), as reported by Bloomberg through its "Volume at Price" function or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30:01 a.m., New York time (or such other time as such market publicly announces is the official open of trading), and ending at 4:00:00 p.m., New York time (or such other time as such market publicly announces is the official close of trading), as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for such security as reported in the OTC Link or "pink sheets" by OTC Markets Group Inc. (formerly Pink OTC Markets Inc.). If the Weighted Average Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Weighted Average Price of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12 with the term "Weighted Average Price" being substituted for the term "Exercise Price." All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

[Signature Page Follows]

IN WITNESS WHEREOF, the Company has caused this Warrant to Purchase Common Stock to be duly executed as of the Issuance Date set out above.

REPROS THERAPEUTICS, INC.

By: /s/ Larry M. Dillaha, M.D.

Name: Larry M. Dillaha, M.D.

Title: President and Chief Executive Officer

EXERCISE NOTICE

TO BE EXECUTED BY THE REGISTERED HOLDER TO EXERCISE THIS
WARRANT TO PURCHASE COMMON STOCK

REPROS THERAPEUTICS, INC.

The undersigned holder hereby exercises the right to purchase _____ shares of Common Stock (" **Warrant Shares** ") of Repros Therapeutics, Inc., a Delaware corporation (t he " **Company** "), evidenced by the attached Warrant to Purchase Common Stock (the " **Warrant** "). Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Warrant.

1. Form of Exercise Price. The Holder intends that payment of the Exercise Price shall be made as: _____ a " Cash Exercise " with respect to _____ Warrant Shares; and/or _____ a "Cashless Exercise" with respect to _____ Warrant Shares, resulting in a delivery obligation by the Company to the Holder of _____ shares of Common Stock representing the applicable Net Number.

2. Payment of Exercise Price. The holder shall pay the Aggregate Exercise Price in the sum of \$ _____ to the Company in accordance with the terms of the Warrant.

3. Delivery of Warrant Shares. The Company shall deliver to Holder, or its designee or agent as specified below, _____ shares of Common Stock in accordance with the terms of the Warrant. Delivery shall be made to Holder, or for its benefit, as follows:

Check here if requesting delivery as a certificate to the following name and to the following address:

Issue to: _____

Check here if requesting delivery by Deposit/Withdrawal at Custodian as follows:

DTC Participant: _____

DTC Number: _____

Account Number: _____

Date: _____,

Name of Registered Holder

By: _____

Name:

Title:

Tax ID: _____

Facsimile: _____

E-mail Address: _____

ACKNOWLEDGMENT

The Company hereby acknowledges this Exercise Notice and hereby directs Computershare Trust Company, N.A. to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated May 23, 2017 from the Company and acknowledged and agreed to by directs Computershare Trust Company, N.A.

REPROS THERAPEUTICS, INC.

By: _____
Name:
Title:

Schedule to Exhibit 10.4

Additional Series C Warrants (other than as set forth below and for the warrant number, these additional Series C Warrants are identical to the Series C Warrant to which this schedule is attached).

Name of Holder	Number of Shares of Common Stock
Hudson Bay Master Fund Ltd	1,122,938

I, Larry M. Dillaha, M.D., certify that:

1. I have reviewed this quarterly report of Repros Therapeutics 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 officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officers 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.

Dated: August 14, 2017

By: /s/ Larry M. Dillaha, M.D.
Larry M. Dillaha, M.D.
President and Chief Executive Officer
Repros Therapeutics Inc.
(Principal Executive Officer)

I, Katherine A. Anderson, certify that:

1. I have reviewed this quarterly report of Repros Therapeutics 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 officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officers 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.

Dated: August 14, 2017

By: /s/ Katherine A. Anderson
Katherine A. Anderson
Chief Financial Officer
Repros Therapeutics Inc.
(Principal Financial Officer)

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

In connection with the Quarterly Report of Repros Therapeutics Inc. (the "Company") on Form 10-Q for the quarter ended June 30, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Larry M. Dillaha, M.D., Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

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

Dated: August 14, 2017

By: /s/ Larry M. Dillaha, M.D.
Larry M. Dillaha, M.D.
President and Chief Executive Officer
Repros Therapeutics Inc.
(Principal Executive Officer)

A signed original of this written statement required by Section 906 has been provided to Repros and will be retained by Repros and furnished to the Securities and Exchange Commission or its staff upon request.

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

In connection with the Quarterly Report of Repros Therapeutics Inc. (the "Company") on Form 10-Q for the quarter ended June 30, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Katherine A. Anderson, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

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

Dated: August 14, 2017

By: /s/ Katherine A. Anderson
Katherine A. Anderson
Chief Financial Officer
Repros Therapeutics Inc.
(Principal Financial Officer)

A signed original of this written statement required by Section 906 has been provided to Repros and will be retained by Repros and furnished to the Securities and Exchange Commission or its staff upon request.
