# UNITED STATES
# SECURITIES AND EXCHANGE COMMISSION
**WASHINGTON, DC 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, 2019**

**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: 001-36593**

# SOLENO THERAPEUTICS, INC.

**(Exact name of registrant as specified in its charter)**

| **Delaware** | **77-0523891** |
|---|---|
| **(State or other jurisdiction of incorporation or organization)** | **(I.R.S. Employer Identification No.)** |

**1235 Radio Road, Suite 110,**
**Redwood City, California**
**(Address of principal executive offices)**

**94065**
**(Zip Code)**

**(650) 213-8444**
**(Registrant's telephone number, including area code)**

Securities registered pursuant to Section 12(b) of the Act:

| Title of each class | Trading Symbol(s) | Name of each exchange on which registered |
|---|---|---|
| Common Stock, $0.001 par value | SLNO | NASDAQ |
| Common Stock, $0.001 per value, underlying the warrants | SLNOW | NASDAQ |

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 every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit 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 an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

| | | | |
|---|---|---|---|
| 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 2, 2019, there were 31,793,292 shares of the registrant's Common Stock, par value $0.001 per share, outstanding.

**SOLENO THERAPEUTICS, INC.**

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## PART I—FINANCIAL INFORMATION

**Item 1. Financial Statements**

**Soleno Therapeutics, Inc.**
**Condensed Consolidated Balance Sheets**
*(In thousands except share and per share data)*

| | June 30, 2019 | December 31, 2018 |
|---|---|---|
| **Assets** | **(Unaudited)** | |
| Current assets | | |
| Cash and cash equivalents | $ 15,503 | $ 23,099 |
| Prepaid expenses and other current assets | 471 | 529 |
| Due from related party | 18 | 64 |
| Minority interest investment in former subsidiary | 623 | 978 |
| Total current assets | 16,615 | 24,670 |
| Long-term assets | | |
| Property and equipment, net | 22 | 12 |
| Intangible assets, net | 17,497 | 18,469 |
| Total assets | $ 34,134 | $ 43,151 |
| **Liabilities and stockholders' equity** | | |
| Current liabilities | | |
| Accounts payable | $ 1,740 | $ 934 |
| Accrued compensation and other current liabilities | 1,115 | 943 |
| Total current liabilities | 2,855 | 1,877 |
| Long-term liabilities | | |
| Series A warrant liability | 51 | 49 |
| 2017 PIPE Warrant liability | 10,202 | 4,563 |
| 2018 PIPE Warrant liability | 1,145 | 600 |
| Contingent liability for Essentialis purchase price | 6,038 | 5,649 |
| Total liabilities | 20,291 | 12,738 |
| Commitments and contingencies (Note 6) | | |
| Stockholders' equity | | |
| Preferred Stock, $.001 par value, 10,000,000 shares authorized: | | |
| Series B convertible preferred stock, 13,780 shares designated at June 30, 2019 and December 31, 2018; zero shares issued and outstanding at June 30, 2019 and at December 31, 2018. Liquidation value of zero. | — | — |
| Common stock, $0.001 par value, 100,000,000 shares authorized, 31,793,292 and 31,755,169 shares issued and outstanding at June 30, 2019 and December 31, 2018, respectively. | 32 | 32 |
| Additional paid-in-capital | 157,881 | 157,413 |
| Accumulated deficit | (144,070) | (127,032) |
| Total stockholders' equity | 13,843 | 30,413 |
| Total liabilities and stockholders' equity | $ 34,134 | $ 43,151 |

*See accompanying notes to condensed consolidated financial statements*

**Soleno Therapeutics, Inc.**
**Condensed Consolidated Statements of Operations**
**(unaudited)**
*(In thousands except share and per share data)*

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| Operating expenses | | | | |
| Research and development | $ 3,745 | $ 1,714 | $ 6,505 | $ 2,894 |
| General and administrative | 1,695 | 1,766 | 3,707 | 3,633 |
| Change in fair value of contingent consideration | 183 | (67) | 389 | 361 |
| Total operating expenses | 5,623 | 3,413 | 10,601 | 6,888 |
| Operating loss | (5,623) | (3,413) | (10,601) | (6,888) |
| Other income (expense) | | | | |
| Cease-use income | — | 3 | — | 6 |
| Change in fair value of warrants liabilities | (4,267) | (3,255) | (6,186) | (3,092) |
| Loss from minority interest investment | (165) | — | (355) | — |
| Interest income | 47 | 30 | 104 | 49 |
| Total other income (expense) | (4,385) | (3,222) | (6,437) | (3,037) |
| Loss from continuing operations | (10,008) | (6,635) | (17,038) | (9,925) |
| Loss from discontinued operations | — | (423) | — | (937) |
| Net loss | $ (10,008) | $ (7,058) | $ (17,038) | $ (10,862) |
| Loss per common share from continuing operations, basic and diluted | $ (0.31) | $ (0.33) | $ (0.54) | $ (0.50) |
| Loss per common share from discontinued operations, basic and diluted | — | (0.02) | — | (0.05) |
| Net loss per common share, basic and diluted | $ (0.31) | $ (0.35) | $ (0.54) | $ (0.55) |
| Weighted-average common shares outstanding used to calculate basic and diluted net loss per common share | 31,776,951 | 20,345,437 | 31,766,593 | 19,940,126 |

*See accompanying notes to condensed consolidated financial statements*

**Soleno Therapeutics, Inc.**
**Condensed Consolidated Statements of Stockholders' Equity**
**For the Three and Six Months Ended June 30, 2019 and 2018**
**(unaudited)**
*(In thousands except share data)*

| | Series B Convertible Preferred Stock | | Common Stock | | Additional Paid-In | Accumulated | Total Stockholders' |
|---|---|---|---|---|---|---|---|
| | Shares | Amount | Shares | Amount | Capital | Deficit | Equity |
| Balances at January 1, 2018 | 4,571 | $ — | 19,238,972 | $ 19 | $ 140,495 | $ (113,697) | $ 26,817 |
| Stock-based compensation | | | | | 200 | | 200 |
| Issuance of common stock on conversion of series B convertible preferred shares | (1,000) | (—) | 200,000 | 1 | — | | 1 |
| Issuance of restricted common stock for bonuses | | | 99,217 | — | 159 | | 159 |
| Issuance of common stock to board members in lieu of cash payments for quarterly board fees | | | 49,519 | — | 82 | | 82 |
| Transaction costs for the 2017 PIPE common stock and warrant issuance. | | | | | (203) | | (203) |
| Issuance of common stock held back on acquisition of Essentialis | | | 180,667 | — | — | | — |
| Net loss | | | | | | (3,804) | (3,804) |
| Balances at March 31, 2018 | 3,571 | — | 19,768,375 | 20 | 140,733 | (117,501) | 23,252 |
| Stock-based compensation | | | | | 199 | | 199 |
| Issuance of common stock on conversion of series B convertible preferred shares | (3,571) | (—) | 714,200 | — | (1) | | (1) |
| Issuance of common stock to board members in lieu of cash payments for quarterly board fees | | | 27,925 | — | 54 | | 54 |
| Transaction costs for the 2017 PIPE common stock and warrant issuance. | | | | | 203 | | 203 |
| Issuance of common stock held back on acquisition of Essentialis | | | 903,367 | 1 | (1) | | — |
| Net loss | | | | | | (7,058) | (7,058) |
| Balances at June 30, 2018 | — | $ — | 21,413,867 | $ 21 | $ 141,187 | $ (124,559) | $ 16,649 |

| | Series B Convertible Preferred Stock | | Common Stock | | Additional Paid-In | Accumulated | Total Stockholders' |
|---|---|---|---|---|---|---|---|
| | Shares | Amount | Shares | Amount | Capital | Deficit | Equity |
| Balances at January 1, 2019 | — | $ — | 31,755,169 | $ 32 | $ 157,413 | $ (127,032) | $ 30,413 |
| Stock-based compensation | | | | | 202 | | 202 |
| Issuance of common stock to board members in lieu of cash payments for quarterly board fees | | | 21,415 | — | 46 | | 46 |
| Net loss | | | | | | (7,030) | (7,030) |
| Balances at March 31, 2019 | — | — | 31,776,584 | 32 | 157,661 | (134,062) | 23,631 |
| Stock-based compensation | | | | | 175 | | 175 |
| Issuance of common stock to board members in lieu of cash payments for quarterly board fees | | | 16,708 | — | 45 | | 45 |
| Net loss | | | | | | (10,008) | (10,008) |
| Balances at June 30, 2019 | — | $ — | 31,793,292 | $ 32 | 157,881 | $ (144,070) | $ 13,843 |

*See accompanying notes to condensed consolidated financial statements*

**Soleno Therapeutics, Inc.**
**Condensed Consolidated Statements of Cash Flows**
**(unaudited)**
*(In thousands)*

| | Six Months Ended June 30, | |
|---|---|---|
| | **2019** | **2018** |
| **Cash flows from operating activities:** | | |
| Net loss | $ (17,038) | $ (10,862) |
| Loss from discontinued operations | — | (937) |
| Loss from continuing operations | (17,038) | (9,925) |
| Adjustments to reconcile net loss from continuing operations to net cash used in operating activities: | | |
| Depreciation and amortization | 978 | 983 |
| Stock-based compensation expense | 377 | 519 |
| Board fees paid with common stock | 91 | 136 |
| Change in fair value of stock warrants | 6,186 | 3,092 |
| Change in fair value of contingent consideration | 389 | 361 |
| Operating loss on minority interest investment | 355 | — |
| Change in operating assets and liabilities: | | |
| Prepaid expenses and other current assets | 58 | 95 |
| Due from related party | 46 | — |
| Accounts payable | 806 | 348 |
| Accrued compensation and other current liabilities | 172 | (111) |
| **Net cash used in continuing operating activities** | (7,580) | (4,502) |
| **Net cash used in discontinued operating activities** | — | (768) |
| **Net cash used in operating activities** | (7,580) | (5,270) |
| **Cash flows from investing activities:** | | |
| Purchases of property and equipment | (16) | (1) |
| **Net cash used in continuing investing activities** | (16) | (1) |
| **Net cash used in investing activities** | (16) | (1) |
| **Cash flows from financing activities:** | | |
| **Net cash provided by discontinued financing activities** | — | 825 |
| **Net cash provided by financing activities** | — | 825 |
| Net decrease in cash, cash equivalents and restricted cash from continuing operations | (7,596) | (4,503) |
| Net decrease in cash, cash equivalents and restricted cash from discontinued operations | — | 57 |
| Net decrease in cash, cash equivalents and restricted cash | (7,596) | (4,446) |
| Net increase in cash and cash equivalents included in current assets held for sale | — | (96) |
| Cash, cash equivalents and restricted cash, beginning of period | 23,099 | 17,135 |
| **Cash, cash equivalents and restricted cash, end of period** | $ 15,503 | $ 12,593 |

*See accompanying notes to condensed consolidated financial statements.*

## Note 1. Overview

Soleno Therapeutics, Inc. (the "Company" or "Soleno") was incorporated in the State of Delaware on August 25, 1999, and is located in Redwood City, California. On May 8, 2017, Soleno received stockholder approval to amend its Amended and Restated Certificate of Incorporation to change its name from "Capnia, Inc." to "Soleno Therapeutics, Inc." The Company is focused on the development and commercialization of novel therapeutics for the treatment of rare diseases. Its lead candidate, Diazoxide Choline Controlled Release tablets, or DCCR, a once-daily oral tablet for the treatment of Prader-Willi Syndrome, or PWS, is currently being evaluated in a Phase III clinical development program.

The Company initially established its operations as a diversified healthcare company that developed and commercialized innovative diagnostics, devices and therapeutics addressing unmet medical needs, which consisted of: precision metering of gas flow technology marketed as Serenz® Allergy Relief, or Serenz, and the CoSense® End-Tidal Carbon Monoxide Monitor, or CoSense, which measures End-Tidal Carbon Monoxide and aids in the detection of excessive hemolysis, a condition in which red blood cells degrade rapidly and which can lead to adverse neurological outcomes; and, products that included temperature probes, scales, surgical tables, and patient surfaces.

On March 7, 2017, the Company completed its merger, or the Merger, with Essentialis, Inc., a Delaware corporation, or Essentialis, in accordance with the Merger Agreement by and between Soleno Therapeutics and Essentialis dated December 22, 2016, or the Merger Agreement. After the Merger, the Company's primary focus has been the development and commercialization of novel therapeutics for the treatment of rare diseases. Essentialis was a privately-held, clinical-stage biotechnology company focused on the development of breakthrough medicines for the treatment of rare diseases in which there is increased mortality and risk of cardiovascular and endocrine complications. Prior to the Merger, Essentialis's efforts were focused primarily on developing and testing product candidates that target the ATP-sensitive potassium channel, a metabolically-regulated membrane protein whose modulation has the potential to impact a wide range of rare metabolic, cardiovascular, and central nervous system diseases. Essentialis had tested DCCR as a treatment for PWS, a complex metabolic/neurobehavioral disorder. DCCR has orphan designation for the treatment of PWS in the United States, or U.S., as well as in the European Union, or E.U.

Subsequent to the Merger with Essentialis described above, the Company determined to divest, sell or dispose of its business efforts focused on the development and commercialization of its Serenz and CoSense technologies. Accordingly, and pursuant to ASC 205-20-45-10, any assets and liabilities related to the discontinued activities of CoSense and Serenz were presented separately as held for sale items, and the related operations reported herein for the CoSense and Serenz activities are reported as discontinued operations in the statements of operations.

The Company's current research and development efforts are primarily focused on advancing its lead candidate, DCCR tablets, for the treatment of PWS, through late-stage clinical development.

## Note 2. Going Concern and Management's Plans

The Company had a net loss of $17.0 million during the six months ended June 30, 2019 and has an accumulated deficit of $144.1 million at June 30, 2019, resulting from having incurred losses since its inception. The Company had $13.8 million of working capital at June 30, 2019, and used $7.6 million of cash in its operating activities during the six months ended June 30, 2019. The Company has financed its operations principally through issuances of equity securities.

On December 19, 2018, the Company entered into a Securities Purchase Agreement with certain purchasers, pursuant to which the Company sold and issued 10,272,375 units at a price per unit of $1.61, for aggregate gross proceeds of $16.5 million. Each unit consisted of one share of common stock and a warrant to purchase 0.05 shares of common stock at an exercise price of $2.00 per share, for an aggregate of 10,272,375 shares of common stock and corresponding warrants to purchase an aggregate of 513,617 shares of common stock, together with the shares of common stock are referred to as the 2018 Resale Shares.

The accompanying condensed consolidated financial statements have been prepared under the assumption the Company will continue to operate as a going concern, which contemplates the realization of assets and the settlement of liabilities in the normal course of business. The condensed consolidated financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts of liabilities that may result from uncertainty related to the Company's ability to continue as a going concern.

The Company expects to continue incurring losses for the foreseeable future and may be required to raise additional capital to complete its clinical trials, pursue product development initiatives and penetrate markets for the sale of its products. Management

believes that the Company will continue to have access to capital resources through possible public or private equity offerings, debt financings, corporate collaborations or other means, but the Company's access to such capital resources is uncertain and is not assured. If the Company is unable to secure additional capital, it may be required to curtail its clinical trials and development of new products and take additional measures to reduce expenses in order to conserve its cash in amounts sufficient to sustain operations and meet its obligations. These measures could cause significant delays in the Company's efforts to complete its clinical trials and commercialize its products, which is critical to the realization of its business plan and the future operations of the Company. The condensed consolidated financial statements do not include any adjustments relating to the recoverability and classification of asset amounts or the classification of liabilities that might be necessary should it be unable to continue as a going concern.

Management believes that the Company does not have sufficient capital resources to sustain operations through at least the next twelve months from the date of this filing. Additionally, in view of the Company's expectation to incur significant losses for the foreseeable future it will be required to raise additional capital resources in order to fund its operations, although the availability of, and the Company's access to such resources is not assured. Accordingly, management believes that there is substantial doubt regarding the Company's ability to continue operating as a going concern within one year from the date of filing these financial statements.

The Company's current research and development efforts are primarily focused on advancing its lead candidate, DCCR tablets for the treatment of PWS, into late-stage clinical development.

**Note 3. Summary of Significant Accounting Policies**

There have been no material changes to the significant accounting policies during the six months ended June 30, 2019 as compared to the significant accounting policies described in Note 3 of the "Notes to Consolidated Financial Statements" in the Company's Annual Report on Form 10-K for the year ended December 31, 2018. Below are those policies with current period updates.

***Basis of Presentation***

The accompanying condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America, or GAAP, and the applicable rules and regulations of the SEC for interim financial information. Accordingly, they do not include all of the information and notes required by GAAP for complete financial statements. The condensed consolidated balance sheet at December 31, 2018, has been derived from the audited consolidated financial statements at that date, but does not include all disclosures, including notes, required by GAAP for complete financial statements.

The unaudited interim condensed consolidated financial statements have been prepared on the same basis as the audited consolidated financial statements and, in the opinion of management, reflect all adjustments of a normal recurring nature that are necessary for a fair presentation of the results for the interim periods presented. The interim results are not necessarily indicative of the results for any future interim period or for the entire year.

The accompanying condensed consolidated financial statements and related financial information should be read in conjunction with the audited consolidated financial statements and the related notes thereto for the year ended December 31, 2018, included in the Company's Annual Report on Form 10-K.

***Recent Accounting Standards***

**Recently Adopted Accounting Standards**

In June 2018, the FASB issued ASU 2018-07, "*Compensation – Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting"*, to simplify the accounting for share-based payments to nonemployees by aligning it with the accounting for share-based payments to employees, with certain exceptions. Under the guidance, the measurement of equity-classified nonemployee awards is fixed at the grant date, which may lower the cost and reduce volatility in the income statement. This ASU was early adopted by the Company at the beginning of 2019. Its adoption did not have a material impact on the Company's condensed consolidated financial statements.

In August 2018, SEC adopted the final rule under SEC Release No. 33-10532, *"Disclosure Update and Simplification*", amending certain disclosure requirements that were redundant, duplicative, overlapping, outdated or superseded. In addition, the amendments expanded the disclosure requirements on the analysis of stockholders' equity for interim financial statements. Under the amendments, an analysis of changes in each caption of stockholders' equity presented in the balance sheet must now be provided in a note or separate statement. The Company has applied this new guidance to its condensed financial statements beginning in the first quarter of 2019.

**Recently Issued Accounting Standards**

In February 2016, the FASB issued ASU 2016-02: "*Leases (Topic 842)*". ASU 2016-02 provides new comprehensive lease accounting guidance that supersedes existing lease guidance. Upon adoption of ASU 2016-02, the Company may elect to apply the transition approach either as of the beginning of the earliest period presented in the financial statements – in which case it would restate its comparative periods, or as of the beginning of the period of adoption – in which case it would not restate its comparative periods. ASU 2016-02 requires the Company to capitalize most current operating lease obligations as right-of-use assets with a corresponding liability based on the present value of future operating lease obligations. Criteria for distinguishing leases between finance and operating are substantially similar to criteria for distinguishing between capital leases and operating leases in existing lease guidance. Lease agreements that are 12 months or less are permitted to be excluded from the balance sheet. Topic 842 includes a number of optional practical expedients that the Company may elect to apply. Expanded disclosures with additional qualitative and quantitative information will also be required. The adoption will include updates as provided under ASU 2018-01, Leases (Topic 842): Land Easement Practical Expedient for Transition to Topic 842, ASU 2018-10, Codification Improvements to Topic 842, Leases, ASU 2018-20, Leases (Topic 842): Narrow-Scope Improvements for Lessors and ASU 2019-01, Leases (Topic 842): Codification Improvements. Topic 842 is effective for public entities with fiscal years beginning after December 15, 2018 and for all other entities for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. As the Company is an emerging growth company and elected 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, Topic 842 will be effective for the Company beginning in fiscal 2020, although early adoption is permitted. The Company will adopt the new lease standard effective beginning in the fiscal year beginning January 1, 2020 using a modified retrospective method and will not restate comparative periods. The Company currently believes that its operating lease commitments will be subject to the new standard and recognized as an operating lease liability and right-of-use asset upon the adoption of Topic 842, which will increase the Company's total assets and total liabilities in its condensed consolidated balance sheet.

In July 2017, the FASB issued ASU 2017-11, "*Earnings Per Share (Topic 260), Distinguishing Liabilities from Equity (Topic 480); Derivatives and Hedging (Topic 815): (Part I) Accounting for Certain Financial Instruments with Down Round Features; (Part II) Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception*", (ASU 2017-11). Part I of this update addresses the complexity of accounting for certain financial instruments with down round features. Down round features are features of certain equity-linked instruments (or embedded features) that result in the strike price being reduced on the basis of the pricing of future equity offerings. Current accounting guidance creates cost and complexity for entities that issue financial instruments (such as warrants and convertible instruments) with down round features that require fair value measurement of the entire instrument or conversion option. Part II of this update addresses the difficulty of navigating Topic 480, Distinguishing Liabilities from Equity, because of the existence of extensive pending content in the FASB Accounting Standards Codification. This pending content is the result of the indefinite deferral of accounting requirements about mandatorily redeemable financial instruments of certain nonpublic entities and certain mandatorily redeemable noncontrolling interests. The amendments in Part II of this update do not have an accounting effect. The amendments in Part I of ASU 2017-11 are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. For all other entities, the amendments in Part I are effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. As the Company is an emerging growth company and elected 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, this ASU 2017-11 will be effective for the Company beginning in fiscal 2020, although early adoption is permitted. The Company is currently assessing the potential impact of adopting ASU 2017-11 on its condensed consolidated financial statements and related disclosures.

In August 2018, the FASB issued ASU 2018-13, "*Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement".* The ASU modifies the disclosure requirements for fair value measurements by removing, modifying, or adding certain disclosures. This ASU is effective for the Company beginning in 2020. Early adoption is permitted. An entity is permitted to early adopt any removed or modified disclosures upon issuance of ASU No. 2018-13 and delay adoption of the additional disclosures until their effective date. The Company has not yet evaluated the impact of adoption of this ASU on its condensed consolidated financial statements disclosures.

**Note 4. Fair Value of Financial Instruments**

The carrying value of the Company's cash, restricted cash, cash equivalents and accounts payable, approximate fair value due to the short-term nature of these items.

Fair value is defined as the exchange price that would be received for an asset or an exit price paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs.

The fair value hierarchy defines a three-level valuation hierarchy for disclosure of fair value measurements as follows:

- Level I — Unadjusted quoted prices in active markets for identical assets or liabilities;
- Level II — Inputs other than quoted prices included within Level I that are observable, unadjusted quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the related assets or liabilities; and
- Level III — Unobservable inputs that are supported by little or no market activity for the related assets or liabilities.

The categorization of a financial instrument within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

The following table sets forth the Company's financial instruments that were measured at fair value on a recurring basis by level within the fair value hierarchy (in thousands).

| | Fair Value Measurements at June 30, 2019 | | | |
|---|---|---|---|---|
| | Total | Level 1 | Level 2 | Level 3 |
| **Liabilities** | | | | |
| Series A warrant liability | $ 51 | $ 51 | $ — | $ — |
| Series C warrant liability | — | — | — | — |
| 2017 PIPE warrant liability | 10,202 | — | — | 10,202 |
| 2018 PIPE warrant liability | 1,145 | — | — | 1,145 |
| Essentialis purchase price contingency liability | 6,038 | — | — | 6,038 |
| Total common stock warrant and contingent consideration liability | $ 17,436 | $ 51 | $ — | $ 17,385 |

| | Fair Value Measurements at December 31, 2018 | | | |
|---|---|---|---|---|
| | Total | Level 1 | Level 2 | Level 3 |
| **Liabilities** | | | | |
| Series A warrant liability | $ 49 | $ 49 | $ — | $ — |
| Series C warrant liability | — | — | — | — |
| 2017 PIPE warrant liability | 4,563 | — | — | 4,563 |
| 2018 PIPE warrant liability | 600 | — | — | 600 |
| Essentialis purchase price contingency liability | 5,649 | — | — | 5,649 |
| Total common stock warrant and contingent consideration liability | $ 10,861 | $ 49 | $ — | $ 10,812 |

The Series A Warrant is a registered security that trades on the open market and the fair value of the Series A Warrant liability is based on the publicly quoted trading price of the warrants which is listed on and obtained from NASDAQ. Accordingly, the fair value of Series A Warrants is a Level 1 measurement. The fair value measurement of the Series C Warrants is based on significant inputs that are unobservable and thus represent Level 3 measurements. The Company's estimated fair value of the Series C Warrant liability is calculated using the Black-Scholes valuation model, which is equivalent to fair value computed using the Binomial Lattice Option Model. Key assumptions include the volatility of the Company's stock, the expected warrant term, expected dividend yield and risk-free interest rates. The Company's estimated fair value of the 2017 PIPE Warrants and the 2018 PIPE Warrants was calculated using a Monte Carlo simulation of a geometric Brownian motion model. The Monte Carlo simulation pricing model requires the input of highly subjective assumptions including the expected stock price volatility, the expected term, the expected dividend yield and the risk-free interest rate. The fair value of the Essentialis purchase price contingent liability is estimated using scenario-based methods based upon the Company's analysis of the likelihood of obtaining specified approvals from the Federal Drug Administration as well as reaching cumulative revenue milestones (see Note 10). The Level 3 estimates are based, in part, on subjective assumptions.

During the periods presented, the Company has not changed the manner in which it values liabilities that are measured at fair value using Level 3 inputs. The Company recognizes transfers between levels of the fair value hierarchy as of the end of the reporting period. There were no transfers within the hierarchy during the periods presented.

The following table sets forth a summary of the changes in the fair value of the Company's Level 1 and Level 3 warrants, which are treated as liabilities (dollars in thousands).

| | Series A Warrant | | Series C Warrant | | 2017 PIPE Warrants | | 2018 PIPE Warrants | | Purchase Price |
|---|---|---|---|---|---|---|---|---|---|
| | Number of Warrants | Liability | Number of Warrants | Liability | Number of Warrants | Liability | Number of Warrants | Liability | Contingent Liability |
| Balance at December 31, 2018 | 485,121 | $ 49 | 118,083 | $ — | 6,024,425 | $ 4,563 | 513,617 | $ 600 | $ 5,649 |
| Change in value of Series A Warrants | — | 2 | — | — | — | — | — | — | — |
| Change in value of 2017 PIPE Warrants | — | — | — | — | — | 5,639 | — | — | — |
| Change in value of 2018 PIPE Warrants | — | — | — | — | — | — | — | 545 | — |
| Change in value of contingent liability | — | — | — | — | — | — | — | — | 389 |
| Balance at June 30, 2019 | 485,121 | $ 51 | 118,083 | $ — | 6,024,425 | $ 10,202 | 513,617 | $ 1,145 | $ 6,038 |

**Note 5. Warrant Liabilities**

The Company has issued multiple warrant series, of which the Series A Warrants, Series C Warrants, the 2017 PIPE Warrants and the 2018 PIPE Warrants (the "Warrants") are considered liabilities pursuant to the guidance established by *ASC 815 Derivatives and Hedging.*

***Accounting Treatment***

The Company accounts for the Warrants in accordance with the guidance in *ASC 815*. As indicated below, the Company may be obligated to settle Warrants in cash in the case of a Fundamental Transaction (as defined in the Warrants).

The Company classified the Warrants, with a term greater than one year, as long-term liabilities at their fair value and will re-measure the warrants at each balance sheet date until they are exercised or expire. Any change in the fair value is recognized as other income (expense) in the Company's condensed consolidated statements of operations.

***Series A Warrants***

The Company has issued 489,921 Series A Warrants to purchase shares of its common stock at an exercise price of $32.50 per share in connection with the unit offering offered in the Company's initial public offering, or the IPO, in November 2014. The Series A Warrants are exercisable at any time prior to the expiration of the five-year term on November 12, 2019.

Upon the completion of the IPO, the Series A Warrants started trading on the NASDAQ under the symbol SLNOW. As the Series A Warrants are publicly traded, the Company uses the closing price on the measurement date to determine the fair value of the Series A Warrants. The Series A Warrants contract further provides for the payment of liquidated damages at an amount per month equal to 1% of the aggregate volume weighted average price, or VWAP, of the shares into which each Warrant is convertible in the event that the Company is unable to maintain the effectiveness of a registration statement as described herein. The Company evaluated the registration payment arrangement stipulated in the terms of these securities and determined that it is probable that the Company will maintain an effective registration statement and has therefore not allocated any portion of the proceeds related to the warrant financings to the registration payment arrangement. The Warrants also contain a fundamental transactions provision that permits their settlement in cash at fair value at the option of the holder upon the occurrence of a change in control. Such change in control events include tender offers or hostile takeovers, which are not within the sole control of the Company as the issuer of these warrants. Accordingly, the Warrants are considered to have a cash settlement feature that precludes their classification as equity instruments. Settlement at fair value upon the occurrence of a fundamental transaction would be computed using the Black Scholes Option Pricing Model, which approximates the binomial lattice model.

Since their issuance, a total of 4,800 Series A Warrants have been exercised. As of June 30, 2019, the fair value of the 485,121 outstanding Series A Warrants was approximately $51,000. The decrease of approximately $22,000 and the increase of approximately $2,000 in fair value during the three and six months ended June 30, 2019, respectively, was recorded as other income (expense) in the condensed consolidated statements of operations.

***Series C Warrants***

On March 5, 2015, the Company entered into separate agreements with certain Series B Warrant holders, who agreed to exercise their Series B Warrants to purchase an aggregate of 117,902 shares of the Company's common stock at an exercise price of $32.50 per share, resulting in the de-recognition of $6.7 million of the previously issued Series B Warrant liability and gross proceeds to the

Company of $3.8 million based on the exercise price of the Series B Warrants. In connection with this exercise of the Series B Warrants, the Company issued to each investor who exercised Series B Warrants, new Series C Warrants for the number of shares of the Company's common stock underlying the Series B Warrants that were exercised. Each Series C Warrant is exercisable at $31.25 per share and will expire on March 5, 2020. The Series C Warrants contract further provides for the payment of liquidated damages at an amount per month equal to 1% of the aggregate volume weighted average price, or VWAP, of the shares into which each Warrant is convertible in the event that the Company is unable to maintain the effectiveness of a registration statement as described herein. The Company evaluated the registration payment arrangement stipulated in the terms of these securities and determined that it is probable that the Company will maintain an effective registration statement and has therefore not allocated any portion of the proceeds related to the warrant financings to the registration payment arrangement. The Warrants also contain a fundamental transactions provision that permits their settlement in cash at fair value at the option of the holder upon the occurrence of a change in control. Such change in control events include tender offers or hostile takeovers, which are not within the sole control of the Company as the issuer of these warrants. Accordingly, the Warrants are considered to have a cash settlement feature that precludes their classification as equity instruments. Settlement at fair value upon the occurrence of a fundamental transaction would be computed using the Black Scholes Option Pricing Model, which approximates the binomial lattice model.

In April 2015, the Company issued a tender offer to the remaining holders of Series B Warrants to induce the holders to cash exercise the outstanding Series B Warrants in exchange for new Series C Warrants with an exercise price of $31.25 per share that expire on March 5, 2020. The tender offer was extended to Series B Warrant holders under a registration statement filed with the SEC on Form S-4, which was declared effective on June 25, 2015 and expired on July 24, 2015. During July 2015, certain Series B Warrant holders tendered their Series B Warrants under the tender offer, which resulted in the issuance of 181 shares of the Company's common stock, the issuance of 181 Series C Warrants and proceeds to the Company of approximately $6,000.

The Series C Warrants are exercisable into 118,083 shares of the Company's common stock. As of June 30, 2019, the fair value of the Series C Warrants was determined to be zero, consistent with the balance as of December 31, 2018 and March 31, 2019.

The Company has calculated the fair value of the Series C Warrants using a Black-Scholes pricing model. The Black-Scholes pricing model requires the input of highly subjective assumptions including the expected stock price volatility. The Company used the following inputs.

| | June 30, 2019 | December 31, 2018 |
|---|---|---|
| Volatility | 90% | 90% |
| Contractual term (years) | 0.67 | 1.17 |
| Expected dividend yield | —% | —% |
| Risk-free rate | 2.03% | 2.60% |

***Warrants Issued as Part of the Units in the 2017 PIPE Offering***

The 2017 PIPE Warrants were issued on December 15, 2017 in the 2017 PIPE Offering, pursuant to a Warrant Agreement with each of the investors in the 2017 PIPE Offering, and entitle the holder to purchase one share of the Company's common stock at an exercise price equal to $2.00 per share, subject to adjustment as discussed below, at any time commencing upon issuance of the 2017 PIPE Warrants and terminating at the earlier of December 15, 2020 or 30 days following positive Phase III results for the DCCR tablet in PWS.

The exercise price and number of shares of common stock issuable upon exercise of the 2017 PIPE Warrants may be adjusted in certain circumstances, including the event of a stock split, stock dividend, extraordinary dividend, or recapitalization, reorganization, merger or consolidation. However, the exercise price of the 2017 PIPE Warrants will not be reduced below $1.72.

In the event of a change of control of the Company, the holders of unexercised warrants may present their unexercised warrants to the Company, or its successor, to be purchased by the Company, or its successor, in an amount equal to the per share value determined by the Black Scholes methodology.

As of June 30, 2019, the fair value of the 2017 PIPE Warrants was estimated at $10.2 million. The increase in the fair value of the liability for the 2017 PIPE Warrants of approximately $3.9 million and $5.6 million during the three and six months ended June 30, 2019, respectively, was recorded as other expense in the condensed consolidated statements of operations. The increase in the fair value of the liability for the 2017 PIPE Warrants of approximately $3.1 million and $3.0 million during the three and six months ended June 30, 2018, respectively, was recorded as other expense in the condensed consolidated statements of operations.

The Company has calculated the fair value of the 2017 PIPE Warrants using a Monte Carlo simulation of a geometric Brownian motion model. The Monte Carlo simulation pricing model requires the input of highly subjective assumptions including the expected stock price volatility. The following summarizes certain key assumptions used in estimating the fair values.

| | June 30, 2019 | December 31, 2018 |
|---|---|---|
| Volatility | 86% | 75% |
| Contractual term (years) | 1.5 | 2.0 |
| Expected dividend yield | —% | —% |
| Risk-free rate | 1.92% | 2.51% |

***Warrants Issued as Part of the Units in the 2018 PIPE Offering***

The 2018 PIPE Warrants were issued on December 19, 2018 in the 2018 PIPE Offering, pursuant to a Warrant Agreement with each of the investors in the 2018 PIPE Offering, and entitle the holders of each of the 10,272,375 units to purchase 0.05 shares of the Company's common stock at an exercise price equal to $2.00 per share, subject to adjustment as discussed below, at any time commencing upon issuance of the 2018 PIPE Warrants and terminating on December 21, 2023.

The exercise price and number of shares of common stock issuable upon exercise of the 2018 PIPE Warrants may be adjusted in certain circumstances, including the event of a stock split, stock dividend, extraordinary dividend, or recapitalization, reorganization, merger or consolidation. However, the exercise price of the 2018 PIPE Warrants will not be reduced below $2.00.

In the event of a change of control of the Company, the holders of unexercised warrants may present their unexercised warrants to the Company, or its successor, to be purchased by the Company, or its successor, in an amount equal to the per share value determined by the Black Scholes methodology.

As of June 30, 2019, the fair value of the 2018 PIPE Warrants was estimated at $1.1 million. The approximate $361,000 and $545,000 increase in the fair value of the liability for the 2018 PIPE Warrants during the three and six months ended June 30, 2019, respectively, was recorded as other expense in the condensed consolidated statements of operations.

The Company has calculated the fair value of the 2018 PIPE Warrants using a Monte Carlo simulation of a geometric Brownian motion model. The Monte Carlo simulation pricing model requires the input of highly subjective assumptions including the expected stock price volatility. The following summarizes certain key assumptions used in estimating the fair values.

| | June 30, 2019 | December 31, 2018 |
|---|---|---|
| Volatility | 86% | 75% |
| Contractual term (years) | 4.5 | 5.0 |
| Expected dividend yield | —% | —% |
| Risk-free rate | 1.76% | 2.51% |

The Monte Carlo simulation of a geometric Brownian motion model requires the use of highly subjective assumptions to estimate the fair value of stock-based awards. These assumptions include the following estimates.

- *Volatility:* The Company calculates the estimated volatility rate based on the volatilities of common stock of comparable companies in its industry.
- *Contractual term:* The expected life of the warrants, which is based on the contractual term of the warrants.
- *Expected dividend yield:* The Company has never declared or paid any cash dividends and does not currently plan to pay cash dividends in the foreseeable future. Consequently, the Company used an expected dividend yield of zero.
- *Risk-free rate:* The risk-free interest rate is based on the U.S. Treasury rate for similar periods as those of expected volatility.

**Note 6. Commitments and Contingencies**

***Facility Leases***

On July 1, 2015, the Company executed a four-year non-cancelable operating lease agreement for 8,171 square feet of office space for its headquarters facility. The lease agreement provides for monthly lease payments of $23,300 beginning in September of 2015, with increases in the following three years. An additional 5,265 square feet of office space became part of the new lease agreement on March 1, 2016, and in December 2017 the Company subleased this additional space to a third party through the end of the lease term.

Rent expense was approximately $48,000 and $83,000 during the three months ended June 30, 2019 and 2018, respectively, net of sublease income of approximately $65,000 and $100,000, respectively. Rent expense was approximately $102,000 and $168,000 during the six months ended June 30, 2019 and 2018, respectively, net of sublease income of approximately $130,000 and $198,000, respectively.

***Contingencies***

In the normal course of business, the Company enters into contracts and agreements that contain a variety of representations and warranties and provide for general indemnifications. The Company's exposure under these agreements is unknown because it involves claims that may be made against the Company in the future but have not yet been made. The Company accrues a liability for such matters when it is probable that future expenditures will be made, and such expenditures can be reasonably estimated.

**Note 7. CoSense Joint Venture Agreement and Discontinued Operations**

In December 2017, the Company entered into a joint venture with OptAsia Healthcare Limited, or OAHL, with respect to its CoSense product by agreeing to sell shares of Capnia, its wholly-owned subsidiary, to OAHL. CoSense was Soleno's first Sensalyze Technology Platform product to receive 510(k) clearances from the FDA and CE Mark certification. CoSense measures CO, which can be elevated due to endogenous causes such as excessive breakdown of red blood cells, or hemolysis, or exogenous causes such as CO poisoning and smoke inhalation. The first target market for CoSense is for the use of ETCO measurements to aid in detection of hemolysis in neonates, a disorder in which CO and bilirubin are produced in excess as byproducts of the breakdown of red blood cells. The Company's entry into the joint venture results from a comprehensive review of strategic alternatives for its legacy products and product candidates following its transition to a primarily therapeutic drug product company. The terms of the Joint Venture Agreement provide that OAHL will invest up to a total of $2.2 million in Capnia's common shares on an incremental quarterly basis commencing in December 2017. Going forward, OAHL will be responsible for funding a portion of the Capnia operations. The Joint Venture Agreement provided that Capnia would issue shares of common shares to OAHL based on a negotiated price of $1.00 per share when the cumulative investment made by OAHL equaled or exceeded $1.2 million. For financial reporting purposes, Capnia's assets, liabilities and results of operations had historically been consolidated with those of the Company.

During October 2018, the Company and OAHL determined and agreed that the cumulative investment made by OAHL exceeded $1.2 million during the quarter ended September 30, 2018. Accordingly, on October 16, 2018, Capnia issued 1,690,322 shares of its common stock to OAHL, representing 53% of its outstanding shares. After the share issuance the Company no longer held a controlling interest in Capnia and resulted in the deconsolidation of Capnia's financial statements with those of the Company and a $2.0 million gain was recognized in the fourth quarter of 2018 as a result of the deconsolidation. Of this amount, $1.2 million related to the remeasurement of the Company's retained interest in the joint venture to fair value which was measured based on the negotiated price of $1.00 per share for Soleno's remaining ownership of 1,480,000 shares less a 23% discount for lack of control over Capnia. The total gain was included in other income from continuing operations on the Company's consolidated statements of operations. The remaining 47% investment in Capnia is classified as an equity method investment and presented as a Minority interest investment in former subsidiary in the condensed consolidated balance sheet. The balance of Minority interest investment in former subsidiary decreased by approximately $165,000 and $355,000 during the three and six months ended June 30, 2019, respectively, as a result of the Company recording its share of Capnia's net losses during the period, which is included in the line titled loss from minority interest investment in the Company's condensed consolidated statements of operations.

There were no assets or liabilities held for sale as of June 30, 2019, or December 31, 2018, after the deconsolidation of Capnia in October 2018, and no discontinued operations during the three and six months ended June 30, 2019. The components of the Statements of Operations presented as Discontinued Operations during the three and six months ended June 30, 2018 follow (in thousands).

| | Three Months Ended June 30, 2018 | Six Months Ended June 30, 2018 |
|---|---|---|
| Product revenue | $ 3 | $ 54 |
| Cost of product revenue | (23) | 28 |
| Gross profit (loss) | 26 | 26 |
| Expenses | | |
| Research and development | 302 | 703 |
| Sales and marketing | 13 | 24 |
| General and administrative | 134 | 236 |
| Total expenses | 449 | 963 |
| Net loss from discontinued operations | $ (423) | $ (937) |

Stock-based compensation expense of approximately $20,000 and $39,000 was classified in discontinued operations for the three and six months ended June 30, 2018, respectively. There were no discontinued operations during the three and six months ended June 30, 2019.

**Note 8. Stockholders' Equity**

***Equity Incentive Plans***

The Company has adopted the 1999 Incentive Stock Plan, the 2010 Equity Incentive Plan, and the 2014 Equity Incentive Plan, or the 2014 Plan, and together, the Plans. The 1999 Incentive Stock Plan expired in 2009, and the 2010 Equity Incentive Plan has been closed to new issuances. Under the 2014 Plan the Company may grant stock options, stock appreciation rights, restricted stock, restricted stock units, performance units or performance shares to employees, directors, advisors, and consultants. Options granted under the 2014 Plan may be incentive stock options ("ISOs") or nonqualified stock options ("NSOs"). ISOs may be granted only to Company employees, including officers and directors.

The Board of Directors has the authority to determine to whom stock options will be granted, the number of options, the term, and the exercise price. Options are to be granted at an exercise price not less than fair value. For individuals holding more than 10% of the voting rights of all classes of stock, the exercise price of an option will not be less than 110% of fair value. The vesting period is normally monthly over a period of 4 years from the vesting date. The contractual term of an option is no longer than five years for ISOs for which the grantee owns greater than 10% of the voting power of all classes of stock and no longer than ten years for all other options. The terms and conditions governing restricted stock units is at the sole discretion of the Board. As of June 30, 2019, a total of 845,578 shares are available for future grant under the 2014 Plan.

The Company recognized stock-based compensation expense related to options and restricted stock units granted to employees, directors and consultants for the three and six months ended June 30, 2019 of approximately $175,000 and $377,000, respectively. Stock-based compensation expense related to options and restricted stock units granted to employees, directors and consultants during the three and six months ended June 30, 2018 was approximately $199,000 and $558,000, respectively, of which approximately $20,000 and $39,000, was recorded in discontinued operations in the three and six months ended June 30, 2018, respectively. There were no discontinued operations during the six months ended June 30, 2019. The compensation expense is allocated on a departmental basis, based on the classification of the option holder. No income tax benefits have been recognized in the statements of operations for stock-based compensation arrangements during any of the periods presented.

Stock compensation expense was allocated between departments in continuing operations as follows (in thousands).

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| Research and development | $ 49 | $ 34 | $ 102 | $ 139 |
| General and administrative | 126 | 145 | 275 | 380 |
| Total | $ 175 | $ 179 | $ 377 | $ 519 |

**Stock Options**

The Company granted options to purchase 114,142 and 119,586 of the Company's common stock during the three months ended June 30, 2019 and 2018, respectively, and granted options to purchase 578,142 and 736,086 of the Company's common stock during the six months ended June 30, 2019 and 2018, respectively. The fair value of each award granted was estimated on the date of grant using the Black-Scholes option pricing model with the following assumptions.

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| Expected life (years) | 5.5-6.0 | 5.5 | 5.5-6.1 | 5.5-6.02 |
| Risk-free interest rate | 1.9%-2.3% | 2.8% | 1.9%-2.6% | 2.7%-2.8% |
| Volatility | 70%-71% | 70% | 70%-71% | 70% |
| Dividend rate | — % | — % | — % | — % |

The Black-Scholes option-pricing model requires the use of highly subjective assumptions to estimate the fair value of stock-based awards. These assumptions include the following estimates:

- *Expected life:* The expected life of stock options represents the average of the contractual term of the options and the weighted-average vesting period, as permitted under the simplified method. The Company does not believe it is able to rely on historical exercise and post-vesting termination activity to provide accurate data for estimating the expected term for use in estimating the fair value-based measurement of stock options. Therefore, it has opted to use the "simplified method" for estimating the expected term of options.

- *Risk-free interest rate:* The risk-free interest rate is based on the yields of U.S. Treasury securities with maturities similar to the expected time to liquidity.
- *Volatility:* The estimated volatility rate based on the volatilities of common stock of comparable companies in the Company's industry.
- *Dividend rate:* The Company has never declared or paid any cash dividends and does not presently plan to pay cash dividends in the foreseeable future. Consequently, the Company used an expected dividend yield of zero.

The following table summarizes stock option transactions for the six months ended June 30, 2019 as issued under the Plans:

| | Shares Available for Grant | Number of Options Outstanding | Weighted-Average Exercise Price per Share | Weighted Average Remaining Contractual Term (in years) |
|---|---|---|---|---|
| Balance at December 31, 2018 | 1,150,961 | 1,667,153 | $ 6.03 | 8.27 |
| Additional shares authorized | 223,742 | | | |
| Options granted | (578,142) | 578,142 | $ 1.84 | |
| Options exercised | — | — | — | |
| Options canceled/forfeited | 49,017 | (49,017) | $ 5.81 | |
| Balance at June 30, 2019 | 845,578 | 2,196,278 | $ 4.93 | 8.27 |
| Options vested at June 30, 2019 | | 1,051,744 | $ 8.11 | 7.51 |
| Options vested and expected to vest at June 30, 2019 | | 2,196,278 | $ 4.93 | 8.27 |

The weighted-average grant date fair value of options granted was $1.18 and $1.09 per share for the six months ended June 30, 2019 and 2018, respectively. At June 30, 2019 total unrecognized employee stock-based compensation was $1.4 million, which is expected to be recognized over the weighted-average remaining vesting period of 2.8 years. As of June 30, 2019, the outstanding stock options had an intrinsic value of approximately $1.4 million.

**Restricted Stock Units**

There were 99,217 restricted stock units granted by the Company during the six months ended June 30, 2018 to employees and nonemployees. The shares were 100% vested on the grant date and were valued based on the Company's common stock price on the grant date, with approximately $159,000 of the related stock-based compensation expense recognized at that time. There were no restricted stock units granted by the Company during the six months ended June 30, 2019.

***2014 Employee Stock Purchase Plan***

The Company's board of directors and stockholders have adopted the 2014 Employee Stock Purchase Plan, or the ESPP. The ESPP has become effective, and the board of directors will implement commencement of offers thereunder in its discretion. A total of 27,967 shares of the Company's common stock has been made available for sale under the ESPP. In addition, the ESPP provides for annual increases in the number of shares available for issuance under the plan on the first day of each year beginning in the year following the initial date that the board of directors authorizes commencement, equal to the least of:

- 1.0% of the outstanding shares of the Company's common stock on the first day of such year;
- 55,936 shares; or
- such amount as determined by the board of directors.

As of June 30, 2019, there were no purchases by employees under this plan.

***Series D Warrants***

The Company issued 256,064 Series D Warrants in October 2015, which are exercisable into 586,182 shares of the Company's common stock, with an exercise price of $12.30 and a term of five years expiring on October 15, 2020. The Company's Series D Warrants contain standard anti-dilution provisions for stock dividends, stock splits, subdivisions, combinations and similar types of recapitalization events. They also contain a cashless exercise feature that provides for their net share settlement at the option of the holder in the event that there is no effective registration statement covering the continuous offer and sale of the warrants and

underlying shares. The Company is required to comply with certain requirements to cause or maintain the effectiveness of a registration statement for the offer and sale of these securities. The Series D Warrant agreement further provides for the payment of liquidated damages at an amount per month equal to 1% of the aggregate VWAP of the shares into which each Series D Warrant is convertible in the event that the Company is unable to maintain the effectiveness of a registration statement as described herein. The Company evaluated the registration payment arrangement stipulated in the terms of this securities agreement and determined that it is probable that the Company will maintain an effective registration statement and has therefore not allocated any portion of the proceeds to the registration payment arrangement. The Series D Warrant agreement specifically provides that under no circumstances will the Company be required to settle any Series D Warrant exercise for cash, whether by net settlement or otherwise.

***Accounting Treatment***

The Company accounts for the Series D Warrants in accordance with the guidance in ASC 815 *Derivatives and Hedging.* As indicated above, the Company is not required under any circumstance to settle any Series D Warrant exercise for cash. The Company has therefore classified the value of the Series D Warrants as permanent equity.

***Other Common Stock Warrants***

As of June 30, 2019, the Company had 102,070 common stock warrants outstanding from the 2010/2012 convertible notes, with an exercise price of $24.35 and a term of 10 years expiring in November 2024. The Company also had 16,500 common stock warrants issued to the underwriter in the Company's IPO, with an exercise price of $35.70 and a term of 10 years, expiring in November 2024.

**Note 9. Net loss per share**

Basic net loss per share is computed by dividing net loss by the weighted-average number of common stock actually outstanding during the period. Diluted net loss per share is computed by dividing net loss by the weighted-average number of common stock outstanding and dilutive potential common stock that would be issued upon the exercise of common stock warrants and options. For the three and six months ended June 30, 2019 and 2018, the effect of issuing the potential common stock is anti-dilutive due to the net losses in those periods and the number of shares used to compute basic and diluted earnings per share are the same in each of those periods.

The following potentially dilutive securities outstanding have been excluded from the computations of diluted weighted-average shares outstanding because such securities have an antidilutive impact due to losses reported (in common stock equivalent shares).

| | As of June 30, | |
|---|---|---|
| | 2019 | 2018 |
| Warrants issued to 2010/2012 convertible note holders to purchase common stock | 102,070 | 102,070 |
| Options to purchase common stock | 2,196,278 | 1,667,896 |
| Warrants issued in 2009 to purchase common stock | — | 1,851 |
| Warrants issued to underwriter to purchase common stock | 16,500 | 16,500 |
| Series A warrants to purchase common stock | 485,121 | 485,121 |
| Series C warrants to purchase common stock | 118,083 | 118,083 |
| Series D warrants to purchase common stock | 586,162 | 586,182 |
| 2017 PIPE warrants | 6,024,425 | 6,024,425 |
| 2018 PIPE warrants | 513,617 | — |
| Total | 10,042,256 | 9,002,128 |

**Note 10. Fair Value of Contingent Consideration**

On March 7, 2017, the Company acquired Essentialis through the Merger of the Company's wholly-owned subsidiary, Company E Merger Sub, Inc., a Delaware corporation, or the Merger Sub, whereby Merger Sub merged into Essentialis, with Essentialis surviving the Merger as a wholly owned subsidiary of the Company.

The transaction has been accounted for as an asset acquisition under the acquisition method of accounting. The amendments in ASU 2017-01 provide a screen to determine when a set of assets and activities is not a business. The screen requires that when substantially all of the fair value of the gross assets acquired (or disposed of) is concentrated in a single identifiable asset or a group of similar identifiable assets, the set of assets and activities is not a business.

Upon the achievement of certain commercial milestones associated with the sale of Essentialis' product in accordance with the terms of the Merger Agreement, the Company is obligated to make cash earnout payments of up to a maximum of $30 million to Essentialis stockholders. The agreement to pay cash upon the achievement of the commercial milestones results in the recognition of a contingent consideration. The fair value of the contingent cash consideration is based on the Company's analysis of the likelihood of the drug indication moving from phase II through approval in the Federal Drug Administration approval process and then reaching the cumulative revenue milestones.

Management engaged independent professional assistance and advice in order to assess the fair value of the contingent stock and cash consideration as of March 7, 2017 and December 31, 2017. During the process of determining the fair value of the contingent consideration at December 31, 2017, the Company became aware that certain of the subjective assumptions made at the time of the initial valuation should be modified based upon management's increased understanding of the commercial capabilities of the DCCR drug. Accordingly, the Company determined that it was appropriate to adjust the provisional valuation amounts recorded for the contingent stock and cash consideration made at the inception in March 2017. As a result, the value of the contingent cash consideration to be paid upon completing successive sales milestones increased and the value of the contingent stock consideration payable upon timing milestones was reduced; the resulting combined change to the total contingent consideration was not material. The initial valuation of the contingent consideration determined the fair value of the contingent stock consideration to be $4.2 million and the fair value of the contingent cash consideration to be $1.1 million, for the combined value of $5.3 million. The revision of the initial valuation of the contingent consideration, made within the measurement period, determined the fair value of the contingent stock consideration to be $2.7 million and the fair value of the contingent cash consideration to be $2.6 million, for the combined value of $5.3 million.

Also subsequent to March 7, 2017 and prior to December 31, 2017, the Company completed its assessment of the tax effect on the net assets acquired by obtaining the independent study and report regarding the change in control in the previously outstanding stock of Essentialis. As a result of completing the study, the Company determined that, pursuant to Section 382 of the Internal Revenue Code, the utilization of Essentialis's federal and state operating loss carryforwards were limited, which required the Company to record a net deferred tax liability in the amount of $1.7 million, deferred to future periods, as an element of the assets acquired. As a consequence of recording the net deferred tax liability, the Company's valuation allowance was reduced by $1.7 million, which resulted in the provision for income tax benefit and an increase in the value of the intangible asset acquired.

The probability weighted milestone payments were discounted to determine the present value of future cash payments. The analysis utilized the weighted average cost of capital, or WACC, discount rate which was estimated to be 20%.

The fair value of the liability for the contingent consideration payable by the Company achieving the commercial sales milestones of $100 million and $200 million was initially established as $2.6 million at the time of the merger and $6.0 million at June 30, 2019, based on the Company's assessment that it could reach the commercial sales milestones in 2024 and 2026, respectively.

**Note 11. Compensation Plan for Board Members**

In 2017, the Compensation Committee of the Board of Directors recommended, and the Board approved a revised compensation plan pursuant to which each board member may choose to receive payment of all annual board fees in common stock of the Company. Net payment to the Board of Directors in shares of the Company's common stock is made after the close of the quarter in which the compensation is earned, with the appropriate federal and state taxes thereon paid in cash directly to the taxing authority. Generally, directors who are citizens and residents of the United States receive their annual board fees in the form of stock, and directors who are not citizens and residents of the United States receive payment of their annual board fees in cash. During the three months ended June 30, 2019 and 2018, the Company issued 16,708 and 27,925 shares, respectively, of common stock to its Board members for fees earned. During the six months ended June 30, 2019 and 2018, the Company issued 38,123 and 77,444 shares, respectively, of common stock to its Board members for fees earned. The appropriate federal and state taxes thereon was paid in cash directly to the taxing authority.

**Note 12. Subsequent Events**

The Company has evaluated its subsequent events from June 30, 2019 through the date these condensed consolidated financial statements were issued and has determined that there are no subsequent events requiring disclosure in these condensed consolidated financial statements other than the item noted below.

***Lease***

The Company's operating lease for its headquarters facility office space in Redwood City, California, terminates in August 2019. In July 2019, the Company executed a non-cancellable operating lease agreement for 6,368 square feet of new space in Redwood City, California, which begins in September 2019 and expires in May 2021. Minimum rental commitments under this lease are approximately $59,000 during 2019, $355,000 during 2020 and $151,000 during 2021.

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

*The interim consolidated financial statements included in this Quarterly Report on Form 10-Q and this Management's Discussion and Analysis of Financial Condition and Results of Operations should be read in conjunction with the financial statements and notes thereto for the year ended December 31, 2018, and the related Management's Discussion and Analysis of Financial Condition and Results of Operations, contained in the Company's Form 10-K for the year ended December 31, 2018. In addition to historical information, this discussion and analysis 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"). These forward-looking statements are subject to risks and uncertainties, including those set forth in Part II – Other Information, Item 1A. Risk Factors below and elsewhere in this report that could cause actual results to differ materially from historical results or anticipated results.*

**Overview**

We are focused on the development and commercialization of novel therapeutics for the treatment of rare diseases. Our lead candidate, DCCR, a once-daily oral tablet for the treatment of PWS, is currently being evaluated in a Phase III clinical development program.

We initially established our operations as a diversified healthcare company that developed and commercialized innovative diagnostics, devices and therapeutics addressing unmet medical needs, which consisted of: precision metering of gas flow technology marketed as Serenz® Allergy Relief, or Serenz, and the CoSense® End-Tidal Carbon Monoxide Monitor, or CoSense, which measures End-Tidal Carbon Monoxide and aids in the detection of excessive hemolysis, a condition in which red blood cells degrade rapidly and which can lead to adverse neurological outcomes; and, products that included temperature probes, scales, surgical tables, and patient surfaces.

On December 22, 2016, we entered into the Merger Agreement with Essentialis. Essentialis's efforts prior to the Merger were focused primarily on developing and testing product candidates that target the ATP-sensitive potassium channel, a metabolically regulated membrane protein whose modulation has the potential to impact a wide range of rare metabolic, cardiovascular, and central nervous system diseases. Essentialis had tested DCCR as a treatment for PWS, a complex metabolic/neurobehavioral disorder. DCCR has orphan designation for the treatment of PWS in the U.S. as well as in the E.U. Consummation of the Merger was subject to various closing conditions, including our consummation of a financing of at least $8.0 million at, or substantially contemporaneous with, the closing of the Merger, which occurred on March 7, 2017 and the receipt of stockholder approval of the Merger at a special meeting of our stockholders, which was held on March 6, 2017.

Subsequent to the Merger with Essentialis described above, we determined to divest, sell or dispose of our business efforts focused on the development and commercialization of our Serenz and CoSense technologies. As a result, we now primarily focus on the development and commercialization of novel therapeutics for the treatment of rare diseases. Our current research and development efforts are primarily focused on advancing our lead candidate, DCCR tablets for the treatment of PWS, into late-stage clinical development. Accordingly, and pursuant to ASC 205-20-45-10, any assets and liabilities related to the discontinued activities of CoSense and Serenz were presented separately as held for sale items, and the related operations reported herein for the CoSense and Serenz activities are reported as discontinued operations in the statements of operations.

On December 4, 2017, we and our then wholly-owned subsidiary Capnia, entered into a joint venture with OptAsia Healthcare Limited, or OAHL, with the purpose of developing and commercializing CoSense with the intent to transfer ownership of Capnia to OAHL. During October 2018, Capnia issued 1,690,322 shares of its common stock to OAHL, representing 53% of its outstanding shares, after which we no longer held a controlling interest in Capnia. Accordingly, we deconsolidated Capnia's financial statements from ours and our remaining minority interest in Capnia is reported as a Minority interest investment in our consolidated balance sheet.

On July 30, 2018, the FDA has granted Fast Track designation to DCCR for the treatment of PWS. We are currently conducting a Phase III clinical trial of DCCR for the treatment of PWS.

As of June 30, 2019, we had an accumulated deficit of $144.1 million, primarily as a result of research and development and general and administrative expenses. While we may in the future generate revenue from a variety of sources, potentially including sales of our neonatology products, therapeutic products, other diagnostic products, license fees, milestone payments, and research and development payments in connection with potential future strategic partnerships, we have, to date, generated approximately $2,000 of revenue from the 2013 license agreement pertaining to Serenz, approximately $2.7 million in revenue from our neonatology products and approximately $0.2 million in government grants; these activities are reported as discontinued operations in our accompanying consolidated financial statements. We may never be successful in commercializing our novel therapeutic and in divesting, selling or otherwise disposing of our existing neonatology products or related therapeutic products. Accordingly, we expect to incur significant

losses from operations for the foreseeable future, and there can be no assurance that we will ever generate significant revenue or profits.

**Critical Accounting Policies and Significant Judgments and Estimates**

Our management's discussion and analysis of financial condition and results of operations are based upon our unaudited condensed consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of these consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses. On an on-going basis, we evaluate our critical accounting policies and estimates. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable in the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions and conditions. Our significant accounting policies are more fully described in Note 3 of our most recent Form 10-K.

**Results of Continuing Operations**

***Comparison of the three months ended June 30, 2019 and 2018, from continuing operations***

| | Three Months Ended June 30, | | Increase (decrease) | |
|---|---|---|---|---|
| | 2019 | 2018 | Amount | Percentage |
| | (in thousands) | | | |
| Operating expenses: | | | | |
| Research and development | $ 3,745 | $ 1,714 | $ 2,031 | 118% |
| General and administrative | 1,695 | 1,766 | (71) | 4% |
| Change in fair value of contingent consideration | 183 | (67) | 250 | 373% |
| Total operating expenses | 5,623 | 3,413 | 2,210 | 65% |
| Operating loss | (5,623) | (3,413) | (2,210) | 65% |
| Other income (expense) | | | | |
| Cease-use income | — | 3 | (3) | 100% |
| Change in fair value of warrants liabilities | (4,267) | (3,255) | (1,012) | 31% |
| Loss from minority interest investment | (165) | - | (165) | n/a |
| Interest income | 47 | 30 | 17 | 57% |
| Total other income (expense) | (4,385) | (3,222) | (1,163) | 36% |
| Loss from continuing operations | (10,008) | (6,635) | (3,373) | 51% |
| Loss from discontinued operations | - | (423) | 423 | 100% |
| Net loss | $ (10,008) | $ (7,058) | $ (2,950) | 42% |

***Revenue***

We have yet not commenced commercialization of DCCR, our current sole product, and accordingly, through June 30, 2019, have generated no revenue from continuing operations.

***Research and development expense***

Research and development expense of $3.7 million for the three months ended June 30, 2019, increased by $2.0 million over the three months ended June 30, 2018, resulting primarily from the initiation of the Phase III clinical trial in May 2018. As of June 30, 2019, we have 20 clinical trial sites initiated and, as a result, have incurred increased clinical site costs, consulting costs, lab costs, and manufacturing costs for DCCR production. Our efforts until May 2018 were focused on preparation of the trials.

***General and administrative expense***

General and administrative expense of $1.7 million for the three months ended June 30, 2019, was generally consistent with the expense during the three months ended June 30, 2018.

***Change in fair value of contingent consideration***

The approximate $183,000 for the three months ended June 30, 2019, represents the increase in the fair value of the additional consideration that we expect to pay Essentialis stockholders based on our assessment of the expected likelihood of achieving commercial sales milestones of $100 million and $200 million in future years.

***Other income (expense)***

Other expense of $4.4 million in the three months ended June 30, 2019, increased by $1.2 million from other expense during the three months ended June 30, 2018. This increase was primarily due to a $1.0 million higher increase in the fair value of the our outstanding warrants during the three months ended June 30, 2019 compared to the three months ended June 30, 2018, as well an approximate $165,000 loss recorded on our minority interest investment in Capnia, our former subsidiary. These increases were slightly offset by approximately $17,000 more of interest income recorded during the three months ended June 30, 2019 compared to June 30, 2018.

***Comparison of the six months ended June 30, 2019 and 2018, from continuing operations***

| | Six Months Ended June 30, | | Increase (decrease) | |
|---|---|---|---|---|
| | 2019 | 2018 | Amount | Percentage |
| | (in thousands) | | | |
| Operating expenses: | | | | |
| Research and development | $ 6,505 | $ 2,894 | $ 3,611 | 125% |
| General and administrative | 3,707 | 3,633 | 74 | 2% |
| Change in fair value of contingent consideration | 389 | 361 | 28 | 8% |
| Total operating expenses | 10,601 | 6,888 | 3,713 | 54% |
| Operating loss | (10,601) | (6,888) | (3,713) | 54% |
| Other income (expense) | | | | |
| Cease-use income | — | 6 | (6) | 100% |
| Change in fair value of warrants liabilities | (6,186) | (3,092) | (3,094) | 100% |
| Loss from minority interest investment | (355) | - | (355) | n/a |
| Interest income | 104 | 49 | 55 | 112% |
| Total other income (expense) | (6,437) | (3,037) | (3,400) | 112% |
| Loss from continuing operations | (17,038) | (9,925) | (7,113) | 72% |
| Loss from discontinued operations | - | (937) | 937 | 100% |
| Net loss | $ (17,038) | $ (10,862) | $ (6,176) | 57% |

***Revenue***

We have yet not commenced commercialization of DCCR, our current sole product, and accordingly, through June 30, 2019, have generated no revenue from continuing operations.

***Research and development expense***

Research and development expense of $6.5 million for the six months ended June 30, 2019, increased by $3.6 million over the six months ended June 30, 2018, resulting primarily from the initiation of the Phase III clinical trial in May 2018. As of June 30, 2019, we have 20 clinical trial sites initiated and, as a result, have incurred increased clinical site costs, consulting costs, lab costs, and manufacturing costs for DCCR production. Our efforts until May 2018 were focused on preparation of the trials.

***General and administrative expense***

General and administrative expense of $3.7 million for the six months ended June 30, 2019, was generally consistent with the expense during the six months ended June 30, 2018.

***Change in fair value of contingent consideration***

The approximate $389,000 for the six months ended June 30, 2019, represents the increase in the fair value of the additional consideration that we expect to pay Essentialis stockholders based on our assessment of the expected likelihood of achieving commercial sales milestones of $100 million and $200 million in future years.

***Other income (expense)***

Other expense of $6.4 million in the six months ended June 30, 2019, increased by $3.4 million from other expense during the six months ended June 30, 2018. This increase was primarily due to a $3.1 million higher increase in the fair value of our outstanding warrants during the six months ended June 30, 2019 compared to the six months ended June 30, 2018, as well an approximate $355,000 loss recorded on our minority interest investment in Capnia, our former subsidiary. These increases were slightly offset by approximately $55,000 more of interest income recorded during the six months ended June 30, 2019 compared to June 30, 2018.

**Results of Discontinued Operations**

Discontinued operations during 2018 consist of our activities previously dedicated to the development and commercialization of innovative diagnostics, devices and therapeutics addressing unmet medical needs, which consisted of: precision metering of gas flow technology marketed as Serenz® Allergy Relief, or Serenz; CoSense® End-Tidal Carbon Monoxide (ETCO) Monitor, or CoSense, which measures ETCO and aids in the detection of excessive hemolysis, a condition in which red blood cells degrade rapidly; and, products that included temperature probes, scales, surgical tables and patient surfaces. In March 2017 we determined to divest, sell or otherwise dispose of the CoSense, Neo Force, Inc., and Serenz businesses in order to focus on the development and commercialization of novel therapeutics for the treatment of rare diseases. The discontinued operations for the development and commercialization of innovative diagnostic devices and therapeutics are summarized below.

***Comparison of the three and six months ended June 30, 2019 and 2018, from discontinued operations***

| | Three Months Ended June 30, | | Increase (decrease) | |
|---|---|---|---|---|
| | 2019 | 2018 | Amount | Percentage |
| | (in thousands) | | | |
| Product revenue | $ — | $ 3 | $ (3) | 100% |
| Cost of product revenue | — | (23) | 23 | 100% |
| Gross profit (loss) | — | 26 | (26) | 100% |
| Expenses: | | | | |
| Research and development | — | 302 | (302) | 100% |
| Sales and marketing | — | 13 | (13) | 100% |
| General and administrative | — | 134 | (134) | 100% |
| Total expenses | — | 449 | (449) | 100% |
| Net loss from discontinued operations | $ — | $ (423) | $ 423 | 100% |

| | Six Months Ended June 30, | | Increase (decrease) | |
|---|---|---|---|---|
| | 2019 | 2018 | Amount | Percentage |
| | (in thousands) | | | |
| Product revenue | $ — | $ 54 | $ (54) | 100% |
| Cost of product revenue | — | 28 | (28) | 100% |
| Gross profit (loss) | — | 26 | (26) | 100% |
| Expenses: | | | | |
| Research and development | — | 703 | (703) | 100% |
| Sales and marketing | — | 24 | (24) | 100% |
| General and administrative | — | 236 | (236) | 100% |
| Total expenses | — | 963 | (963) | 100% |
| Net loss from discontinued operations | $ — | $ (937) | $ 937 | 100% |

All discontinued operations activity during the three and six months ended June 30, 2018 related to Capnia and its CoSense products. During October 2018, Capnia issued 53% of its outstanding shares of common stock to OAHL, leaving us with a noncontrolling interest. Accordingly, we deconsolidated Capnia's financial statements from ours and our remaining minority interest in Capnia is reported as a minority interest investment in our condensed consolidated balance sheet. As Capnia is no longer a consolidated entity of ours, there is no corresponding discontinued operations activity for the three or six months ended June 30, 2019.

**Liquidity and Capital Resources**

We had a net loss of $17.0 million during the six months ended June 30, 2019, and an accumulated deficit of $144.1 million at June 30, 2019, from having incurred losses since our inception. We had $13.8 million of working capital at June 30, 2019, and used $7.6 million of cash in operating activities during the six months ended June 30, 2019. We have financed our operations principally through issuances of equity securities.

We have continued to focus on expense control, including reducing legal fees and implementing a plan to allow Board members to receive common stock, in lieu of cash payments.

We expect to continue incurring losses for the foreseeable future and may be required to raise additional capital to complete our clinical trials, pursue product development initiatives and penetrate markets for the sale of our products. We believe that we will continue to have access to capital resources through possible public or private equity offerings, debt financings, corporate collaborations or other means, but the access to such capital resources is uncertain and is not assured. If we are unable to secure additional capital, we may be required to curtail our clinical trials and development of new products and take additional measures to reduce costs in order to conserve our cash in amounts sufficient to sustain operations and meet our obligations. These measures could cause significant delays in our efforts to complete clinical trials and commercialize our products, which is critical to the realization of our business plan and our future operations. These matters raise substantial doubt about our ability to continue as a going concern within one year from the date of filing this quarterly report.

The accompanying condensed consolidated financial statements have been prepared under the assumption we will continue to operate as a going concern, which contemplates the realization of assets and the settlement of liabilities in the normal course of business. The condensed consolidated financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts of liabilities that may result from uncertainty related to our ability to continue as a going concern.

**Cash flows**

The following table sets forth the primary sources and uses of cash and cash equivalents for each of the periods presented below:

| | Six Months Ended June 30, | |
|---|---|---|
| | 2019 | 2018 |
| | (in thousands) | |
| Net cash used in continuing operating activities | $ (7,580) | $ (4,502) |
| Net cash used in discontinued operating activities | - | (768) |
| Net cash used in operating activities | (7,580) | (5,270) |
| Net cash used in continuing investing activities | (16) | (1) |
| Net cash used in investing activities | (16) | (1) |
| Net cash provided by discontinued financing activities | — | 825 |
| Net cash provided by financing activities | — | 825 |
| Net decrease in cash, cash equivalents and restricted cash | | |
| Continuing operations | (7,596) | (4,503) |
| Discontinued operations | — | 57 |
| Net decrease in cash, cash equivalents and restricted cash | $ (7,596) | $ (4,446) |

**Continuing Operations**

***Cash used in operating activities***

During the six months ended June 30, 2019, operating activities used net cash of $7.6 million, which was primarily due to the loss from continuing operations of $17.0 million, adjusted for non-cash expenses of approximately $978,000 for depreciation and amortization, approximately $468,000 of expenses paid with common stock or equity awards, $6.6 million for the change in fair value of stock warrants and contingent consideration, and an approximate $355,000 operating loss on minority interest investment. Additionally, the usage of cash during the six months ended June 30, 2019, was reduced by $1.1 million due to decreases in prepaid

expenses and other current assets and amounts due from related parties, and increases in accounts payable, and accrued compensation and other current liabilities.

During the six months ended June 30, 2018, operating activities used net cash of $4.5 million, which was primarily due to the loss from continuing operations of $9.9 million, adjusted for non-cash expenses of approximately $983,000 for depreciation and amortization, $655,000 of expenses paid with common stock or equity awards, and $3.5 million for the change in fair value of stock warrants and contingent consideration. Additionally, an increase in accounts payable and a decrease in prepaid expenses and accrued compensation and other current liabilities offset the cash usage by $332,000.

***Cash used in investing activities***

Minimal cash was used for investing activities related to continuing operations in the six months ended June 30, 2019 and June 30, 2018 for the costs of acquiring property and equipment.

***Cash provided by financing activities***

There were no financing activities related to continued operations during the six months ended June 30, 2019 and June 30, 2018.

As of June 30, 2019, we had cash and cash equivalents of $19.4 million.

We believe that we do not have sufficient capital resources to sustain operations through at least the next twelve months from the date of this filing. We expect to continue incurring losses for the foreseeable future and may be required to raise additional capital to pursue our therapeutic product development initiatives. These conditions raise substantial doubt about our ability to continue as a going concern for a period of one year from the date of this report.

**Discontinued Operations**

***Cash used in operating activities***

There were no discontinued operations during the six months ended June 30, 2019, after the deconsolidation of Capnia in October 2018. During the six months ended June 30, 2018, we used net cash of approximately $768,000 for discontinued operating activities, resulting primarily from the loss from discontinued operations of approximately $937,000 partially offset by $52,000 of non-cash expenses associated with stock compensation and depreciation and amortization. Changes in the discontinued operations working capital accounts also offset the cash used by approximately $117,000, primarily from the decrease in various asset balances.

***Cash provided by investing activities***

There were no investing activities related to discontinued operations during the six months ended June 30, 2019 or June 30, 2018.

***Cash provided by financing activities***

There were no financing activities related to discontinued operations during the six months ended June 30, 2019. Net cash provided by financing activities related to discontinued operations was approximately $825,000 during the six months ended June 30, 2018, representing the cash received during the period from our joint venture partner to fund the operations of Capnia. Capnia was deconsolidated in October 2018 upon a transfer of a controlling interest in the entity to our joint venture partner, OAHL.

**Off-Balance Sheet Arrangements**

We do not have any off-balance sheet arrangements.

**Item 3. Quantitative and Qualitative Disclosures about Market Risk**

There have not been any material changes to our exposure to market risk during the six months ended June 30, 2019. For additional information regarding market risk, refer to the *Qualitative and Quantitative Disclosures About Market Risk* section of the Form 10-K.

**Item 4. Controls and Procedures**

**(a) Evaluation of Disclosure Controls and Procedures**

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in reports filed under the Securities Exchange Act of 1934, as amended, or the Exchange Act, is recorded, processed, summarized and reported within the time periods specified in U.S. Securities and Exchange Commission, or SEC, rules and forms, and that such information is accumulated and communicated to our management to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives.

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act as of the end of the period covered by this Quarterly Report on Form 10-Q. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of the period covered by this Quarterly Report on Form 10-Q, our disclosure controls and procedures were effective.

**(b) Changes in Internal Control over Financial Reporting**

There have been no changes to our internal control over financial reporting that occurred during the second fiscal quarter ended June 30, 2019, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

***Inherent Limitations on Effectiveness of Controls***

In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, even if determined effective and no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives to prevent or detect misstatements. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply judgment in evaluating the benefits of possible controls and procedures relative to their costs. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

## PART II – OTHER INFORMATION

### Item 1. Legal Proceedings

We may, from time to time, be party to litigation and subject to claims that arise in the ordinary course of business. In addition, third parties may, from time to time, assert claims against us in the form of letters and other communications. We currently believe that these ordinary course matters will not have a material adverse effect on our business; however, the results of litigation and claims are inherently unpredictable. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

### Item 1A. Risk Factors

An investment in our securities has a high degree of risk. Before you invest you should carefully consider the risks and uncertainties. A description of factors that could materially affect our business, financial condition, or operating results is included under "Risk Factors" in Item 1A of Part I of our 2018 Annual Report on Form 10-K and is incorporated herein by reference. There have been no material changes to the risk factor disclosure since our 2018 Annual Report on Form 10-K. The risk factors described in our Form 10-K are not the only risks facing our company. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial conditions and/or operating results. If any of these risks actually occur, our business, operating results and financial condition could be harmed, and the value of our stock could go down. This means you could lose all or a part of your investment.

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

None.

### Item 3. Defaults Upon Senior Securities

None.

### Item 4. Mine Safety Disclosures

Not applicable.

### Item 5. Other Information

The Company's current focus is on the development of Diazoxide Choline Controlled-Release, or DCCR, for patients with Prader-Willi syndrome, or PWS. On July 30, 2018, the DCCR development program for PWS was granted Fast Track designation by the FDA.

DCCR is a once-a-day tablet formulation which is currently being evaluated in a Phase III program in approximately 105 patients being enrolled at multiple sites. The program consists of a three-month Phase III randomized, double-blind, placebo-controlled, parallel group study (also called C601 or DESTINY PWS) as well as a 9-month open-label safety extension study. All patients who complete the Phase III study are eligible to enroll into the open-label extension study (C602). The Company continues to enroll patients into its ongoing DESTINY PWS study, which commenced in May 2018 and is evaluating DCCR tablets for the treatment of PWS. To date, approximately 50% of the targeted number of patients have been enrolled into the DESTINY PWS clinical study and approximately 90% of them have either successfully completed or continue to be treated in the study. Approximately 90% of those completing the Destiny PWS study have elected to continue in C602, Soleno's open-label safety extension study and approximately 90% of those enrolled have continued to receive DCCR treatment in C602.

As of June 30, 2019, 17 trial sites have been activated in the U.S., with additional sites anticipated to be added, and 3 sites have been activated in the United Kingdom. The most recent sites activated are the National Institutes of Health in Bethesda, MD, Children's Hospital Colorado in Aurora, CO, Nationwide Children's Hospital in Columbus, OH, University of California, Irvine, in Irvine, CA, University of Utah, Salt Lake City, UT, Emory University, Atlanta, GA, and Sparrow Clinical Research Institute, Lansing, MI in the U.S. and Chelsea and Westminster Hospital, Royal London Hospital and Birmingham Children's Hospital in the U. K. Top-line data from the DESTINY PWS study is expected in the first half of 2020.

On March 14, 2019, the Data Safety Monitoring Board, the independent group of experts monitoring the safety of the DESTINY PWS study, recommended the continuation of the study without modification, which supports the Company's understanding of DCCR's safety.

**Item 6. Exhibits**

See the Exhibit Index on the page immediately preceding the exhibits for a list of exhibits filed as part of this Quarterly Report on Form 10-Q, which Exhibit Index is incorporated herein by reference.

## EXHIBIT INDEX

| Exhibit Number | Description of Document | Incorporated by Reference from | | | Filed Herewith |
|---|---|---|---|---|---|
| | | Registrant's Form | Date Filed with the SEC | Exhibit Number | |
| 2.1 | Stock Purchase Agreement, dated as of July 18, 2017, and between Soleno Therapeutics, Inc., a Delaware corporation, and NeoForce Holdings, Inc. a Delaware corporation | 8-K | July 24, 2017 | 2.1 | |
| 2.2 | Joint Venture Agreement, dated as of December 4, 2017, by and among Soleno Therapeutics, Inc., Capnia, Inc., and OptAsia Healthcare Limited | 8-K | December 8, 2017 | 2.1 | |
| 2.3 | PRC IP Purchase Agreement, dated as of December 4, 2017, by and between OptAsia Healthcare Limited and Capnia, Inc. | 8-K | December 8, 2017 | 2.2 | |
| 2.4 | Transition Services Agreement, dated as of December 4, 2017, by and among Soleno Therapeutics, Inc., a Delaware corporation, Capnia, Inc. and OptAsia Healthcare, Ltd., a Hong Kong company | 8-K | December 8, 2017 | 2.3 | |
| 3.1 | Amended and Restated Certificate of Incorporation of Soleno Therapeutics, Inc. | S-1/A | August 7, 2014 | 3.2 | |
| 3.2 | Amended and Restated Bylaws of Soleno Therapeutics, Inc. | S-1/A | July 1, 2014 | 3.4 | |
| 3.3 | Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock. | 8-K | October 15, 2015 | 3.1 | |
| 3.4 | Certificate of Designation of Preferences, Rights and Limitations of Series B Convertible Preferred Stock | 8-K | July 6, 2016 | 3.1 | |
| 3.5 | Certificate of Amendment | 8-K | May 11, 2017 | 3.1 | |
| 3.6 | Certificate of Amendment to the Certificate of Incorporation | 8-K | October 6, 2017 | 3.1 | |
| 4.1 | Form of the common stock certificate. | S-1/A | August 5, 2014 | 4.1 | |
| 4.2 | Amended And Restated Investors' Rights Agreement, dated March 20, 2008, by and among Soleno Therapeutics, Inc. and certain holders of the Soleno Therapeutics, Inc.'s capital stock named therein. | S-1/A | July 1, 2014 | 4.2 | |
| 4.3 | Form of Series A Warrant Agreement. | S-1/A | August 5, 2014 | 4.3 | |
| 4.4 | Form of the Series A Warrant certificate. | S-1/A | August 5, 2014 | 4.4 | |
| 4.5 | Form of Underwriters' Compensation Warrant. | S-1/A | August 5, 2014 | 4.5 | |
| 4.6 | Form of Convertible Promissory Note issued in February 2010 and March 2010 in connection with the 2010 convertible note financing. | S-1 | June 10, 2014 | 4.6 | |
| 4.7 | Form of Warrant to Purchase Shares issued in February 2010 and March 2010 in connection with the 2010 convertible note financing. | S-1 | June 10, 2014 | 4.7 | |

| Exhibit Number | Description of Document | Incorporated by Reference from | | | Filed Herewith |
|---|---|---|---|---|---|
| | | Registrant's Form | Date Filed with the SEC | Exhibit Number | |
| 4.8 | Form of Convertible Promissory Note issued in November 2010 in connection with the 2010 convertible note financing. | S-1 | June 10, 2014 | 4.8 | |
| 4.9 | Form of Warrant to Purchase Shares issued in November 2010 in connection with the 2010 convertible note financing. | S-1 | June 10, 2014 | 4.9 | |
| 4.10 | Form of Convertible Promissory Note issued in January 2012 in connection with the 2012 convertible note financing. | S-1 | June 10, 2014 | 4.10 | |
| 4.11 | Form of Warrant to Purchase Shares issued in January 2012 in connection with Soleno Therapeutics, Inc.'s 2012 convertible note financing. | S-1 | June 10, 2014 | 4.11 | |
| 4.12 | Form of Convertible Promissory Note issued in July 2012 and August 2012 in connection with the 2012 convertible note financing. | S-1 | June 10, 2014 | 4.12 | |
| 4.13 | Form of Warrant to Purchase Shares issued in July 2012 and August 2012 in connection with the 2012 convertible note financing. | S-1 | June 10, 2014 | 4.13 | |
| 4.14 | Form of Convertible Promissory Note issued in April, August and October 2014 in connection with the 2014 convertible note financing. | S-1 | June 10, 2014 | 4.14 | |
| 4.15 | Form of Warrant to Purchase Shares issued in April, August and October 2014 in connection with the 2014 convertible note financing. | S-1 | June 10, 2014 | 4.15 | |
| 4.16 | Form of unit certificate. | S-1/A | August 5, 2014 | 4.16 | |
| 4.17 | Form of Series B Warrant Agreement. | S-1/A | November 4, 2014 | 4.17 | |
| 4.18 | Form of the Series B Warrant certificate. | S-1/A | November 4, 2014 | 4.18 | |
| 4.19 | Form of the Series C Warrant Agreement. | S-4 | April 1, 2015 | 4.19 | |
| 4.20 | Form of the Series C Warrant certificate. | S-4 | April 1, 2015 | 4.20 | |
| 4.21 | Form of Series D Common Stock Purchase Warrant. | 8-K | October 15, 2015 | 4.1 | |
| 4.22 | Form of Placement Agent Warrant. | 8-K | October 15, 2015 | 4.2 | |
| 4.23 | Form of Series D common stock Warrant Certificate. | 8-K | October 15, 2015 | 4.3 | |
| 4.24 | Form of Series A Convertible Preferred Stock Certificate. | 8-K | October 15, 2015 | 4.4 | |
| 4.25 | Form of Placement Agent Warrant. | 8-K | July 6, 2016 | 4.1 | |
| 4.26 | Form of Series B Convertible Preferred Stock Certificate. | 8-K | July 6, 2016 | 4.2 | |
| 4.27 | Form of Common Stock Purchase Warrant | 8-K | December 13, 2017 | 4.1 | |
| 4.28 | Form of Common Stock Purchase Warrant | 8-K | December 19, 2018 | 4.1 | |
| 9.10 | Form of Voting Agreement. | 8-K | October 15, 2015 | 9.1 | |

| Exhibit Number | Description of Document | Incorporated by Reference from | | | Filed Herewith |
|---|---|---|---|---|---|
| | | Registrant's Form | Date Filed with the SEC | Exhibit Number | |
| 9.20 | Form of Voting Agreement. | 8-K | July 6, 2016 | 9.1 | |
| 9.30 | Form of Voting Agreement. | 8-K | December 27, 2016 | 10.1 | |
| 10.1 | Form of Indemnification Agreement between the Registrant and each of its directors and executive officers. | S-1 | June 10, 2014 | 10.1 | |
| 10.2 | 1999 Incentive Stock Plan and forms of agreements thereunder. | S-1 | June 10, 2014 | 10.2 | |
| 10.3 | 2010 Equity Incentive Plan and forms of agreements thereunder. | S-1 | June 10, 2014 | 10.3 | |
| 10.4 | 2014 Equity Incentive Plan and forms of agreements thereunder. | S-1/A | July 1, 2014 | 10.4 | |
| 10.5 | 2014 Employee Stock Purchase Plan and forms of agreements thereunder. | S-1/A | July 1, 2014 | 10.5 | |
| 10.6 | Offer Letter, dated June 22, 2007, by and between Soleno Therapeutics, Inc. and Ernest Mario, Ph.D. | S-1 | June 10, 2014 | 10.6 | |
| 10.7 | Employment Agreement, dated April 6, 2010, by and between Soleno Therapeutics, Inc. and Anish Bhatnagar. | S-1 | June 10, 2014 | 10.7 | |
| 10.8 | Offer Letter, dated May 29, 2013, between Soleno Therapeutics, Inc. and Anthony Wondka. | S-1 | June 10, 2014 | 10.8 | |
| 10.9 | Offer Letter, dated April 17, 2014, by and between Soleno Therapeutics, Inc. and Antoun Nabhan. | S-1 | June 10, 2014 | 10.9 | |
| 10.10 | Asset Purchase Agreement dated May 11, 2010, by and between Soleno Therapeutics, Inc. and BioMedical Drug Development Inc. | S-1 | June 10, 2014 | 10.10 | |
| 10.11 | Convertible Note and Warrant Purchase Agreement, dated February 10, 2010, by and among Soleno Therapeutics, Inc. and the investors named therein. | S-1 | June 10, 2014 | 10.11 | |
| 10.12 | Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares, dated November 10, 2010, by and among Soleno Therapeutics, Inc. and the investors named therein. | S-1 | June 10, 2014 | 10.12 | |
| 10.13 | Amendment No. 2 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares, dated January 17, 2012, by and among Soleno Therapeutics, Inc. and the investors named therein. | S-1 | June 10, 2014 | 10.13 | |
| 10.14 | Convertible Note and Warrant Purchase Agreement, dated January 16, 2012, by and among Soleno Therapeutics, Inc. and the investors named therein. | S-1 | June 10, 2014 | 10.14 | |

| Exhibit Number | Description of Document | Incorporated by Reference from | | | Filed Herewith |
|---|---|---|---|---|---|
| | | Registrant's Form | Date Filed with the SEC | Exhibit Number | |
| 10.15 | Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares, dated July 31, 2012, by and among Soleno Therapeutics, Inc. and the investors named therein. | S-1 | June 10, 2014 | 10.15 | |
| 10.16 | Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares, dated April 28, 2014, by and among Soleno Therapeutics, Inc. and the investors named therein. | S-1 | June 10, 2014 | 10.16 | |
| 10.17 | Convertible Note and Warrant Purchase Agreement, dated April 28, 2014, by and among Soleno Therapeutics, Inc. and the investors named therein. | S-1 | June 10, 2014 | 10.17 | |
| 10.18 | Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares, dated May 5, 2014, by and among Soleno Therapeutics, Inc. and the investors named therein. | S-1 | June 10, 2014 | 10.18 | |
| 10.19 | Sublease, dated May 20, 2014, by and among Soleno Therapeutics, Inc. and Silicon Valley Finance Group. | S-1/A | July 1, 2014 | 10.19 | |
| 10.20 | Offer Letter, dated June 24, 2014, by and between Soleno Therapeutics, Inc. and David D. O'Toole. | S-1/A | July 22, 2014 | 10.20 | |
| 10.21 | Loan Agreement by and between Soleno Therapeutics, Inc. and the investors named therein, dated September 29, 2014. | S-1/A | September 29, 2014 | 10.21 | |
| 10.22 | Revised Second Tranche Closing Notice and Letter Amendment dated August 18, 2014 relating to the August 2014 Notes. | S-1/A | November 4, 2014 | 10.22 | |
| 10.23 | Second Tranche Subsequent Closing Notice and Letter Amendment dated October 22, 2014 relating to the October 2014 Notes. | S-1/A | November 4, 2014 | 10.23 | |
| 10.24 | Form of Warrant Exercise Agreement. | 8-K | March 5, 2015 | 10.1 | |
| 10.25 | Advisory Agreement by and between Soleno Therapeutics, Inc. and Maxim Group LLC, dated March 4, 2015. | S-4 | April 1, 2015 | 10.25 | |
| 10.26 | Agreement and First Amendment to Asset Purchase Agreement between the Company, BDDI and affiliate of BDDI, dated June 30, 2015. | 8-K | July 7, 2015 | 10.1 | |
| 10.27 | Common Stock Purchase Agreement between the Company and an affiliate of BDDI, dated June 30, 2015. | 8-K | July 7, 2015 | 10.2 | |

| Exhibit Number | Description of Document | Incorporated by Reference from | | | Filed Herewith |
|---|---|---|---|---|---|
| | | Registrant's Form | Date Filed with the SEC | Exhibit Number | |
| 10.28 | Registration Rights Agreement between the Company and Aspire Capital Fund, LLC, dated July 24, 2015. | 8-K | July 27, 2015 | 4.1 | |
| 10.29 | Common Stock Purchase Agreement between the Company and Aspire Capital Fund, LLC, dated July 24, 2015. | 8-K | July 27, 2015 | 10.1 | |
| 10.30 | Engagement Letter dated September 17, 2015, between Soleno Therapeutics, Inc. and Maxim Group, LLC. | 8-K | October 15, 2015 | 1.1 | |
| 10.31 | Securities Purchase Agreement dated October 12, 2015. | 8-K | October 15, 2015 | 10.1 | |
| 10.32 | Form of Registration Rights Agreement. | 8-K | October 15, 2015 | 10.2 | |
| 10.33 | Form of Lock-Up Agreement. | 8-K | October 15, 2015 | 10.3 | |
| 10.34 | Amendment No. 1 to Securities Purchase Agreement dated October 29, 2015. | S-1/A | December 22, 2015 | 10.33 | |
| 10.35 | Transfer and Distribution Agreement: United States: by and between Soleno Therapeutics, Inc. and Bemes, Inc. signed January 26, 2016. | 8-K | January 28, 2016 | 10.1 | |
| 10.36 | Engagement Letter dated June 26, 2016, between Soleno Therapeutics, Inc. and Maxim Group, LLC. | 8-K | July 6, 2016 | 1.1 | |
| 10.37 | Securities Purchase Agreement dated June 29, 2016. | 8-K | July 6, 2016 | 10.1 | |
| 10.38 | Form of Registration Rights Agreement dated June 29, 2016. | 8-K | July 6, 2016 | 10.2 | |
| 10.39 | Amendment No. 1 to Securities Purchase Agreement dated September 20, 2016. | S-1/A | September 20, 2016 | 10.39 | |
| 10.40 | Agreement and Plan of Merger and Reorganization, dated as of December 22, 2016, by and among Soleno Therapeutics, Inc., a Delaware corporation, Essentialis, Inc., a Delaware corporation, Company E Merger Sub, Inc., a Delaware corporation and a wholly-owned subsidiary of Soleno Therapeutics, and Neil Cowen as the stockholders' representative. | 8-K | December 27, 2016 | 2.1 | |
| 10.41 | Registration Rights Agreement between the Company and Aspire Capital Fund, LLC, dated January 27, 2017. | S-1 | February 1, 2017 | 10.51 | |
| 10.42 | Common Stock Purchase Agreement between the Company and Aspire Capital Fund, LLC, dated January 27, 2017. | S-1 | February 1, 2017 | 10.52 | |
| 10.43 | Stock Purchase Agreement made by and between the Company and NeoForce Holdings, Inc. a Delaware corporation dated July 18, 2017 | 8-K | July 24, 2017 | 2.1 | |

| Exhibit Number | Description of Document | Incorporated by Reference from | | | Filed Herewith |
|---|---|---|---|---|---|
| | | Registrant's Form | Date Filed with the SEC | Exhibit Number | |
| 10.44 | Joint Venture Agreement dated as of December 4, 2017 by and among Soleno Therapeutics, Inc., Capnia, Inc., and OptAsia Healthcare Limited | 8-K | December 8, 2017 | 2.1 | |
| 10.45 | Securities Purchase Agreement, dated as of December 11, 2017 | 8-K | December 13, 2017 | 10.1 | |
| 10.46 | Confidential Consulting Agreement, dated September 5, 2017 by and between FLG Partners, LLC and the Company | 8-K | June 4, 2018 | 10.1 | |
| 10.47 | Securities Purchase Agreement, dated as of December 19, 2018 | 8-K | December 19, 2018 | 10.1 | |
| 10.48 | Employment Agreement with Kristen Yen. | S-1 | March 29, 2019 | 10.48 | |
| 31.1 | Certification of Principal Executive Officer Required Under Rule 13a-14(a) and 15d-14(a) of the Securities and Exchange Act of 1934, as amended | | | | X |
| 31.2 | Certification of Principal Financial and Accounting Officer Required Under Rule 13a-14(a) and 15d-14(a) of the Securities and Exchange Act of 1934, as amended | | | | X |
| 32.1 | Certification of Principal Executive Officer Required Under Rule 13a-14(b) of the Securities and Exchange Act of 1934, as amended, and 18 U.S.C. §1350 | | | | X |
| 32.2 | Certification of Principal Financial and Accounting Officer Required Under Rule 13a-14(b) of the Securities and Exchange Act of 1934, as amended, and 18 U.S.C. §1350 | | | | X |
| 101.INS | XBRL Instance Document. | | | | X |
| 101.SCH | XBRL Taxonomy Extension Schema Document. | | | | X |
| 101.CAL | XBRL Taxonomy Extension Calculation Linkbase Document. | | | | X |
| 101.DEF | XBRL Taxonomy Extension Definition Linkbase Document. | | | | X |
| 101.LAB | XBRL Taxonomy Extension Label Linkbase Document. | | | | X |
| 101.PRE | XBRL Taxonomy Extension Presentation Linkbase Document. | | | | X |

**SIGNATURES**

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

Date: August 7, 2019

**SOLENO THERAPEUTICS, INC.**

By: /s/ Jonathan Wolter
Jonathan Wolter
Chief Financial Officer
**(authorized officer and principal financial and accounting officer)**

**Exhibit 31.1**

**CERTIFICATION OF THE CHIEF EXECUTIVE OFFICER**
**PURSUANT TO**
**SECURITIES EXCHANGE ACT RULES 13A-14(A) AND 15D-14(A)**

I, Anish Bhatnagar, M.D., certify that:

1. I have reviewed this quarterly report on Form 10-Q of Soleno 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 officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

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

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

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

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

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

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

Date: August 7, 2019

/s/ Anish Bhatnagar
Anish Bhatnagar
President, Chief Executive Officer
(principal executive officer)

**Exhibit 31.2**

**CERTIFICATION OF THE CHIEF EXECUTIVE OFFICER**
**PURSUANT TO**
**SECURITIES EXCHANGE ACT RULES 13A-14(A) AND 15D-14(A)**

I, Jonathan Wolter, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Soleno 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 officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

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

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

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

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

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

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

Date: August 7, 2019

/s/ Jonathan Wolter
Jonathan Wolter
Chief Financial Officer
(principal financial and accounting officer)

**Exhibit 32.1**

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

In connection with the Quarterly Report of Soleno Therapeutics, Inc. (the "Company") on Form 10-Q for the fiscal quarter ended June 30, 2019, as filed with the Securities and Exchange Commission (the "Report"), Anish Bhatnagar, President, Chief Executive Officer of the Company does hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

Date: August 7, 2019

/s/ Anish Bhatnagar
Anish Bhatnagar
President, Chief Executive Officer
(principal executive officer)

**Exhibit 32.2**

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

In connection with the Quarterly Report of Soleno Therapeutics, Inc. (the "Company") on Form 10-Q for the fiscal quarter ended June 30, 2019, as filed with the Securities and Exchange Commission (the "Report"), Jonathan Wolter, Chief Financial Officer of the Company does hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

Date: August 7, 2019

/s/ Jonathan Wolter
Jonathan Wolter
Chief Financial Officer
(principal financial and accounting officer)