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

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 OF THE SECURITIES EXCHANGE ACT OF 1934

For the month of: April 2018 (Report No. 1)

Commission File Number 001-35932

ARCTURUS THERAPEUTICS LTD.

(Translation of Registrant's name into English)

10628 Science Center Drive, Suite 200 San Diego, California 92121 (Address of Principal Executive Office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F ⊠ Form 40-F □

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

On April 2, 2018, Mark Herbert, Interim President of Arcturus Therapeutics Ltd. (the "Company"), sent a letter (the "Letter") to the Company's employees regarding the progress the Company has been making across its ongoing preclinical programs and collaborations. The Letter is attached hereto as Exhibit 99.1.

Forward-Looking Statements

The Letter may contain "forward-looking statements" that involve substantial risks and uncertainties for purposes of the safe harbor provided by the Private Securities Litigation Reform Act of 1995. Any statements, other than statements of historical fact, included in the Letter regarding strategy, future operations, collaborations, future financial position, prospects, plans and objectives of management are forward-looking statements. Examples of such statements may include, but are not limited to, statements relating to the Company's future operations and its ability to successfully initiate and complete clinical trials; the nature, strategy and focus of the Company; the potential benefits of the Company's new facility and the development and commercial potential and potential benefits of any product candidates and collaborative arrangements. The Company may not actually achieve the plans, carry out the intentions or meet the expectations or projections disclosed in any forward-looking statements and you should not place undue reliance on those forward-looking statements. Any such statements are based on management's current expectations and involve risks and uncertainties. Actual results and performance could differ materially from those projected in any forward-looking statements.

The forward-looking statements contained or implied in the Letter are subject to other risks and uncertainties, including those discussed under the heading "Risk Factors" in the Company's (formerly Alcobra Ltd.'s) Annual Report on Form 20-F for the fiscal year ended December 31, 2016, filed with the Securities and Exchange Commission (the "SEC") on April 28, 2017 and in subsequent filings with, or submissions to, the SEC. Except as otherwise required by law, the Company disclaims any intention or obligation to update or revise any forward-looking statements, which speak only as of the date they were made, whether as a result of new information, future events or circumstances or otherwise.

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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.

ARCTURUS THERAPEUTICS LTD.

Date: April 2, 2018

By: /s/ Mark Herbert Name: Mark Herbert

Title: Interim President

Exhibit Index

Exhibit No.	Description
99.1	Letter to Company Employees from Mark Herbert, dated April 2, 2018

To: Arcturus Therapeutics Ltd. Employees From: Mark Herbert, Interim President Date: April 2, 2018 Subject: Notes from the Road

Hi Team,

We are excited to share some of the great progress we have been making at Arcturus across our ongoing preclinical programs and collaborations. We are confident that we are well-positioned to deliver on our objective of developing innovative RNA medicines.

I recently returned from Germany, where together with seven Arcturus colleagues, we had a successful kick-off meeting for our partnership with CureVac, one of the three leading pure-play novel messenger RNA (mRNA) therapeutics companies. Our new partnership with CureVac is the first co-development program of our lead asset, LUNAR-OTC. As you may recall, we announced in January 2018 a broad strategic collaboration agreement with CureVac to jointly discover, develop and commercialize novel mRNA therapeutics. These recent meetings with CureVac made clear to us that they value Arcturus' innovative, proprietary delivery technology and the potential for our collaboration.

Our existing partners and other stakeholders have expressed renewed enthusiasm and support for the important work that we at Arcturus do to deliver value for patients, partners, employees and shareholders. We have also continued to receive tremendous interest from new pharma and biotech partners for use of our technology platforms in oncology and infectious disease applications as evidenced by the more than 25 one-on-one meetings we supported at BIO Europe in Amsterdam in March.

In addition, your continued efforts have driven key advancements in our platform and ongoing collaborations. We have completed mouse and non-human primate studies, which demonstrate applications of LUNAR[™] for infectious and oncology vaccines. Our lung delivery and LUNAR-CF data, presented recently to our collaborators at Cystic Fibrosis Foundation Therapeutics, was impressive, and we hope to fast-track additional proof-of-concept studies in non-human primates and quickly move our program to the clinic. Finally, we have achieved LUNAR-OTC proof-of-concept in a repeat dose study in a mouse model of OTC deficiency. This is an important milestone when considering utility of an mRNA therapeutic, and we have set the stage for future successes as we work with the CureVac team to move the program forward.

Our progress is driven by what you do each and every day – from our preclinical and scientific teams to our researchers and business development leaders. Thanks to your hard work, Arcturus is positioned for continued success as we build on our momentum and advance the Company toward clinical development.

As you know, we recently moved into our new headquarters on March 19, a reflection of the growth and expansion our footprint and broadened capabilities. The nearly 25,000 square foot state-of-the-art facility encompasses all of our functional groups, with offices, labs and vivarium located in a single location. We are confident the new facility will deliver significant benefits to the entire Arcturus organization providing:

- · Stronger scientific infrastructure, which will enhance our platform research capabilities;
- · Increased production, process development and scale capabilities for our RNA and LUNAR technology platforms;
- · Expanded preclinical and pharmacology research capabilities; and
- State of the art offices and infrastructure.

Thanks again for remaining focused on your day-to-day responsibilities as we aim to transform the lives of patients with serious diseases. We are committed to executing our strategic plan, and we appreciate your continued efforts as we build on our success in developing and commercializing our diverse pipeline of RNA therapeutics.

Best,

Mark

Mark Herbert Interim President