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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: May 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):

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On May 14, 2018, Arcturus Therapeutics Ltd. (the “Company”) announced the filing (on May 14, 2018) of the Company’s Annual Report on Form 20-F for the fiscal year ended December 31, 2017 with the U.S. Securities and Exchange Commission. The press release is attached hereto as Exhibit 99.1.

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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: May 14, 2018

By: /s/ Mark Herbert  
Name: Mark Herbert  
Title: Interim President

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## Exhibit Index

Exhibit No.	Description
99.1	Press Release issued by the Company on May 14, 2018, titled "Arcturus Therapeutics Files Form 20-F."

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FOR IMMEDIATE RELEASE

**Arcturus Therapeutics Files Form 20-F**

**San Diego, CA – May 14, 2018** – Arcturus Therapeutics Ltd. (NASDAQ: ARCT), a leading RNA medicines company, today announced the filing of the Company's Annual Report on Form 20-F for the fiscal year ended December 31, 2017 with the U.S. Securities and Exchange Commission on May 14, 2018. The document is also available on the company's corporate website at <https://arcturusrx.com>.

Arcturus said:

The filing of our Form 20-F is a key milestone in strengthening the Company and complying with financial disclosure requirements following our merger last year. We are actively advancing our preclinical programs and partnerships, and continue to make significant progress towards developing innovative RNA medicines to transform the lives of patients with serious diseases.

In the last two quarters, we have initiated several new collaborative programs with Janssen, CureVac and Synthetic Genomics, and we continue progressing programs within the Takeda and Ultragenyx relationships. We have achieved proof of concept for the Ultragenyx program LUNAR-GSDIII in the preclinical disease model. In our internal programs, we are moving the LUNAR-OTC program closer to the clinic with our co-development partner CureVac, and have achieved several milestones in the LUNAR-CF program supported by Cystic Fibrosis Foundation Therapeutics.

The Executive Committee of Arcturus' Board of Directors and the refreshed Arcturus management team remain focused on executing on our strategic initiatives and driving long-term growth and value for our shareholders.

**About Arcturus Therapeutics Ltd.**

Founded in 2013 and based in San Diego, Arcturus Therapeutics Ltd. (NASDAQ: ARCT) is an RNA medicines company with enabling technologies - UNA Oligomer chemistry and LUNAR® lipid-mediated delivery. Arcturus' diverse pipeline of RNA therapeutics includes programs pursuing rare diseases, Hepatitis B, non-alcoholic steatohepatitis (NASH), cystic fibrosis, and vaccines. Arcturus' versatile RNA therapeutics platforms can be applied toward multiple types of RNA medicines including small interfering RNA, messenger RNA, replicon RNA, antisense RNA, microRNA and gene editing therapeutics. Arcturus owns LUNAR lipid-mediated delivery and Unlocked Nucleomonomer Agent (UNA) technology including UNA Oligomers, which are covered by its extensive patent portfolio (140 patents and patent applications, issued in the U.S., Europe, Japan, China and other countries). Arcturus' proprietary UNA technology can be used to target individual genes in the human genome, as well as viral genes, and other species for therapeutic purposes. Arcturus' commitment to the development of novel RNA therapeutics has led to partnerships with Janssen Pharmaceuticals, Inc., part of the Janssen Pharmaceutical Companies of Johnson & Johnson, Ultragenyx Pharmaceutical, Inc., Takeda Pharmaceutical Company Limited, Synthetic Genomics Inc., CureVac AG and Cystic Fibrosis Foundation Therapeutics Inc. For more information, visit [www.ArcturusRx.com](http://www.ArcturusRx.com), the content of which is not incorporated herein by reference.

**Forward-Looking Statements**

This press release 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 this press release including with respect to activities to advance the Company’s preclinical programs and partnerships, the potential of the Company’s RNA medicines to transform the lives of patients, the future of the Company’s current and future collaborations, and the potential for long-term growth, are forward-looking statements. Any such statements are based on management’s current expectations and involve risks and uncertainties, including the risks inherent in preclinical and clinical drug development, risks related to collaborations with third parties and the risks related to the holding shares of the Company’s stock for the long term. Arcturus 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. Actual results and performance could differ materially from those projected in any forward-looking statements. The forward-looking statements contained or implied in this press release are subject to other risks and uncertainties, including those discussed under the heading “Risk Factors” in Arcturus’ (formerly Alcobra Ltd.’s) Annual Report on Form 20-F for the fiscal year ended December 31, 2017, filed with the SEC on May 14, 2018 and in subsequent filings with, or submissions to, the SEC. Except as otherwise required by law, Arcturus 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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