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: February 2018 (Report No. 3)

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 o

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): o

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): o

Effective February 11, 2018, Padmanabh Chivukula, Ph.D., resigned as a member of the board of directors, Chief Scientific Officer and Chief Operating Officer of Arcturus Therapeutics Ltd. (the "Company").

This Form 6-K is incorporated by reference into the Registration Statements on Form F-3 (File No. 333- 209960) and Form S-8 (File No. 333- 194875, File No. 333-202394, File No. 333-209947, File No. 333-217556 and File No. 333-221830) of the Company, filed with the Securities and Exchange Commission, to be a part thereof from the date on which this report is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.

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: February 13, 2018

ARCTURUS THERAPEUTICS LTD.

By: /s/ Mark Herbert

Name: Mark Herbert Title: Interim President