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 under the Securities Exchange Act of 1934

For the month of: November 2017

Commission file number: 001-35932

ALCOBRA LTD.

(Translation of registrant's name into English)

Azrieli Triangle Building
132 Derech Menachem Begin 39th Floor
<u>Tel Aviv 6701101 Israel</u>
(Address of principal executive offices)

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 Regulations S-T Rule 101(b)(1):	
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Supplemental Information Concerning the November 12, 2017 Extraordinary General Meeting of Shareholders

Background

On October 20, 2017, Alcobra Ltd. (the "**Registrant**") furnished to the Securities and Exchange Commission (the "**SEC**") its Report of Foreign Private Issuer on Form 6-K (the "**Prior Report**"), which included, as exhibits, an Amended Notice of Extraordinary General Meeting of Shareholders of the Registrant (the "**Meeting**"), a proxy statement ("**Proxy Statement**") and a proxy card (collectively, the "**Proxy Materials**"). Copies of the Proxy Materials were mailed to the shareholders of the Registrant on or about October 20, 2017, and are also available on https://www.sec.gov/Archives/edgar/data/1566049/000114420417053475/0001144204-17-053475-index.htm.

As stated in the Prior Report, the Meeting is scheduled to take place on November 12, 2017, at 10:00 am (Israel Time), at the offices of the Registrant's counsel (Zysman, Aharoni, Gayer & Co.) at "Beit Zion", 41-45 Rothschild Blvd., 8th Fl., Tel Aviv 6578401, Israel. The purpose of the Meeting is for shareholders to vote on the approval of certain resolutions required in connection with the proposed issuance of a majority interest in the Registrant's share capital to the current equity-holders of Arcturus Therapeutics, Inc. ("Arcturus") in consideration for 100% of the equity securities of Arcturus, which will merge with a wholly-owned subsidiary of the Registrant and become a wholly-owned subsidiary of the Registrant (the "Transaction").

Only shareholders of record who held Ordinary Shares, NIS 0.01 par value per share, of the Registrant at the close of trading on the Nasdaq Global Market on October 3, 2017, will be entitled to vote at the Meeting and any postponements or adjournments thereof.

Since the date of the Prior Report, certain developments have taken place, which developments are expected to change the Exchange Ratio (as such term is defined in the Proxy Statement) and expected combined company cash and cash equivalents upon the closing of the Transaction ("Closing"). Therefore, the Registrant seeks to provide in this Report of Foreign Private Issuer on Form 6-K (the "Supplemental Report") supplemental information concerning the Transaction and the updated anticipated consideration to be paid at Closing to the current equity-holders of Arcturus.

Accordingly, the Proxy Materials are hereby amended and supplemented by, and should be read as part of, and in conjunction with, the information set forth in this Supplemental Report. Capitalized terms used in this Supplemental Report that are not otherwise defined herein have the respective meanings ascribed to those terms in the Proxy Materials. These supplemental disclosures to the Proxy Materials should be read in conjunction with the Proxy Materials, which should be read in their entirety. To the extent that information in this Supplemental Report differs from or supplements information contained in the Proxy Materials, the information in this Supplemental Report prevails.

Voting

If you have any questions about any of the matters to be voted on at the Meeting, the Proxy Materials or this Supplemental Report, or if you would like additional copies of the Proxy Materials or need to obtain proxy cards or other information related to the proxy solicitation, you may contact our proxy solicitor, Morrow Sodali, at 470 West Avenue, Stamford CT, 06902 or call: Banks and Brokerage Firms Call: (203) 658-9400; Shareholders Call Toll Free: (800) 662-5200, or via e-mail: adhd@morrowsodali.com.

Instructions for voting your shares at the Meeting were included with the Proxy Materials. If you have previously voted your shares and do not wish to change your vote, you do not need to take any further action. If you have previously voted your shares and wish to change your vote, please see the instructions in the Proxy Materials or please contact Morrow Sodali as described above. Voting again will supersede your previous vote, regardless of how you previously voted.

Supplemental Information and Amendments to the Proxy Statement

Synthetics Genomics Partnership

In October 2017, Arcturus partnered with Synthetic Genomics Inc. ("SGI") to develop and commercialize next-generation vaccines and therapeutics for human and animal health, using Arcturus' LUNAR lipid-mediated delivery platform and SGI's self-amplifying RNA technology. Under the agreement, Arcturus received an upfront cash payment and will receive R&D support, as well as pre-clinical, development, and sales milestone payments, and royalty payments on any future sublicensed products.

Change in Arcturus Net Cash at Closing

Since the date of the Prior Report, Arcturus has received (or has receivables for) an aggregate of approximately \$10,000,000 from it business partners, in both upfront payments upon execution of new collaboration agreements, including the Janssen Pharmaceuticals, Inc. ("Janssen") and SGI partnership agreements, and exercise of the existing option to further collaboration by Ultragenyx Pharmaceutical, Inc. Accordingly, Arcturus anticipates having net cash at Closing of approximately \$15,000,000, instead of \$5,000,000 as anticipated in the Proxy Materials. Since the updated anticipated Arcturus net cash at Closing exceeds the \$6,750,000 Arcturus net cash threshold set forth in the merger agreement for the Transaction (the "Merger Agreement"), the Exchange Ratio will need to be recalculated and change, as provided for below.

As previously reported, the Registrant estimates to have net cash at Closing that is within the range of \$33,250,000 and \$36,750,000. This estimation has not changed.

Change in the Exchange Ratio

As disclosed in the Proxy Statement, the adjustment of ownership percentage in the combined company will be made by increasing or reducing the valuations of the Registrant and Arcturus on a dollar for dollar basis assuming a valuation of \$46,670,000 for the Registrant and \$70,000,000 for Arcturus. In light of the change in Arcturus net cash at Closing, Arcturus' valuation is expected to be adjusted upwards from \$70,000,000 to approximately \$80,000,000, while the Registrant's valuation is not expected to change (and will remain at \$46,700,000).

Due to the change in the anticipated Arcturus net cash at Closing, the Exchange Ratio is expected to change from 0.2542 Alcobra Ordinary Shares, NIS 0.07 par value per share, on a post-split basis to 0.2904 Alcobra Ordinary Shares, NIS 0.07 par value per share, on a post-split basis (to be issued to Arcturus' current equity-holders in exchange for each share of Arcturus common stock held by them). In light of this change, the current equity-holders of Arcturus are expected to hold approximately 63.2% of the outstanding share capital of the combined company using the treasury stock method, and the holders of the Registrant's shares immediately prior to the Closing are expected to hold approximately 36.8% of the outstanding share capital of the combined company using the treasury stock method. In the Proxy Materials the ownership percentages were estimated at 60% and 40%, respectively.

The estimated balances in the preceding paragraphs refer to net cash (as defined in the Merger Agreement). Cash balances that ultimately will be reflected in the financial statements of the combined company in future periods may differ from the expected net cash.

Change of Cash Resources at Closing

Immediately following Closing, the combined company is estimated to have approximately \$50 million of net cash. This is an update to the figure of \$40 million disclosed in the Proxy Statement and reflects, among other things, amounts recently received by Arcturus as described in the section entitled "Change in Arcturus Net Cash at Closing" above.

As previously disclosed, the combined company's capital resources are intended to be used primarily to fund the research and development of the product candidates in the combined company's pipeline and for working capital and general corporate purposes. The combined company's capital resources at Closing are expected to be sufficient to fund the combined company's business through multiple value creation milestones and into early clinical development.

Principal Shareholders of Combined Company

As a result of the expected changes to the Exchange Ratio described above, and assuming an Exchange Ratio of 0.2904, assuming that Arcturus net cash before Closing shall equal \$15,000,000, the following table and the related notes update the information in the Proxy Statement regarding the beneficial ownership of Ordinary Shares of the combined company by:

- each shareholder known by us that will beneficially own more than 5% of the combined company's outstanding Ordinary Shares upon Closing;
- each prospective director of the combined company;
- each prospective executive officer of the combined company; and
- all of the combined company's prospective directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to the securities. The number of Ordinary Shares beneficially owned and the percentage of Ordinary Shares beneficially owned assumes, in each case, the consummation of the Transaction, for a total of approximately 10,514,396 Ordinary Shares issued and outstanding immediately following the consummation of the Transaction after giving effect to the proposed reverse share split described in Item No. 1 of the Proxy Statement.

Ordinary Shares of the combined company that may be acquired by an individual or group within 60 days of September 30, 2017, pursuant to the exercise of options or warrants or the conversion of securities, are deemed outstanding for the purposes of computing the percentage of Ordinary Shares beneficially owned by such individual or group, but are not deemed outstanding for purposes of computing the percentage of Ordinary Shares beneficially owned by any other individual or group shown in the table. The table below also gives effect to the proposed reverse share split described in Item No. 1 of the Proxy Statement.

	Number of Ordinary Shares	Percentage of Ordinary Shares
Beneficial Owner	Beneficially Owned	Beneficially Owned
Alcobra's 5% or Greater Shareholders	_	
Exodus Capital L.P., Exodus Management Israel Ltd. and their affiliates (1)	650,608	6.2%
Franklin Resources, Inc., Charles B. Johnson, Rupert H. Johnson, Jr., Franklin Advisers,		
Inc. ⁽²⁾	639,643	6.1%
Arcturus' 5% or Greater Stockholders		
Bradley T. Sorenson ⁽³⁾	576,653	5.5%
Prospective Directors and Executive Officers		
Joseph E. Payne ⁽⁴⁾	1,452,217	13.8%
Padmanabh Chivukula, Ph.D. ⁽⁵⁾	726,108	6.9%
Craig Willett ⁽⁶⁾	858,720	8.2%
Stuart Collinson, Ph.D. ⁽⁷⁾	163,432	1.6%
Daniel Geffken	*	*
Orli Tori	*	*
David Shapiro, M.D.	-	*
All of the combined company's prospective directors and executive officers as a group (7		
persons)	3,214,764	31%

- Less than 1%.
- (1) Based solely on Amendment 6 to Schedule 13D filed with the SEC July 3, 2017, and which reflects holdings as of June 12, 2017.
- (2) Based solely on Amendment 1 to Schedule 13G filed with the SEC November 9, 2016, and which reflects holdings as of October 31, 2016.
- (3) Consists of: (i) 1,000,000 shares of Arcturus' Common Stock, which represent 290,443 Ordinary Shares of the combined company, (ii) 770,835 shares of Arcturus' SSP Stock, which represent 223,884 Ordinary Shares of the combined company, (iii) 73,655 shares of Arcturus' Series A Preferred Stock, which represent 21,392 Ordinary Shares of the combined company, (iv) 125,000 shares of Arcturus' Common Stock issuable upon the exercise of a warrant, which represent 36,305 Ordinary Shares of the combined company and (v) 15,938 shares issuable upon the exercise of an option, which represent 4,629 Ordinary Shares of the combined company.
- (4) Consists of 5,000,000 shares of Arcturus' Common Stock held directly by Mr. Payne, which represent 1,452,217 Ordinary Shares of the combined company, certain of which are subject to an option to repurchase in favor of Arcturus.
- (5) Consists of 2,500,000 shares of Arcturus' Common Stock held directly by Dr. Chivukula, which represent 726,108 Ordinary Shares of the combined company, certain of which are subject to an option to repurchase in favor of Arcturus.
- (6) Consists of (i) 369,539 shares of Arcturus' Common Stock held directly by Mr. Willett, which represent 107,330 Ordinary Shares of the combined company, certain of which are subject to an option to repurchase in favor of Arcturus, (ii) 833,335 shares of Arcturus' SSP Stock held by DUR Holdings, LC, which represent 242,036 Ordinary Shares of the combined company, (iii) 125,000 shares of Arcturus' Common Stock issuable upon the exercise of a warrant held by DUR Holdings, LC, which represent 36,305 Ordinary Shares of the combined company, (iv) 833,335 shares of Arcturus' SSP Stock held by Phoenician Enterprises, Ltd., which represent 242,036 Ordinary Shares of the combined company, (v) 125,000 shares of Arcturus' Common Stock issuable upon the exercise of a warrant held by Phoenician Enterprises, Ltd., which represent 36,305 Ordinary Shares of the combined company, (vi) 45,384 shares of Arcturus' Common Stock issuable upon the conversion of a convertible promissory note held by Phoenician Enterprises, Ltd., which represent 13,181 Ordinary Shares of the combined company and (vii) 625,000 shares of Arcturus' Series A Preferred Stock held by 6-W Discretionary Trust (the "6-W Trust"), which represent 181,527 Ordinary Shares of the combined company.
- (7) Consists of (i) 516,527 shares of Arcturus' Common Stock, which represent 150,021 Ordinary Shares of the combined company, certain of which are subject to an option to repurchase in favor of Arcturus, (ii) 9,035 shares of Arcturus' Common Stock issuable upon the conversion of a convertible promissory note upon Closing, and which represent 2,620 Ordinary Shares of the combined company and (iii) 37,154 shares of Arcturus' Common Stock issuable upon the exercise of an option, which represent 10,791 Ordinary Shares of the combined company.

Forward Looking Statements

This Supplemental Report contains forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995 and other Federal securities laws. Because such statements deal with future events and are based on the Registrant's current expectations, they are subject to various risks and uncertainties and actual results, performance or achievements of the Registrant could differ materially from those described in or implied by the statements in this Report. For example, forward-looking statements include statements regarding future milestone and royalty payments, the change in Arcturus net cash at Closing, the expected valuations of Arcturus and the Registrant, the expected Exchange Ratio, the number of shares to be issued to the current equity-holders of Arcturus at Closing and cash resources of the combined company. The forward-looking statements contained or implied in this Supplemental Report are subject to other risks and uncertainties, including those discussed in "Risk Factors" and elsewhere in the Proxy Statement and under the heading "Risk Factors" in the Registrant's Annual Report on Form 20-F for the fiscal year ended December 31, 2016, filed with the SEC and in subsequent filings with the SEC. Except as otherwise required by law, the Registrant 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.

No Offer of Solicitation

In connection with the previously disclosed proposed merger involving the Registrant and Arcturus, a proxy statement and a proxy card has been furnished to the SEC and has been mailed to the Registrant's shareholders seeking shareholder approval in connection with the proposed merger transactions. Before making any voting or investment decision, investors and shareholders are urged to read the proxy statement (including any amendments or supplements thereto) and any other relevant documents that the Registrant may furnish to or file with the SEC when they become available because they will contain important information about the proposed merger transactions.

This communication shall not constitute an offer to sell or the solicitation of an offer to sell or the solicitation of an offer to buy any securities, nor shall there be any sale of securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction.

Incorporation by Reference

This Supplemental Report is incorporated by reference into the Registration Statements on Form F-3 (File No. 333-209960) and Forms S-8 (File No. 333-194875, File No. 333-202394, File No. 333-209947 and File No. 333-217556) of the Registrant, 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.

Alcobra Ltd. (Registrant)

By: /s/ Dr. Tomer Berkovitz

Name: Dr. Tomer Berkovitz

Chief Financial Officer and Chief Operating Officer

Date: November 7, 2017