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: September 2016

Commission file number: 001-35932

ALCOBRA LTD.
(Translation of registrant's name into English)

Azrieli Triangle Building
132 Derech Menachem Begin 39th Floor
Tel Aviv 6701101 Israel
(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):_____

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

Attached hereto and incorporated by reference herein is the Registrant's press release issued on September 28, 2016, announcing an IND clinical hold affecting the MDX Phase III MEASURE study.

The first two paragraphs and the paragraph titled “Forward Looking Statements” of the press release attached to this Form 6-K of the Registrant are incorporated by reference into the Registration Statements on Form F-3 (File No. 333-209960) and Form S-8 (File No. 333-194875, 333-202394 and 333-209947) 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and Exchange Commission, to be a part thereof from the date on which this report is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.

Exhibit No.

99.1 Press release issued by Alcobra Ltd. on September 28, 2016, announcing an IND clinical hold affecting the MDX Phase III MEASURE study.

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: September 29, 2016

Exhibit 99.1

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Alcobra Announces IND Clinical Hold Affecting the MDX Phase III MEASURE Study

Tel Aviv, Israel – September 28, 2016 – Alcobra Ltd. (NasdaqGM: ADHD), an emerging pharmaceutical company focused on the development of new medications to treat patients with cognitive disorders, including Attention Deficit Hyperactivity Disorder (ADHD) and Fragile X Syndrome, today announced that it has received verbal notice from the Division of Psychiatry Products of the U.S. Food and Drug Administration (FDA) that a full clinical hold has been placed on its Investigational New Drug (IND) applications for MDX in ADHD and Fragile X Syndrome. The clinical hold affects Alcobra's ongoing Phase III clinical study of MDX in adult patients with ADHD, known as the "MEASURE" study.

Alcobra has not yet received written notice of the clinical hold from the FDA, however, based on verbal communications, the FDA indicated that the clinical hold is due to adverse neurological findings in a pre-clinical study. The FDA notification was not based on clinical safety data observed in the ongoing MEASURE study, which has enrolled nearly 500 subjects, or previous clinical studies involving MDX. Alcobra plans to work diligently with the FDA to seek the removal of the clinical hold.

Conference Call Information
Alcobra will host a conference call to discuss today's announcement.

Thursday, September 29, 2016 @ 8:30 a.m. Eastern Time

Domestic:	855-469-0611
International:	484-756-4341
Passcode:	91332641
Webcast:	http://www.alcobra-pharma.com/events.cfm

Replays available through October 13, 2016

Domestic:	855-859-2056
International:	404-537-3406
Passcode:	91332641

About Alcobra Ltd.
Alcobra Ltd. is an emerging pharmaceutical company primarily focused on the development and commercialization of MDX, a proprietary drug candidate, to treat cognitive disorders including ADHD and Fragile X Syndrome. For more information, please visit the company's website, www.alcobra-pharma.com, the content of which is not incorporated herein by reference.

Forward Looking Statements

This press release 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 Alcobra's current expectations, they are subject to various risks and uncertainties and actual results, performance or achievements of Alcobra could differ materially from those described in or implied by the statements in this press release. For example, forward-looking statements include statements regarding the effect of the clinical hold on the Company's Phase III MEASURE study and other clinical trials, whether the clinical hold will be released, the content of the official full clinical hold letter and any deviations of the content of the clinical hold letter, if and when issued, to the information communicated before by the FDA and content of discussions with the FDA and possible outcomes of such discussions. In addition, historic results of scientific research do not guarantee that the conclusions of future research would not suggest different conclusions or that historic results referred to in this press release would not be interpreted differently in light of additional research or otherwise. 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 Alcobra Ltd.'s Annual Report on Form 20-F for the fiscal year ended December 31, 2015, filed with the Securities and Exchange Commission (SEC) and in subsequent filings with the SEC. Except as otherwise required by law, Alcobra 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.