

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 2014

ALCOBRA LTD.

(Translation of registrant's name into English)

Amot Investment Building
2 Weizman St. 9th Floor
Tel Aviv 6423902 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): _____

Indicate by check mark, whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes No

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): _____

Attached hereto and incorporated by reference herein is the registrant's press release issued on September 2, 2014.

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. Yaron Daniely
Name: Dr. Yaron Daniely

Chief Executive Officer and President

Date: September 2, 2014

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**Alcobra Announces Enrollment of First Patient in Phase IIb
Clinical Trial of MDX in Adolescents With ADHD**

Tel Aviv, Israel – September 2, 2014 – Alcobra Ltd. (NasdaqGM: ADHD), an emerging pharmaceutical company focused on the development of new medications to help patients with cognitive disorders, including Attention Deficit Hyperactivity Disorder (ADHD) and Fragile X Syndrome, announced today that the first patient has been enrolled in a Phase IIb study of MDX in adolescents with ADHD. The trial is expected to complete enrollment and report topline data by the end of 2014.

The Phase IIb trial is a multi-center, randomized, double-blind, fixed dose study designed to evaluate the safety and tolerability of MDX in up to 82 adolescents (aged 13-17) with predominantly inattentive ADHD (PI-ADHD). The primary endpoint will be safety, tolerability and pharmacokinetics. Secondary endpoints include change in efficacy measures such as TOVA (Test of Variables of Attention), Wechsler Intelligence Scale for Children (WISC-IV) subtests, and working memory and processing speed. ClinicalTrials.gov Identifier: NCT02189772

About Attention Deficit Hyperactivity Disorder (ADHD)

Attention Deficit Hyperactivity Disorder (ADHD) is a common and impairing neuropsychiatric condition. Once believed to only affect children, ADHD is now known to persist into adolescence and adulthood in a sizeable number of cases. Key symptoms of ADHD include inattention, hyperactivity and impulsivity.

According to the Centers for Disease Control, about 9% of children in the U.S. meet criteria for ADHD with similar numbers reported in other countries. Although boys are more commonly diagnosed, ADHD is also common in girls who often go undiagnosed. Approximately 4-5% of adults worldwide are affected with ADHD, yet most adults with ADHD remain undiagnosed and untreated. There is no known cause of ADHD, however studies suggest that genetics may play a role.

About Alcobra Ltd.

Alcobra Ltd. is an emerging pharmaceutical company primarily focused on the development and commercialization of a proprietary drug candidate, MDX (Metadoxine Extended Release (MG01CI)), to treat cognitive disorders including Attention Deficit Hyperactivity Disorder (ADHD) and Fragile X Syndrome. MDX has completed multiple Phase II studies in adults with ADHD and has completed enrollment in a Phase III study in adults with ADHD. The company is conducting separate Phase IIb trials in pediatric ADHD and Fragile X Syndrome. The company was founded in 2008 and is headquartered in Tel Aviv, Israel. 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 may contain 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 expected timing of completion of enrollment of the Phase IIb clinical trial reported above and reporting topline results, if the trial is completed at all, as well as the design of the Phase IIb clinical trial in question. In addition, historic results of scientific research and clinical and preclinical trials do not guarantee that the conclusions of future research or trials would not suggest different conclusions or that historic results referred to in this press release would be interpreted differently in light of additional research and clinical and preclinical trials results. 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 filed with the Securities and Exchange Commission ("SEC") on March 28, 2014, 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 hereof, whether as a result of new information, future events or circumstances or otherwise.

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