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: October 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 x 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 October 6, 2014.

The first, third, fourth and sixth paragraphs in the press release herein are incorporated by reference into the Registration Statements on Form F-3 (File No. 333-197411) and Form S-8 (File No. 333-194875) 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and Exchange Commission, to be a part thereof from the date on which this report is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.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.

Alcobra Ltd.
(Registrant)

By /s/ Dr. Yaron Daniely
Name: Dr. Yaron Daniely

Chief Executive Officer and President

Date: October 6, 2014

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Alcobra Announces Topline Results from Phase III Study of MDX in Adult ADHD

- ***Company to hold a conference call Monday, October 6, 2014 at 8:30am EST***

Tel Aviv, Israel – October 6, 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, today announced topline results from a Phase III study of Metadoxine Extended Release (MDX) in adults with ADHD. In a modified Intent To Treat (mITT) population (n=293), MDX demonstrated a statistically significant improvement in ADHD symptoms compared to placebo as measured by the Conner's Adult ADHD Rating Scale (CAARS-INV) ($p<0.03$). The mITT population was derived by a post hoc exclusion of four subjects with extreme placebo responses (The ITT analysis before exclusion yielded a positive trend, $p=0.15$; n=297).

"This is a key milestone for Alcobra," said Dr. Yaron Daniely, Alcobra's President and Chief Executive Officer. "We are encouraged by these findings, as they build upon our Phase II studies showing that MDX significantly improved symptoms of ADHD without many of the safety and tolerability issues commonly associated with currently available ADHD medications. We look forward to completing the full analysis on the secondary endpoints in the study and reporting the complete data set in the near future."

The 300-patient, randomized, placebo-controlled study was conducted at 18 sites in the United States and 2 in Israel. Approximately 70 percent of patients were enrolled in the U.S., and patients were nearly evenly split between men and women. Patients were randomized to receive either 1400 mg of MDX or placebo over 6 weeks. The primary endpoint was the CAARS-INV, a widely accepted clinical measure of the presence and severity of ADHD symptoms, which has been utilized in registration studies for other approved ADHD drugs.

In the mITT analysis, there was a mean change on the CAARS-INV from baseline to the final visit of 11.6 in the MDX treated group as compared with a mean change of 8.7 in the placebo treated group ($p<0.03$). MDX also showed a statistically significant impact on the inattention subscale of the CAARS-INV ($p<0.05$). Patients with both predominately inattentive (PI) ADHD and combined type (CT) ADHD subtypes appeared to benefit similarly in this trial.

"We conducted the mITT analysis after observing the disproportional effect of a few extremely large placebo responses which were inconsistent with what has been reported in previous ADHD trials of MDX or other agents," said Dr. Jonathan Rubin, Alcobra's Chief Medical Officer. "We plan to take the complete findings of this and other MDX studies to the FDA to determine the next steps on the path to potential regulatory approval for MDX."

MDX was well tolerated during the trial. The number of patients reporting adverse events was similar between the MDX and placebo groups with no drug-related serious adverse events reported. The most common adverse events seen in the study were headache (15.1% in MDX group vs. 12.3% in placebo group), nausea (8.6% vs. 6.2%), and fatigue (7.2% vs. 8.2%).

Detailed results of the study will be made available at various scientific and medical conferences in the coming weeks, as well as in peer-reviewed publications. Additional advanced clinical studies of MDX in adolescents with ADHD, as well as in adolescents and adults with Fragile X Syndrome are currently actively enrolling patients. These studies are expected to be completed by the end of 2014.

Conference Call
Monday, October 6 2014, @ 8:30am Eastern Time/5:30am Pacific Time

Domestic:	855-469-0611
International:	484-756-4341
Conference ID:	15517950
Webcast:	http://www.media-server.com/m/p/bsr2eo4r

Replays, available through October 20, 2014

Domestic:	855-859-2056
International:	404-537-3406
Conference ID:	15517950

About MDX
MDX (Metadoxine Extended Release (MG01CI)) is a proprietary investigational new drug candidate being developed by Alcobra for the potential treatment of Attention Deficit Hyperactivity Disorder (ADHD) and Fragile X Syndrome. MDX is not a stimulant and acts as a monoamine-independent modulator of GABA (gamma-aminobutyric acid). This novel mechanism of action does not directly affect dopamine or norepinephrine. In studies to date, metadoxine has shown no potential for abuse or addiction. MDX is currently in Phase III development for adults with ADHD. Additional studies of MDX in adolescents with ADHD and in adolescents and adults with Fragile X Syndrome are currently underway and are actively enrolling patients.

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, 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 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 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 expected timing of completion and reporting of results of secondary endpoints of the study Alcobra recently completed, as well as completion of other studies referred to above, or statements regarding our plan to take the complete findings of MDX studies to the FDA to determine the next steps on the path to potential regulatory approval for MDX. 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 not 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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