UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): October 20, 2013

MEI Pharma, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**000-50484**	**51-0407811**
(State or other jurisdiction of incorporation or organization)	**(Commission File Number)**	**(I.R.S. Employer Identification No.)**

11975 El Camino Real, Suite 101, San Diego, California 92130
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (858) 792-6300

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (*see* General Instruction A.2. below):

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 8.01 Other Events.

On October 21, 2013, MEI Pharma, Inc. issued a press release announcing detailed results from a Phase I clinical trial of its mitochondrial inhibitor drug candidate ME-344 in patients with refractory solid tumors, as presented at the AACR-NCI-EORTC International Conference on Molecular Targets and Cancer Therapeutics in Boston on October 20, 2013. A copy of the press release is attached as Exhibit 99.1 to this Current Report on Form 8-K and incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
99.1	Press release, dated October 21, 2013.

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 hereunto duly authorized.

MEI PHARMA, INC.

By: /s/ Daniel P. Gold
Daniel P. Gold
Chief Executive Officer

Dated: October 21, 2013

Exhibit Index

Exhibit No.	Description
99.1	Press release, dated October 21, 2013.

Exhibit 99.1

Contact:
Pete De Spain
Sr. Director, Investor Relations &
Corporate Communications
(858) 792-3729
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MEI PHARMA'S MITOCHONDRIAL INHIBITOR ME-344 SHOWS PRELIMINARY EVIDENCE OF SINGLE-AGENT ACTIVITY IN FIRST-IN-HUMAN CLINICAL STUDY

Extension of Progression-Free Survival Observed Compared to Last Prior Therapy

San Diego – October 21, 2013 – MEI Pharma, Inc. (Nasdaq: MEIP), an oncology company focused on the clinical development of novel therapies for cancer, announced results from a Phase I first-in-human, single-agent clinical study of its investigational mitochondrial inhibitor drug candidate, ME-344, in patients with refractory solid tumors. The results, presented yesterday at the AACR-NCI-EORTC International Conference on Molecular Targets and Cancer Therapeutics in Boston, indicated that five of 21 evaluable patients treated with ME-344 experienced progression free survival (34 to 61+ weeks) that was at least twice the duration of their last prior treatment before entry into the study.

In addition, the presentation highlighted that one of these 5 patients, a heavily pre-treated patient with small cell lung cancer, achieved a confirmed partial response. The patient received his first treatment of ME-344 in August 2012 and has now been on study for more than 61 weeks. His June 2013 scans showed a decrease of 32% in target lesions, which was confirmed in his most recent scans (August 2013). This patient and three others remain on study and continue weekly dosing.

"The observed radiographic partial response is promising, particularly in such a difficult-to-treat disease as small cell lung cancer," said presenter and co-investigator Jeffrey R. Infante, MD, Director, Drug Development at Sarah Cannon Research Institute and Tennessee Oncology. "In addition to tumor shrinkage, this patient has also demonstrated symptomatic improvement while on study, including decreased cough, shortness of breath and improved performance status. The results of this single agent Phase I study are encouraging and further clinical development of ME-344 is warranted."

A copy of yesterday's poster presentation, entitled "ME-344, a novel mitochondrial oxygenase inhibitor: Results from a first-in-human Phase I study," is now available at www.meipharma.com.

ME-344 was generally well tolerated at doses equal to or less than 10 mg/kg delivered on a weekly schedule for extended durations. Dose limiting toxicities were observed at both the 15 and 20 mg/kg dose levels, consisting primarily of Grade 3 peripheral neuropathy. Other medically significant adverse events observed in single patients included angina and QTc prolongation at the 10 mg/kg dose.

"We are encouraged by the results from this first-in-human study of ME-344," said Robert D. Mass, MD, Chief Medical Officer of MEI Pharma. "Not only did the trial show evidence of clinical activity, but the primary dose limiting toxicity was consistent with the proposed mechanism of

action of ME-344, namely mitochondrial inhibition, suggesting on-target activity. Based on these findings, we are now actively preparing for a Phase Ib clinical trial of ME-344 in combination with Hycamtin® (topotecan) in small cell lung cancer and ovarian cancer, which we expect to initiate during the second quarter of 2014."

The Phase Ib trial will be designed to evaluate the safety and tolerability of ME-344 in combination with Hycamtin® in a total of 45 patients with either small cell lung cancer or ovarian cancer. Hycamtin® is a chemotherapy approved by the U.S. Food & Drug Administration for the treatment of small cell lung cancer and ovarian cancer, as well as cervical cancer.

About ME-344

ME-344 is MEI Pharma's isoflavone-derived mitochondrial inhibitor drug candidate. In preclinical studies, ME-344 has been shown to cause caspase-independent cell death in multiple human tumor cell lines, including ovarian cancer stem cells, by interfering with mitochondrial energy generation. In April 2013, Ayesha Alvero, MD, Yale University School of Medicine, presented data at the American Association for Cancer Research Annual Meeting showing the ability of ME-344 to decrease tumor burden and delay recurrence in a pre-clinical *in vivo* model of recurrent epithelial ovarian cancer, the most lethal of all gynecologic malignancies.

MEI Pharma owns exclusive worldwide rights to ME-344.

About MEI Pharma

MEI Pharma, Inc. (Nasdaq: MEIP) is a San Diego-based oncology company focused on the clinical development of novel therapies for cancer. The Company's lead drug candidate is Pracinostat, a potential best-in-class, oral HDAC inhibitor being developed for advanced hematologic diseases, such as myelodysplastic syndrome (MDS) and acute myeloid leukemia (AML). The Company initiated a randomized, placebo-controlled Phase II trial of Pracinostat in combination with Vidaza (azacitidine) in patients with previously untreated MDS in June 2013. An open-label Phase II trial of Pracinostat in combination with Vidaza in elderly patients with AML who are unsuitable for intensive chemotherapy is expected to initiate in the fall of 2013. In September 2013, the Company further expanded its pipeline of drug candidates with the acquisition of PWT143, a highly selective PI3-kinase delta inhibitor. For more information, go to www.meipharma.com.

About Sarah Cannon Research Institute

Sarah Cannon Research Institute (SCRI) is a global strategic research organization focusing on advancing therapies for patients. It is one of the largest clinical research programs, conducting community-based clinical trials in oncology and cardiology through affiliations with a network of more than 700 physicians in the United States and United Kingdom. Additionally, SCRI offers management, regulatory and other research support services to drug development sponsors and strategic investigator sites. For more information, please visit sarahcannonresearch.com.

Under U.S. law, a new drug cannot be marketed until it has been investigated in clinical trials and approved by the FDA as being safe and effective for the intended use. Statements included in this press release that are not historical in nature are "forward-looking statements" within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. You should be aware that our actual results could differ materially from those contained in the forward-looking statements, which are based on management's current expectations and are subject to a number of risks and uncertainties,

including, but not limited to, our failure to successfully commercialize our product candidates; costs and delays in the development and/or FDA approval, or the failure to obtain such approval, of our product candidates; uncertainties or differences in interpretation in clinical trial results; our inability to maintain or enter into, and the risks resulting from our dependence upon, collaboration or contractual arrangements necessary for the development, manufacture, commercialization, marketing, sales and distribution of any products; competitive factors; our inability to protect our patents or proprietary rights and obtain necessary rights to third party patents and intellectual property to operate our business; our inability to operate our business without infringing the patents and proprietary rights of others; general economic conditions; the failure of any products to gain market acceptance; our inability to obtain any additional required financing; technological changes; government regulation; changes in industry practice; and one-time events. We do not intend to update any of these factors or to publicly announce the results of any revisions to these forward-looking statements.