
FORM 6-K
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Report of Foreign Issuer

Pursuant to Rule 13a-16 or 15d-16
of the Securities Exchange Act of 1934

For the Month of April 2014

ELRON ELECTRONIC INDUSTRIES LTD.
(Translation of Registrant's Name into English)

3Azrieli Center, Triangle Building, 42nd Floor, Tel Aviv • ISRAEL
(Address of Principal Corporate Offices)

Indicate by check mark whether the registrant files or will file annual reports under cover 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 Regulation S-T Rule 101(b)(7): ____

Indicate by check mark if 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): 82-_____

English Translation of immediate report filed by the Registrant with the Israeli Securities Authority on April 6, 2014

Tel Aviv, April 6, 2014 – Further to the immediate release of Elron Electronic Industries Ltd. (TASE: ELRN) ("Elron") on November 11, 2013 and Item 4B of Elron's Annual Report on Form 20F for 2013 published on March 11, 2014, Elron announces, as conveyed to it by BrainsGate Ltd. ("BrainsGate") as follows:

The Data Safety Monitoring Board (the "DSMB") for BrainsGate's study examined the effect and safety results in an interim analysis of the study (BrainsGate was not exposed to these results due to the study being a blinded study). As a result of the said interim analysis, the DSMB determined as follows:

1. The measured effect justifies the continuation of the study.
2. There were no safety concerns.
3. In order to maximize the possibility of success in the study, increasing the sample size from 450 to 800-1000 patients is appropriate.

The Board of Directors of BrainsGate will soon convene in order to discuss the results of the interim analysis in order to approve a suitable work plan including increasing the number of patients and updating the anticipated study completion date. It is emphasized that the currently approved study protocol allows for increasing the number of patients up to 1000.

Further to Item 4B of Elron's Annual Report on Form 20F for 2013 and further to the above, BrainsGate, at this stage, estimates that the recruitment of the number of patients required for the study will not be completed during the first half of 2014.

BrainsGate is approximately 30% held by Elron.

SIGNATURE

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.

ELRON ELECTRONIC INDUSTRIES LTD.
(Registrant)

By: /s/ Yaron Elad
Yaron Elad
VP & CFO

Dated: April 7, 2014