

National Otolaryngology Institute
Susánszky Miklós
Deputy-Chairman

Budapest 04.10.1992.

Dear Mr. Deputy Chairman,

On February 12th, 1992 ORKI requested the clinical expertise of our institute to investigate the LEC-02* Cancer Detector, developed by the Leszlauer Electronic Research Laboratory.

These are the results we acquired on the device from our clinical experiments.

The patented probe and electronic device measures the electrolyte level of the human cell. This level changes in malignant tumors and, without doubt, the LEC 02 is able to detect these fluctuations. The device works with either a non-invasive touch probe or needle probe**. The LEC-02 measures the fluctuation of electric current, in micorampers, and compares it to a reference level value, which characterizes the condition of the tested tissue. This is displayed graphically on a computer screen, making the results easy to read and understand. An automated signal processing system analyzes incoming data from several sites, making it possible to compare several suspect sites with other test results – leading to the correct diagnosis.

This device is easy to use. Its operation does not require extensive training, nor highly skilled technicians.

The machine proved its reliability, providing uniform results on several repeated tests on the same target areas. It is equipped with additional accessories like touch probes and needle probes as well. These are standard features provided with each of the LEC 02s. Probe cables are readily attachable to the device. All the accessories - including the probes - can be sterilized in ethylene oxide. Probes and needles are easy to handle, reliable and disposable.

We have tested the LEC in our Otolaryngology Institute at the Semmelweis University on 16 different tumorous patients. Dr Balázs Fabinyi, assistant lecturer appointed by me, was in-charge of the experiments.

Based on our tests and experiments, we concluded that the device provides reliable and instant data, in an inexpensive way, about the targeted area's malignancy. The results can be used to differentiate malignant tumorous alterations from the innocuous or simply inflamed ones, with great reliability. The LEC-02 promotes the correct diagnosis in early alteration cases, in which the practitioner may be uncertain, so he is able to make the right decision about scheduling necessary medical check-ups and examinations or, if necessary, to pick the area for future excisional biopsy.

The LEC-02 provides valuable information during surgery about the dimensions of the tumor and for the diagnosis of possible metastases in the lymphatic glands, and sets the stage for carrying out ablation surgery. Based on our research, the device gives a point of reference on the effectiveness of radio- or medical therapy. In the case of successful treatment, the incoming signal level of the LEC-02 declines. If it does not, recidivation occurs in most cases.

This examination process (the LEC02 probe) can be used with either fiberoptic or endoscopic devices.

The illustrations from Petz Aladár County Hospital of Győr and from the Otolaryngology Clinic of the Semmelweis University of Budapest presented by Dr Emil Hochenburger are unambiguous and convincing.

We recommend the approval of LEC-02 for health care application. Our opinion is based on the above said and written data, as well as photo and videos demonstrations. In smaller institutions the use of one device is advised, using it in emergency rooms and surgeries as well.

Attached are some illustrations of the test results, supporting the above opinions.

Dr Ribári Ottó
Professor at Semmelweis University
Director of National Otolaryngology Institute

** LEC-02 is an earlier version of LEC-03*

*** This is the next direction for further improvement is the development of a syringe-like probe line that makes the detection of cancerous tissues possible in deeper areas of the body, reaching it by placing the probe into the target area.*