

Medical device for tumor treatment Medizingerät für Tumor Behandlung

TLU-17







Mit dem TLU 17 können Tumore und Gewebeanomalien in den Nieren, Leber, Prostata, Magen, Milz, Darm, Haut, Gehirn (feste Gewebebereiche) ambulant therapiert werden.



Ambulant cancer treatment with TLU 17

TLU 17 has been developed for the medical ambulance application of Bajog electronic. Tumors and abnormal tissue areas are thermally eliminated by means of special biopsy needles. The biopsy needles can be up to 350 mm long. Likewise, the use in obliteration of varicose veins, spider veins, or embolization in prostate enlargements without surgery is possible





The heating of the biopsy needle takes place exclusively on the closed needle tip in the range of 1-2 mm and can be varied with respect to temperature value and treatment temperature before any arbitrary by the doctor. In practice, a tumor as small as 1 cm in size can be completely destroyed thermally in 8 seconds. Tumors in the size of 5 mm require a

treatment time of about 4 seconds at 70 °C.

The residues of the treated and adenoid tissue are degraded by the body without residue. The current temperature values at the biopsy needle tip are released by software from Bajog electronic up to 100 °C. The biopsy needle tip could reach up to 200 °C in 7 seconds. The doctor can set the required temperatures over the power and time setting in the manufacturer-approved temperature range.

The biopsy needle itself is not heated over its entire length and has only, regardless of their length, only the usual body / ambient temperature.

This heating is achieved through a specially developed, fully enclosed class 4 laser process designed for up to 20,000 hours and one specially designed



The treatment device incl. biopsy needle is completely enclosed and there is no light passing waves to the outside!

The TLU 17 contains 6 safety circuits

- Software u. Password protected input parameters to limit the maximum power. an extended release can only be done by the manufacturer Bajog electronic
- > Timer, with LED display which determines the duration of treatment
- Power controller with preset maximum values (adjustable by the physician)
- > foot u. Release switch combined with
- Trigger switch directly on the device
- > Temperature check and monitoring sensor

During the treatment period, a beep sounds constantly.

After a treatment break of > 20 seconds, a system self - calibration is performed to ensure that the same performance and performance are achieved in the repeated treatment cycle. Temperature parameters are ensured.

The TLU 17 can treat tumors and tissue abnormalities in the kidneys, liver, prostate, breast, stomach, spleen, intestine, skin, bile, brain (solid tissue areas) on an outpatient basis.

Precise mm positioning with respect to the cancer cells is accomplished by 3D imaging, CT, rotational angiography or MRI (hospital specific), as well as a mm template, which can be ordered with the TLU 17. The template consists of 3 plate levels to ensure a stable needle guidance in the necrotic tissue.

Advantages of treatment:

Because **neither** chemical products, magnetic nanoparticles, photoactive chemicals, high-frequency-dependent probes, currents, voltages, or optical fibers in conjunction with a photochemical reaction, or magnetic alternating fields burden the patient, all cancer patients, even patients with pacemakers and metal implants cab be treated well, quickly

and without risk.

The treatment can be done immediately in conjunction with the appropriate imaging (depending on equipment, 3D ultrasound, CT, MRI, rotational angiography, etc.). As a result, the patient is spared unnecessary waiting times or time-tracked treatment appointments.

The treatment is done on an ambulant basis with a local anesthetic.

Bajog electronic

Medical

The treatment takes place exclusively via the sterile, closed biopsy needle and prevents the destruction of surrounding tissue by the millimeter-accurate placement, thus preventing the risk of infection. Likewise, the unnecessary, protracted influx and bleeding is excluded by unwanted tissue destruction of adjacent organs (bladder, intestine, etc.).



