

Where can high-frequency HIFU be used?

HIFU is generally a rapidly growing field with intense research and approval activities for a very large number of medical indications. Commercial use of HIFU started in the mid 2000's with various cosmetology treatments, but has gradually moved into medical treatment. Recently, HIFU has gained general acceptance as standard practise for treatment of Prostate Cancer, Uterine Fibroids and Parkinson-related essential tremor. Large clinical studies have furthermore been started to expand these treatments to breast-, liver-, pancreas and kidney cancers.

These treatments typically use frequencies in the 1 to 5 MHz range, and therefore generate relatively large treatment points. With the low frequency also comes a potential to penetrate deep into the body (see separate FAQ on depth of focus points), and these large and deep treatment points are therefore very suitable for treatment of the relatively large tumours in these indications.

TOOsonix's specific modality and focus on HIFU systems operating at frequencies in the range of 15 to 30 MHz generate much smaller treatment points in superficial structures (see FAQ regarding size of treatments points). This opens the HIFU treatments to a range of new and exciting fields:

- Skin cancers and other dermatological treatments through tissue coagulation and ablation
- Small animal models for pharmaceutical research through treatment size scalability
- General oncology through precise hyperthermia-accelerated drug delivery
- Various cosmetology treatments

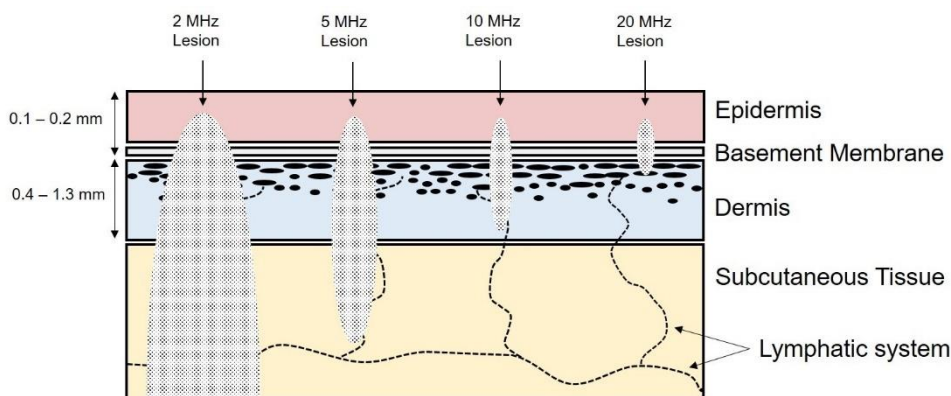


Fig. 1. Schematic representation of HIFU lesion sizes at different frequencies in relation to the normal size of the skin structure

Contact

TOOsonix A/S
Agern Allé 1
DK-2970 Horsholm
Denmark

info@toosonix.com
www.toosonix.com