

**TECHNICAL SPECIFICATIONS OF CRYOABLATION SYSTEM /HIGH FREQUENCY ABLATION UNIT**

	The cryoablation system should be a stand-alone system for performing cryosurgical procedures, utilizing the functionality of the cryoprobes and ultrasound system. The system should deliver extreme cold energy through the use of cryo gas at room temperature.
	The equipment should give solution of advance fast and effective therapy for various benign and malignant tumors, without the need for surgery.
<b>I)</b>	<b>Applications</b>
1	Should be capable of ablating lesion of size ranging from 1cm diameter upto 5cm or more.
2	The System should be able perform various Interventional Oncology applications like: Breast Tumour Lung Cancer Renal Cell Carcinoma Fibro Adenoma Bone Palliative treatments Liver Cancer Prostate Uterine Fibroids Pain Management
<b>II)</b>	<b>Generator</b>
1	Should be compact in size & portable for easy transportation between CT/US/MRI rooms to enable use of appropriate modality in a given case.
2	The system should have a Touch screen display to guide procedural efficiency.
3	The system should provide the operator with full control of the procedure, both automatic and manual.
4	The system should use Argon for freezing and Helium for thawing.
5	The system should be optimized for rapid/lethal ice formation.
6	Cooling rate should be fast and pressure has to be low.
7	Should have low profile insulated handle to allow easy multiple probe placement.
8	Should have options of both active and passive thawing.
9	Should have helium free active thawing.
10	Should be able to provide track ablation.
<b>III)</b>	<b>Cryo Needles</b>
1	The probes should be disposable.
2	Kindly mention Compatible Cryoprobes for different lengths.
3	Mention the Availability of Temperature sensor probe & Introducer.
4	Should have lengths up to 23cm (straight & 90 degree angled) to allow access to deeper areas.
5	Should be narrow, light weight and have sharp needle tip.
6	Should be available in different designs, to enable control of ablation volume.
7	Should have Teflon coating and active zone indicator marking.
8	Should be able to provide both ellipsoid and spherical-shaped ablation zone sizes.
9	Should be compatible upto 17G.
10	Cryoprobes for tumor ablations to be supplied with system - 20 units.
<b>IV)</b>	<b>Others</b>
1	The vendor should provide comprehensive warranty for the first five years and comprehensive maintenance from 6 to 10 years. Should perform yearly calibration/Validation and preventive maintenance.
2	The system should have US FDA/European CE/BIS/CDSCO certification.
3	The Software/Hardware upgrades for first 5 year should be provided free of cost.
4	Vendors shall provide adequate operator and procedural training on site.
5	Performance user certificate from reputed Government Institute in India with special mention of after sales service and availability of applicable gases.
6	Consumables/Disposables price should be fixed for three years from the date of Installation.