



Health Technology Review	
Technology Ref.:	HTA23047
Technology Name:	Microwave Thyroid Ablation
Approvals by International Bodies:	FDA 510(K) approved
Company name:	Mediclinic Hospital – Al Noor
Agent in UAE:	Mr. Sharif Shahine
Email:	Sharif.shahine@mediclinic.ae

Short Description of the Technology:	Under The Guidance of Imaging Techniques Such As CT, The Tumor Is Percutaneously Punctured with A Specialized Treatment Needle (Microwave Antenna or Microwave "Knife Head") To Implement Precise Treatment. Minimally Invasive; After Converting Physical Energy into Thermal Energy, It Acts on Tumor Tissue to Achieve in Situ Inactivation. On The Basis of Effectively Treating Tumours, The Normal Function of Tissues Is Fully Protected, With Less Damage and Faster Recovery. The core indication is the thyroid nodules ablation to avoid the surgeries.
---	--

Health Technology Assessment Team Recommendation:	Approve
Summary of Review:	
The technology is a percutaneous ultrasound-guided microwave ablation for symptomatic benign thyroid nodules . This involves inserting a thin wire into the nodule under local anaesthetic and guiding it into position using ultrasound. Microwaves from the wire heat the nodule to destroy it (ablation). Benign thyroid nodules may need treatment if they are symptomatic or causing cosmetic problems. The technology offers an alternative to the conventional treatment includes surgery which is Less invasive.	
Advantages	Disadvantages
The device is been approved by FDA and is CE marked	Patients should be assessed to exclude thyroid cancer before the procedure and the advantages and disadvantages of all available options weighed in a dialogue with the patient
MWA is safe, effective, and can be a good option to treat large benign thyroid nodules.	This procedure should only be done by a clinician with experience in the procedure and specific training in thyroid ultrasound intervention
Quality of life; By treating minimally invasive with MWA you save patients an operation. This means faster recovery and shorter hospital stay. symptom relief, cosmetic improvement and nodule volume reduction.	The technology may cause some side effects on the patients such as complained of a sensation of heat in the neck and/or slight pain in the ablated site, (MWA can deliver higher

	temperatures in the ablation zone.) and Pain or Discomfort During the Procedure
Effective; The MWA causes progressive nodule shrinkage as well as the improvement of the symptoms and cosmesis.	Immediate support should be available to deal with airway complications.
Safety: The minimally invasive procedure also allows the preservation of more healthy tissue than a surgical intervention, which generally leads to improved quality of life.	
Performed under local anaesthesia as an out-patient procedure (no downtime or hospitalization)	

We recommend an **approval of using this technology** with the following conditions:

1. Approval of the device – SABERWAVE ECO-200G for the management of benign thyroid nodules.
2. This procedure should only be done by a clinician with experience in the procedure and specific training in thyroid ultrasound.
3. Establishing a proper quality monitoring process and reporting of any adverse events or unwarranted consequences including safety issues of employees.
4. Provision of regular updates and reports about the product to DOH upon request.

Moreover, DOH has the right to stop the product at any stage if deemed necessary, initial conditions and any subsequent conditions must be satisfied before obtaining final approval. Failure to do so will reflect in provoking the approval.

Technology Image





Population, setting and intended user for Technology “Microwave Thyroid Ablation”

- **Population/ Intended User;**
 - Patients with benign Thyroid Nodules
- **To be performed by:**
 - By interventional radiology team.
- **Clinical Setting:**
 - Hospitals, special surgery centers.
- **Condition of use:**
 - As per manufacturer guidance
- **Exclusion criteria:**
 - Other conflicting medical issues