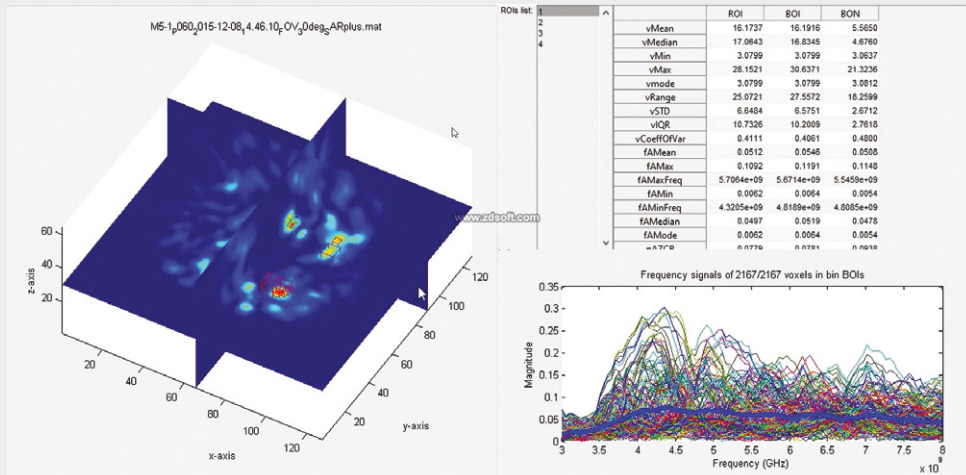


How MARIA™ works

The array contains 60 radio frequency antennae that surround the breast. They are configured to operate over a wide range of frequencies. Each antenna transmits and the other 59 record the signal back from the breast tissue which allows MARIA™ to build up a **3D map** of tissue variation throughout the breast.

The scanning process takes **less than 5 minutes**. The data is then reconstructed before being presented to the clinician as a DICOM-compatible 3D volume. MARIA™ captures variations in the **impedance, permittivity and conductance** of tissue within the breast to differentiate between normal tissue and lesions, and also between types of lesions based on their individual electromagnetic response.

This contrast mechanism performs particularly well in **dense tissue** and has been shown to detect tumours as small as 5mm.



MARIA™

New radio-wave breast imaging modality for dense tissue



Evolving Medical Imaging



Evolving Medical Imaging

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Physical features of MARIA™



Today's challenges include

- Current screening methods do not allow early detection of breast cancer which we know improves patient outcomes
- The majority of tumours and lesions are found outside of the screening process
- Mammography has difficulty imaging dense tissue
- Mammography involves breast compression and ionising radiation

MARIA™

- ✓ Uses harmless radio-waves and requires no breast compression
- ✓ Effective on women of all ages
- ✓ Performs better than mammography in dense tissue
- ✓ Provides new clinical information to identify lesion types
- ✓ Easy to install, operate and interpret