Opto-acoustics as a potential new diagnostic technology in breast care: Practical experiences from the field

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Maestro trial

• Multicenter prospective cohort study

• Inclusion of 200 women with BIRADS 4a / 4b lesions on conventional assessment

• Patients undergo additional evaluation with opto-acoustics using the Imagio – does not affect patient management

• Goal: To decrease negative biopsies in women with benign lesions
Opto-acoustics with Imagio: Feedback from the field

“Clear additional information in the images”

“Super Doppler’ with functional information”

“Shows what’s happening within and around the lesion”

“Allows ‘wait and see’ policy in lesions that would otherwise require biopsy”
Opto-acoustics with Imagio: Feedback from the field

“Clear additional information in the images”

“Super Doppler’ with functional information”

“Shows what’s happening within and around the lesion”

“Allows “wait and see” policy in lesions that would otherwise require biopsy”

BUT

“There is a clear learning curve”
Reducing the need for biopsy
Reducing the need for biopsy

BIRADS 4a
To
BIRADS 2
Fibroadenoma
Shocking results

64 year-old woman
Recalled from screening
Shocking results
Eliminating false negatives

Pathology:
DCIS, growing inside a papilloma

BIRADS 4a to BIRADS 4c
Realtime information

Study protocol:
• Image acquisition of ~15 minutes, including movies in 4 directions
• Postprocedural image evaluation on dedicated forms
  ~5 minutes

Clinical reality:
• Immediate feedback on lesion characteristics
• Additional information interpreted within 5 minutes
Excellent tolerability

• Virtually all women prefer Imagio over biopsy

• Only safety precaution is the use of dedicated laser protective eyewear

• No device related adverse events reported so far
Easy to install in clinical environment

• If the door can be locked, every room is usable

• No special requirements as there is no ionising radiation or magnetism involved
Easy to install in clinical environment

• No IV contrast agents or radio-nuclides required

BUT

• Lasers generate heat, so some cooling is mandatory
Replacing biopsy in many benign masses
Thanks for your attention