

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

R.M. Mann, MD, PhD  
Department of Radiology and Nuclear Medicine

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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

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# 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”

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# Opto-acoustics with Imagio: Feedback from the field

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“‘Super Doppler’ with functional information”

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

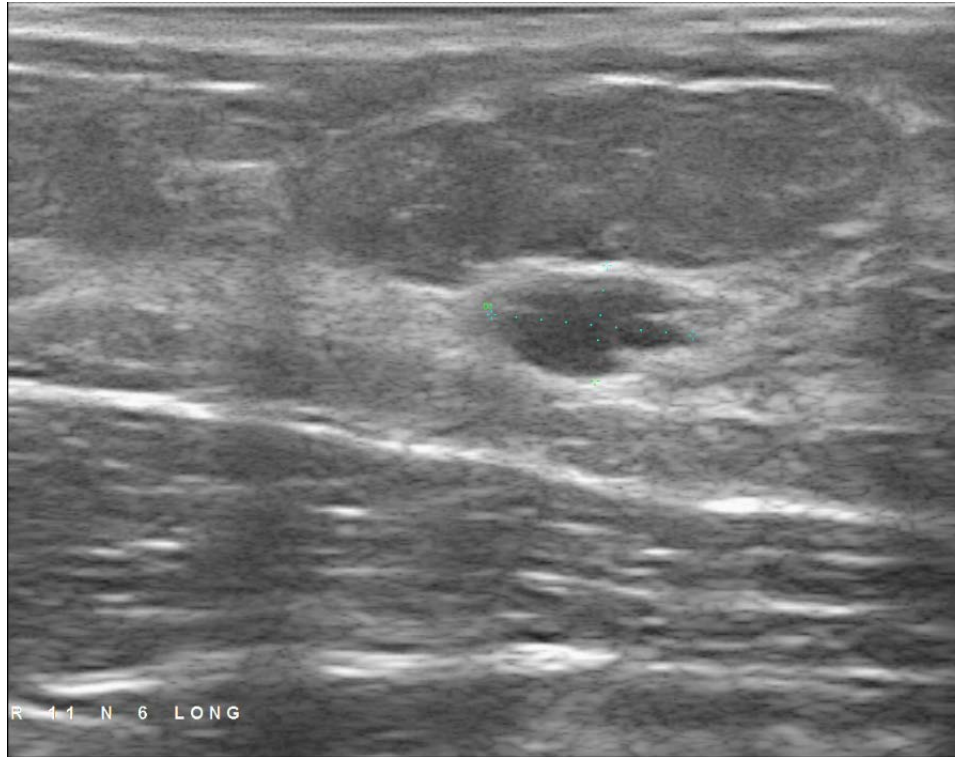
“Allows “wait and see” policy in lesions that would otherwise require biopsy”

**BUT**

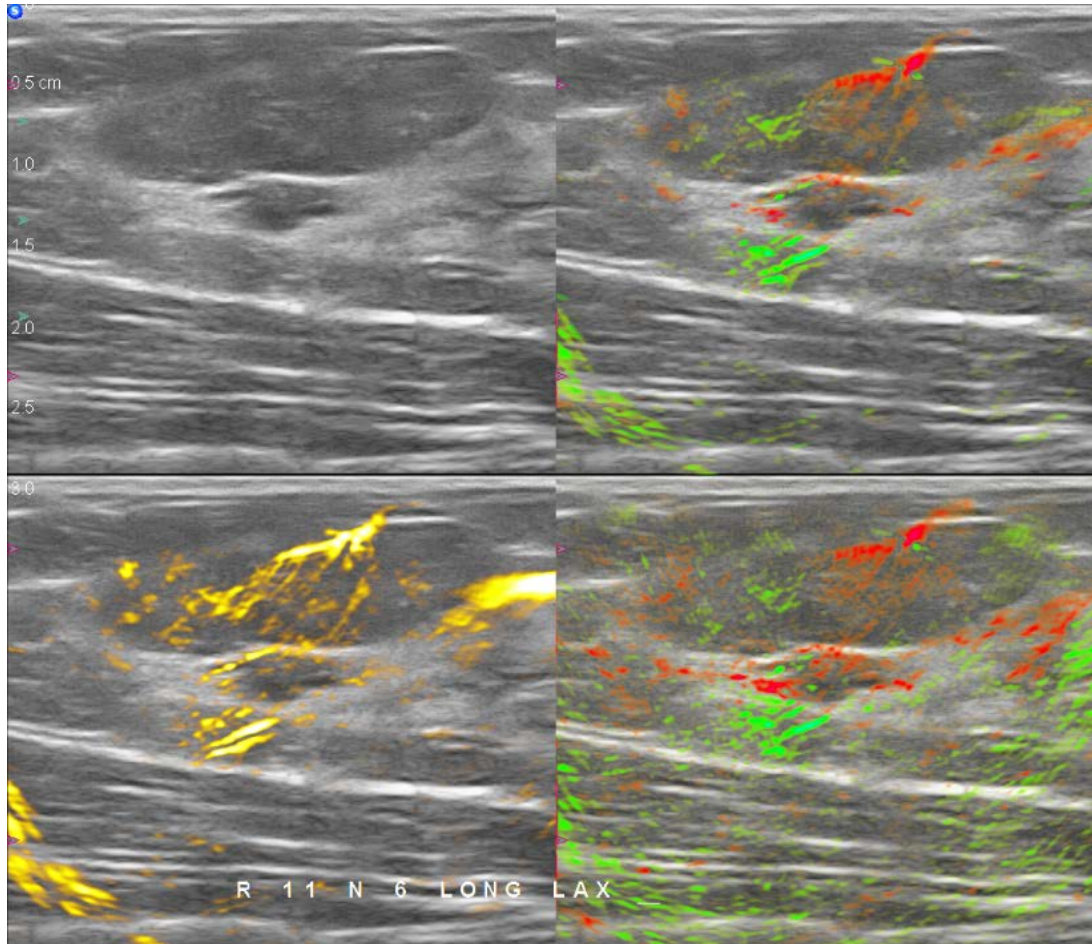
“There is a clear learning curve”

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# Reducing the need for biopsy



# Reducing the need for biopsy



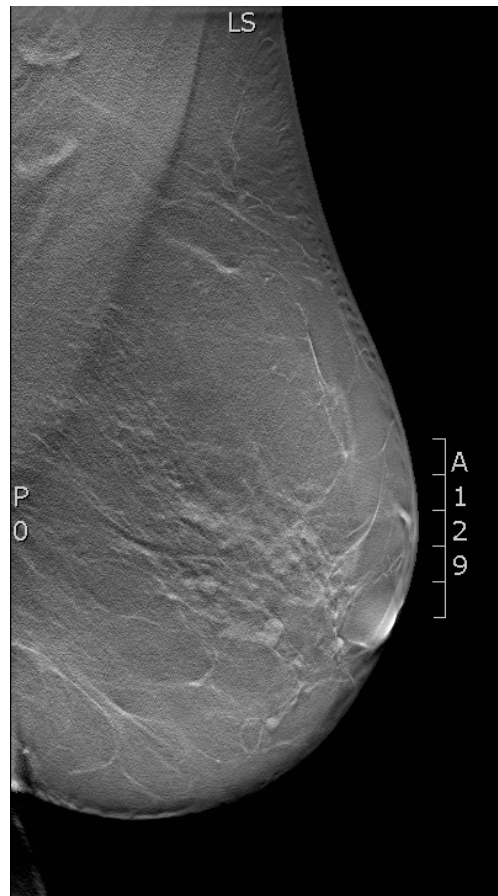
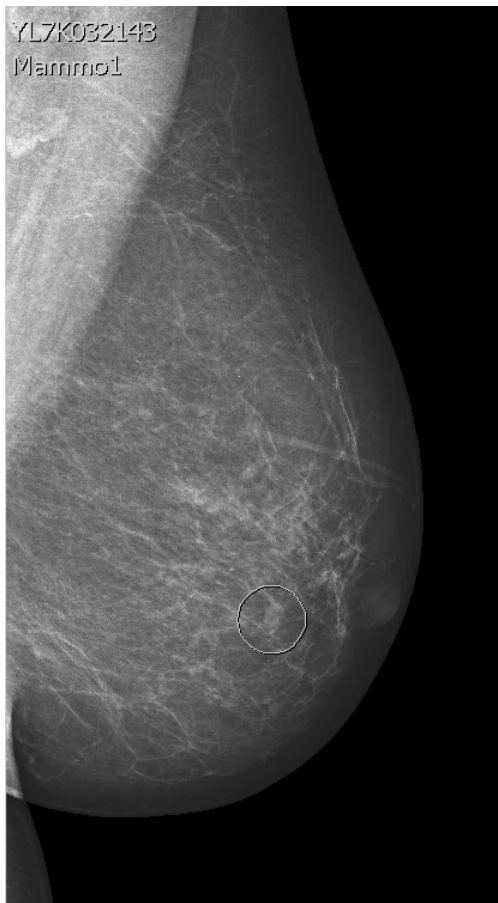
BIRADS 4a

To

BIRADS 2

Fibroadenoma

# Shocking results

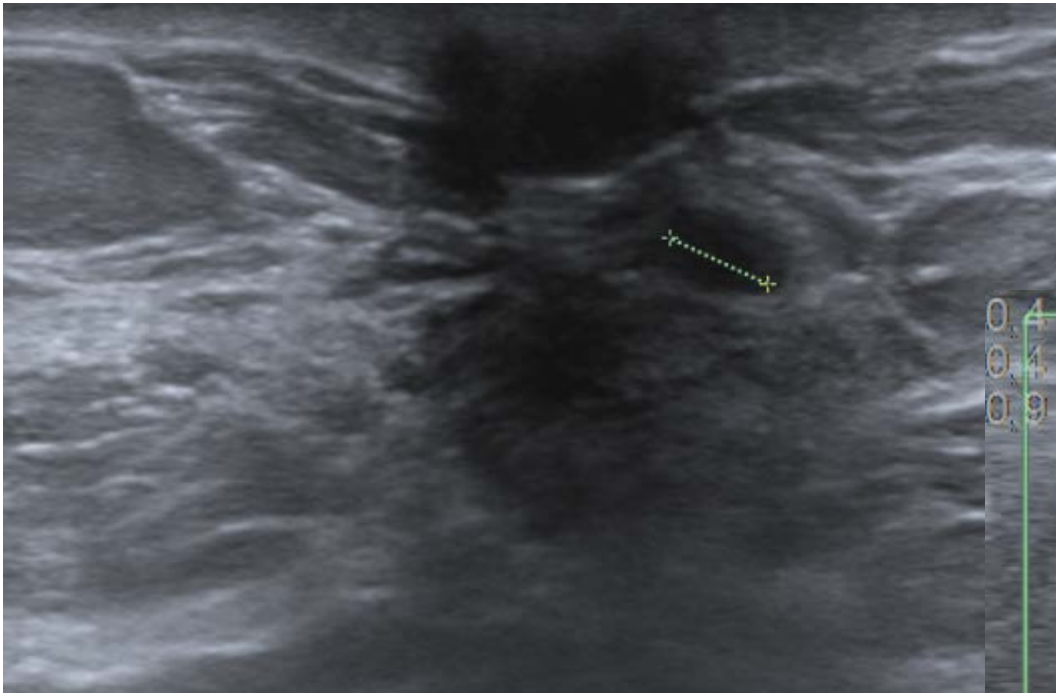


64 year-old woman  
Recalled from screening



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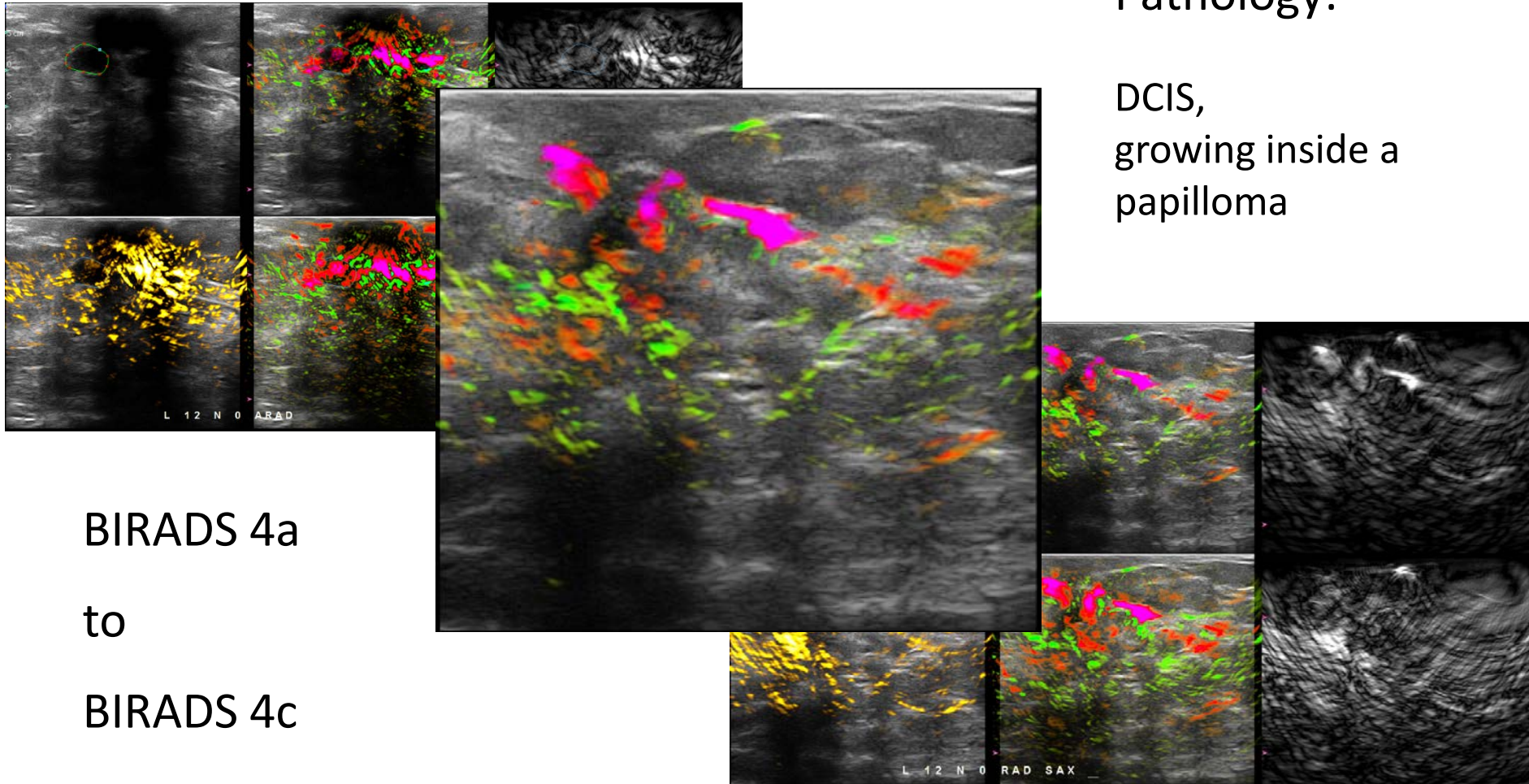
# Shocking results



# Eliminating false negatives

Pathology:

DCIS,  
growing inside a  
papilloma



BIRADS 4a

to

BIRADS 4c

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# 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

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# 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



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# 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





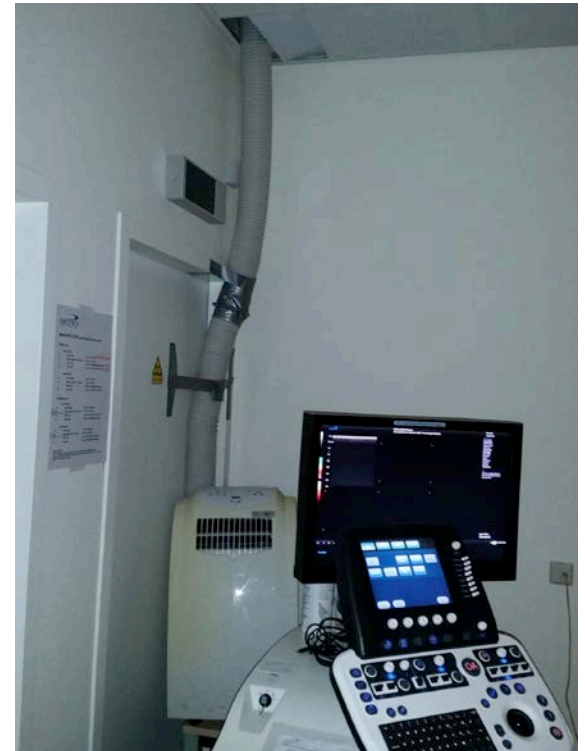
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# Easy to install in clinical environment

- No IV contrast agents or radio-nuclides required

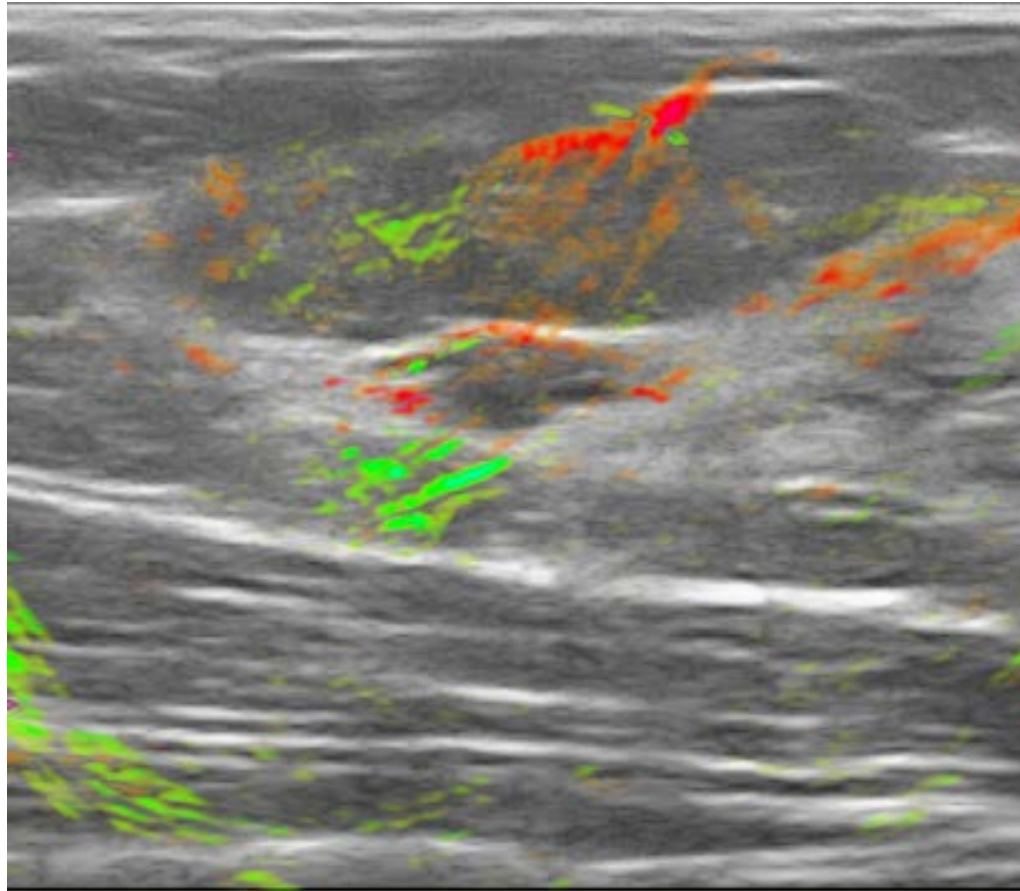
**BUT**

- Lasers generate heat, so some cooling is mandatory



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# Replacing biopsy in many benign masses



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# Thanks for your attention

