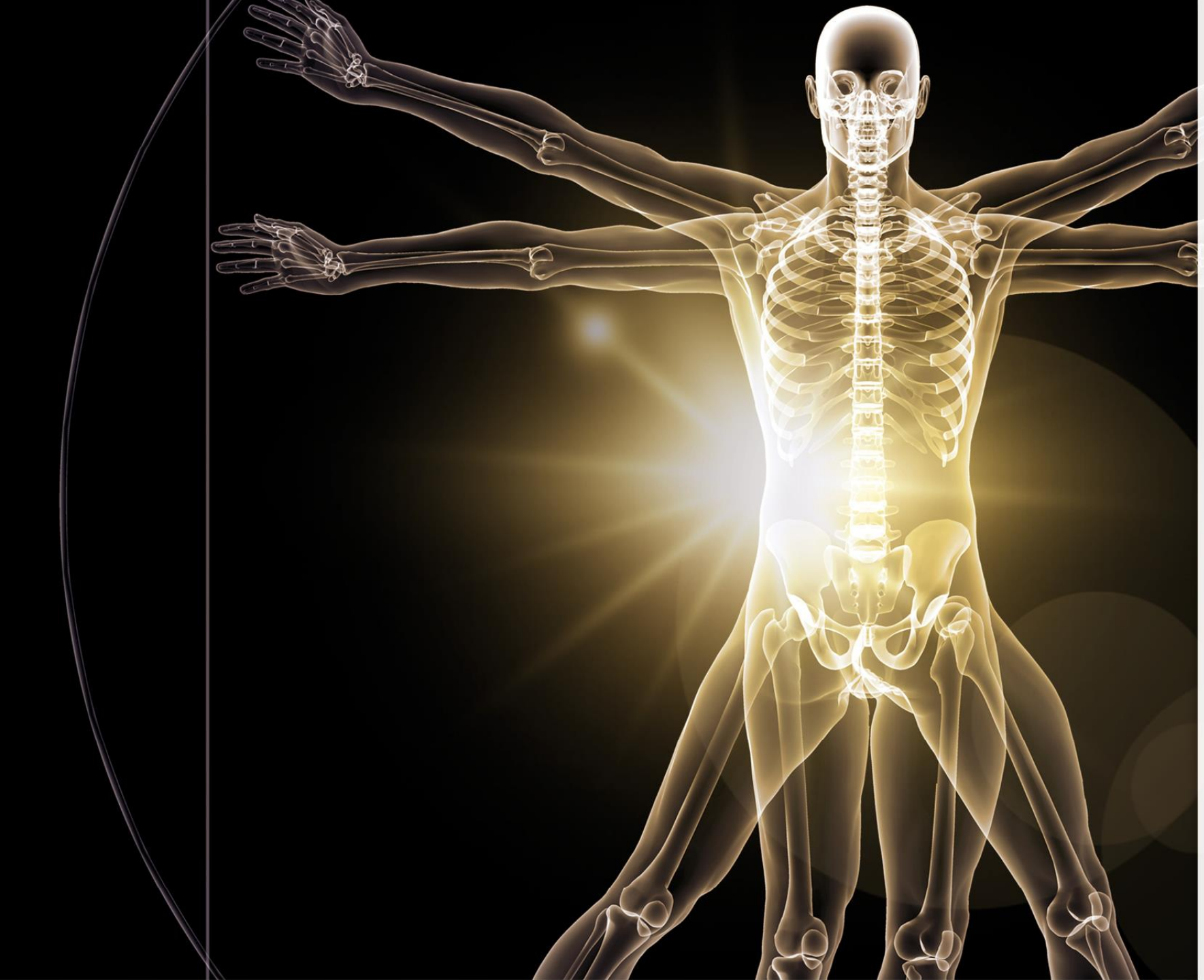


IS3R 2023

Berlin/Germany
August 24–26, 2023

MRI

Where do we go from here?

Peter Chang, MD

Univ. of California Irvine
Avicenna.ai
Olea Medical

Avicenna.
empowering radiology with AI

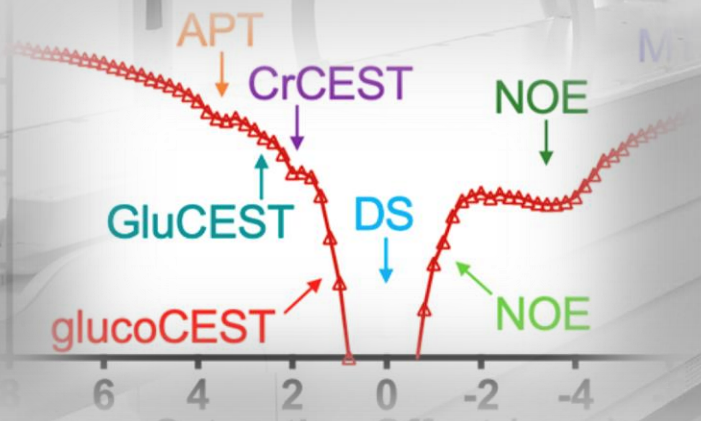
Olea medical
Improved diagnosis for life™

Where do we go from here?

portable

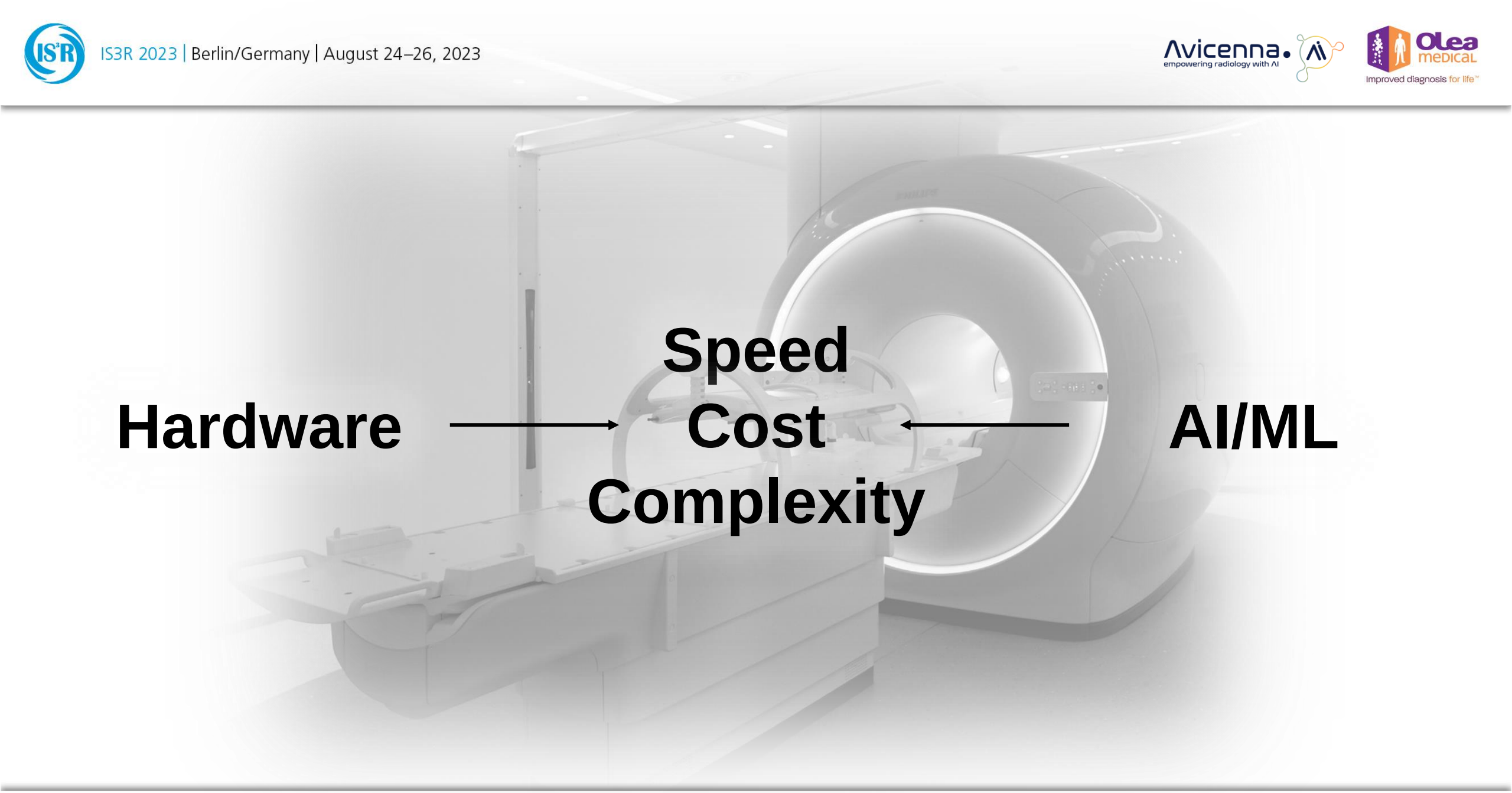
low-field

sealed



CEST MRI

Compressed sensing



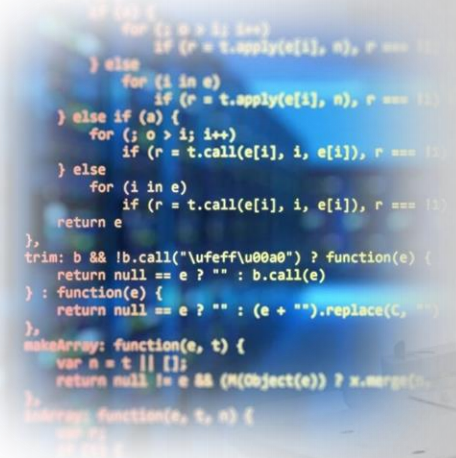
Hardware → **Speed** / **Cost** / **Complexity** ← **AI/ML**

Patterns in Data

Avicenna.ai empowering radiology with AI
Olea medical Improved diagnosis for life™

Fill in the [ ]

blank
gaps
hole
…



Initial training

v0

v1

v2

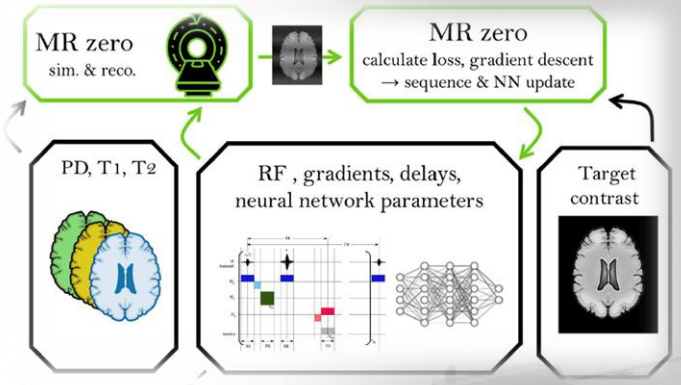
Latent Information

Koonjoo et al (2021)

Low-field DLR

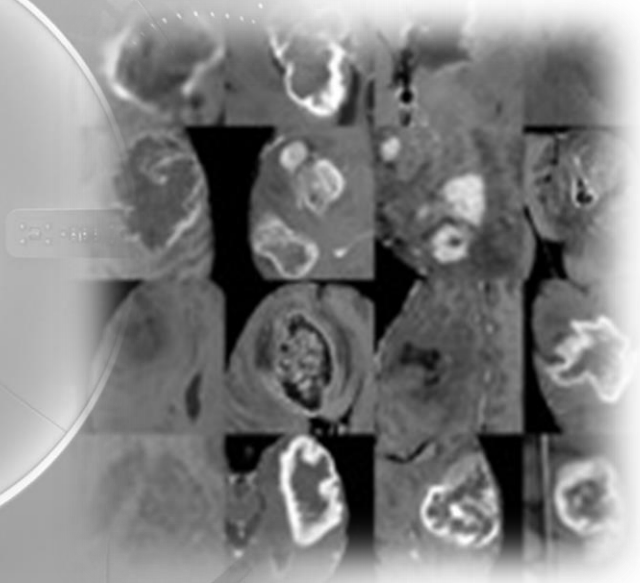
MR fingerprinting

Loktyushin et al (2021)

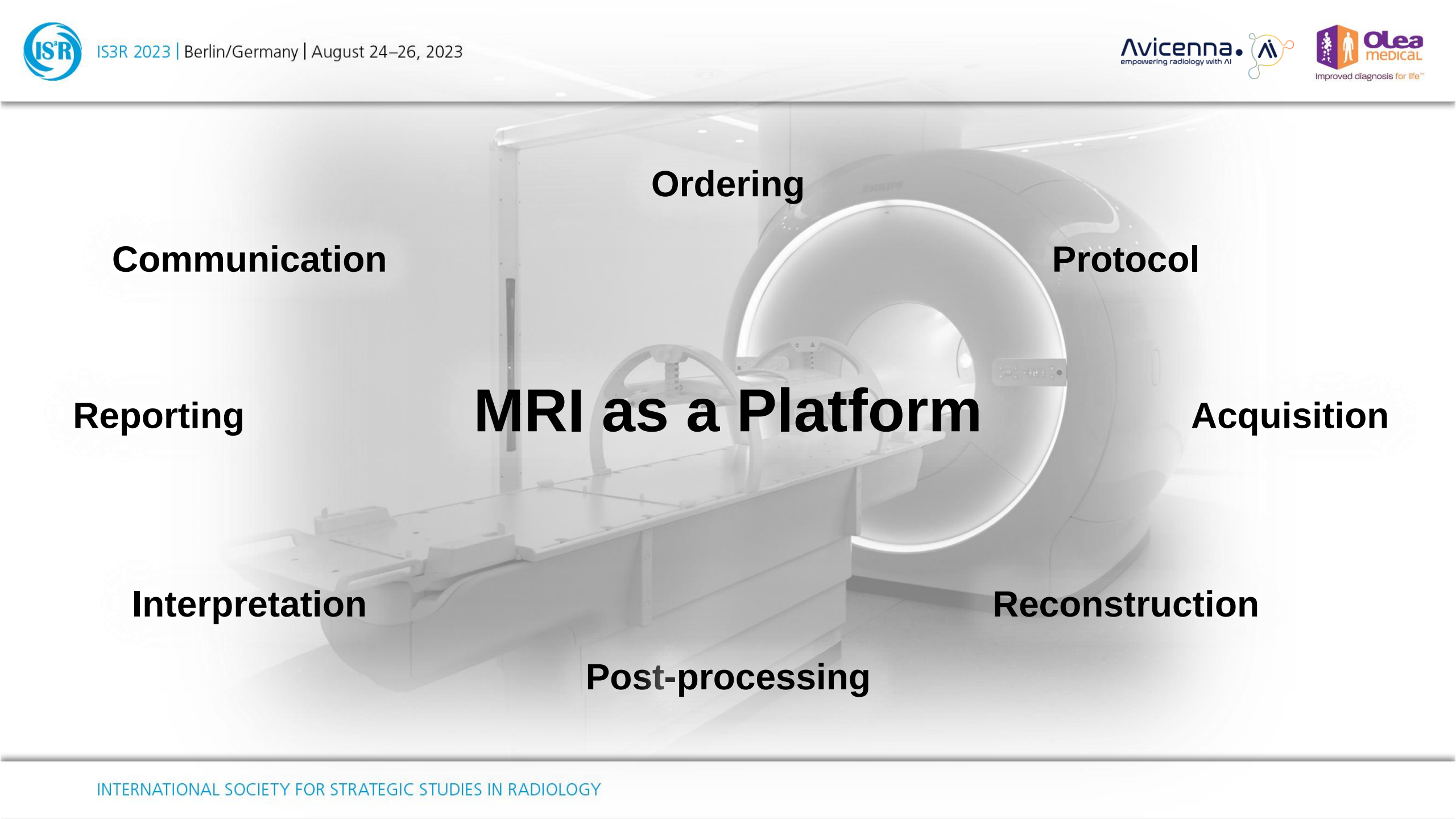


Sequence generation

Personalized Care



Dynamic protocols


Ordering
Communication
Protocol
Reporting
MRI as a Platform
Acquisition
Interpretation
Reconstruction
Post-processing

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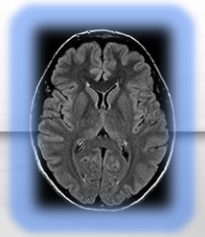
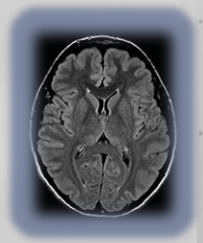
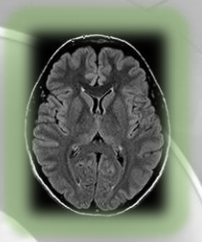
Olea medical
Improved diagnosis for life™



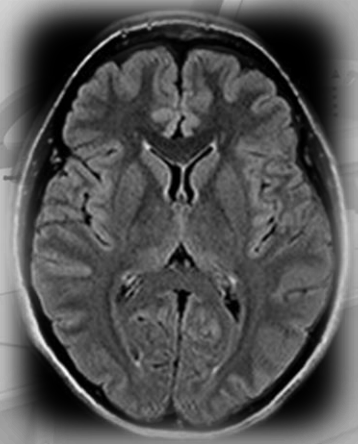
Ordering

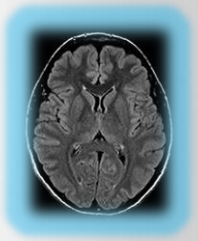


Communication

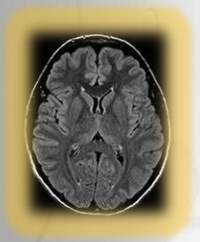


Protocol

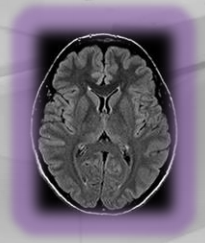




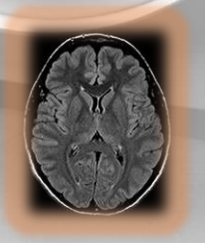
Reporting



Acquisition

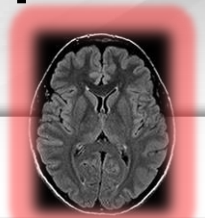


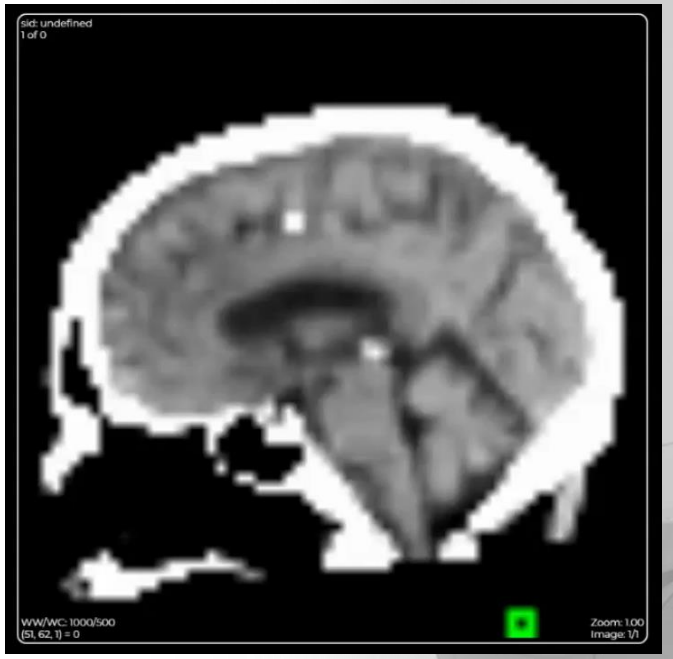
Interpretation



Reconstruction

Post-processing

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WW/WC: 1000/500
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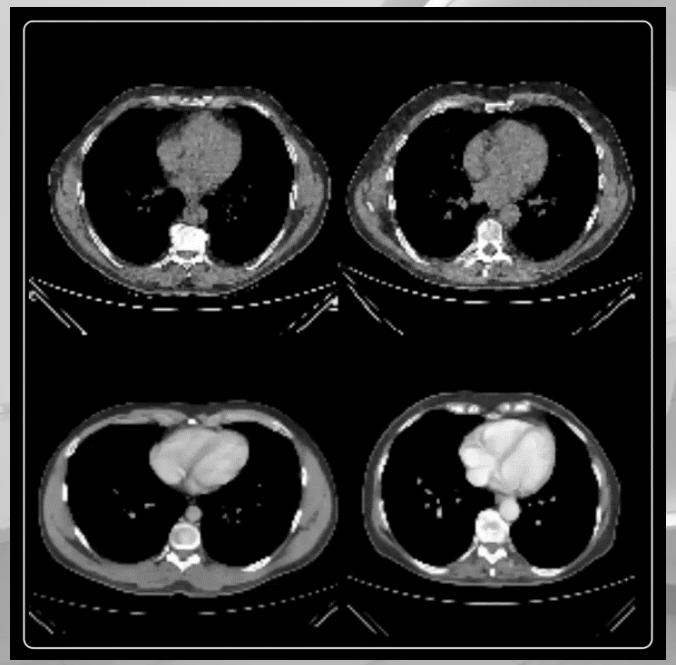
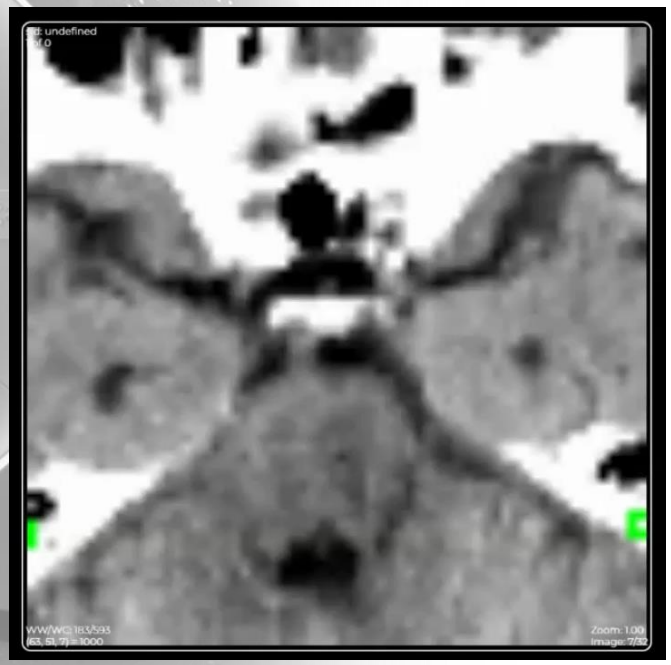
Zoom: 1.00
Image: 1/1

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Where do we go from here?