

Enhancing Surgical Precision: MR Applications in Surgery

Malcolm Laurie : Chief Commercial Officer

apo@lar
medical

 **PERCIPIENT**
MIXED REALITY SURGICAL PLANNING

XXVII Ifso World Congress

**Ifso**
MELBOURNE 2024

Melbourne 2024

Who am I?

Malcolm Laurie : Chief Commercial Officer
Strategic Focus : Partnerships & Collaborations



20 years marketing & sales, J&J MedTech

Currently seeking: Pioneers, visionaries and surgeons that are a little crazy

Who are we? apo@lar_{medical}

60 Colleagues, dispersed around the world Creating and developing the Medical Metaverse since 2017



Hamburg, GER



London, UK



New Delhi, IND



Miami, FL, US



Poznan, PL



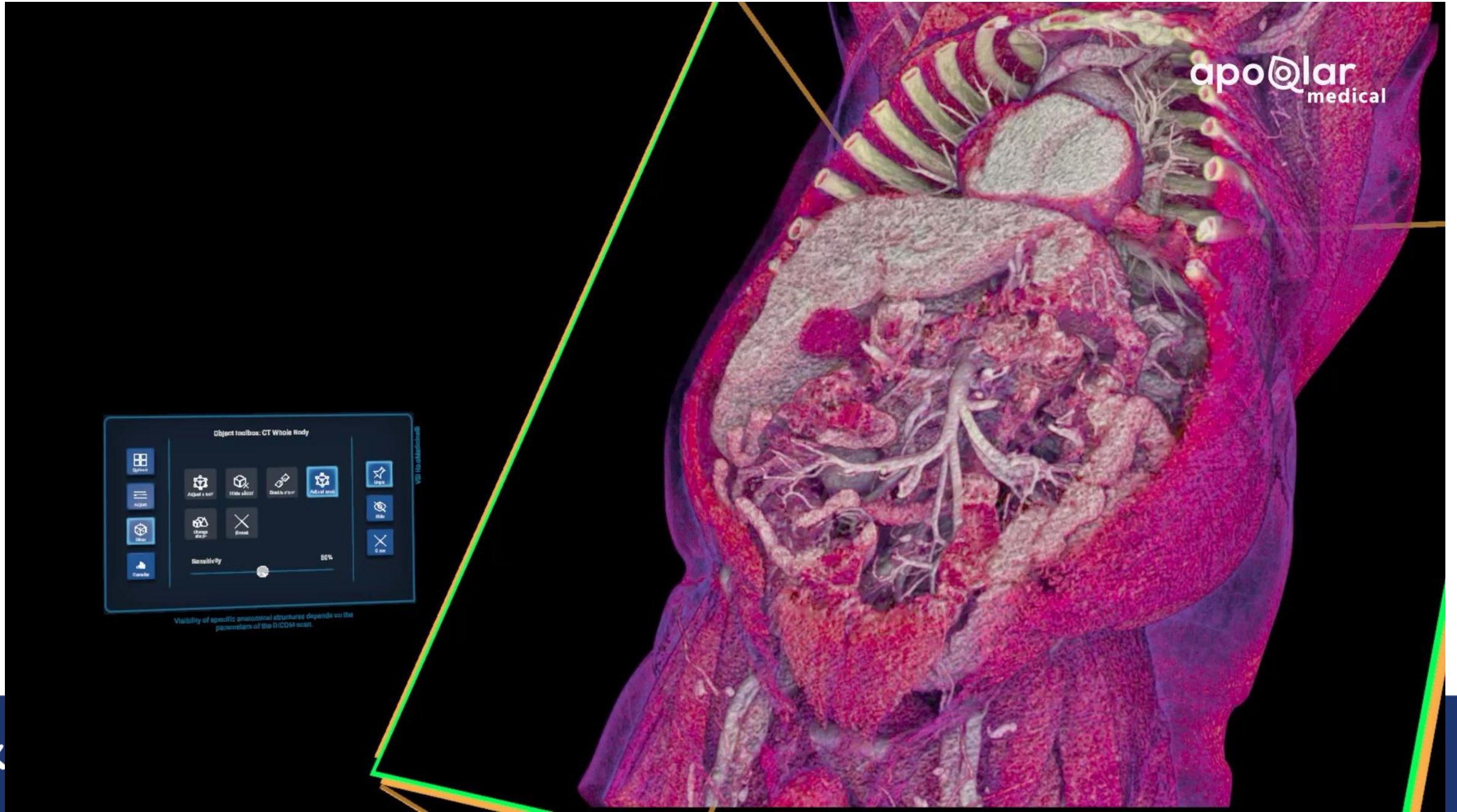
Singapore, SG



Auckland & Sydney, ANZ



What is MR Software? Enhanced Visualisation, a companion for Revisions?



Introducing: **apo@lar**
medical

The HoloMedicine® Platform

EDUCATION
in Virtual Reality

Education & collaboration



PLANNING
in Extended Reality

Pre-op planning & collaboration



NAVIGATION**
in Mixed Reality

Intra-op & Procedure guidance



medically certified in

31
countries

deployed across

60+
medical institutions

consulted by

35+
medical advisors

Medical Certifications & Compliance

- ✓ FDA 510(k) Approved (USA)
- ✓ CE Class 1 Registered (EU)
- ✓ HSA Class A Registered (Singapore)
- ✓ UK Class 1 Registered (UK)
- ✓ MDSAP Completed 12/2021 (USA & EU)
- ✓ EN ISO 13485:2016 Compliant
- ✓ HIPAA & GDPR Compliant

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2D Medical Data Has its Limitations



**You can't plan for what you can't
see.**

39%

of doctors report anatomical variations on a monthly basis¹.

56%

of adverse events in surgery are **correlated with human error.**

55bn\$

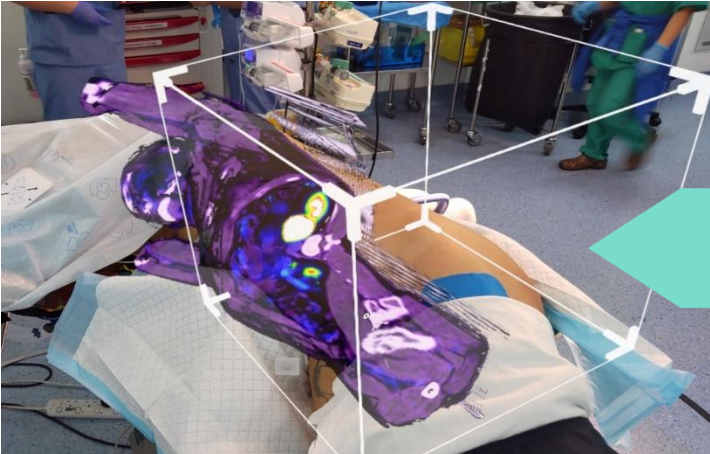
annual costs of medical liability in the US alone.

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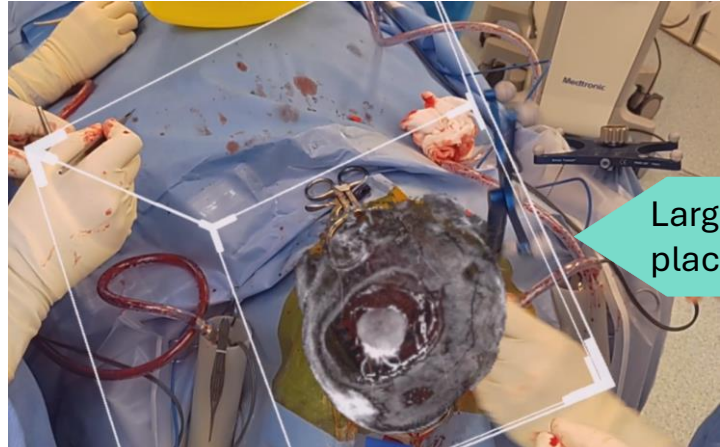

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HoloMedicine® Program NUHS – operating since 2020



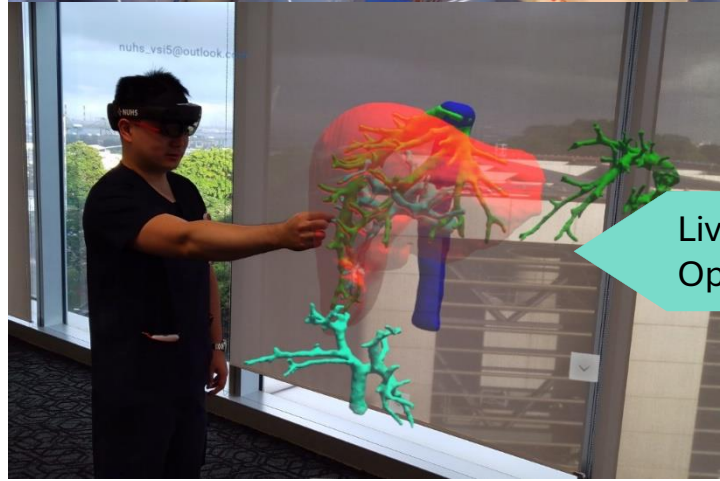
PET Scan
superimposition



Large Brain Meningioma,
placement



Advanced Breast
Cancer Op Planning



Liver Transplant Donor
Op Planning

HoloMedicine® Program NUHS – Dr Gao Yugia



Head & Neck Surgery – Vanderbilt University Hospital USA

Aweeda M, Huang L, Perez AN, Ely KA, Mehrad M, Lewis JS, Topf MC. Augmented Reality-Guided Frozen Section Analysis: Bringing the Pathologist From the Laboratory to the Operating Room. OTO Open. 2024 Aug 28;8(3):e70002. doi: 10.1002/oto2.70002. PMID: 39206428; PMCID: PMC11351170.



Perez, Alexander N



Aweeda, Marina



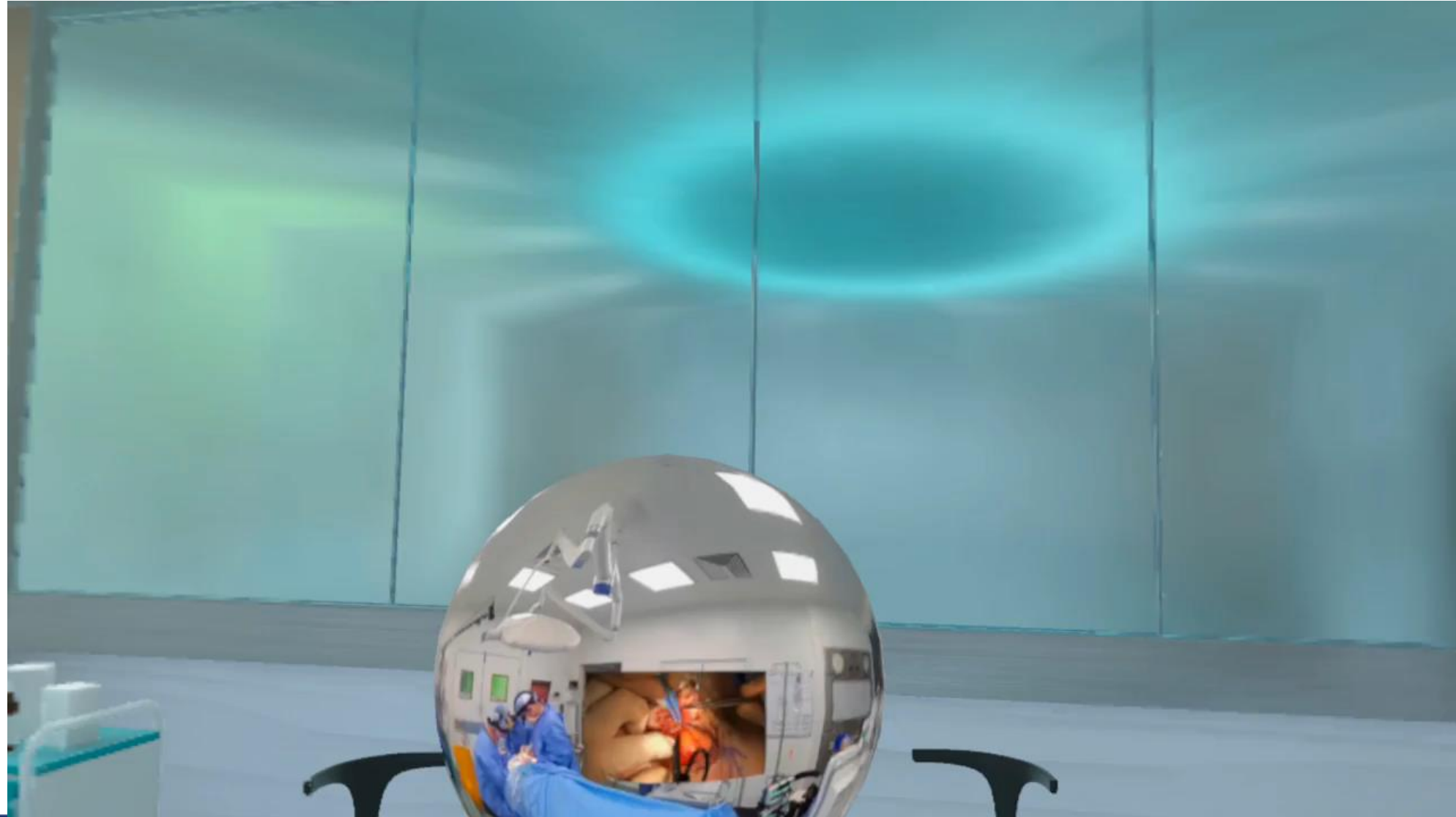
HoloMedicine® Program NUHS – Dr Gao Yugia



Shared Experience & Teams Streaming for Proctoring



Shared Experience & Teams Streaming for Proctoring



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Stream from Rita

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Experience Collaborative Medicine