Medivis reimagines surgical navigation as a cohesive system–integrating **augmented reality, interface design, and physical hardware** into a unified experience.

The goal: deliver critical information exactly where and when it's needed, reducing cognitive load while enabling greater precision and confidence in high-pressure environments.



The challenges with the current standard of care

AR Design

Interface Design

Hardware Design

The Medivis solution

AR Design

Current Navigation Solutions

The standard for computer-guided surgeries relies on 2D imaging, **requiring the surgeon to look away from the patient** and mentally translate flat visuals into 3D space.



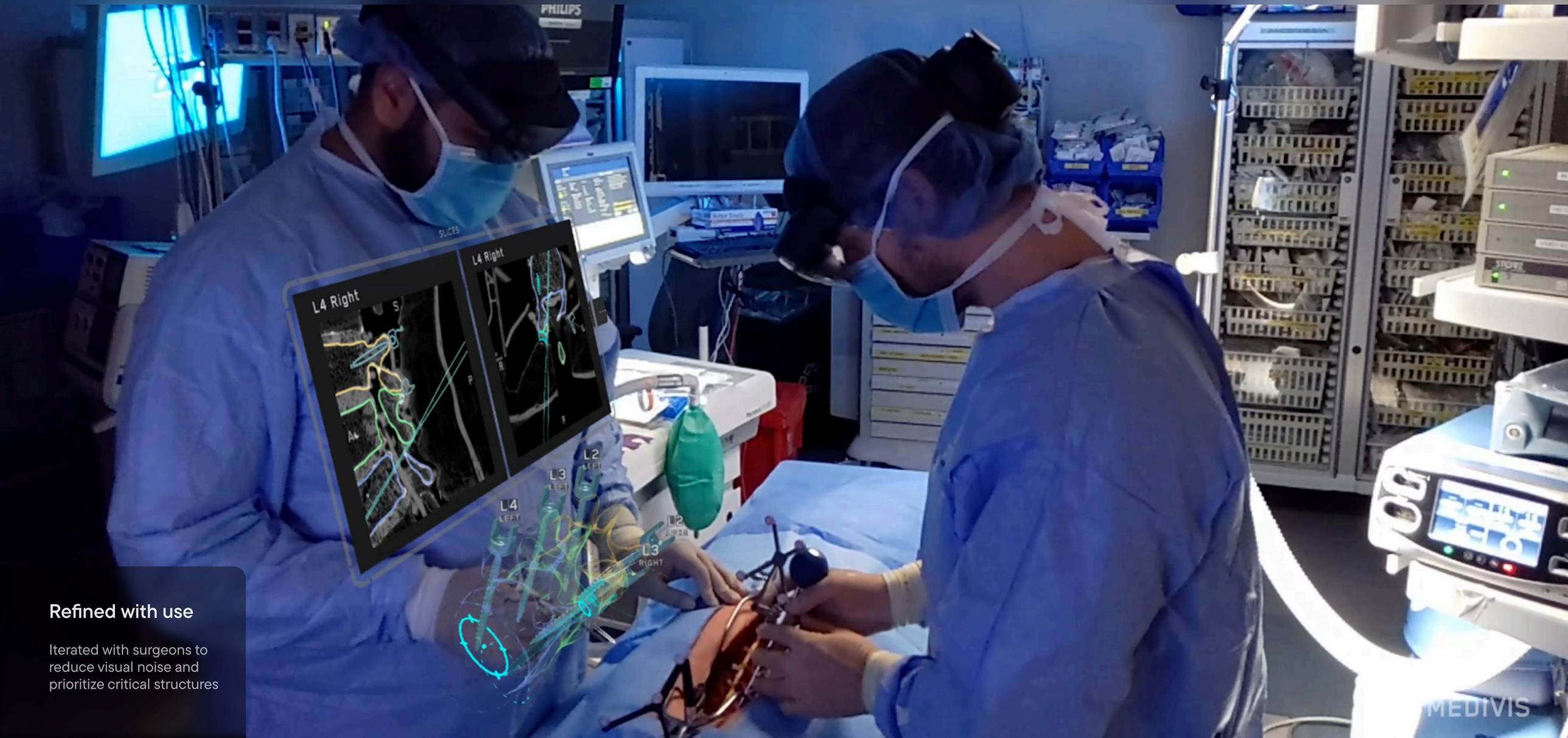






Less than 20% of surgeries use computer guidance because the existing tools are clunky, inefficient, and expensive.

MEDIVIS gives surgeons the information they need, right where they need it



Refined with use

Iterated with surgeons to reduce visual noise and prioritize critical structures

Industry status quo: low clarity, high cognitive burden

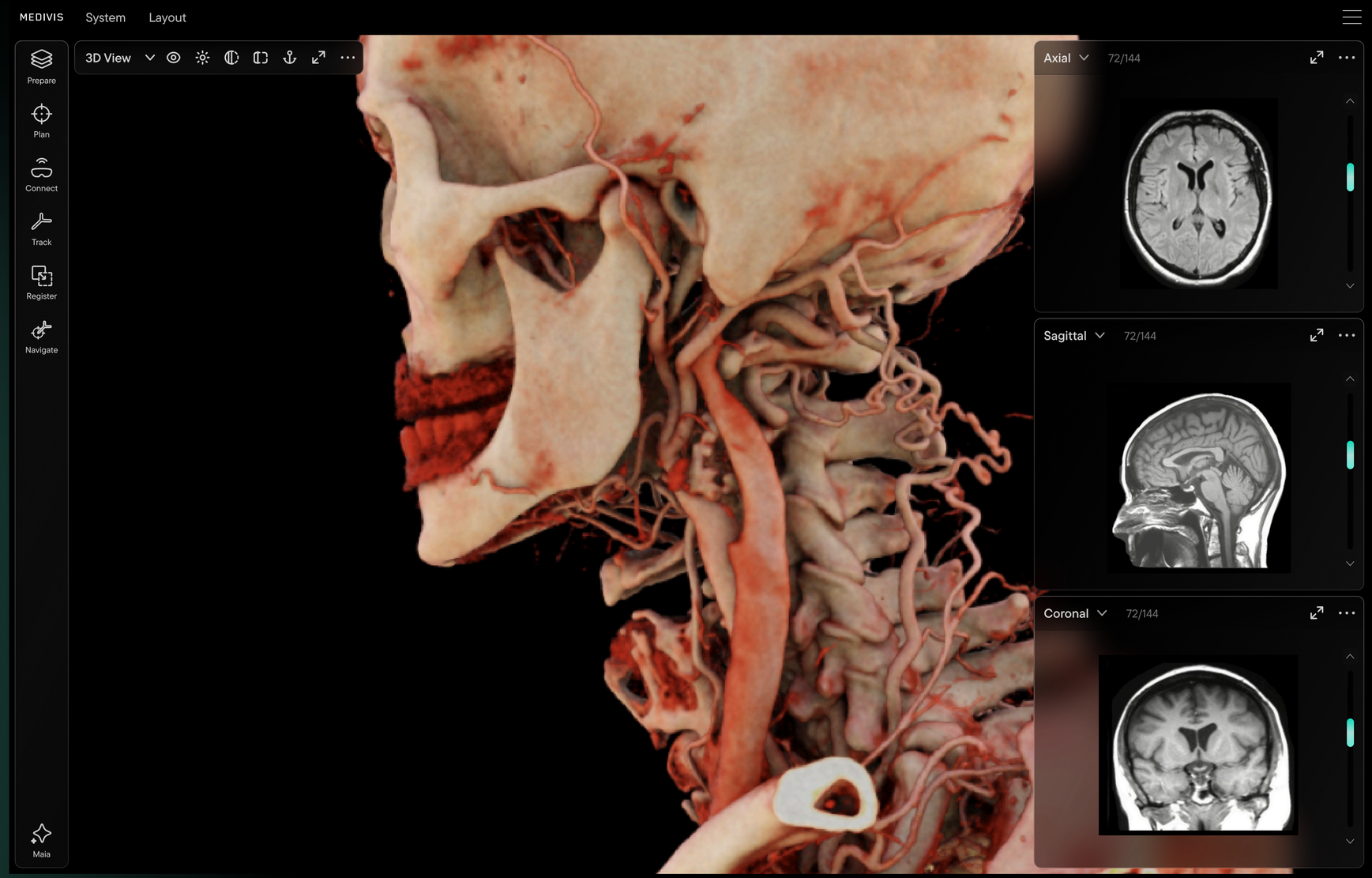


Poor information hierarchy — Outdated visuals — Overloaded controls — Higher error risk

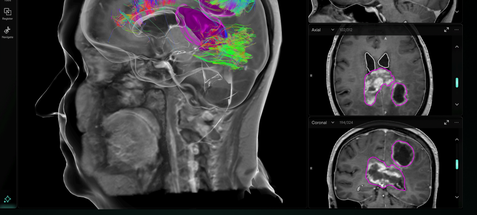
The Medivis standard



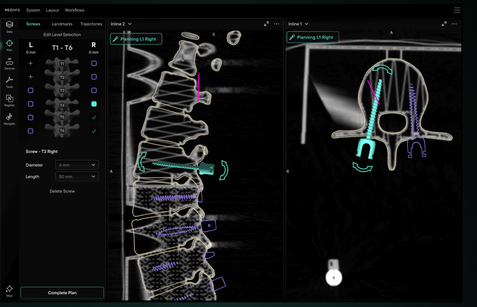
Clarity and confidence, every step of the procedure



GUIDED NAVIGATION



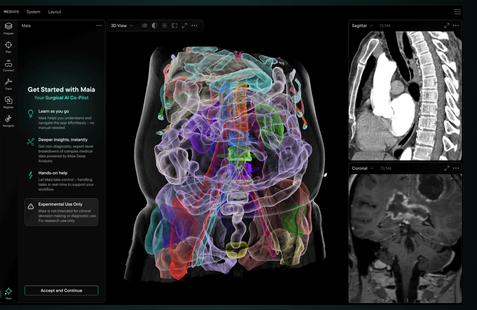
REGISTER IMAGING TO PATIENT



TRACK TOOLS



PAIR WITH YOUR DEVICES



PLAN PROCEDURE

PREPARE DATA



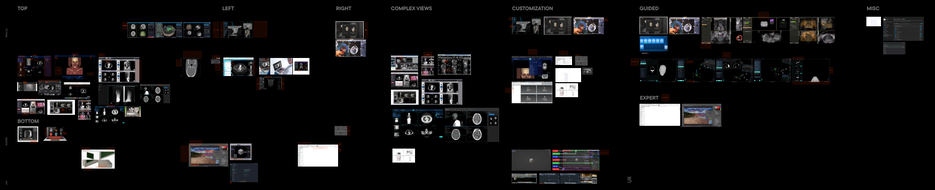
From exploration to execution

Parallel UI exploration and a unified design system **ensured consistency, reduced cognitive load, and supported rapid feature development.**

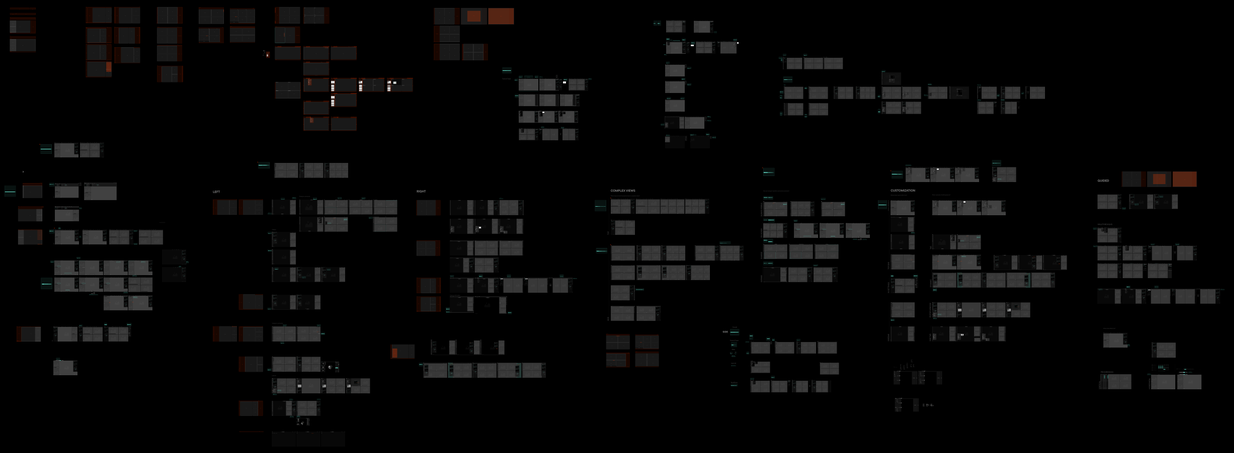
User Persona Development



Parallel Models Audit

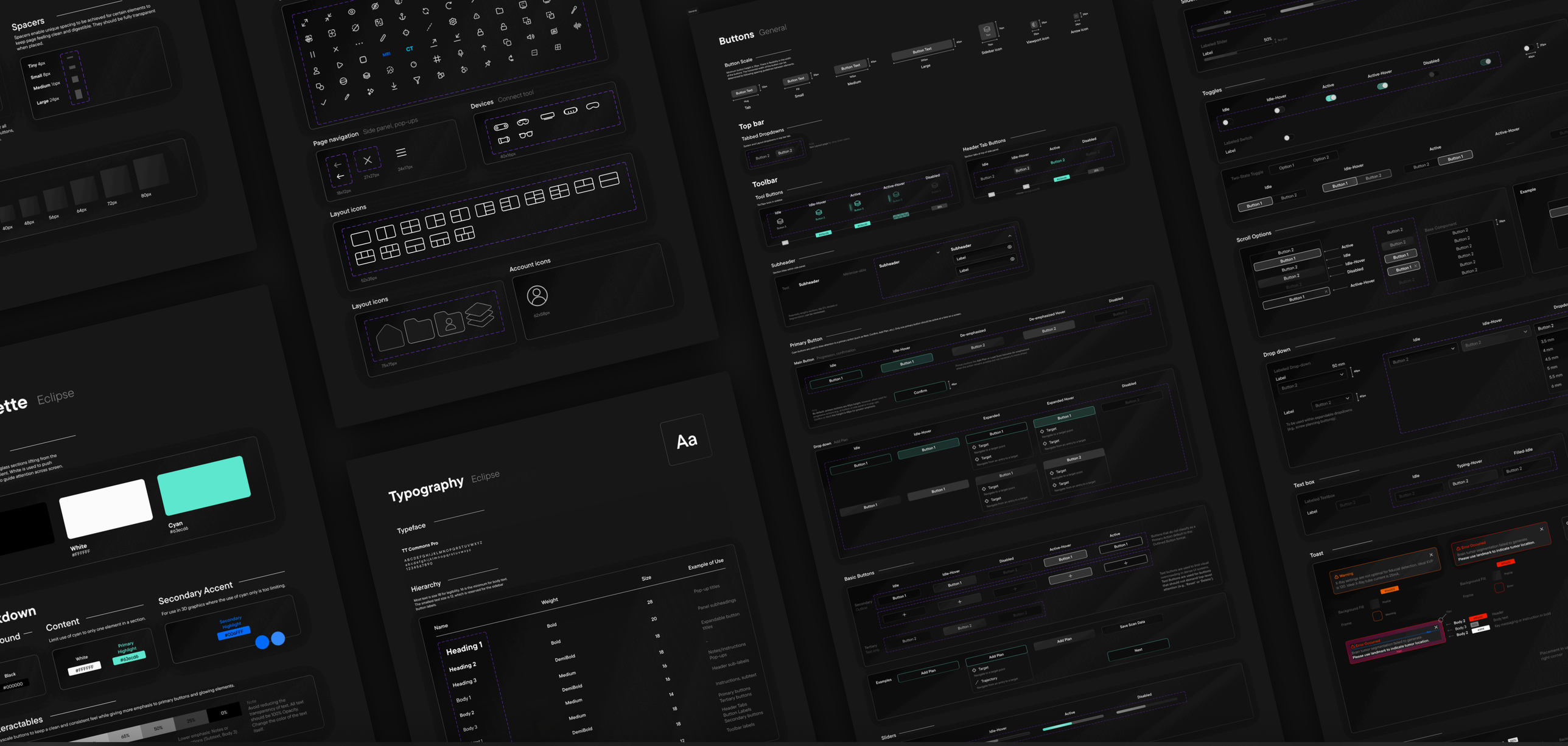


Layouts and Information Architecture



Design language directions





Bringing modern design to critical care at scale.

Hardware Design

Existing surgical navigation systems have plateaued in software capability, care setting versatility and hardware agnosticism.

- Large physical footprint
- Long complex setups
- $500K-1M+ capital cost
- Closed ecosystems
- Onsite reps required
- Poor ergonomics
- No ASC or ICU workflows



MEDIVIS





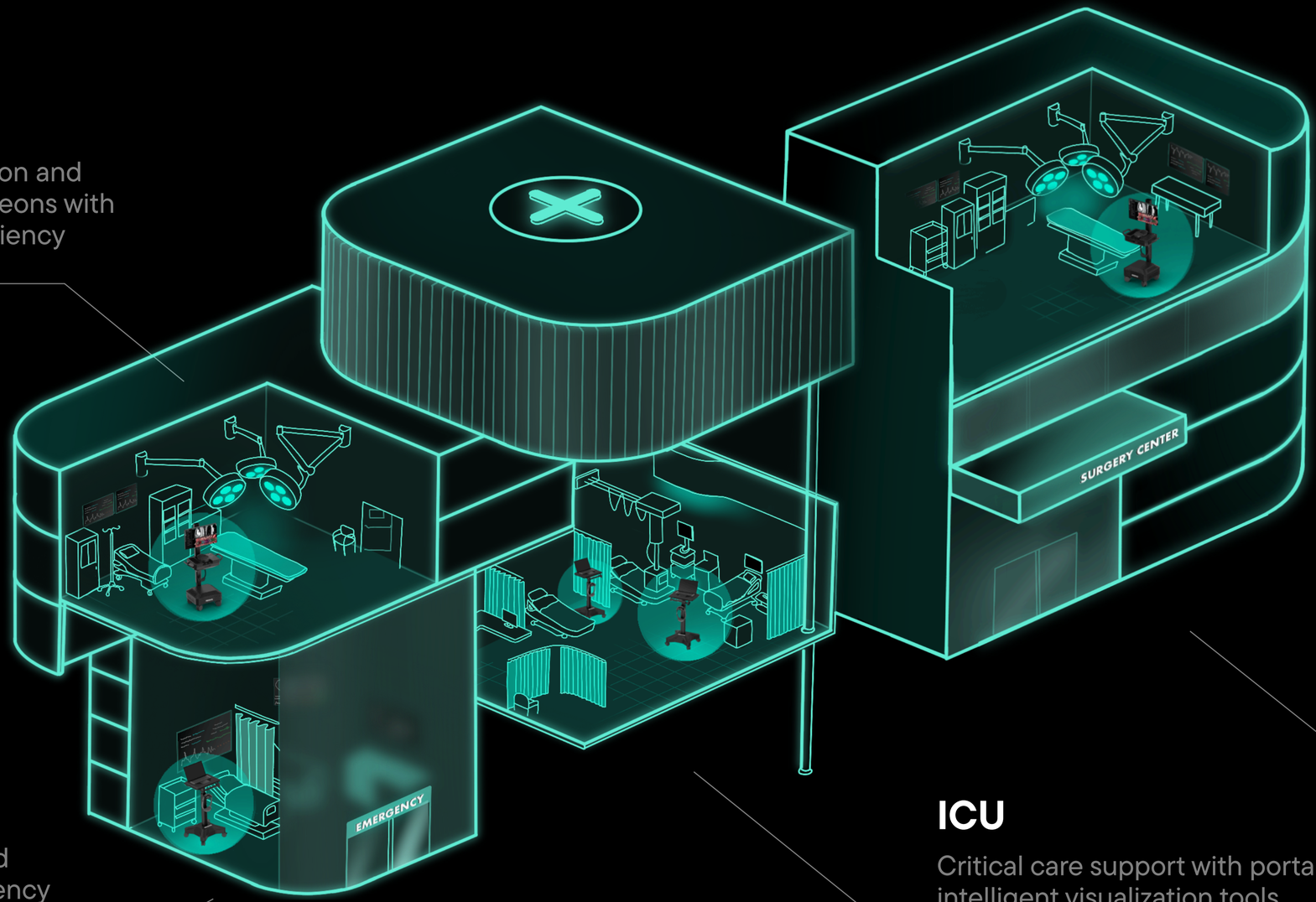
The new standard for premium clinical navigation across specialties.

Precision tracking, immersive AR visualization, and high-performance computing–all integrated into a compact, portable platform.

Designed to enable precision navigation across care environments

OR

Next-gen surgical visualization and guidance, empowering surgeons with real-time precision and efficiency



ASC

OR precision in a much smaller footprint

ER

Rapid-response imaging and guidance to support emergency teams when every second counts

ICU

Critical care support with portable, intelligent visualization tools

Core Workstation Design Objective

Expand access to navigation in resource-limited settings while shaping a cohesive Medivis product family.

+Portability/lightness

+Modularity

+Ease of assembly



From exploration to execution

Rapid iteration from early form studies to refined, manufacturable design–**balancing compactness, modularity, and clarity.**








MEDIVIS


MEDIVIS



Ultrasound modularity
Fans, wipes, gel



Pro Workstation

The OR solution.





Tabletop

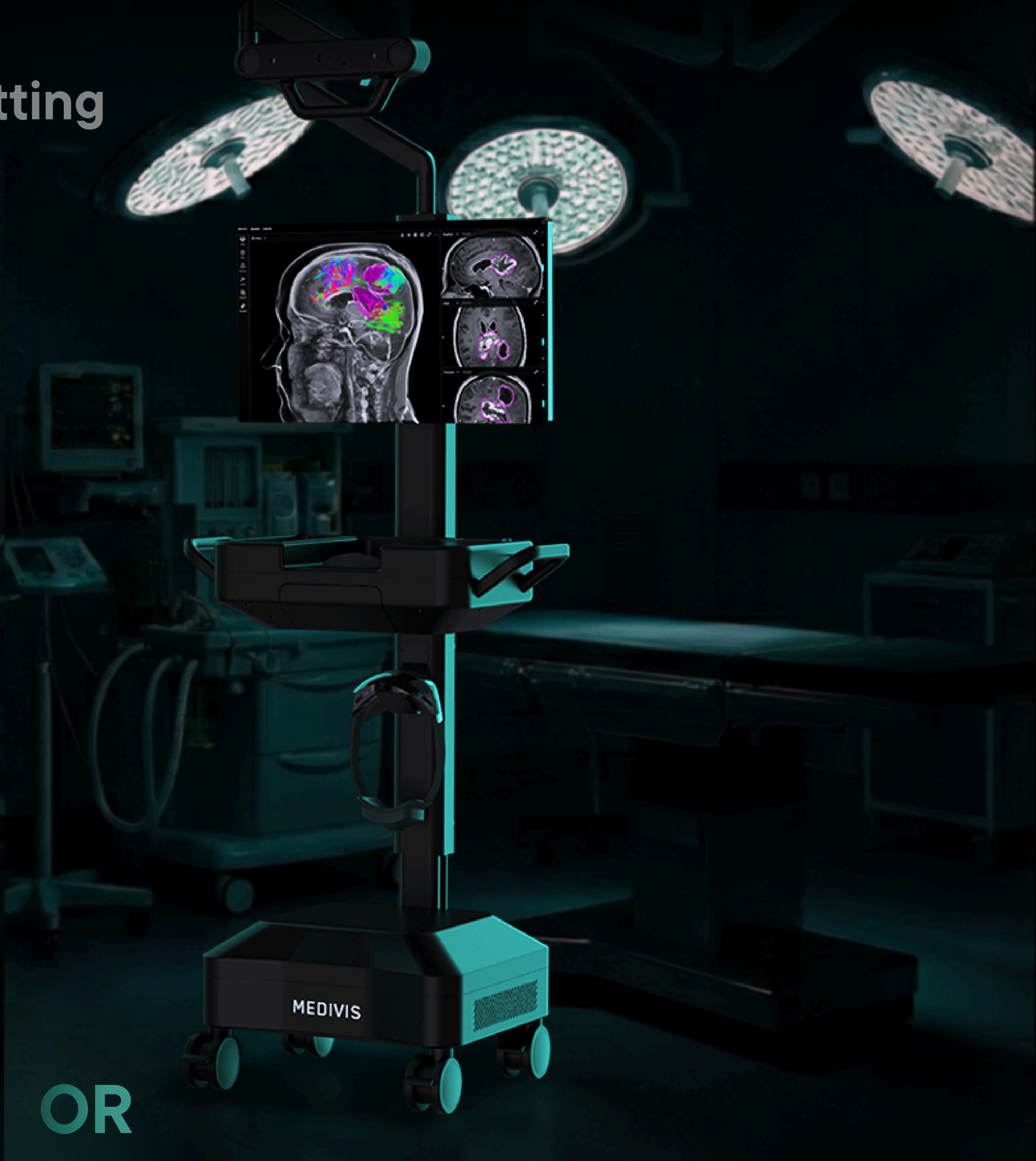


MEDIVIS

Precision care for every patient, every setting



ICU



OR

MEDIVIS

Design principles that unite the surgical navigation system

Premium Clean. Elevated. Restrained.

Refined materials, minimal forms, and intelligent simplicity create a system that feels elevated and purposeful. Every detail is designed to communicate quality without distraction.

Precise Surgical accuracy. Technical rigor.

Sharp geometry, intentional transitions, and clear visual hierarchy reflect the accuracy of the system. Every element is designed to support confident, exact interaction.

Future-focused Cutting-edge. Sophisticated.

Nontraditional forms and forward-looking technologies signal a new standard for surgical navigation. The design balances simplicity with depth, using light and form to convey innovation.

User-centric Intuitive. Respectful of clinical context.

Designed around real clinical workflows, the system prioritizes ease of use, adaptability, and clarity. Complex functionality is simplified to reduce cognitive load in high-pressure environments.



Strong user feedback

Using this technology feels like cheating. It is just too easy, and I get that is the point. I have a case on Tuesday - can I use this then?



Dr. Ronit Gilad
Chair of Neurosurgery
Staten Island University

You have built a much better Augmedics. I don't accept KOL contracts so I can be deep in AR/VR developments across companies. I can honestly say Medivis is truly at the forefront.



Dr. Galal Elsayed
Neurological Spine Surgery
Weill Cornell

Legacy companies are not moving fast enough. Nothing like what you've built. AR navigation is a powerful tool, reinforcing anatomy especially in percutaneous cases.

I have not been sold on robotics at all. Robots suck and introduce unnecessary complications.

Spine and AR side of Brainlab are not their priority and they don't understand the US market.



Dr. Jason Pittman
Co-Director Spine Center
Beth Israel Deaconess

Now surgeons don't even need to know how to place screws. You can just follow the Medivis system.



Dr. Mahmoud AlYamany
Health & Wellbeing Head, Neurosurgery Professor
NEOM, Saudi Arabia

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Defining the future of safer, better care.

Thank You