PERCISIO

- a new standard for medicine

https://percisio.tech/

https://www.linkedin.com/company/percisio

https://www.youtube.com/@Percisio

(deck)

PERCISIO – a new standard for medecine

PERCISIO is a computer vision-based medical guidance system, designed to assist medical procedures from percutaneous interventions to routine check-up operations using a hologram-based interface to enhance spatial understanding and precision.

#medtech #augmentedreality #virtualreality
#needleguidance #surgicalinnovation
#imageguidedtherapy #digitalhealth
#interventionalradiology #mixedreality
#computerassistedintervention #healthcaretechnology
#3dimaging #medicaldevice #XRinHealthcare
#percutaneousprocedures #minimallyinvasive
#futureofsurgery

Team

Frédéric Lesage

CEO

Engineer by background, specialized in **IT project management and Industry 4.0**, with expertise in **augmented/virtual reality** and **data science**.

Benoit Marcot

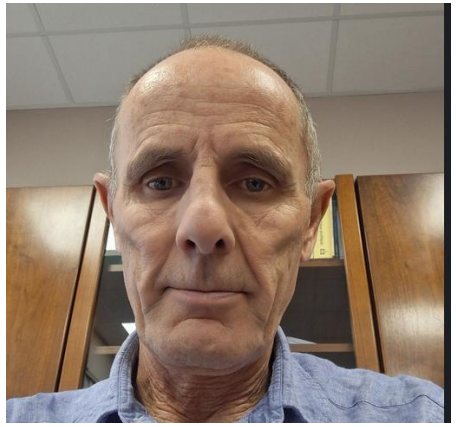
CTO

Engineer by training
Freelance IT specialist, with expertise in **blockchain** and **emerging technologies**

Nicolas Gautier

Electronics Engineer

Engineering background
Specialist in **Industry 4.0**, **cobotics**, **robotics**, **manufacturing**, and **electronics**



Bernard Landry

Medical Adviser

Nuclear Physician
Specialist in X-ray exposure
Member of EURADOS

Limitations of traditional interventional radiology

Significant X-ray exposure

→ For both the medical team and the patient, especially during repeated procedures.

Sources : 1, 2, 3

Costly equipment and infrastructure

→ Requires access to CT scanners, angiography suites, and dedicated radiology rooms. (scanner = 690 $ US/hour)

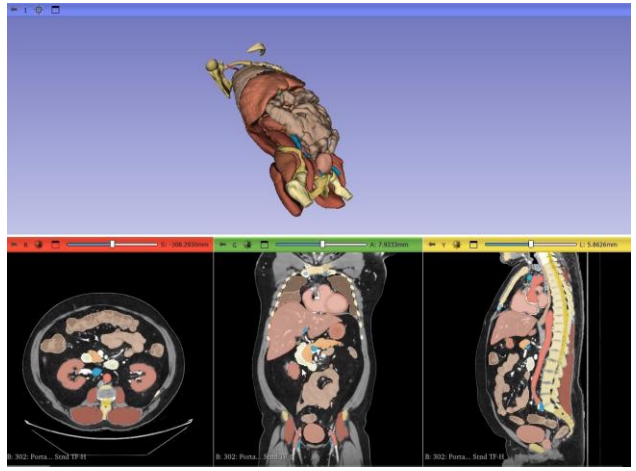
Sources : 1, 2

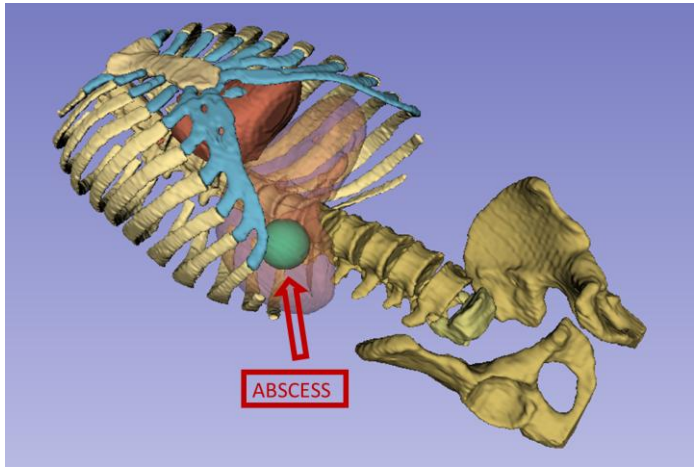
High dependency on expert operators

→ Precision relies heavily on the experience of interventional radiologists, limiting reproducibility and scalability.

Sources : 1, 2

A hologram-based three steps procedure





DICOM

Acquiring medical images → Construction of the Hologram → Medical Operation

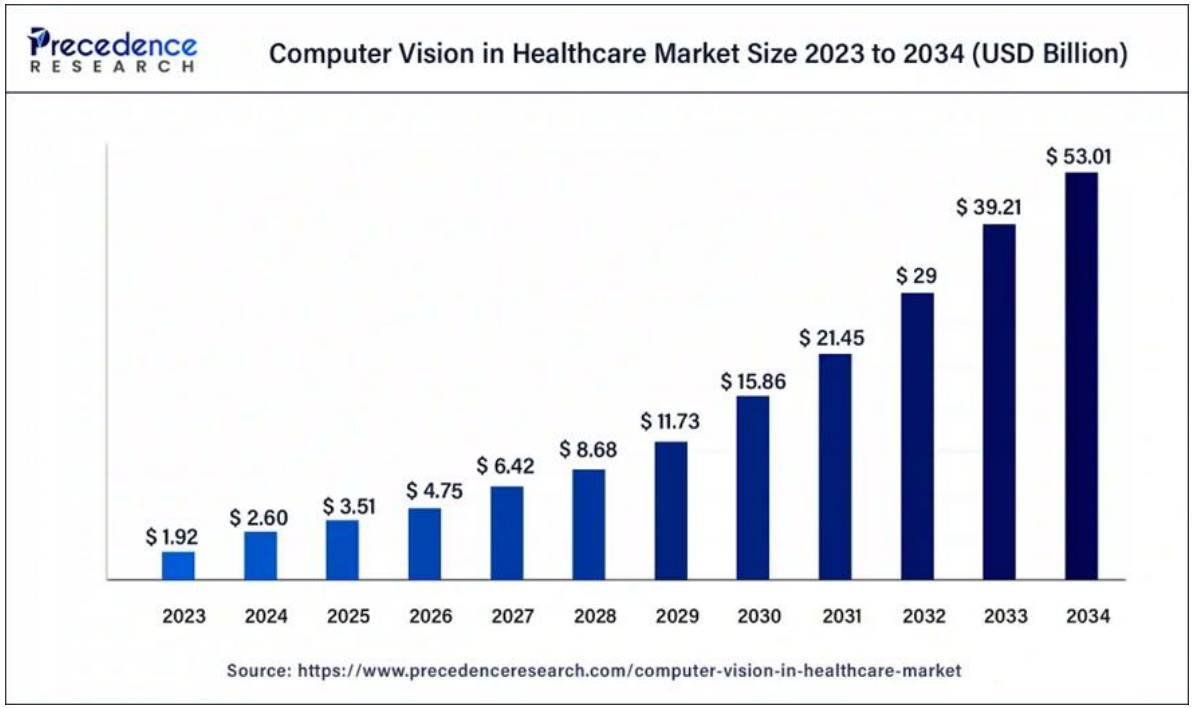
PERCISIO relies on a hologram-based approach for diagnosis and guidance. The hologram is built within the application using CT scan images, with the full anatomy represented before the doctor identifies the pathologies to be treated during the procedure.

A three-step workflow separates the core areas of expertise across the clinical lifecycle: image acquisition, medical interpretation, and procedural execution. The **PERCISIO** platform is designed as a collaborative hub, enabling seamless interaction between these roles.

BOOSTED BY COMPUTER VISION

PERCISIO relies on cutting-edge technologies. As illustrated, computer vision is a revolution in the medical field and represents a key pillar of Medicine 4.0.

Combined with the right hardware and software choices, computer vision enables the delivery of a solution with excellent quality of service.



PERCISIO leverages computer vision and fully harnesses the benefits of this technology to calculate the patient's position and track medical instruments.

Embedded Electronic Tracking System

PERCISIO outperforms conventional instrument guidance methods such as electromagnetic tracking, infrared, or optical markers. An embedded electronic system enables real-time tracking of any medical instrument in space. This real-time tracking assists practitioners throughout the entire procedure.

	Precision	Cost	Portability	Maintenance	Setup Complexity
Infrared tracking	**High**	**€€€**	**No**	**High**	**High**
Electromagnetic tracking	**High**	**€€€**	**No**	**High**	**High**
Optic marker tracking	**Low**	**€**	**Yes**	**Low**	**Low**
PERCISIO	**High**	**€**	**Yes**	**Low**	**Low**

Thanks to its attachment system, **PERCISIO** can be easily mounted on any medical instrument.

Intellectual Property – Regulation

PERCISIO

Europäisches Patentamt
European Patent Office
Office européen des brevets

EP25155166.9

“Computer Vision for 3D Needle Guidance in Medical Procedures”

Patent under submission
First positive opinion received on 17/07/2025 from the EPO

CE

Class IIA medical device

PERCISIO is protected by a European patent. The drafting of patent EP25155166.9 followed a thorough review of existing intellectual property. For years, extensive literature has explored how best to guide medical instruments. **PERCISIO** is the result of in-depth research and a strong understanding of emerging technologies, aiming to deliver the most effective solution.

AU2016358472A1 Navigation, tracking and guiding system for the positioning of operatory instruments …..
EP3099234A1 WEARABLE ELECTRONIC DEVICE FOR ENHANCING VISUALIZATION DURING INSERTION ….
WO2018213489A1 SYSTEMS, METHODS, AND DEVICES FOR ASSISTING OR PERFORMING GUIDED INTERVENTIONAL …
CN210277329U Directional ablation needle for interventional operation
CN108309409A CT-guided puncture handle, puncture needle set and system
CN109381256A Directional melting needle for interventional operation
CN210019440U Biopsy puncture needle navigated by gyroscope
CN211300229U Auxiliary puncture orientation system and assembly

Espacenet Patent search

uspto

Google Patents

VIDEOS

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Competition

	IMACTIS a GE HealthCare company	QUANTUM surgical	MediView	endosight	PERCISIO
Technology	ElectroMagnetic guidance	Infrared guidance + cobot	ElectroMagnetic + optic markers + augmented reality	Markers + AR	IMU + laser + VR
Use Case	CT-guided procedures		Ultrasound-guided procedures	Interventional oncology	All interventional procedures
Precision	4,1 mm	2,3 mm	2,3 mm	3 mm	<3 mm
Portable version	X	X	X	X	✓
Price	65€	1.3M€	?	?	10k€ + subscription

MediView XR, Inc.

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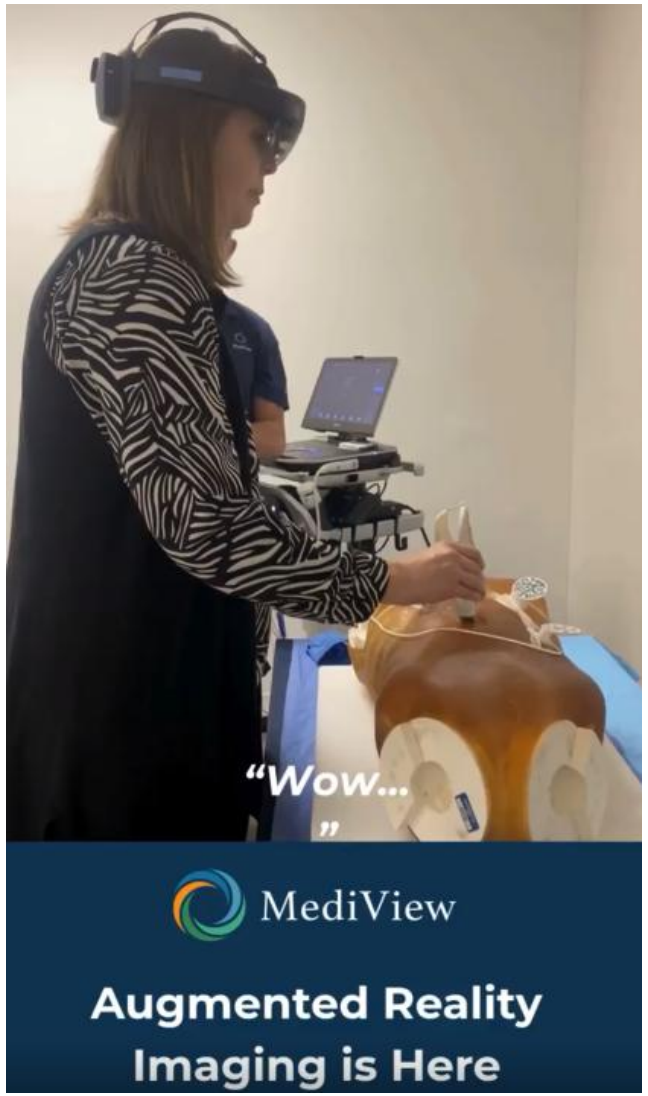
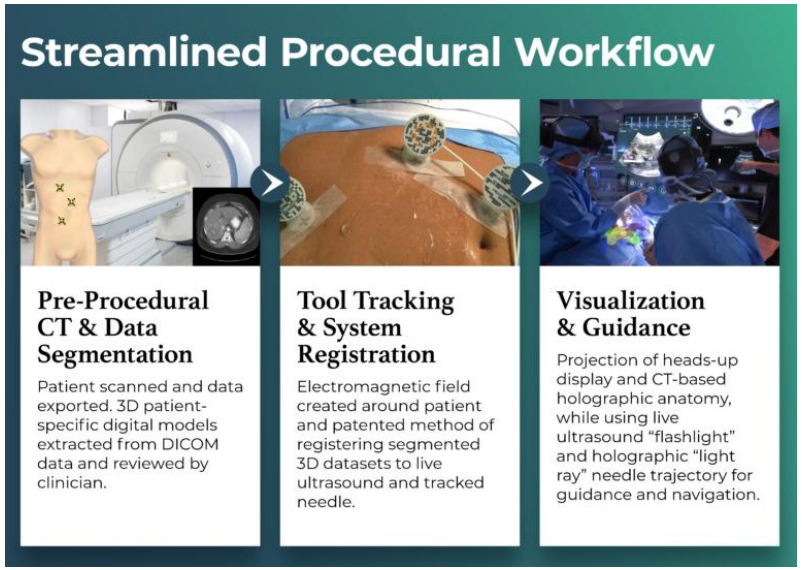
GROWJO

$3.5M Revenue (est) | $44M Total Funding | 46 Number of Employees

https://mediview.com/technology/





MediView's technology requires the placement of markers on the patient's body.
The patient must wear them before the CT scan and keep them on until the procedure.
This constraint forces the patient to remain in the operating room.

MediView's technology cannot track the patient's breathing.

QR code-based tracking is not very accurate.

Electromagnetic (EM) tracking is expensive and restrictive.

Quantum Surgical, FR, Montpellier

PERCISIO

https://www.quantumsurgical.com/

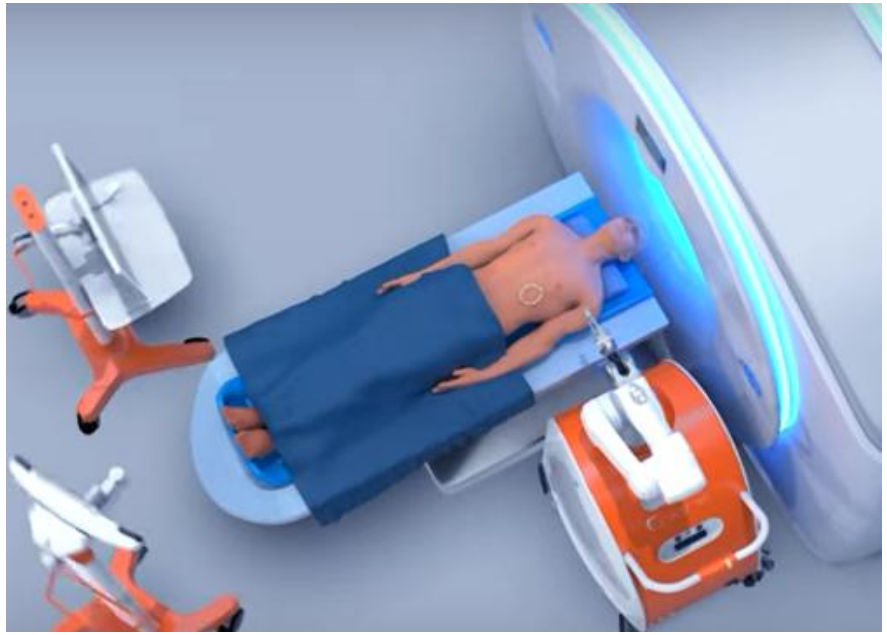
GROWJO

155 Number of Employees

$38.9M Revenue (est)

Quantum Surgical's system is a large, stationary platform that remains confined to the operating room. Similar to MediView, it requires the placement of infrared markers on the patient's body, which are then detected by the Epione system for tracking and navigation.

QUANTUM surgical



The use of a collaborative robot in the Epione system feels more like gadget technology than a clinical necessity. In contrast, Percisio was built on deliberate design choices focused on real-world priorities and practical needs in the field.

PERCISIO Product Offering

CE Class I — PERCISIO Insight

CE Class IIA — PERCISIO Guidance

Two initial products can be offered:

- **PERCISIO Insight**, a Class I medical device providing a 3D visualization of diagnoses made from CT scan images.
- **PERCISIO Guidance**, a Class IIA medical device, provides an advanced guidance system for medical instruments.

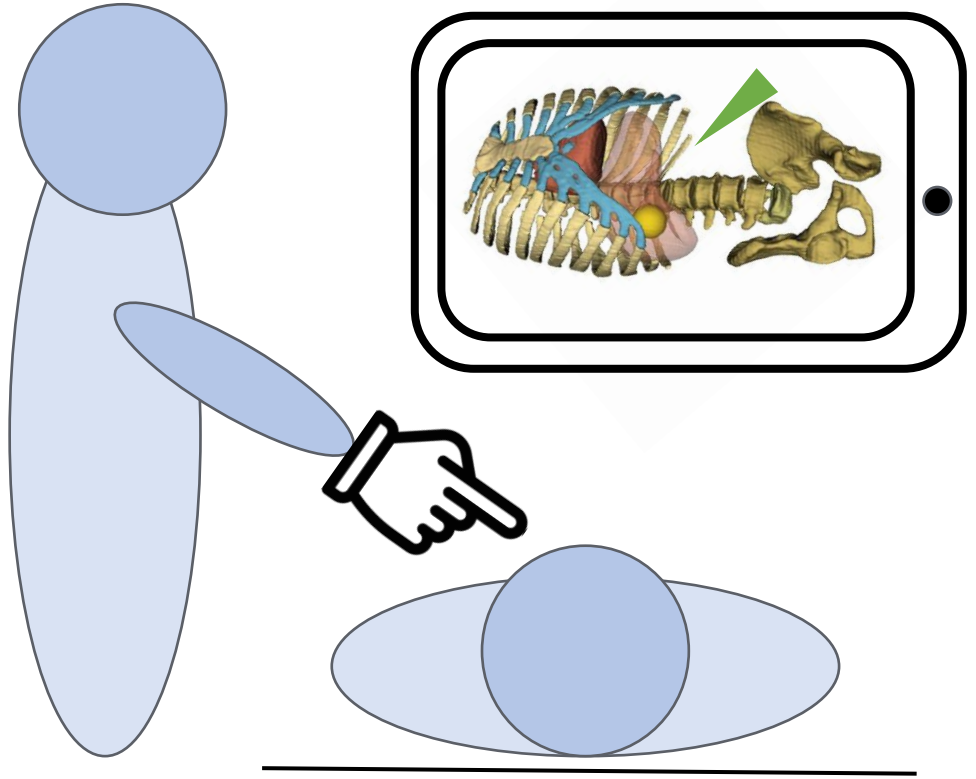
	One-Time revenue			Annual revenue
	Software	**Hardware**	**Services**	**Soft + Services**
PERCISIO Insight	• **Hologenerator** • **PERCISIO Viewer**	• Tablet • Cameras • Laser	• Formation • Deployment & Setup	• Updates • New modules • Maintenance
	8 k €			
PERCISIO Guidance	• + Guidance system	• + instrument attachments	• + guidance training with phantom support	
	15 k €			**8k € / year**

Percisio Insight - MVP

PERCISIO Insight is a Class I medical device, ready for use. No clinical trials are required for its deployment, which simplifies the process of bringing **PERCISIO Insight** to market.

PERCISIO Insight transforms CT scan data into a holographic model, enabling both radiologists and patients to better understand the medical findings.

While existing solutions focus solely on ultrasound guidance, **PERCISIO Insight** offers greater flexibility and can be used with or without ultrasound imaging.



Business Model

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Targets:

- University Hospitals (Key Opinion Leaders)
- Care centers with imaging departments
- Care centers with operating rooms
- Specialized private clinics
- Equipped private radiology practices
- Medical training/simulation institutes

	University Hospitals / Equivalent	Imaging Centers	Private Clinics
France	~32	~1 500	~1800
Germany	~35 Uni-Klinik	~1 800	>1 000
Italy	~40 CHU	~2 000	~900
Spain	~25	500 -600	~700
United Kingdom	~30 NHS Teaching Trusts	~2 500–3 500	~500
Top 5 EU total	~160	~5 000 à 7 000	~4900

European University Hospital Alliance

MARWOOD GROUP

LERU League of European Research Universities

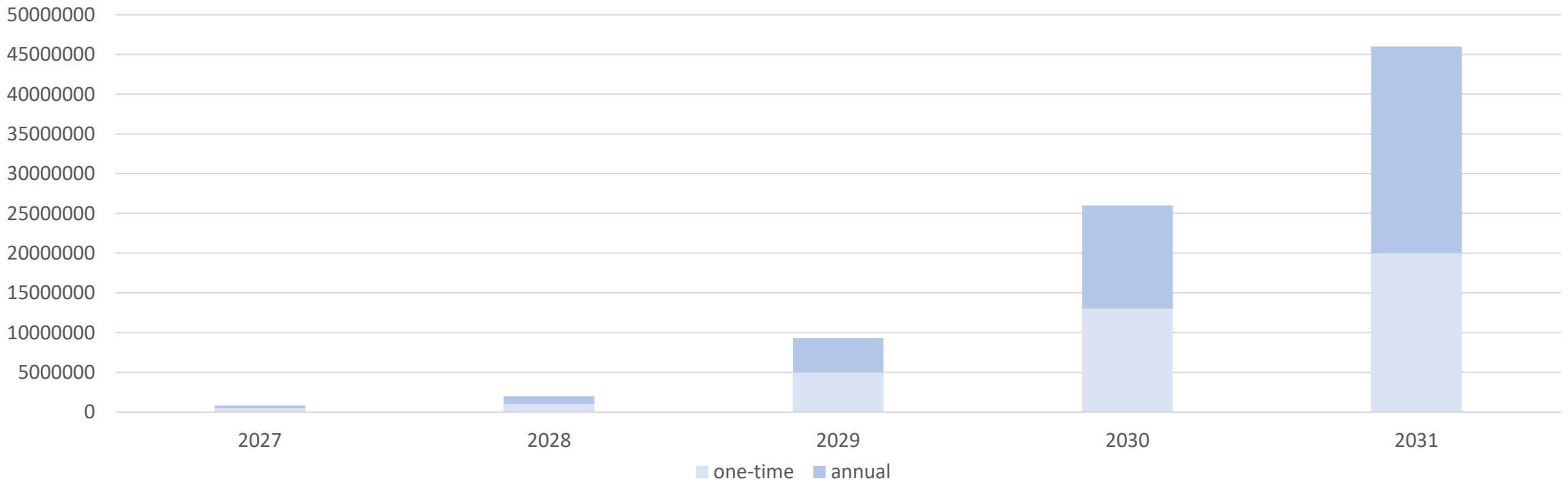
Rentech Digital

European Observatory on Health Systems and Policies

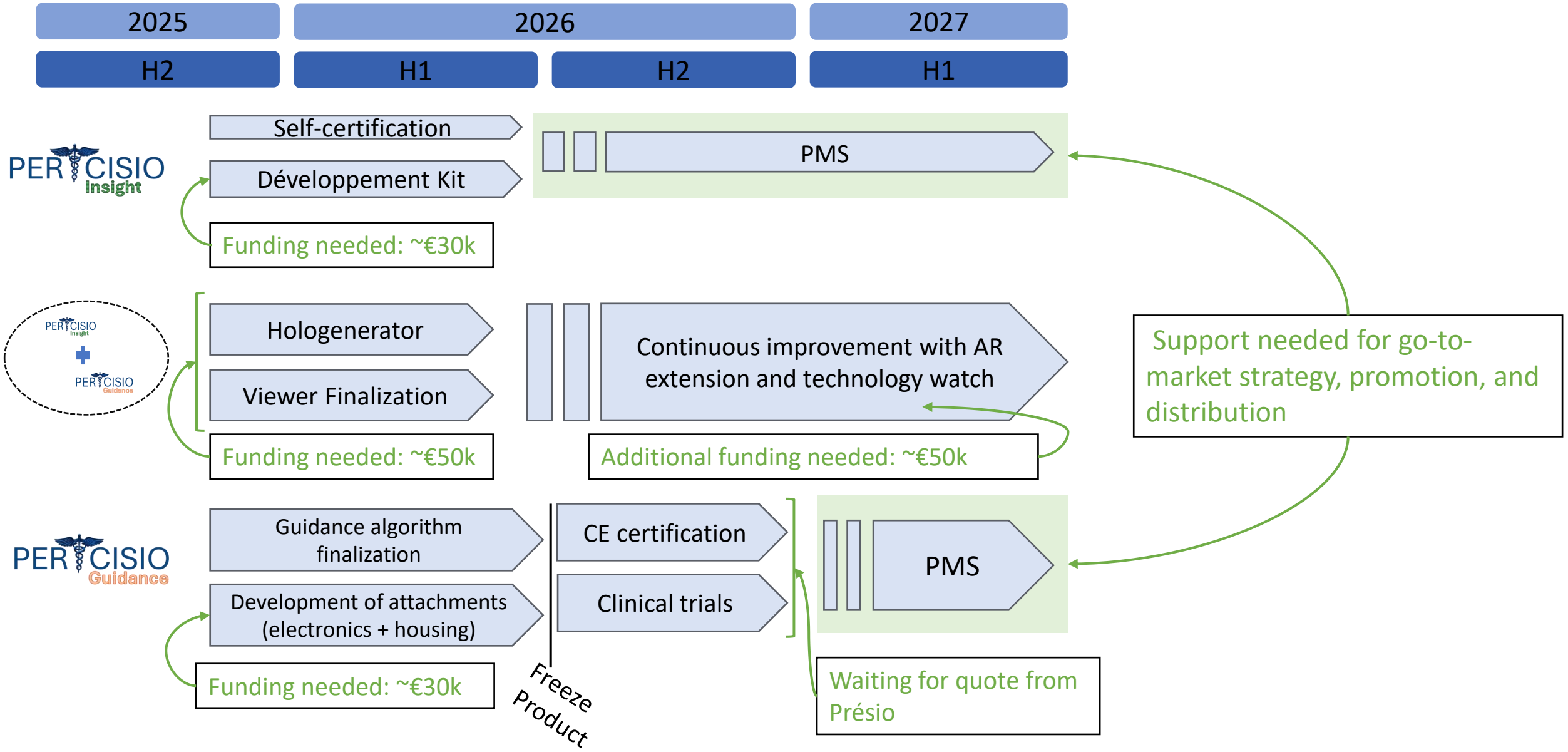
Projections

	Percisio Insight + Guidance	Total
Total Addressable Market (Monde)	150 000 * (12k + 8k) *1.5	**2.7B€ + 1.8B€ / an**
Serviceable Available Market (Europe)	12 000 * (12k + 8k) * 1.5 * 90%	**194M€ + 130M€ / an**
Serviceable Obtainable Market (Europe – 2030 avec hypothèse de 10%)	12 000 * (12k + 8k) * 1.5 * 90% * 10%	**19.5M€ + 13M€ /an**

(Europe 2030 projection assuming 1.5 units sold per site, with an average price of 12k€, and an adoption rate of 10%)



Development Plan



Conclusion

PERCISIO

Challenges associated with image-guided percutaneous procedures

Limited access to care – restricted to expert centers (university hospitals)	Heavy reliance on large guidance equipment: CT, ultrasound, MRI, IR suite	High level of technical expertise required	Limited and costly machine time: • Diagnostic imaging: 5–15 min • Interventional radiology: 60–120 min

The PERCISIO solution addresses all these challenges:

→ Simplifies percutaneous procedures

→ Reduces procedure time and patient care duration

→ Expands the number of potential users

Next Steps and Partnerships

Skills development for project leaders so they become autonomous across all business components.

Support with fundraising strategy and investor outreach.

Assistance with preparing funding applications.

Support with preparing tax incentive applications (JEI, CIR, CII, etc.).

Free access to expert advisors through regular consulting sessions.

More informations

What is the potential of computer vision for medical use?

https://nvlabs.github.io/FoundationStereo/

What market share do augmented and virtual reality technologies represent in the medical field?

https://www.globenewswire.com/en/news-release/2022/08/23/2503208/0/en/Augmented-and-Virtual-Reality-in-Healthcare-Market-Size-to-Reach-USD-19-6-Bn-by-2030.html