About CathPax, a Lemer Pax group company

Founded in 2024, Cathpax designs, develops and commercialises innovative, full-body, team-wide radiation protection systems for cath lab staff during interventional procedures. As part of the Lemer Pax group, the company leverages more than 50 years of innovation in the radiation protection field. A pioneer in ionising radiation protection since the 1970s, Lemer Pax spent the past two decades developing groundbreaking innovations to advance its mission of Protecting Life® over the last two decades. The group has created cutting-edge radiation protection materials and technologies used in thousands of products worldwide. Today, Lemer Pax covers three major areas of expertise through three different entities: Lemer Pax (Civilian nuclear sector, radiopharmacy, nuclear medicine and radiology), GMP (therapy radioisotope production) and Cathpax (interventional medicine).

Developed over more than 10 years of research & development, Nova-X® is Cathpax's second-generation radiation protection system. Protected by more than 10 patents, Nova-X® is currently the only available solution on the market providing 2 mm lead equivalence*. The system features a unique dose monitoring system displaying real-time dose rate reduction (Dosicath®). Nova-X® also boasts a built-in laser system that projects two green laser beams onto the floor, clearly marking out a controlled zone for Healthcare providers (Laserguard®). Thanks to all these unique features, Nova-X® drastically improves cath lab staff safety and comfort, promoting stress-free working conditions through efficient full-body and team-wide protection against radiation injuries, ultimately benefiting the patient.

The company is currently conducting a multicentre prospective clinical study to gather data demonstrating the level of dose attenuation to provide further evidence that Nova-X® enables safe lead-free procedures.

Based in Nantes, France, Cathpax aims to become the world leader in full-body, team-wide radiation protection in interventional medicine in the coming years.

**based on a competitive analysis on similar devices and conventional actual shieldings in the cathlab (lead-aprons, suspended shielding, lower table shielding). 2 mm lead eq. on 70% of the surface of the product.*

CATHPAX
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MKT_Brochure Nova-X_05NOV25_REV01_EN
For further information about the product, please consult the Instructions for Use.
Nova-X IFU are available upon request to Cathpax or its local representative.

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MADE IN FRANCE

CATHPAX
A LEMER PAX GROUP COMPANY

NOVA-X
THE ULTIMATE PROTECTION

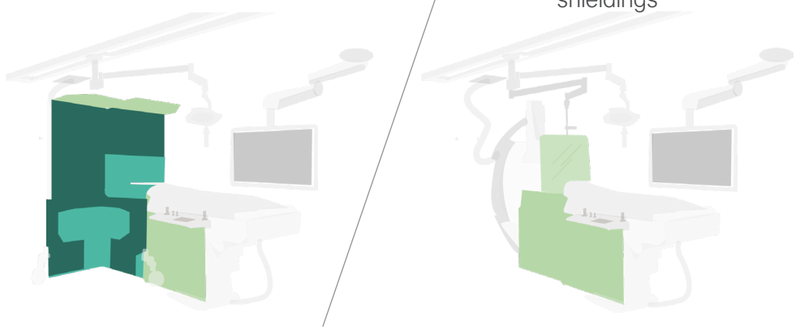
THE ONLY FULL-BODY, TEAM-WIDE PROTECTION SYSTEM WITH 2 MM LEAD EQUIVALENCE

UNMATCHED RADIATION PROTECTION THANKS TO UNIQUE PROPRIETARY TECHNOLOGIES

THE **ONLY 2 MM LEAD EQUIVALENCE SYSTEM** AVAILABLE ON THE MARKET (70% OF SURFACE)

- 2 mm lead equivalence
- 1 mm lead equivalence
- 0,5 mm lead equivalence

Nova-X® Vs. Conventional shieldings



DIAMOND GLASS®
This yellowing and stress-resistant material offers perfect patient vision thanks to its high transparency and provides a 2 mm lead equivalence optimally protecting the entire team.

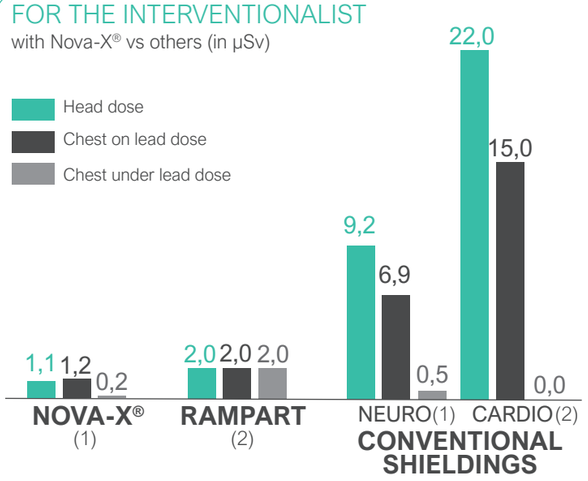
NOVASHIELD GLASS®
These ceiling-mounted glass panels made from patented lead-free Novashield glass® protect against scattered radiation from the ceiling, which is often underestimated in the cath lab.

RX41® & RX45®
These flexible lead-free shutters ensure optimal radiation protection against scattered radiation from the patient. Thanks to their flexibility, the shutters can be adjusted for each patient's profile.

>10 patents

DOSE MEASUREMENTS FOR THE INTERVENTIONALIST

with Nova-X® vs others (in µSv)



OUTSTANDING ERGONOMICS

WHEELGLIDER®
This proprietary technology ensures effortless mobility (4kg) for all users, allowing smooth and precise movement at a controlled speed, with minimal bulk thanks to a triple rotation axis system. This system also ensures effortless small movements during the procedure.

UNIQUE SAFETY FEATURES

DOSICATH®
This proprietary technology displays real-time dose rate reduction inside and outside of the system. It allows for immediate corrective actions in case of dose leakage caused by incorrect system positioning.

LASERGUARD®
This proprietary technology, specifically designed for Nova-X®, delineates a zone on the floor where radiation protection is controlled for Healthcare providers. Nova-X® is the only full-body radiation protection system offering this key feature.

BI-PLANE & SINGLE-PLANE COMPATIBILITY
Thanks to its flexible frame and specially designed front wheels, Nova-X® is compatible with most of bi-plane C-arms (all incidences).

NOVA-X® BENEFITS
IMPROVES MEDICAL TEAM SAFETY, COMFORT AND OPTIMIZES ORGANISATIONAL EFFICIENCY

PROTECTS AGAINST RADIATION INJURIES
Prevent occupational diseases (cancer, cataract, cognitive disorders, DNA damage and other X-ray exposure related conditions)

REDUCES MUSCULOSKELETAL DISORDERS (66% of interventionalists suffer from MSDs[3])
Transition toward lead-free procedures or lighter aprons

OPTIMISES HEALTH ECONOMICS AND SOCIAL OUTCOMES
- Reduces sick leave due to occupational hazards
- Decreases stress and fatigue among the cath lab staff
- Promotes engagement of women in interventional careers

REDUCES STRESS AND FATIGUE
Encourages interventionalists to perform more complex, distal and longer procedures for the patient's benefit

INSTITUTION ROI
- Reduced sick leave
- Longer careers
- No change in procedural gesture
- More complex procedures generate additional revenue
- Talent attractiveness
- Optimized organisational efficiency and workflow
- Potential for improved productivity
- Liability and corporate social responsibility

(1) Data from Novarad study, preliminary results (164 neurovascular procedures in Toulouse University Hospital, Bicêtre Hospital University, Nantes University Hospital). All measurements are expressed meanly and were collected using last generation of operational dosimeters.
(2) Radiation Exposure Using Rampart vs Standard Lead Aprons and Shields During Invasive Cardiovascular Procedures, Lisko, John C. et al., Journal of the Society for Cardiovascular Angiography & Interventions, Volume 3, Issue 1, 101184 – median dose – RaySafe dose measurement system (radiometers)
(3) Abudayyeh I, Dupont AG, Hermiller JB, Mascarenhas J, Velagapudi P, Ijioma NN, Duffy PL, Kolansky DM, Cigarroa J, Scantlebury DC, Skelding K, Klein AJ. Occupational Health Hazards in the Cardiac Catheterization Laboratory: Results of the 2023 SCAI Survey. J Soc Cardiovasc Angiogr Interv. 2025 Mar 4;4(4):102493. doi: 10.1016/j.jscai.2024.102493. PMID: 40308248; PMCID: PMC12038281