



At GLX ANALYTIX, we aim to improve the lives of people all over the world

With earlier diagnosis, optimized treatment and improved monitoring of illness, personalized medicine becomes a reality.

Industrial Partner of
Harvard / Wyss Diagnostic Accelerator

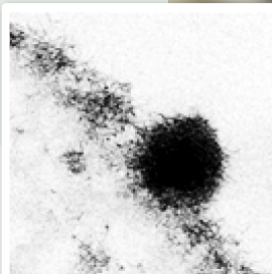


Winner Of Roche Startup Award
Future X Healthcare

“...this approach has a clear potential
to improve the lives of patients all
over the world”



Global Head of Diagnostics
Information Solutions,
Tim M. Jaeger. Roche



The problem is late diagnostics, ineffective treatments, and poor monitoring tools



Lack of Biomarkers

The lack of biomarkers for chronic diseases often leaves patients and their care-givers **in the dark** when it comes to **diagnosis, treatment** and **monitoring**.



Late Point of Diagnosis

Chronic diseases such as Multiple Sclerosis, Alzheimer's, and Parkinson's Disease are diagnosed much **too late**, when **unnecessary harm** to the patient has already occurred.



Lack of Drug Development Tools

Biomarkers are the **oil** in the engine of the drug development machine.

The FDA is signalling a future where market approval may be **contingent** on biomarkers.

Autoimmune & Neurodegenerative diseases are increasing worldwide

85% of biotech candidates fail.

82% of phase III failure is from no effect or bad safety.

The GLX solution enables early diagnosis and treatment-response monitoring tools

The Discovery



The solution we have found is hidden in the seaweed-like meshwork on the surface of the blood vessel called the **glycocalyx** (GLX). The GLX is the **first interaction** between the blood and an organ of the body and therefore provides **unique** and **early, upstream** information about disease. This is a **new class of biomarker**.

The GLX Signature

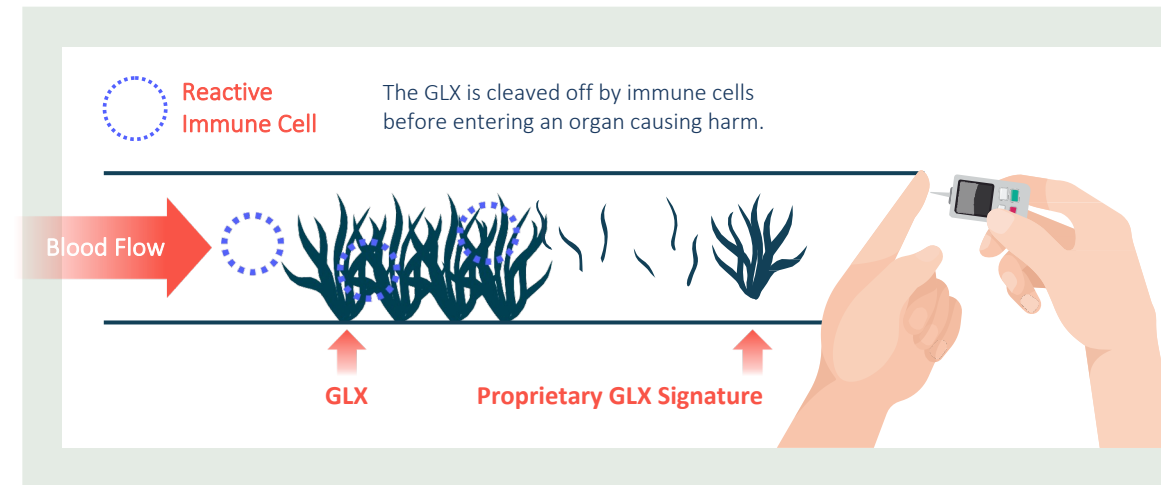
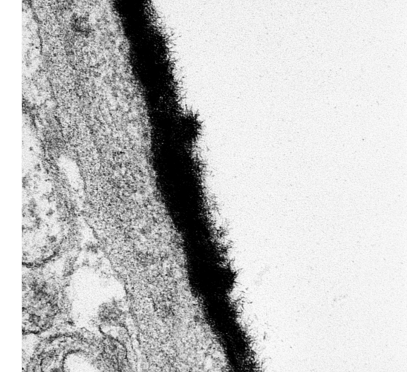
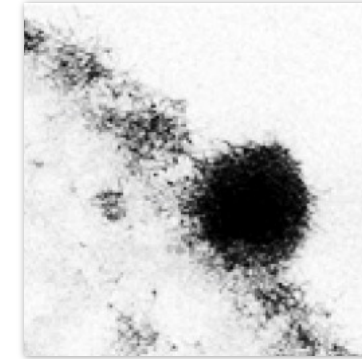


Our **novel, proprietary** technology plucks GLX components out from the blood using antibodies and reassembles the signal through AI. This **Bio-AI** strategy produces a fingerprint we call the **GLX Signature**.

The Value



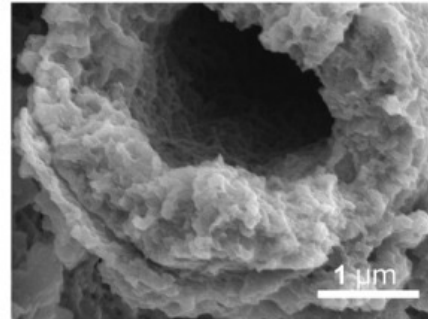
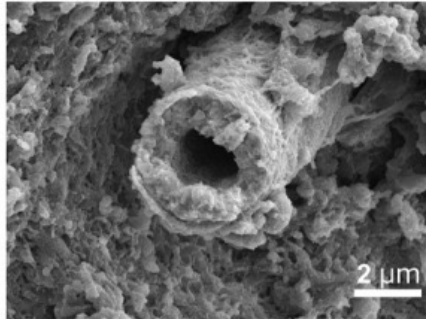
Testing for the GLX Signature enables **early diagnosis**. It can also support the **treatment plan** and **monitor** disease progression. This tool can also be leveraged by **drug developers** for **maturing** their **therapeutic pipelines**.



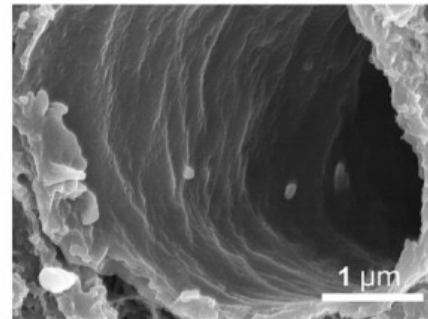
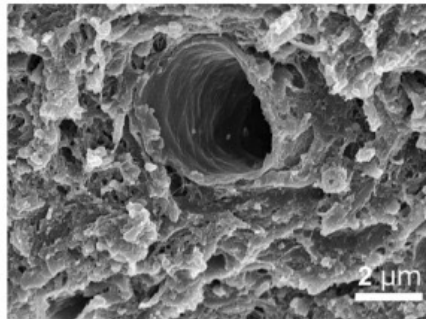
The GLX Technology

Images of blood vessel in brain with and without intact GLX

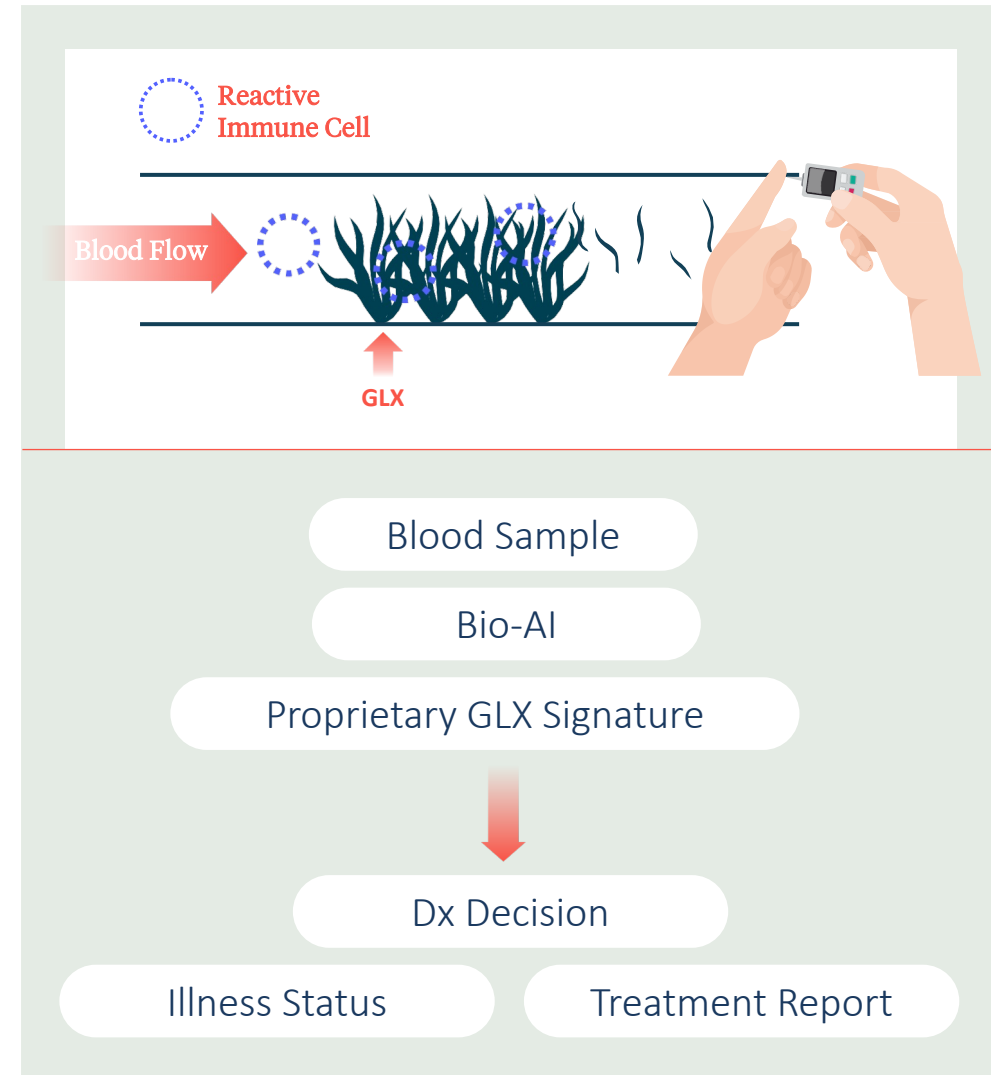
With



Without



Modern imaging techniques have shown that the GLX is 100-1000x larger than previously thought. This discovery places the GLX front-and-center as the key interface between the blood and the body.



Steps:

01

02

03

Market sizes & Industry trends

Markets	Market sizes (B, USD, 2020)	CAGR to 2030	Addressable Market (TAM) for GLX by 2030	SHOTS ON GOAL Each disease we are targeting has a multi- billion dollar market
In-Vitro diagnostics	83.4	4.5%	+1B	
Personalized Medicine	493.1	6.2%	+1B	
Companion Diagnostics	3.7	12,9%	+1B	

Supporting industry trends and market drivers

- › Chronic diseases are on the rise
- › Increased focus on biomarkers for early diagnosis and personalized medicine
- › Consumers are increasing their use of technology and lab testing for health monitoring
- › Primary care doctors see the majority of patients and prefer additional information for directing care.
- › Biomarkers will drive the future of drug development growth
- › The FDA is signaling a future where approvals may be contingent on better biomarkers
- › Big Pharma are investing heavily internally in biomarkers and building new departments
- › Biotech startups need biomarkers for maturing their lead candidates.

Products and Market Launch

GLX Clinic



The GLX Signature platform offered as a tool for **clinics** and **patients**.

Market Launch:

Q2 2024 – Cedars Sinai, CA
Q4 2023 – FDA Breakthrough Device
2025: FDA De Novo authorization



GLX Catalyst

The GLX Signature platform for **pharmaceutical companies** to accelerate drug development and **academics** for research.

Market Launch:

Q3 2021 – Academics research-use only
Q3 2023 – Biotech research-use only



GLX USPs vs. alternative technologies



VS.

Industry technologies

- Upstream
- Dynamic
- Simple
- Low Cost
- High accuracy



Blood tests for biomarkers for tissue damage
e.g. Neurofilament Light Chain, Quanterix.



Genomics
Testing a tissue for DNA
e.g. baseline genetics of a patient or a biopsy.



Medical imaging
MRI / PET / Spect
e.g. lesion sizes, amyloid plaque load.



Omics
Shotgun, wide-net approach to data gathering of biological processes. e.g. proteomics, lipidomics, transcriptomics.




AutoAntibodies
Presence or Absence of 'anti-self' antibodies in circulating blood.

Feature matrix: GLX Analytix & alternative solutions

Our test utilizes a tried-and-true method in clinical chemistry, the immunoassay, and can slot in to existing medical infrastructure.

This also permits easy application to at-home, self-monitoring solutions.

Our tool incorporates A.I. techniques, has a mechanism-of-action upstream of disease activity and has potential to create value in many illnesses.

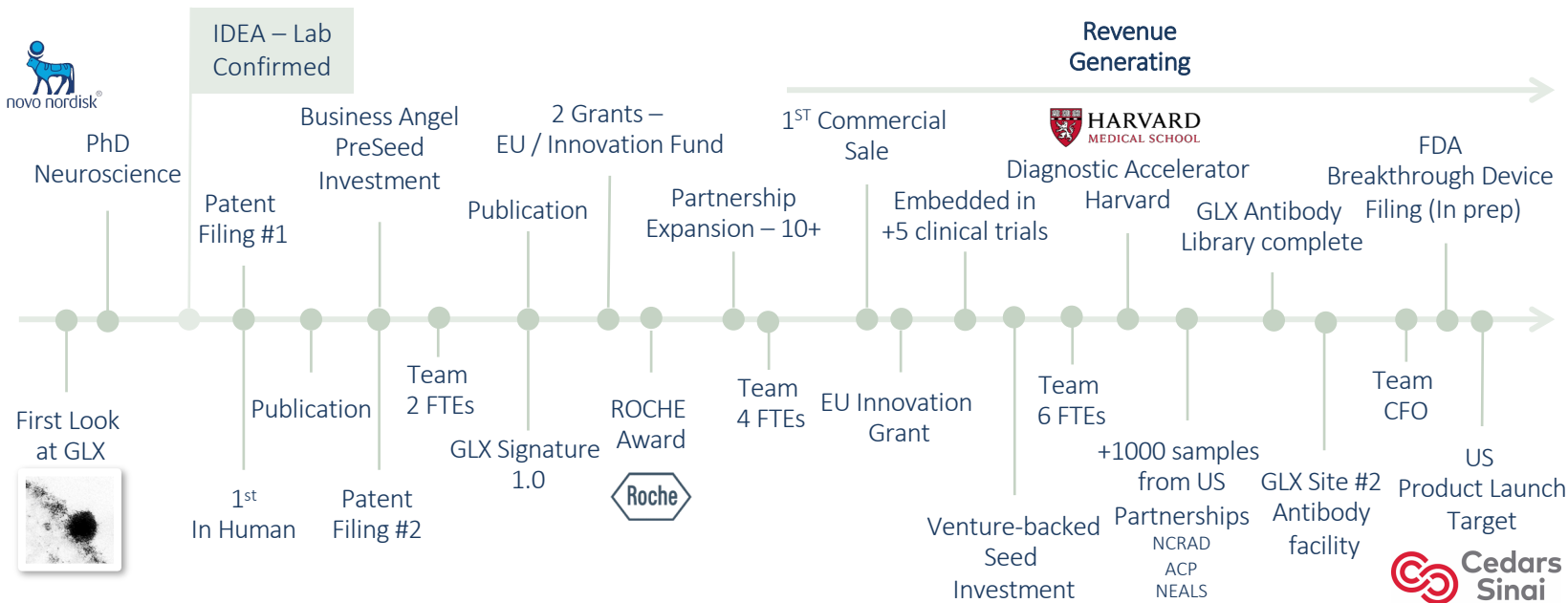
	Early / Upstream Dx	At-Home Monitoring	A.I.	Expansive product line	Multi disease relevance	Ease of Use	Low cost per sample
	✓	✓	✓	✓	✓	✓	✓
Neurofilament Light	✗	✓	✗	✗	✓	✓	✓
Genomics	✓	✗	✓	✓	✓	✗	✓
MRI	✗	✗	✓	✓	✓	✗	✗
Multi-Omics	✓	✗	✓	✗	✓	✗	✗
Auto Antibodies	✓	✗	✗	✓	✗	✓	✓

Execution Timeline – from lab to revenue



GLX ANALYTIX emerged from a eureka of sorts.

We executed on the idea in the lab, confirmed it in humans, filed a patent, secured investment and started the company within one year. Since then, we have filed broader IP protection, hired key employees, established an experienced advisory board, and are nurturing clinical partnerships across the world. We have won grants and awards and have secured our first commercial sale in 2021. In 2022, we closed an international, venture-backed seed round, were invited to join the Harvard Diagnostic Accelerator, and have established our ‘Line-Of-Sight’ for launching our clinical product at Cedars Sinai in California in 2024.



PATENT #1
MULTIPLE SCLEROSIS

PATENT #2
BROAD INFLAMMATORY DISEASE

Status:
National Phase US / EU / CAN
Patent Granted: 2023-2025

Status:
National Phase US / EU / CAN / JP
Patent Granted: 2024-2026

100% GLX
Ownership
(No University license/
royalty structure)

Team and Board

TEAM



Brian Della Valle, PhD
Founder & CEO



Nancy Hargreaves
CFO



Chris Goth, PhD
Senior Glycobiologist



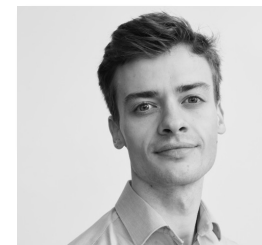
Mathias Jørgensen, PhD
Antibody Specialist



Phillip Mogensen, PhD
Senior Data Scientist



Charity Kaphale Graae
Lab Technician



Hjalte Bøgehave
Data Scientist

BOARD OF DIRECTORS



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Chair, Investor



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Founder & CEO



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Investor, Board Member



Christian Anker-Ladefoged
Investor, Board Observer

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SCIENTIFIC



Jørgen Rungby, PhD, MD (DK)

Head of Translational
Medicine, **Steno**
Diabetes Center



Fabrice Chimienti, PhD (DK)

Principal of precision
medicine strategies,
Novo Nordisk



Srinka Ghosh, PhD (USA)

VP at Nephrosant
Former Assoc.
Director, **Grail**



Jerry Lanchbury (USA)

Former CSO of **Myriad**
Genetics



Jeremy Ford, MD (USA)

Blood-Brain Barrier
Imaging expert
Harvard Medical
School, Mass General

COMMERCIAL



Gisela Paulsen (USA)

Former executive
Oncocyte and Senior VP
Roche.



Laura Medzey (USA)

Former VP and Head
counsel for **Bayer**
Diagnostics



Elliot Cowan (USA)

Former 20 years as Chief of
Product Review Branch for
medical devices, **FDA**



Sue Mockus (USA)

Executive Director
Precision Biomarker
Laboratory
Cedars-Sinai



Richard Frank (USA)

Former **CMO** of
Siemens
Healthineers

Testimonials

“...this approach has a clear potential to improve the lives of patients all over the world.”
 - Dr. Tim M. Jaeger, Global Head of Diagnostics Information Solutions, Roche

We are very intrigued by the innovation and the potential of the technology GLX has developed (the GLX Signature Test) to detect and monitor chronic diseases, and are currently evaluating a potential early-stage partnership”
 – Amgen (Medical lead, Nicholas Sroczynski and Medical advisor, Christa Broholm).

“The mission of the Wyss DxA is to get transformative diagnostic tests to market and reduce disease burden for patients with major unmet needs. We aim to compress timelines and measure impact on lives. GLX Analytix was invited to join the Industrial Partnership Program and is already forming meaningful partnerships with our stakeholder network,” Rushdy Ahmad, MD, Head of Harvard / Wyss Diagnostics Accelerator

I am writing this letter to express my enthusiastic support for the launch of the GLX Signature test developed by GLX Analytix at Precision Biomarker Laboratories (PBL) at Cedars Sinai in Los Angeles. As a part of the Cedars community and an advocate for advancing medical diagnostics and treatments, I believe that this innovative test has the potential to revolutionize the field of biomarker analysis and greatly benefit patients and healthcare providers alike. With our CLIA-certified laboratory (fall 2023) at PBL (Cedars Sinai), we are well-positioned to facilitate the launch of the GLX Signature test and extend its benefits not only to the local Cedars community but also to individuals across California. Our aim is to become a hub for servicing clinical trials leveraging this technology from across the country, ensuring widespread access to this ground-breaking diagnostic tool. We are confident that this partnership will greatly contribute to advancing medical research, improving patient care, and shaping the future of personalized medicine.

- Susan Mockus, PhD, MBA, Executive Director, Precision Biomarker Laboratory, Cedars Sinai

“The field of neuroscience is in dire need of innovative tools like GLX Signature test, not only to support diagnostic advancements but also to propel the development of therapeutic solutions. Our team will use the test to evaluate vascular dysfunction in dementia and we believe the platform’s ability to assess blood-brain barrier health represents a significant innovation in our field and addresses a critical unmet need for better diagnostic tools. In the future, we aim to use the GLX Signature test for other neurological conditions such as ALS, psychiatric disorders and more. The strong feasibility of the test, coupled with its unique focus on vascular biomarkers, offers a promising avenue for furthering our understanding of these diseases and developing targeted treatments.” – Jeremy Ford, MD, MBA, MS, Harvard Medical University and Mass General Hospital



Testimonials

“...this approach has a clear potential to improve the lives of patients all over the world.”

- Dr. Tim M. Jaeger, Global Head of Diagnostics Information Solutions, Roche

“In psychiatry, we need objective biomarkers that stratify diagnostics subgroups and are prognostic in for predicting treatment effects across different treatment modalities. We successfully used the GLX Signature test on a large prospective cohort of patients with first-episode major depressive disorder. We have recommended it to our colleagues and will use it in another cohort of treatment-resistant depression patients. Targeting signals from the blood-brain barrier in a simple blood sample is innovative and we are excited about the prospect of a new clinical tool for differential diagnostics and guiding treatment choices.”

- Kristian Reveles Jensen, MD, Neurobiology Unit, Copenhagen University Hospital.

“Brian's research and validation of the glycocalyx for early detection of disease are game-changing. We are at a pivotal moment in personalized healthcare, and GLX Analytix is poised to vastly improve patients' lives with their innovative platform.”

- Michele Colucci, Founder and Managing Partner of DigitalDx Ventures

“GLX Analytix offers a unique and innovative platform with the potential to not only derisk drugs, but also to provide a critical glimpse of a drug's efficacy early in the clinical process. The promise of a dynamic biomarker that measures neuroinflammation from the blood-brain barrier could be game-changing as the pharmaceutical industry is making a return to solving diseases of the central nervous system.” - Ian Laquian, CEO of Kariya Pharmaceuticals

“We are very intrigued by the GLX Signature test as a tool for monitoring flares and treatment effects in Multiple Sclerosis from a blood sample. The approach of measuring endothelial glycocalyx in blood is unique and innovative and the simplicity of an immunoassay is attractive for ease-of-uptake into the clinic if the results prove clinically useful. We are testing our longitudinal CLIMB study that has been a mainstay in testing new technologies over the years and we are excited to see how the GLX Signature test performs”. -- Tanuja Chitnis, MD, Harvard Medical and Mass General Hospital

“We have used GLX Signature test with great success and have observed potentially very important signals in diagnosis and prognosis of patients with schizophrenia (in submission to Nature Neuroscience). Next, we will run the GLX Signature test on a prospective trial focused on early detection of psychosis and schizophrenia. The GLX signature is innovative and has the potential to be a much-sought-after, powerful new tool for the clinic.

- Bjørn Ebdrup, MD, PhD. Head of the Lundbeck Centre for Neuropsychiatric Schizophrenia Research, Copenhagen University Hospital.

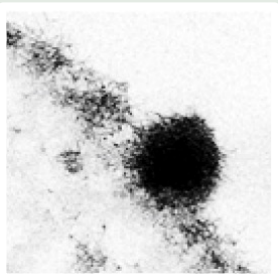


Extra: The GLX – Gatekeeper to the body



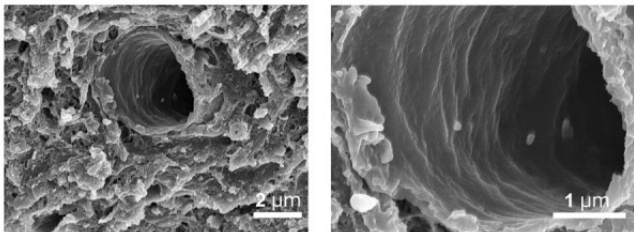
The GLX is the first interaction between the blood and an organ, for example, the brain. This makes the GLX an **upstream biomarker** for disease activity.

Largely forgotten, this dense, seaweed-like matrix on the blood vessel wall regulates blood flow, immune cell trafficking and blood-brain barrier (BBB) function. GLX loss leads to **BBB leakiness** and immune attack.

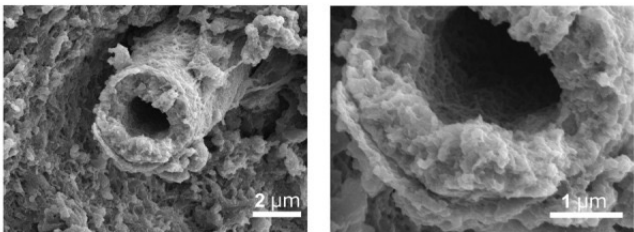


Images of blood vessel in brain with and without intact GLX

Without



With



10-100x larger.



The GLX is a major **barrier** for immune cells and for **drug delivery**.

This makes the GLX unique for early diagnosis, differentiating treatment responders in patient recruitment or drug trials and monitoring disease progression. Monitoring the GLX has the potential to **predict immune attacks before** they cause damage.

