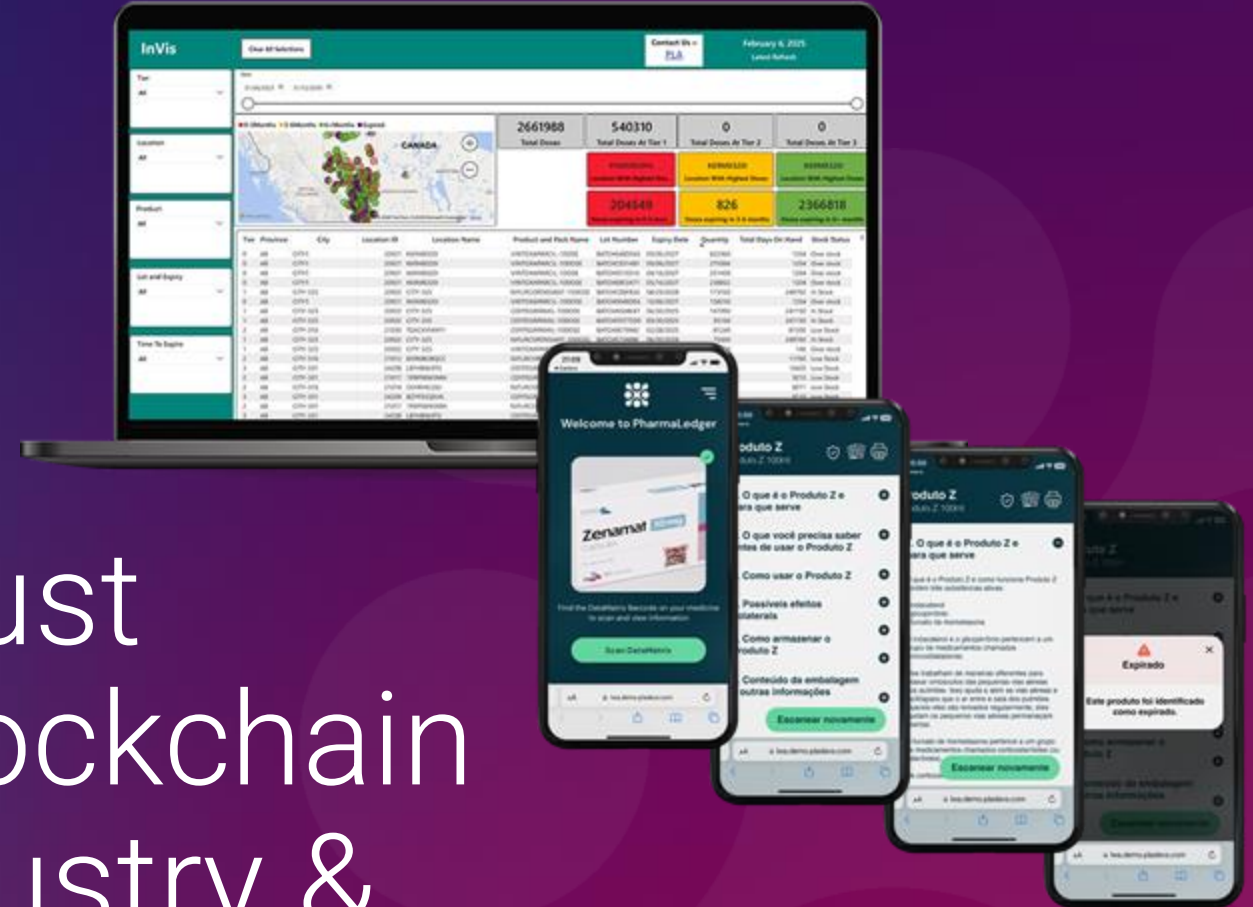




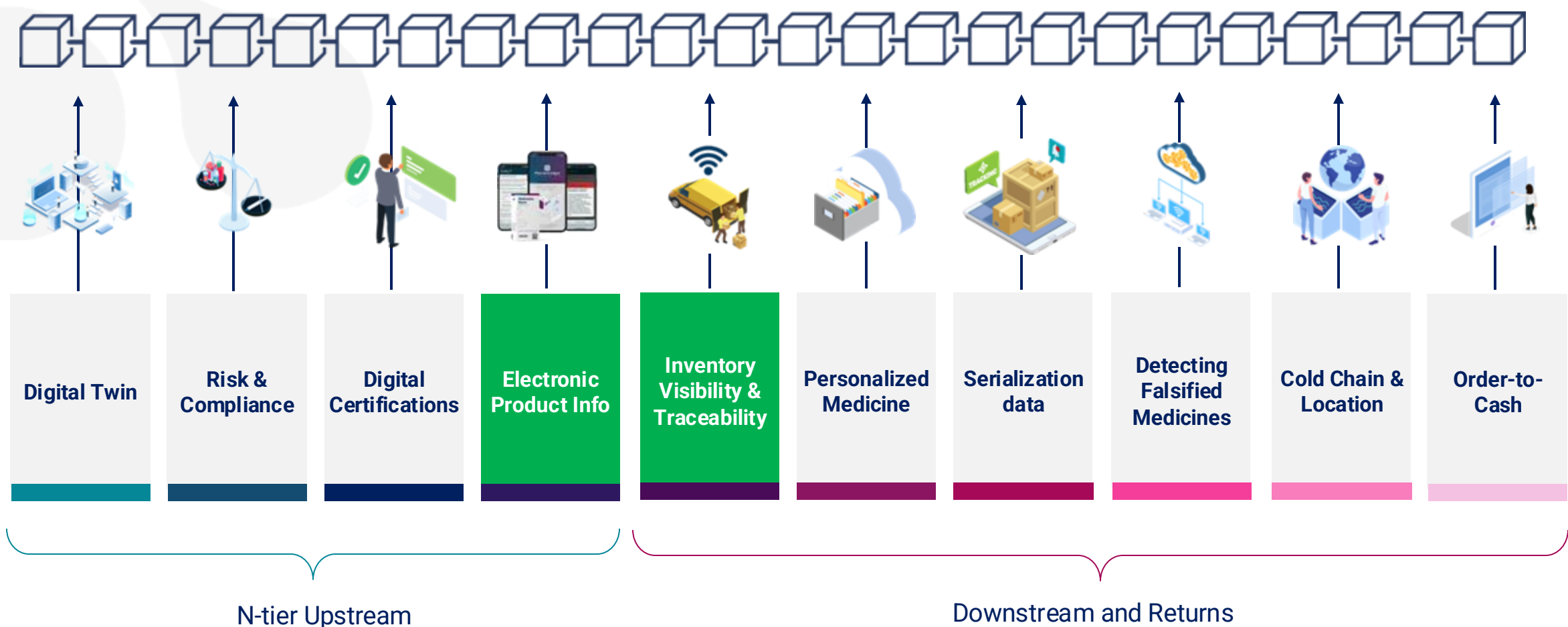
# A collaborative approach to Building a Digital Trust Ecosystem: How Blockchain Strengthens the Industry & Patients



# End-to-end Visibility, Traceability, & Security **Vision**



**An end-to-end decentralized traceability solution is a win-win for all stakeholders**

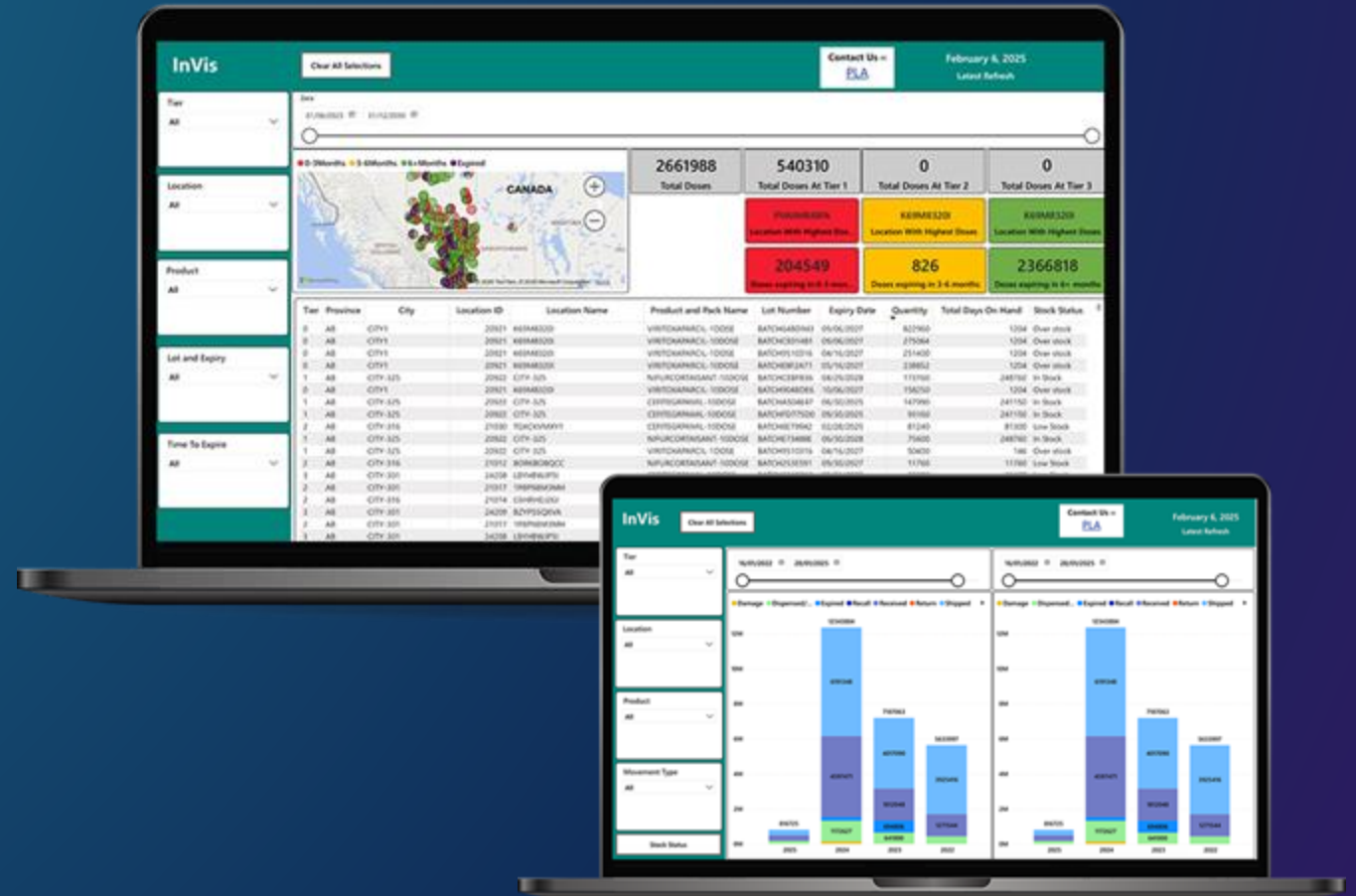


# InVis

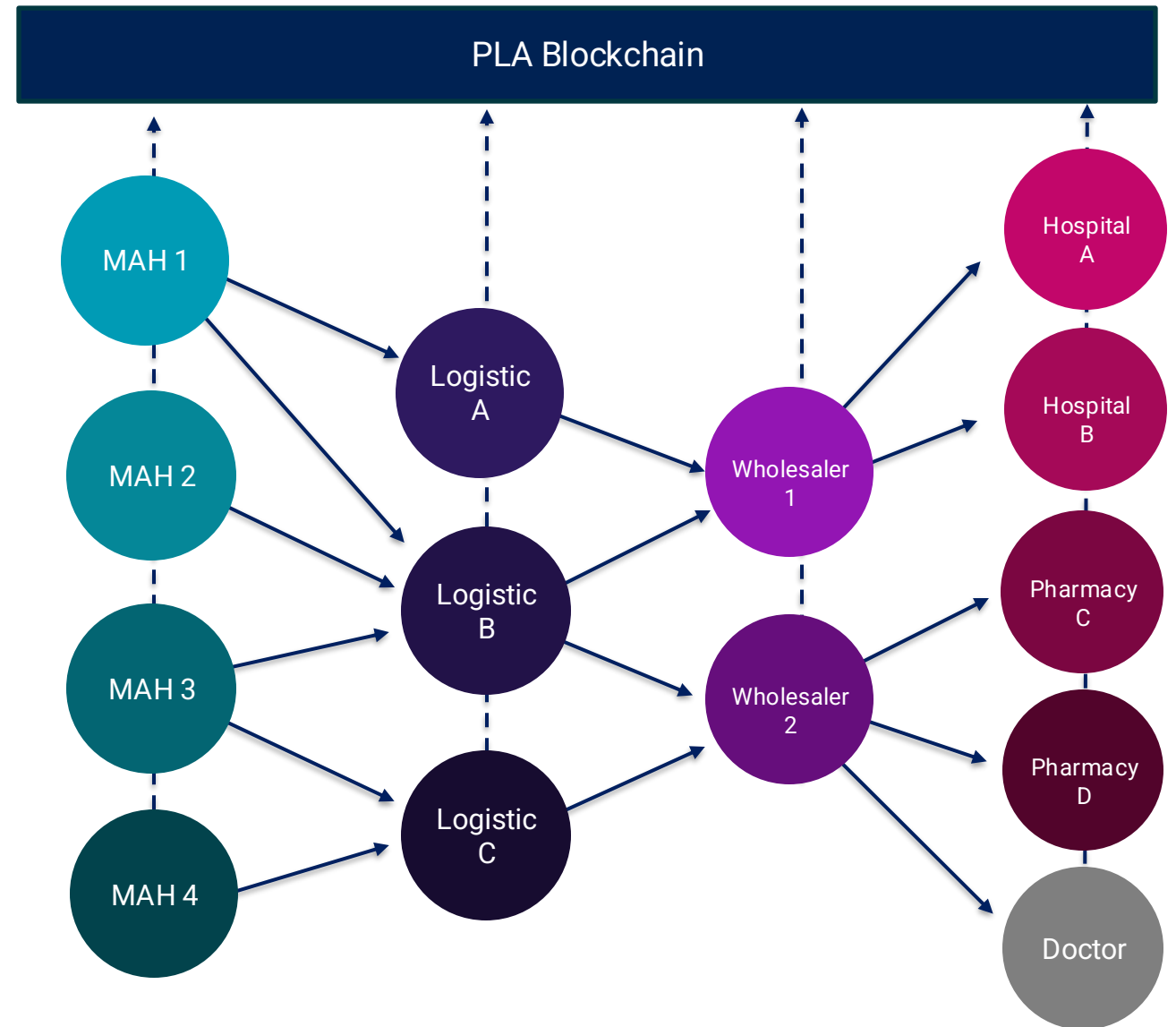
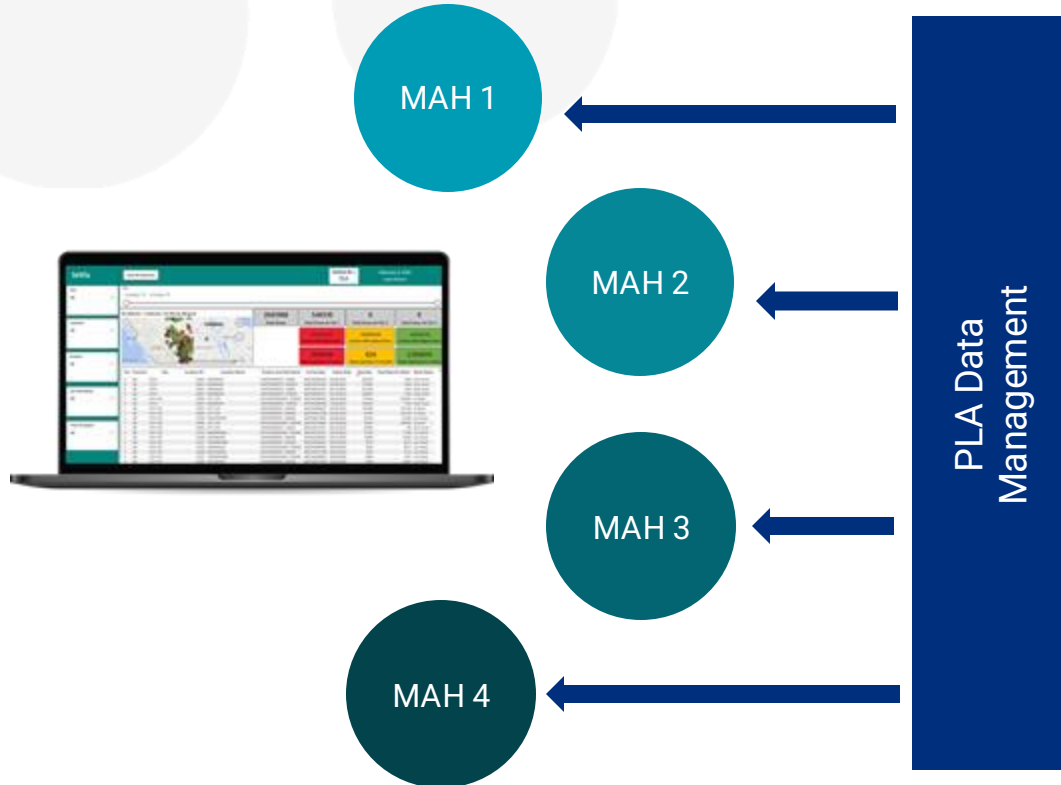
## Inventory Visibility Insights

InVis stands for **Inventory Visibility Insights**—a real-time, end-to-end visibility of pharmaceuticals across an **international supply chain**.

It connects all key players in the chain—manufacturers, distributors, health authorities, and dispensers—into a **single, data-driven ecosystem**.



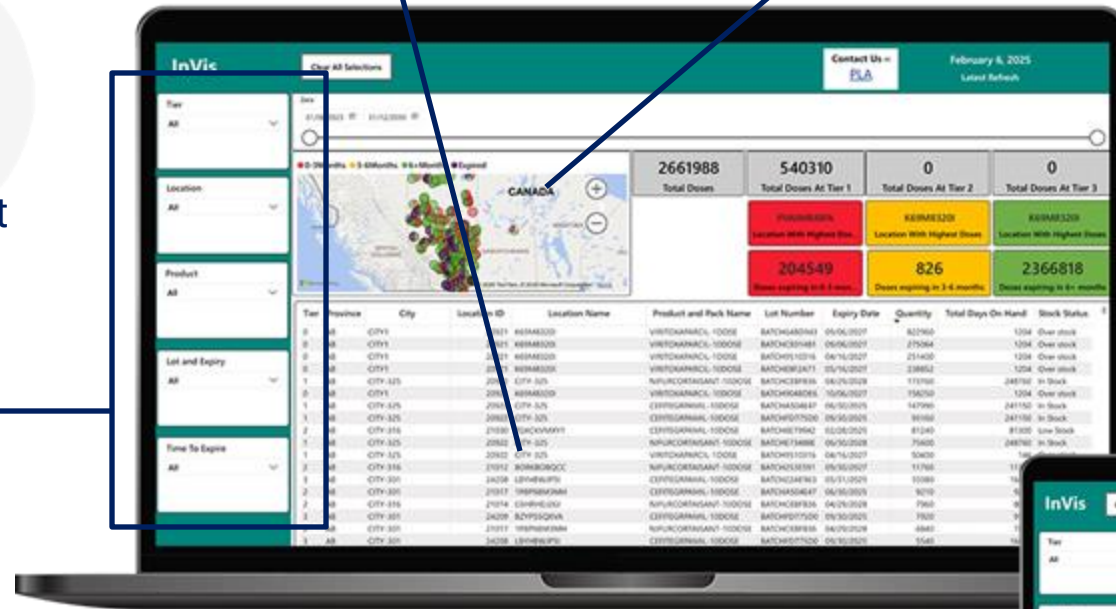
# InVis in Blockchain



# Key Features that make InVis Powerful

## Secure, Near Real-Time Data

- Data shared daily via SFTP from all partners
- Data refresh visible on every page
- Ensures decisions are based on the most recent data available



## Geospatial Intelligence

- Interactive maps show real-time status by geography
- Helps target interventions, monitor regional trends, and support logistics

## Advanced Filtering & Drill-Down

- Multi-tier views: from national authorities (Tier 1) to pharmacies (Tier 3)
- Dynamic filters for product, location, expiry, movement type, and more
- Drill-down into visual hierarchies (e.g., year → month → day)



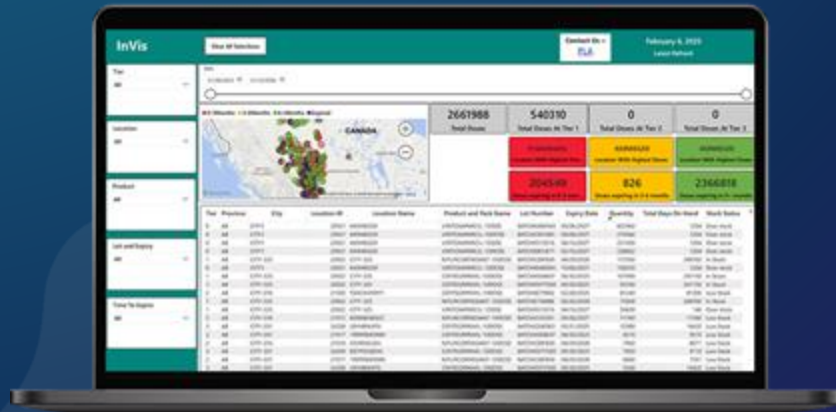


## 1. Daily Operational Pulse

The Daily Pulse page offers a **snapshot view** of:

- Total inventory levels and movements
- Locations at risk due to **low or no stock**
- Locations with overstock
- Doses dispensed, wasted, or shipped

**It helps identify hotspots needing intervention—before they become problems.**



The map shows stock status by location with color-coded pins—easy to interpret at a glance.

## 2. Deep Historical Analytics

The InVis Analytics page gives **historical trends** over custom timeframes. You can track:

- Changes in **stock levels** (in stock, low, out, over)
- **Movement types**: shipped, dispensed, received
- **Wastage**: damaged, expired, recalled
- Comparison of current vs past **dispensing performance**

This enables **data-driven forecasting**, policy evaluation, and supply optimization.



### 3. Year-on-Year Comparison

The **Comparison** page shows **side-by-side bar charts** that compare any two time periods. This is great for:

- Seasonal demand tracking
- Evaluating supply efficiency year-over-year
- Identifying unusual consumption or distribution patterns



### 4. Shelf Life Intelligence

The **Shelf Life** page is designed to prevent wastage and ensure effective stock rotation by showing:

- Expired doses
- Doses expiring in **0-3, 3-6, or 6+ months**
- **Location-specific insights:** which sites are most at risk of losing inventory to expiry?
- Drill down by lot number, expiry date, and product



# Who Benefits from InVis | Stakeholder Benefits

## **MOHs & Governments**

National-level visibility  
to manage supply equity

## **Wholesalers**

Inventory balancing across  
networks

## **Dispensers/Pharmacies**

Anticipate stock-outs or avoid  
overstocking

## **Manufacturers**

Understand downstream  
demand, reduce waste,  
improve forecasting

## The Big Picture

**InVis transforms pharmaceutical supply chain management from reactive to proactive.**  
It empowers stakeholders at all levels to:

Make better  
decisions faster

Reduce waste

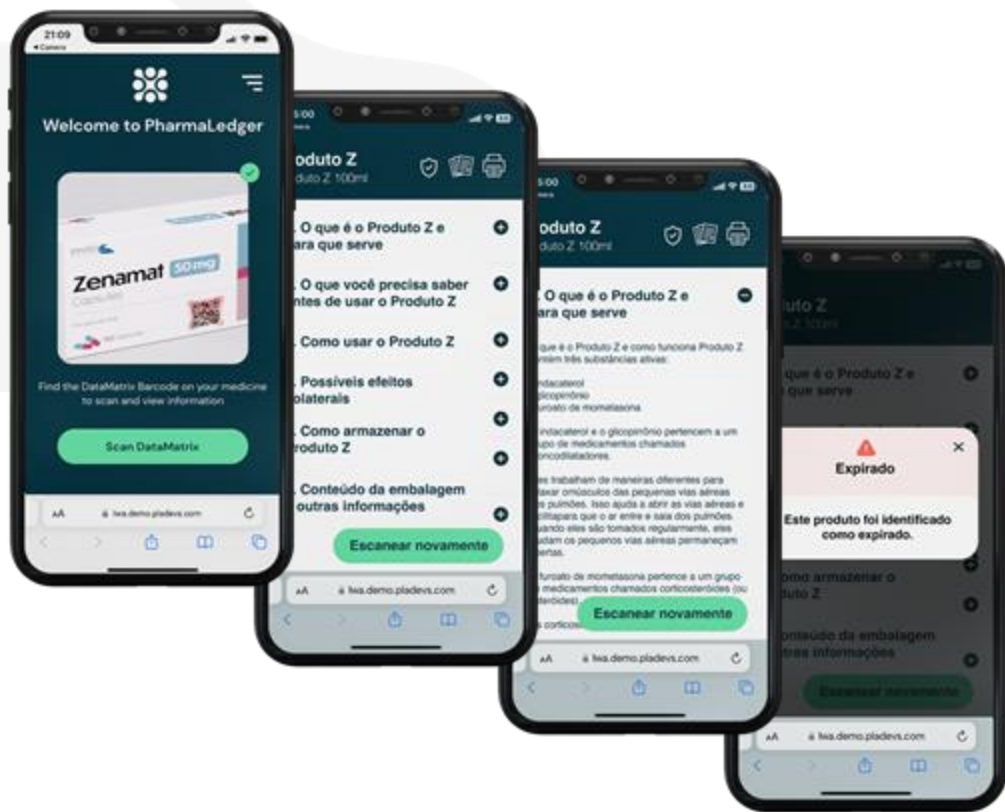
Improve access to  
medicines

Enable safer, smarter  
global health supply  
chains



# ePI **BRASIL** by PharmaLedger™





## Digital Readiness

As of January 2024, Brazil had approximately 187.9 million internet users, representing an internet penetration rate of 86.6% of the total population.

In 2025 PharmaLedger is gearing up to pilot the ePI initiative in full compliance with Brazilian regulatory authority, and adoption from some of the world's largest pharmaceutical companies.

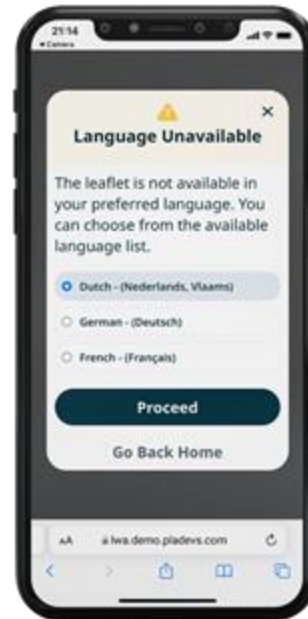
## Access to the most current and approved product information

All features available in Portrait or landscape format for mobiles and tablets



### LIGHTWEIGHT AND PRIVATE

Lightweight App that  
does not require  
download or sign in



### MULTI LANGUAGES

Available in multiple  
languages unlike paper  
leaflets



### TEXT TO SPEECH FUNCTIONALITY

Our app supports text to  
speech to increase  
accessibility



### FONT SIZE ADJUSTABILITY

The font size can be  
changed up to 300%  
for better reading



## eLeaflet **type**

For patients, a clear, easy-to-understand and user interactive. For healthcare professionals, quick access to pharmacological data and guidelines.



## **Printing** feature

To promote equal access incorporating a printing feature is essential to bridge the digital divide.



## **Recall** Notifications

Recall Notifications prevents patients from continuing to use a potentially dangerous medication.



1.

Host your node  
on PLA Network

Full control and “sovereignty”  
of data and environment,  
optimized performance.

Own node  
10'000s of eLeaflets  
Influence over future of solutions

2.

Node as a  
Service

PLA is operating the node  
on behalf of a  
Manufacturer like  
Software as a Service

PLA Node  
1'000s of eLeaflets

3.

eLeaflet  
as a Service

Quick ePI demonstrator  
capability at lowest cost  
designed for a limited  
number of leaflets

PLA Node  
100 eLeaflets  
XML Conversion



# PharmaLedger Association

## Building trust in healthcare



### Empowered Ecosystem

An opportunity for all

The challenges inherent to Pharma Supply Chain Traceability encompass various stakeholders globally.

Only collaboration can be effective in building the end-to-end solution that delivers strategic change value.

Discover ways to  
engage with PLA today!

## Interested in learning more?

Contact us today at [info@pharmaledger.org](mailto:info@pharmaledger.org)

**For more information on all PLA's projects,  
visit our Website**



Scan to  
contact us

