



Disruptions

How Labs Can Utilize Big Data and Capitalize on Industry Innovations

Jason Bhan, MD, Chief Medical Officer, Medivo
www.medivo.com
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Data Analytics Revolution



Big Data Analytics Disruptions



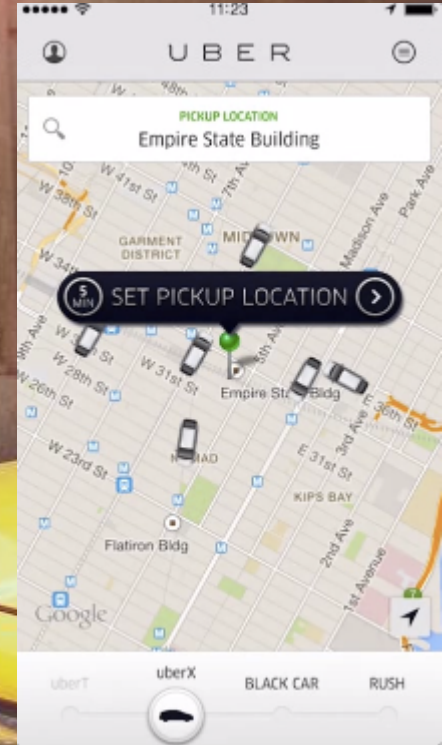
dis·rup·tion

/dis'rəpSH(ə)n/

Harvard Business School professor and disruption guru Clayton Christensen says that a disruption displaces an existing market, industry, or technology and produces something new and more efficient and worthwhile.

It is at once destructive and creative.

UBER



Leverages big data to offer hyper customized transport services. Valuation climbs to \$40 billion, while taxi medallion prices tumble 20%.



OpenTable®



Leverages big data to sustain and improve restaurant efficiency. Some restaurant owners feel “forced” to use it, while those who don’t lose business.

Finance



Traders leverage big data and electronic trading to beat the market. “Humanless” trading displaces most open outcry exchanges.

NYSE, 1987

Finance



Traders leverage big data and electronic trading to beat the market. “Humanless” trading displaces most open outcry exchanges. [\[video\]](#)

NYSE, 2012

Diagnostics



Labs SHOULD leverage their big data assets to address some of the disruptions occurring in the industry today, such as...

Diagnostics: Reimbursement Issues



- *CMS fee schedule revisions*
- *Shift from FFS to bundled services*
- *Retail business model (market dynamics)*

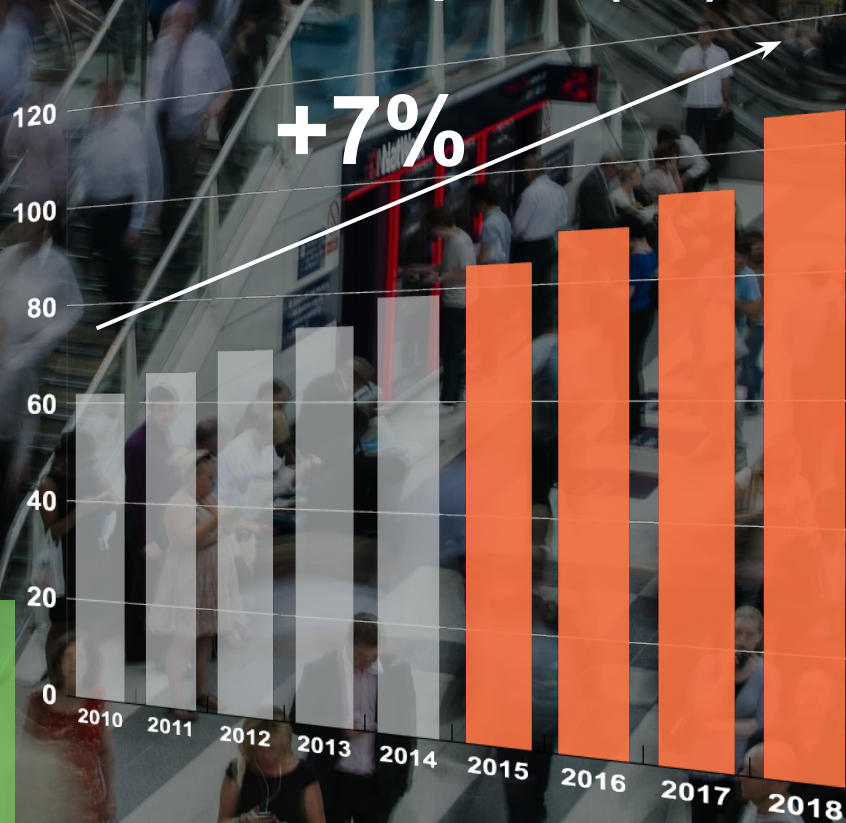
Diagnosics: Molecular Testing



Raw genetic sequences need interpretation. Companies such as Nof1 are leveraging lab data to offer tailored, synthesized analysis based on each patient's molecular profile.

Diagnosics: Utilization Trends

Total Lab Spend (\$B)



- *More lives covered and an aging population*
- *Increased development and usage of molecular Dx*

Diagnostics: Technology Evolution



- *Genomics and Precision Medicine*
- *Data and Analytics*
- *POC testing and diagnostics*

Recognizing Value

UPPSALA UNIVERSITET

Lab Data is valuable because it is...

INFLUENTIAL

70% or more of medical decisions are based on lab testing

TIMELY

Lab data can be delivered within a few days of testing, well before treatment decisions have been made

TARGETED

Lab data is the only way to find patients based on result ranges

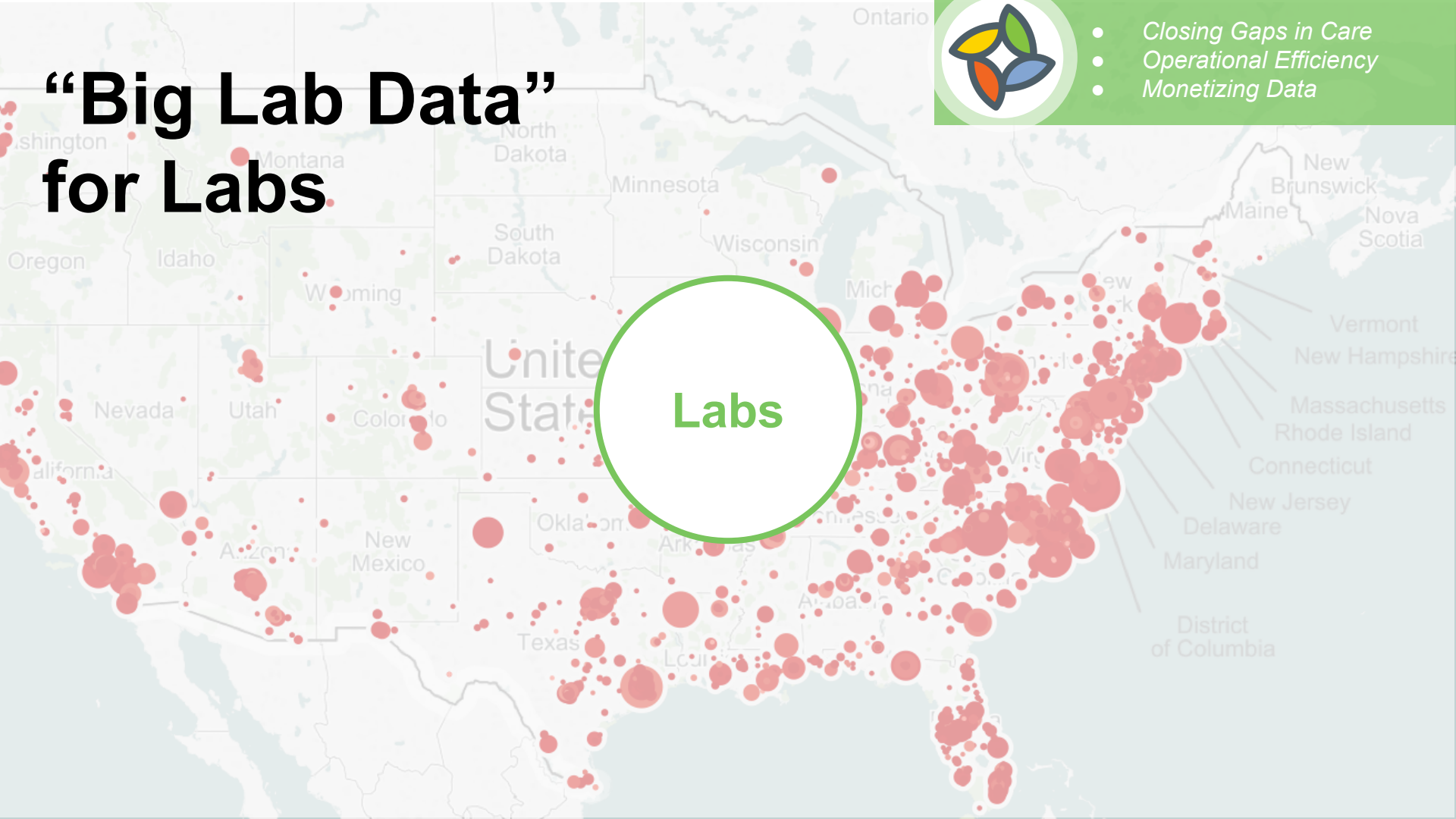
ACCURATE

Lab testing is conducted using rigorous statistical analysis that includes extensive quality control and oversight by the FDA

“Big Lab Data” for Labs



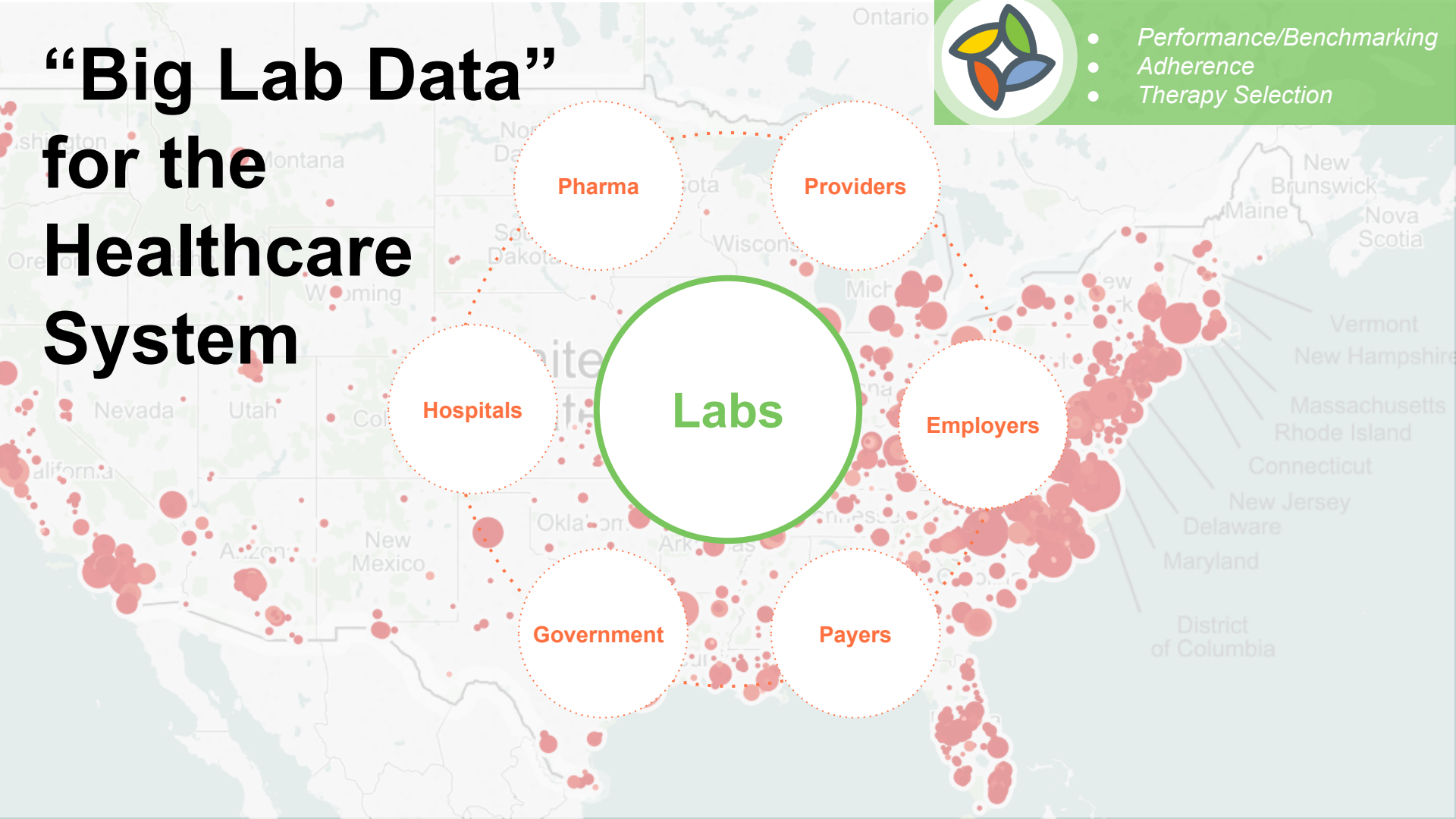
- Closing Gaps in Care
- Operational Efficiency
- Monetizing Data



“Big Lab Data” for the Healthcare System



- Performance/Benchmarking
- Adherence
- Therapy Selection



Pharma

Providers

Labs

Employers

Hospitals

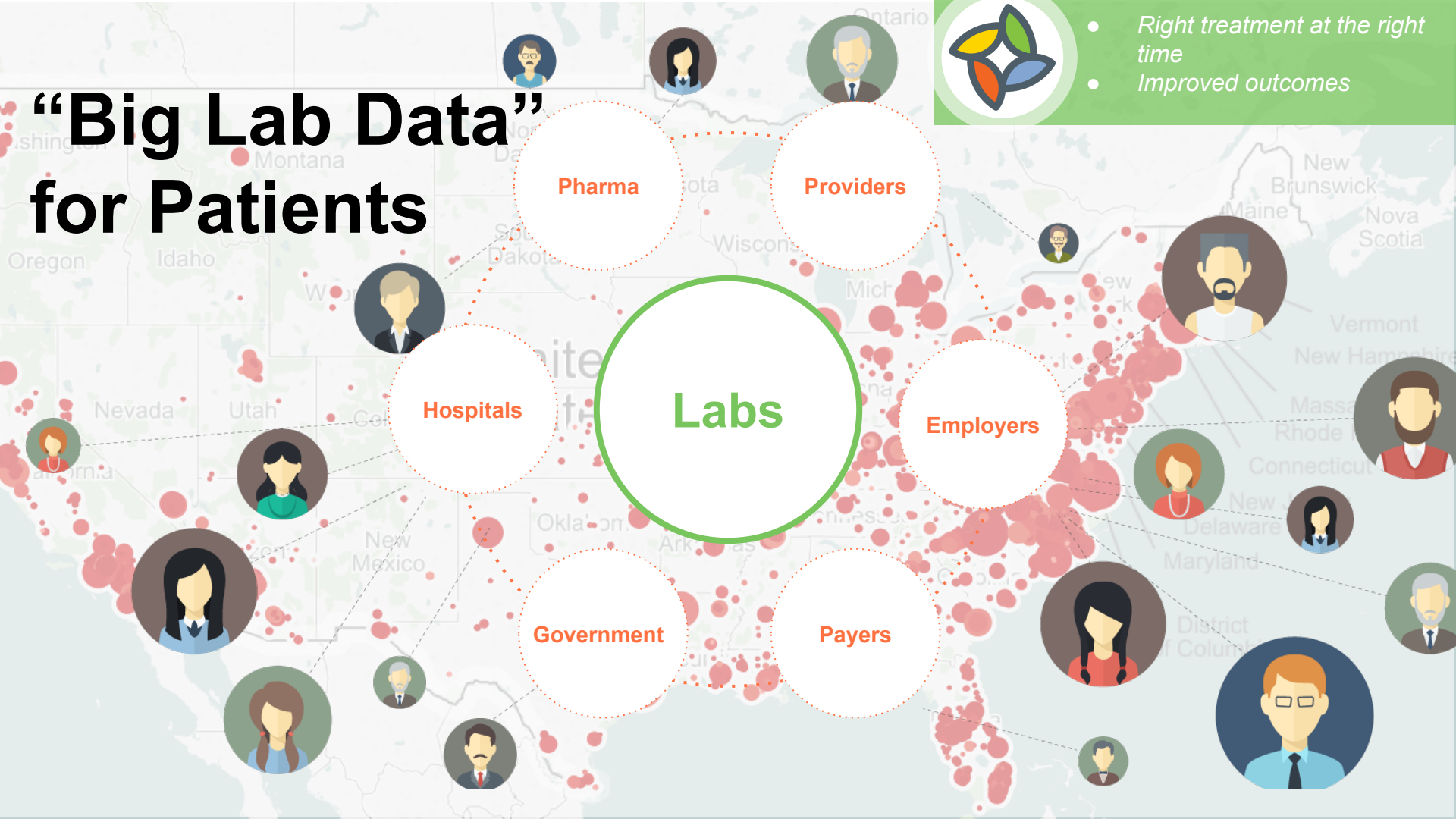
Government

Payers

“Big Lab Data” for Patients



- Right treatment at the right time
- Improved outcomes

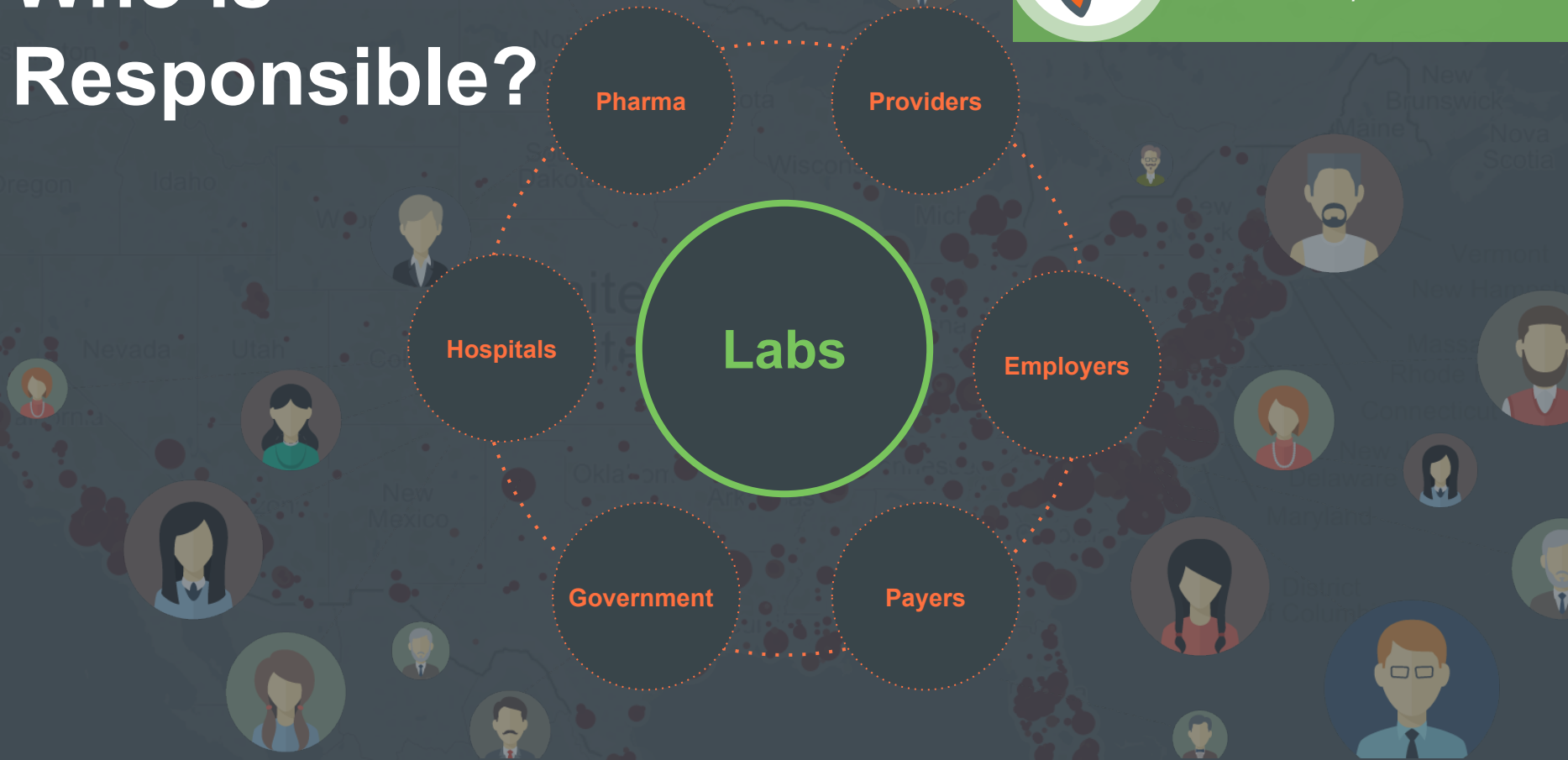


Who is Responsible?



"Diagnostics needs to be data businesses with a wet lab on the side" Mara Aspinall

Who is Responsible?



A young pine tree is the central focus, growing in a lush green forest. The tree is positioned slightly to the right of the center, with its branches spreading out. The background is a dense forest of similar trees, creating a sense of depth and growth. The overall color palette is various shades of green, from light to dark, giving it a natural and vibrant feel.

Unlocking the Power of Lab Data

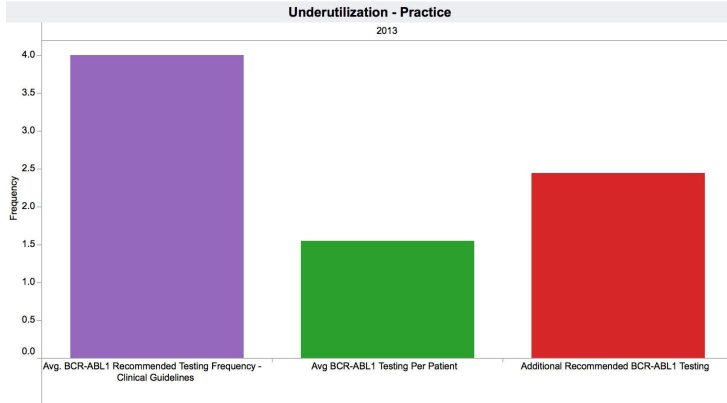
Access Analytics to Unlock Potential

Underutilization - Practice View

Practice Info						
Loc Nm	Lab Acct Num	Loc Addr	Loc City	Loc State	Loc Zip	# of Te.. # of U..
			ANDALUSIA	AL	36420	13 8
			EAIGHLNDE	AI	36233	4 4

Provider Info			
Prov First Nm	Prov Last Nm	Splty 1	Splty 2
Null	Null		
		HEMATOLOGY/ONCOLOGY	
		INTERNAL MEDICINE	
		INTERNAL MEDICINE	
		INTERNAL MEDICINE	

Revenue Opportunity - Total
\$123,329
Revenue Opportunity - BCR-ABL 1
\$83,922



Clinical Analytics Platform that helps our lab partners locate and quantify underutilization and add-on testing opportunities.

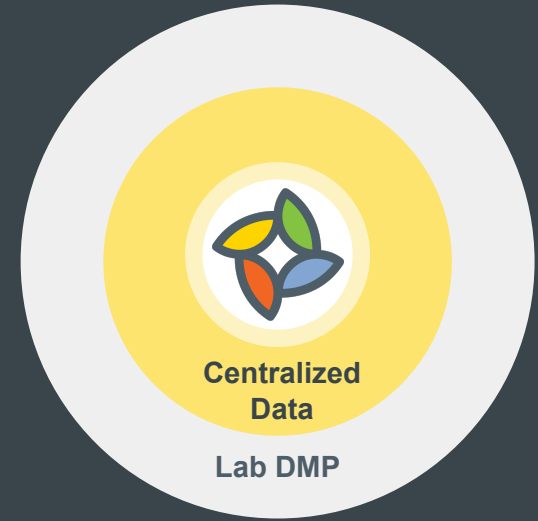
CLEAR Data Solutions™ for Labs helps our lab partners:

- Better informed sales team
- Drive value-based patient care
- Collect revenue by finding new opportunities for appropriate testing

Data Management Platform

Singular cloud-based lab data platform for multiple applications

- ETL data from all relevant systems within the lab
- Prepare data for all supported applications
- Secure, cloud-based storage
- Plug-and-play integration with all supported front end applications
- Consultative data services and evaluations



Population Health

Regulatory Compliance

Research

Payer Reporting

Utilization Analytics

Top Line Revenue Opps

Productivity and Workflow

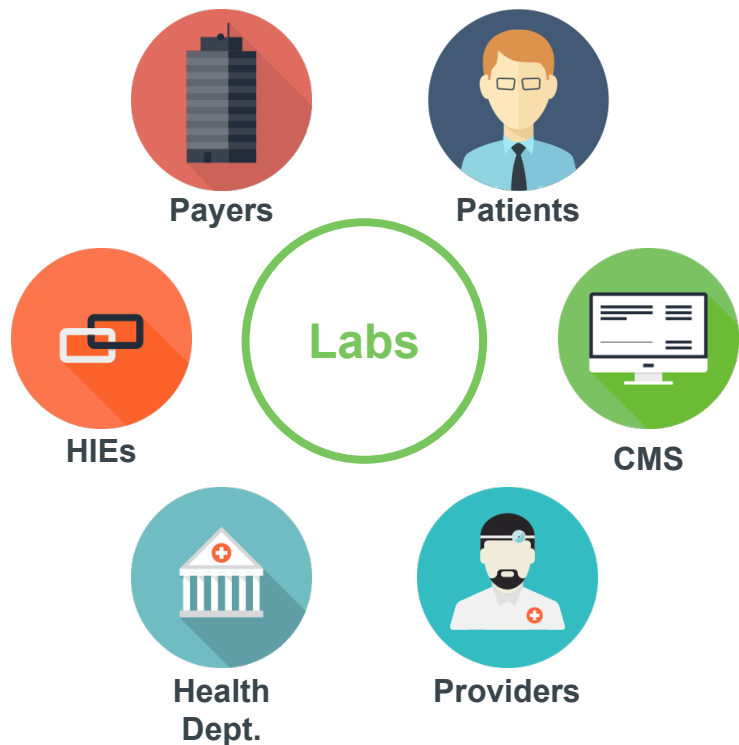
Esoteric Interpretation

Delivery to HIEs

Government

Patient Services

Reduce Overhead and Speed Response



Multiple entities need your data and you need to share it securely.

Easily service the demands of all of your 3rd party data requests.

- Reduce the time spent by employees pulling data requests
- Streamline request management

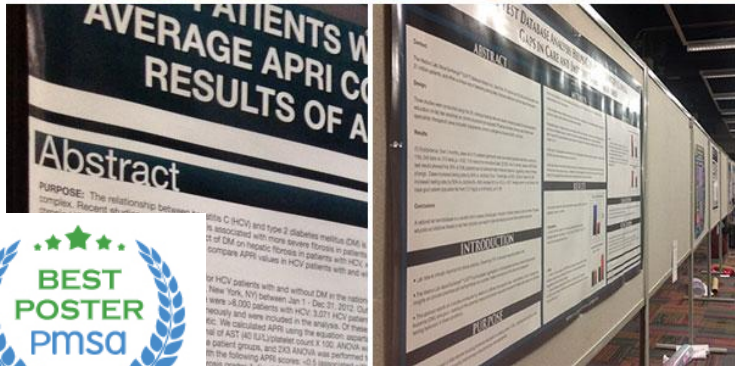
Monetize an Untapped Asset



Convert your data platform from a cost center into an valuable asset that feeds a developing ecosystem.

- Utilize one data platform for multiple applications.
- Minimize data related IT projects.
- Monetize data, straight to the bottom line.

Furthering the Cause with Meaningful Research



Clinical Research presented at:

- **American Association of Clinical Endocrinologists - 2013, 2014, 2015**
- **Pharmaceutical Management Sciences Association - 2014, 2015**
- **Digestive Disease Week - 2013, 2014, 2015**
- **American Association for the Study of Liver Diseases - 2013, 2014**
- **College of American Pathology - 2014**
- **American Society of Hematology - 2014**
- **Clinical Management Laboratory Association - 2015**

Improve Patient Care Delivery



Lab data must become a more integral part of the patient care continuum.

- Lab data should be the driving force behind patient care solutions:
 - Pop Health, Disease Management, Research

My husband Joe was diagnosed with CML. He was put on treatment and all went well. After 6 months he gained clinical remission and I thought he was cured. Suddenly after 6 months he lost remission and our doctor is trying to find a new solution. We are waiting.



I was referred a male patient. He is 55 now, diagnosed in June 2012. I started him on imatinib (Gleevec). 6 months into the therapy he showed significant improvement, but then his results went up again. Trying to look into the literature to find similar cases... Waiting...

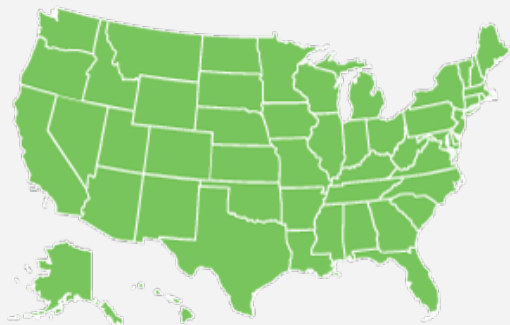


How can Lab Data Help?



Medivo LVX Fact 1

We observe 22,000 CML patients tested every year



Medivo LVX Fact 2

1,250 new patients are diagnosed with CML every month

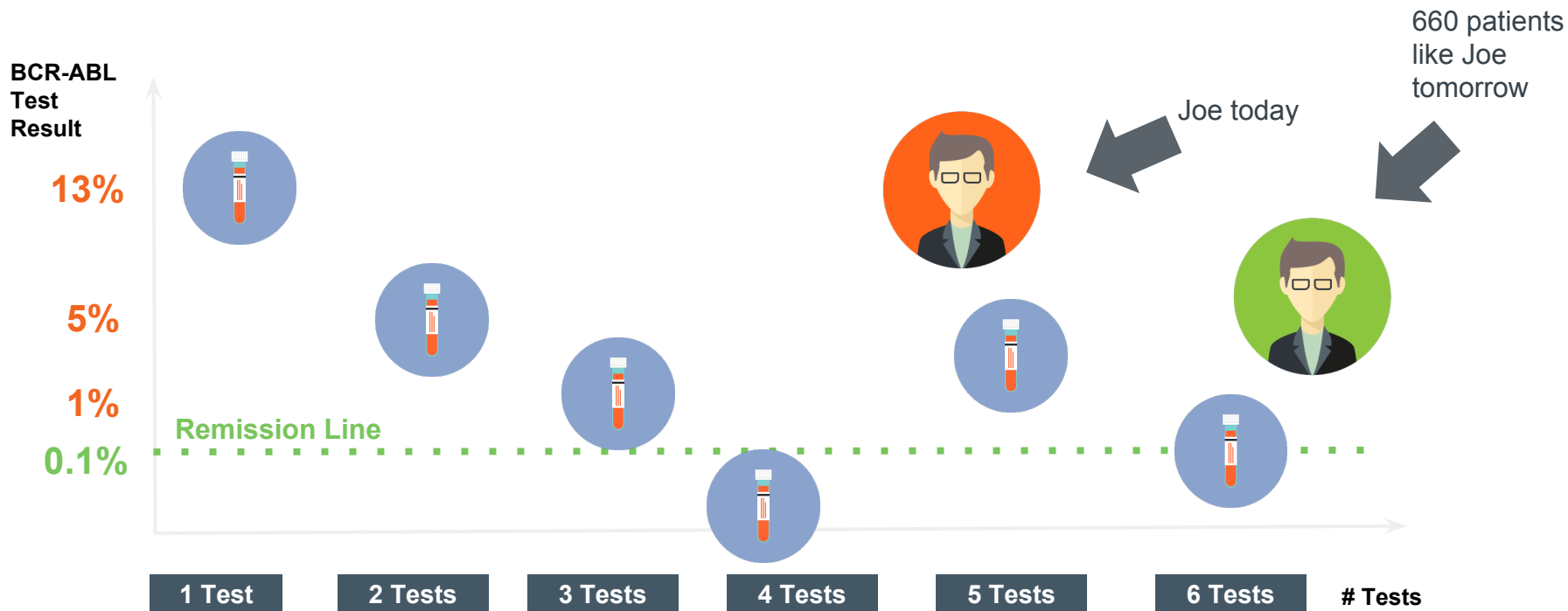


Medivo LVX Fact 3

Approx 6 CML patients show poor response to their current treatment **EVERY DAY!**



Medivo found 660 patients in the LVX just like Joe, and followed their patient journey with lab data to find ways to get Joe back to remission again!



N = 660 patients in Medivo LVX who lost response to treatment, switched therapy and gained remission back



Together we can unlock the power of lab data.

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