



# Median Technologies The Imaging Phenomics Company®

**Fredrik Brag, CEO**

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# Median's Executive Team



**Fredrik Brag**  
*CEO  
& Co-founder*



**Bernard Reymann**  
*Chief Financial Officer*



**Sophie Campagno**  
*Chief of Administration,  
HR and Procurement*



**Yan Liu**  
*Chief Medical Officer*



**Nozha Boujemaa**  
*Chief Science and  
Innovation Officer  
iBiopsy®*



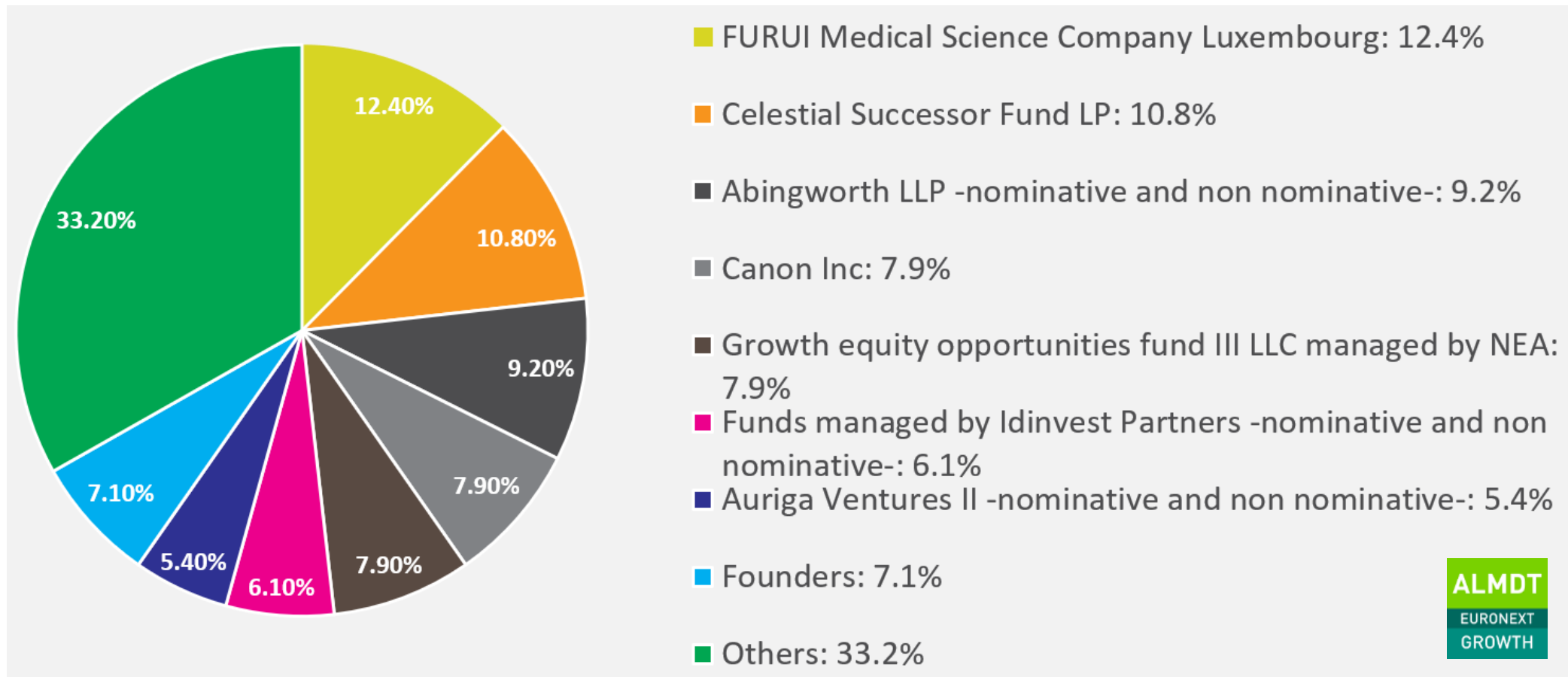
**Nicolas Dano**  
*Chief Operating Officer  
iCRO*



**Robin Zhang**  
*General Manager  
of China, iCRO*

# Company's Shareholding Structure

Publicly held, listed on Euronext Growth Paris,  
ISIN: FR0011049824, Ticker: ALMDT



Shareholding Structure, as of June 26, 2019



**Leading AI-based next generation precision medicine company focused on helping conquer cancer and other diseases through routine imaging tests and imaging services for drug development**

# Innovation Is in Our DNA

**Our Growth:** Powered by proprietary technology, strong KOL connections, and medical/scientific/technology partnerships



**Our People:** As of March 2020, 120+ employees worldwide (EU, US and China), 30% working in Research and Development



**Our Value :** Leveraging AI technologies, data science and cloud computing to help the development of predictive and precision medicine for the benefit of patients and payers



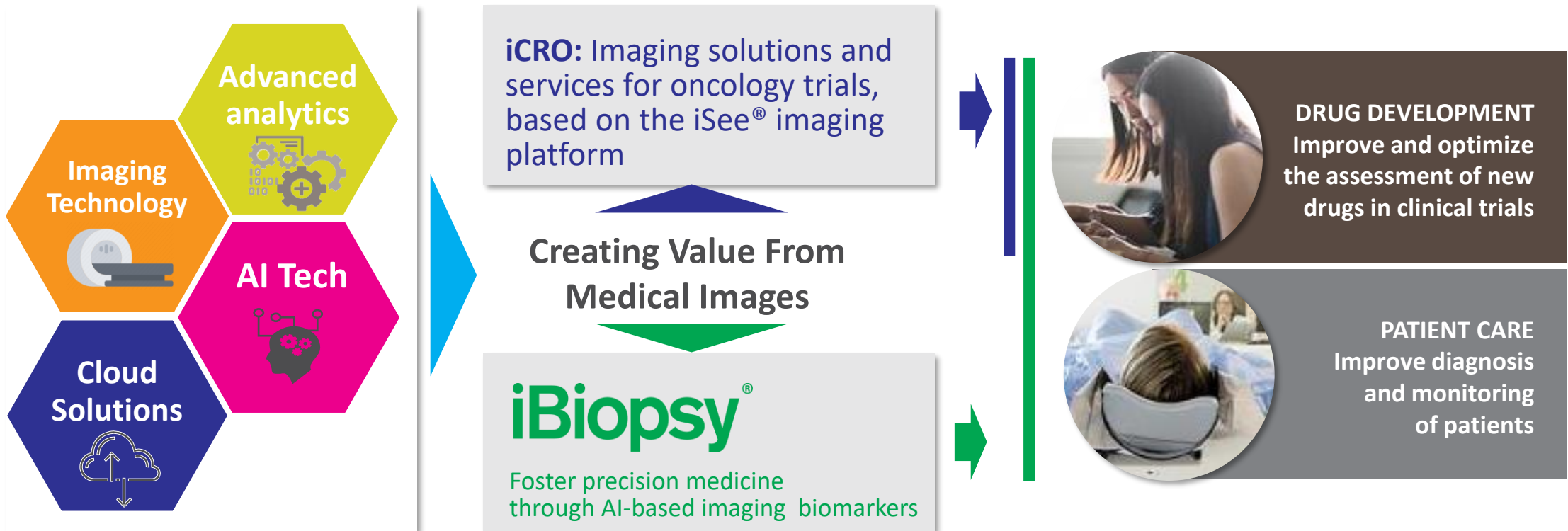
## 2 Business Units:

- **iCRO:** Image management for oncology trials
- **iBiopsy<sup>®</sup>:** Imaging platform for biomarker discovery



# Solutions for Disease Diagnosis & Monitoring

We are transforming the science of medical imaging



# 2019 Results and Highlights

## Selected financial information (IFRS consolidated financial statements)

In thousands of euros (audited figures)	2019	2018
Revenue from ordinary activities	9,032	6,534
Staff costs	-8,551	-10,430
External costs	-7,436	-9,895
Operating result	-7,963	-15,393
Net financial result	-4	70
Net result	-7,984	-15,284

- Revenue of €9m as of December 31, 2019, an increase of 41% compared with revenue for 2018

## Order backlog and NNB as of December 31<sup>st</sup>, 2019

Order backlog of €38.3m, +61.6% compared with December 31, 2018

Net New Business: + 230% vs 2018

## Cash position as of December 31<sup>st</sup>, 2019

Cash and cash equivalents: **€7.6 million**, compared to:

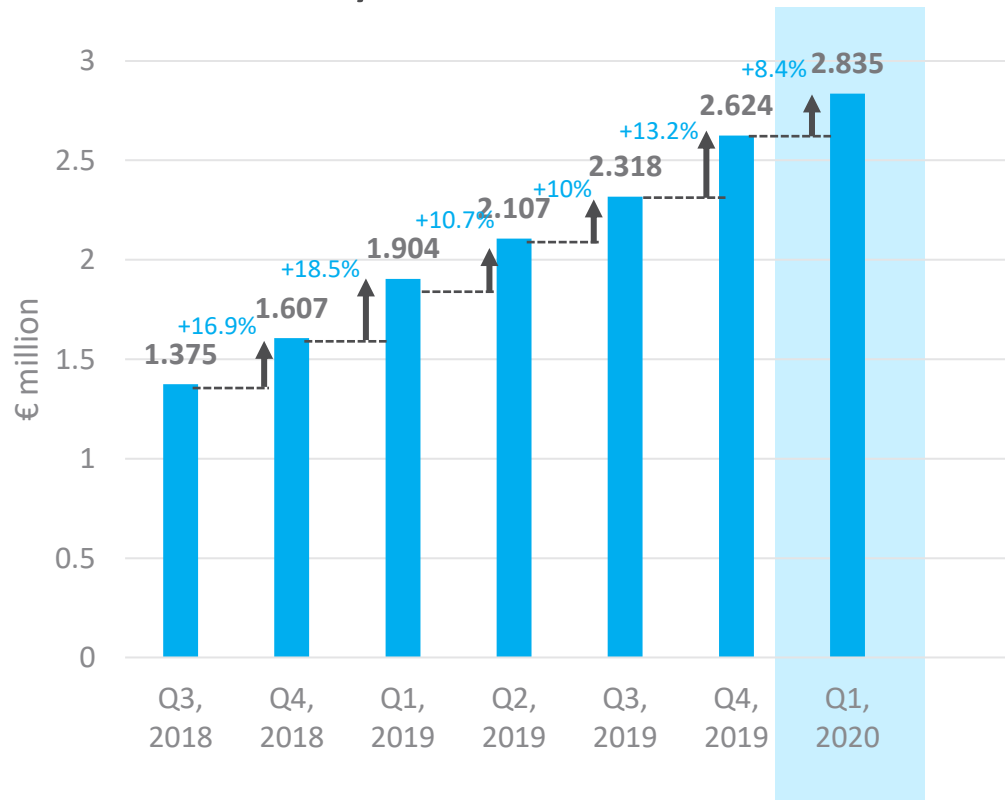
- €7.9 million as of June 30<sup>th</sup>, 2019 and
- €12.7 million as of December 31<sup>st</sup>, 2018.

## European Investment Bank (EIB) Loan

- Loan agreement signed on Dec. 18, 2019 for an amount of €35m in total
- Relates to the investment program for iBiopsy®
- As part of the Juncker plan, which aims at supporting research and innovation projects developed by companies with substantial growth potential

# Q1, 2020 Performance and Highlights

## Quarterly revenue evolution



	Q4, 2018	Q1, 2019	Q2, 2019	Q3, 2019	Q4, 2019	Q1, 2020
Revenue progression (Q, Q-1)	+16.9%	+18.5%	+10.7%	+10%	+13.2%	+8.4%

Despite the Covid-19 outbreak and sanitary crisis:

- **Order backlog of €44.4m, +€6.1m compared with December 31, 2019**
- Best quarterly performance ever
- Revenue of €2.8m, +47% compared with the first quarter of 2019

On April 20, 2020, Median announced that it had received the disbursement of €15 million, corresponding to the first tranche of the loan granted by the EIB.



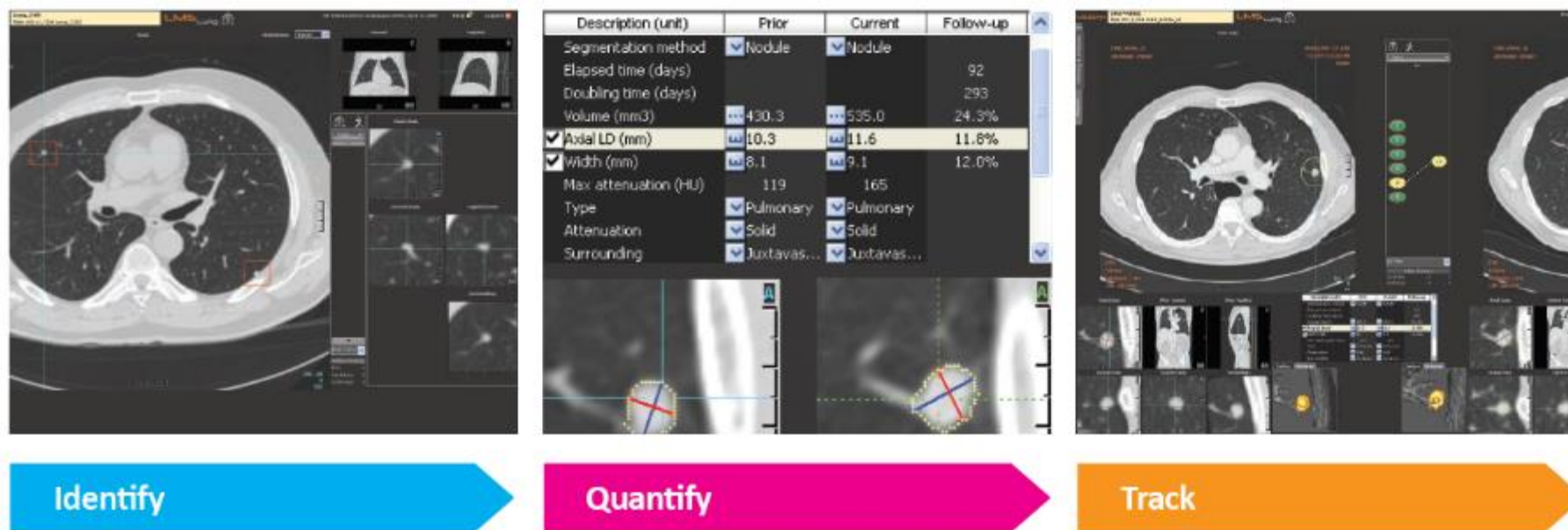
# iCRO Business

Solutions and Services for Image Management  
in Clinical Trials



# Imaging CRO Solutions and Services

## Bringing more meaning to image data: iSee®



- Image analysis and data management platform
- Extracts more data from an image than any other system
- Delivers the highest quality data for better informed decisions

- Limits variability and increases reproducibility by automatically identifying, quantifying, and tracking lesions across all time points
- All readers use this advanced proprietary tool, accessed through a web-browser
- Based on a 510K FDA cleared platform

# Experience by Phase

111 studies

24

Phase I trials

*Including 12 immuno-oncology trials*

17

Phase I/II trials

*Including 9 immuno-oncology trials*

36

Phase II trials

*Including 13 immuno-oncology trials*

2

Phase II/III trials

*Including 1 immuno-oncology trial*

32

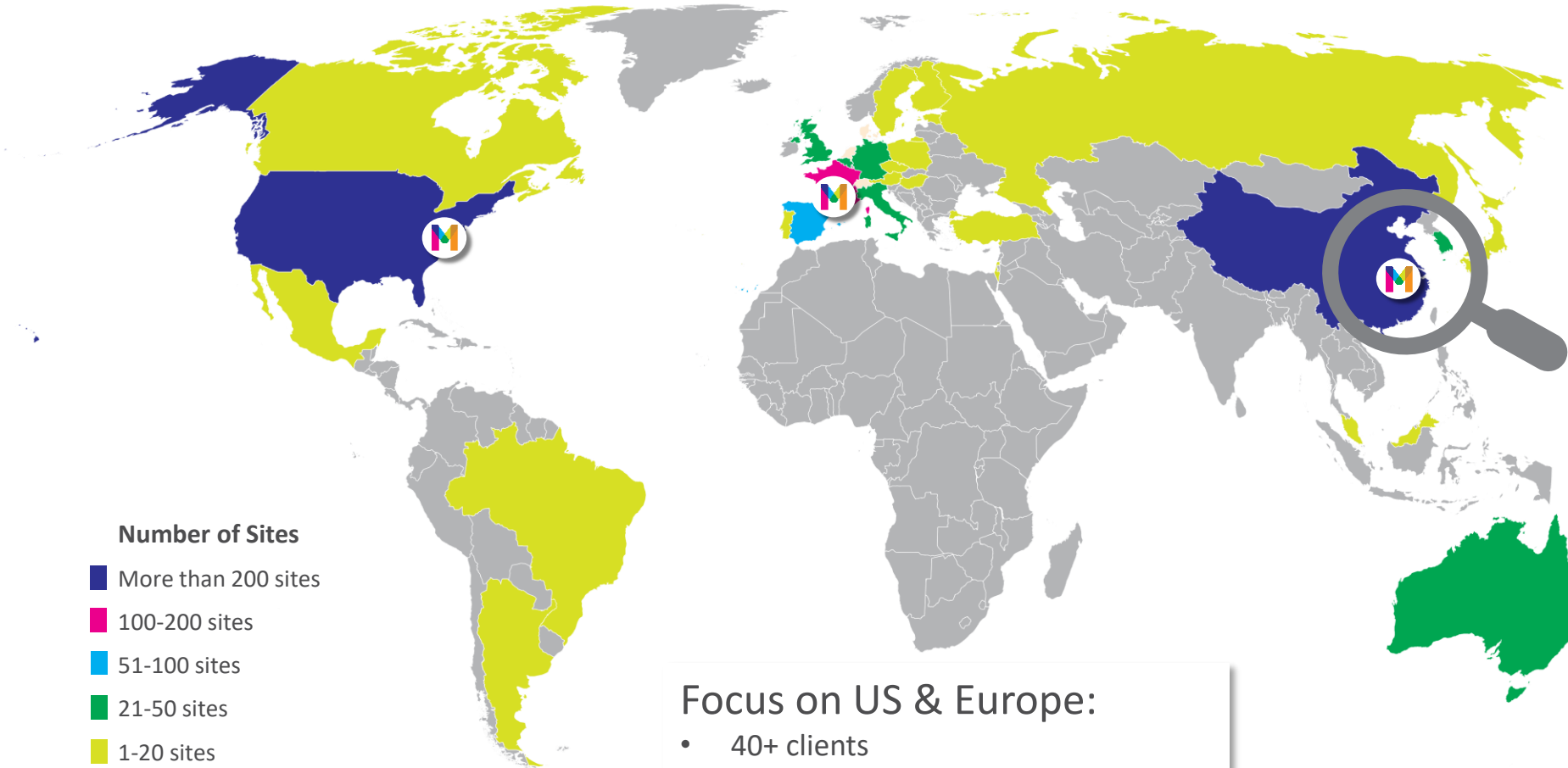
Phase III trials

*Including 23 immuno-oncology trials*

## 111 studies also means:

- 7 supported regulatory approvals
  - 3 Drugs for 4 Indications
- 2 successful FDA inspections
  - In 2017 & in 2019
- 26,138 enrolled patients
- 42,756 quality controlled timepoints
- 1,500+ clinical sites managed globally

# Global Footprint



## Focus on US & Europe:

- 40+ clients
- 4 Top 10 including 1 Top 3 - Ranking based on Revenue 2019 [1]

## Focus on China:

- 12+ clients, including 3 Top 3
- 32 trials with Chinese customers: 15 are **Phase III trials**, all trials are to be submitted to regulatory in China or globally
- More than **200 sites in China** working with Median on Chinese and other global trials

- The global contract research organization (CRO) services market size was valued at USD 38bn in 2018 and is projected to reach USD 91bn by 2026 [1]
- The largest market is in oncology and the biggest growth is in China (CRO CAGR: 20% [2])
- Competitive imaging CRO landscape: fragmented competition with 3 major players: Bioclinica, Parexel, Icon
- Median is the only oncology-focused imaging CRO with a global footprint. We partner with global CROs
- We expect to continue to grow at a solid pace in China, the EU & the USA

Sources: [1] <https://www.fortunebusinessinsights.com/industry-reports/100864>

[2] <https://www.prnewswire.com/news-releases/china-contract-research-organization-cro-industry-report-2019-2025-300819505.html>

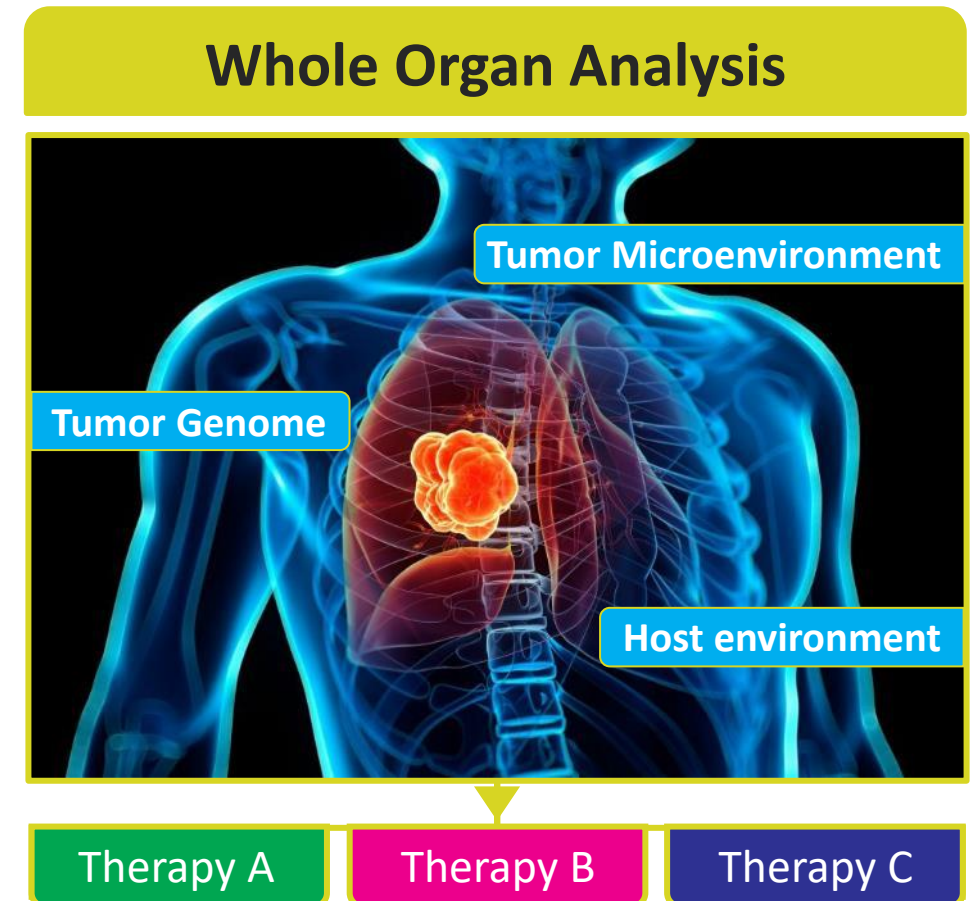
# iBiopsy<sup>®</sup>

Fostering precision medicine through AI-based imaging biomarkers

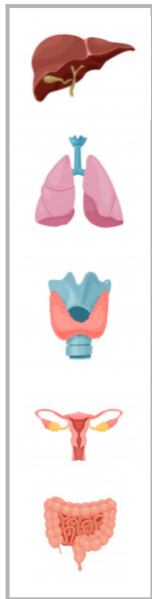


## Look Beyond What You See<sup>™</sup>: Lesion-agnostic paradigm

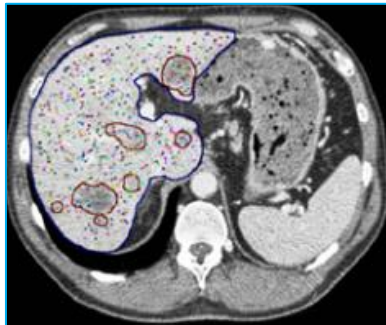
- **Proprietary algorithms, proprietary platform**
- **Comprehensive digital** image signatures extractions using whole-organ analysis and description to identify new generations of non-invasive biomarkers
- **Mathematical models** for prediction, prognosis, and diagnosis
- **Cloud-based** architecture for real-time pattern recognition, data mining, visualization, and exploration
- **Multimodal approach** that combines cutting-edge imaging technology with other clinical data sources



# iBiopsy<sup>®</sup> Is a Paradigm Shift in Medical Image Analysis

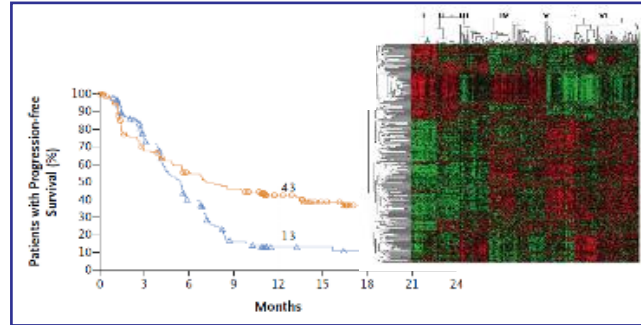


## Extraction



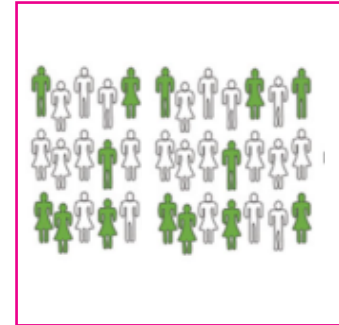
Imaging signatures  
-> biomarkers

## Correlation



Insights

## Stratification

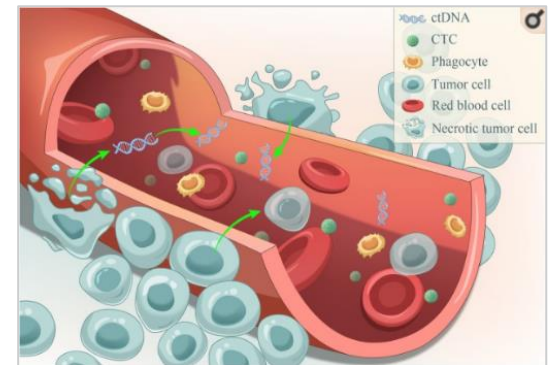
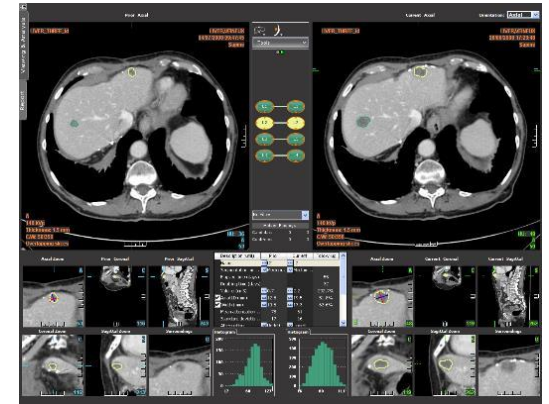


Profile

Matching patients  
with best  
treatments in  
predictive and  
precision medicine



	Biopsy	Liquid Biopsy	iBiopsy <sup>®</sup>
Non-invasive procedure	No	No	Yes
Patient risk	High	Low	Low
Standardized and cost-effective procedure	No	No	Yes
Standard of care for every stage of cancer, screening, diagnosis, and monitoring	No	No	Yes
Detection of DNA mutation	Yes	Yes	No
Overall phenotypic representation of the tumor landscape, not just a subset of a single tumor	No	No	Yes
Representative of the whole organ tumoral landscape	No	No	Yes
Real-time analysis that provides immediate, actionable information for patient treatment and precision medicine	No	No	Yes



Liquid biopsy in hepatocellular carcinoma: circulating tumor cells and circulating tumor DNA; Ye et al, *BMC*, July 2019

# iBiopsy<sup>®</sup> Platform - Strategy & Product Development Pipeline



**Median's iBiopsy<sup>®</sup> platform is designed to leverage our capabilities in:**

- Imaging technology
- AI and data science
- Clinical development
- Regulatory and reimbursement

**To:**

- Drive the development of our **PhenoIDx** suite of products
- Drive commercial adoption
- Lower healthcare costs
- Improve patient clinical outcomes

**Our first PhenoIDx products:**

- NASH
- Immuno-Oncology
- HCC

**Followed by:** PhenoIDx Lung, PhenoIDx CR, PhenoIDx Screening, PhenoIDx Prostate Cancer, etc

## Clinical development

- We will invest in our own clinical studies and develop strategic relationship with biopharmaceutical companies and luminary health institutions worldwide

## Market Opportunities

- Can be compared to the opportunity of liquid biopsies, which Guardant has estimated to be \$35bn in the US alone
- We expect to price our imaging tests at a lower rate than the average reimbursement rate of \$3,000 covered by Medicare for a comprehensive genomic profiling test as imaging can be far more cost effective

## Business, partnerships and regulatory pathway

- Leverage our iBiopsy<sup>®</sup> platform to expand our product portfolio
- Leverage our existing biopharmaceutical customers to develop strategic partnerships for new imaging biomarker discovery
- Continue to develop strategic relationships with major KOL and clinical institutions for research collaboration and clinical data acquisition
- Develop a strategic partnership with a major cloud/technology player to scale our business worldwide and for technology collaborations
- Submit clinical data for regulatory clearance and biomarker approval
- Engage with payers for reimbursement in multiple clinical indications

# Clinical validation partnerships

## Framework research collaboration agreement with AP-HP



- Research collaboration agreement with Assistance Publique-Hôpitaux de Paris (AP-HP) around iBiospy® announced on March 2, 2020
- AP-HP, one of the largest health institutions in Europe is one of the world's largest providers of high-quality medical data
- The agreement will enable Median to work with large patient cohorts for the clinical validation of iBiospy® AI technologies

The collaboration agreement initially covers two joint clinical studies on liver cancer (HCC)

- The PHELICAR study aims to identify the phenotypic heterogeneity of liver cancer and its impact on the diagnosis and prognosis of patients.
- The LIVER IBIOPSY study aims to identify phenotypes of high-risk liver tumor recurrence, in order to improve the treatment and follow-up of high-risk patients.

# Current Clinical Development Plans

## *The Pheno IDX Portfolio*

	Biomarker application	Indication	Drug development	Patient care
NASH Diagnosis	Screening marker	NAFLD	Patient recruitment for clinical trial	Early detection of advanced form of disease
NASH Monitoring	Efficacy biomarker	NASH	Biomarker as approved surrogate marker to measure drug efficiency	Improve patient compliance in the absence of early clinical improvement
Immuno oncology (IO)	Stratification marker	Solid Tumor	Select patients to increase likelihood of clinical trial successes	Identify IO responders / non responders and select the best treatment for each patient
HCC Diagnosis	Screening marker	Cirrhotic patient & HBV	Not applicable	Early disease detection
HCC Prognosis	Prognosis marker	Primary HCC	Patient recruitment for clinical trial	Not applicable yet

# First Results: HCC Recurrence Prediction in Resected Patients (1/2)

Performance Comparison for Significant Fibrosis ( $F \geq 3$ ) – Cohort: 94 patients

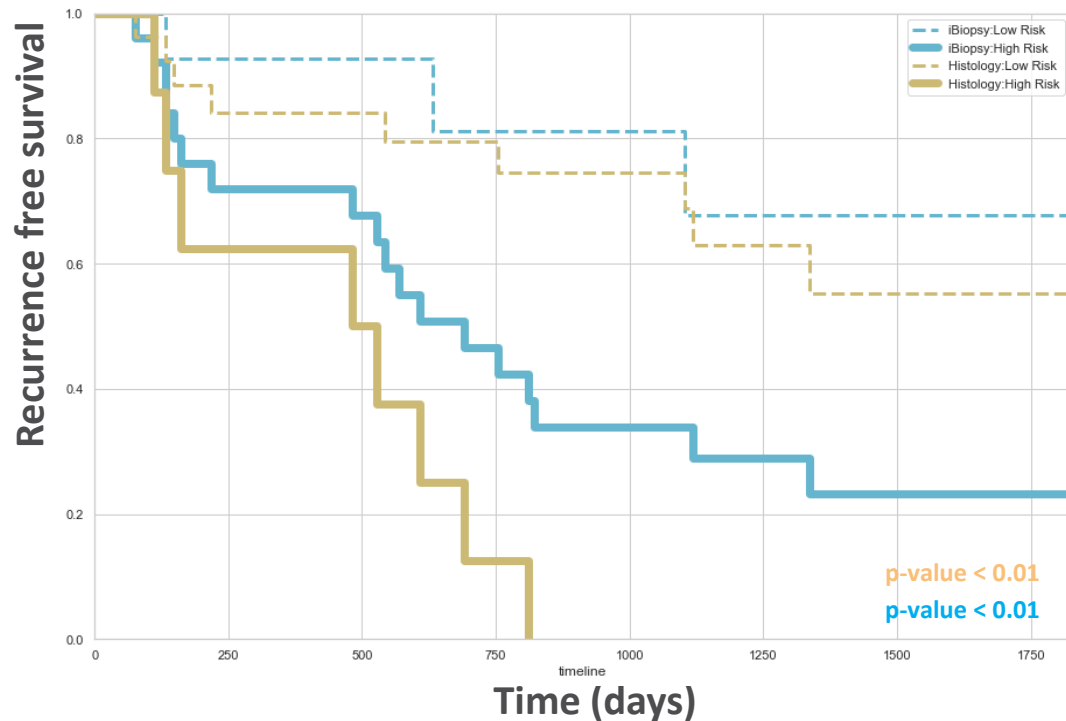
Non-invasive



	Biopsy	Liquid Biopsy		Imaging				
	Metavir Score	Fib-4	FibroTest	Transient Elastography	Elastography	Multiparametric MRI	iBiopsy® (training)	iBiopsy® (validation)
Data Type	Tissue Biopsy	Blood	Blood	US	MRE	MRI	CT	CT
AUC	0.87	0.75	0.74	0.89	0.82	0.70	0.83	0.91
Sensitivity	0.93	0.74	0.39	0.95	0.76	0.71	0.75	0.86
Specificity	0.83	0.80	0.88	0.57	0.81	0.67	0.93	1.00
PPV	0.80	0.49	0.71	0.66	0.68	0.28	0.75	1.00
NPV	0.95	0.85	0.67	0.92	0.86	0.93	0.93	0.82
N training	109	270	74	118	95	135	112	48

# First Results: HCC Recurrence Prediction in Resected Patients (2/2)

Added value to standard histological evaluation

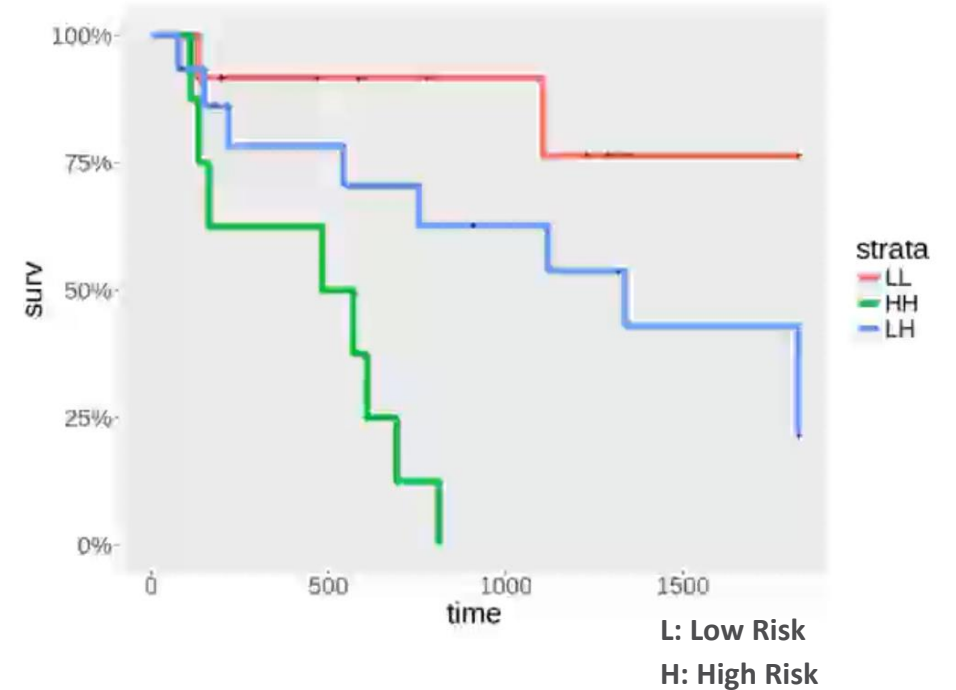


RFS (survival) analysis (Cox regression modelling)

**iBiopsy® : HR = 4.1 (CI:[1.2,13.9], p-value<0.01)**

**Histology: HR = 6.6 (CI:[2.2,19.8], p-value<0.01)**

Combined  
Histology and iBiopsy®



# Payer coverage and reimbursement







**We can help payers reduce diagnostic and treatment costs while improving clinical outcome**

We believe our products offer significant health economic values in the following ways:

- Reduce the need for a repeat invasive biopsy. Biopsies are not representative of the whole lesion/organ landscape, expensive, dangerous, not always feasible
- Match patient with therapies
- Predict disease recurrence in cancer survivors
- Detect early disease in high risk individuals to increase chance of treatments
- Enhance sensitivity and specificity of diagnosis, prognosis and monitoring of cancer and other chronic diseases



# Some Comparable Companies Engaged in Precision Medicine

	Intent of use	Biomarker	Biopsy	Liquid biopsy	Image biopsy	Data-driven patient profiling – Machine learning + Data Library + CBIR
	CANCER - Therapy selection, early detection and recurrence monitoring	Blood	NO	YES	NO	No AI, No search engine
	CANCER - Early detection	Blood	NO	YES	NO	No AI, no search engine
	CANCER - Therapy selection	Blood & Tissues...	NO	NO	NO	Cancer patient immune system profiling – Responder/non responder
	CANCER – Therapy selection	Tumor tissue	YES	NO	NO	Tumor genomic profiling – Responder/non responder
 [1]	CANCER	Tumor tissue + EHR data	YES	NO	NO	Patient clinical and genomic data profiling – Responder/non responder
	CANCER - Therapy selection, early detection and recurrence monitoring, patient stratification	Digital Images	NO	NO	YES	Patient clinical and imaging data profiling– Responder/ non responder

# Take Away Messages

# 2020 and Beyond

## iCRO

- Major potential for growth in a very dynamic market
- Global landscape: M&A consolidation activities led:
  - By CROs wanting to provide global end-to-end solutions,
  - By the consolidation of the fragmented iCRO market
- Very strong technology differentiator with iBiopsy® for clinical trials
- Strong position in the fast-growing Chinese market

## iBiopsy®

- Very strong push for precision medicine and non-invasive biomarkers from patients, regulatory agencies (FDA, EMA) and payers
- First results for HCC recurrence risk prediction. Ongoing clinical studies for Immuno-Oncology, NASH and HCC
- Ongoing negotiations with potential clinical and technology partners
- Positioning Median as a comparable to major liquid biopsy players
- Comparable companies positioned as multibillion valuation players with zero or very little revenue





## Our Core Values

### **Leading innovation with purpose**

Combine the spirit of innovation with our passion and conviction to help cure cancer and other debilitating diseases.

### **Committing to quality in all we do**

Be dedicated to quality in everything we do. Quality begins with us and we are committed to it.

### **Supporting our customers in achieving their goals**

Listen to the needs of our customers and help make their goals our goals through our innovation, imaging expertise, superior services, and quality solutions.

### **Putting the patient first**

There is a person at the other end of the images we analyze who is counting on us to do everything we can to help make them healthier.

