5th Healthcare
COMPASS Seminar
Key Takeaways

goetzpartners
SECURITES

BARRIERS IN HEALTHCARE INNOVATION

Bridging Efficiency Gaps in Modern Healthcare

At our latest goetzpartners securities COMPASS event on 11th October 2019, we discussed in a multi-stakeholder format barriers in healthcare innovation and how to overcome them. We focused our discussion on two major areas profoundly impacting clinical outcomes as well as healthcare delivery and economics: AI & Big Data analytics, and Precision Medicine.

We see a bright future for digitalisation and Precision Medicine but need to address critical questions now: What are the biggest roadblocks to widespread adoption of AI and Precision Medicine? How can we ensure broad access to these innovations for patients around the world?

Technical solutions are emerging to quantify and standardise the vast amount of healthcare data remaining unstructured and digitalisation has been embraced among healthcare actors. Making data silos less hermetic is the next challenge. It can only be addressed by going beyond technical solutions and creating more comprehensive governing bodies bringing all healthcare stakeholders to the same table to improve data fluidity while keeping patients' interest at the very core.

At the same time, improving care will increasingly rely on Precision Medicine. This shift already represents a financial challenge for healthcare systems and pharma companies faced with increasing development costs. Innovative companies are already paving the way for the use of AI at the earliest stages of the drug discovery process. Identifying "dead-ends" early in research will allow for better fund allocation and improve the R&D / revenues balance to more sustainable levels for highly innovative future drugs.

Ulrich Kinzel
CEO – goetzpartners securities Limited

KEYNOTE SPEAKER

Dr Andreas Weigend
Former Chief Scientist of Amazon

Dr Andreas Weigend holds a PhD in neural networks from Stanford and teaches courses on AI and Data Science at Stanford, Berkeley and in Asia. Andreas is author of the influential book "Data for the People", coached Jack Ma on Alibaba's data strategy and is a member of Germany's Digital Council.

Baker McKenzie.

RANKED IN THE TOP 10 LAW FIRMS IN THE WORLD FOR LIFE SCIENCES

We would like to express our special thanks to our event partner Baker McKenzie, the leading international law firm for healthcare M&A by deal volume.







PANEL 1: BIG DATA ANALYTICS

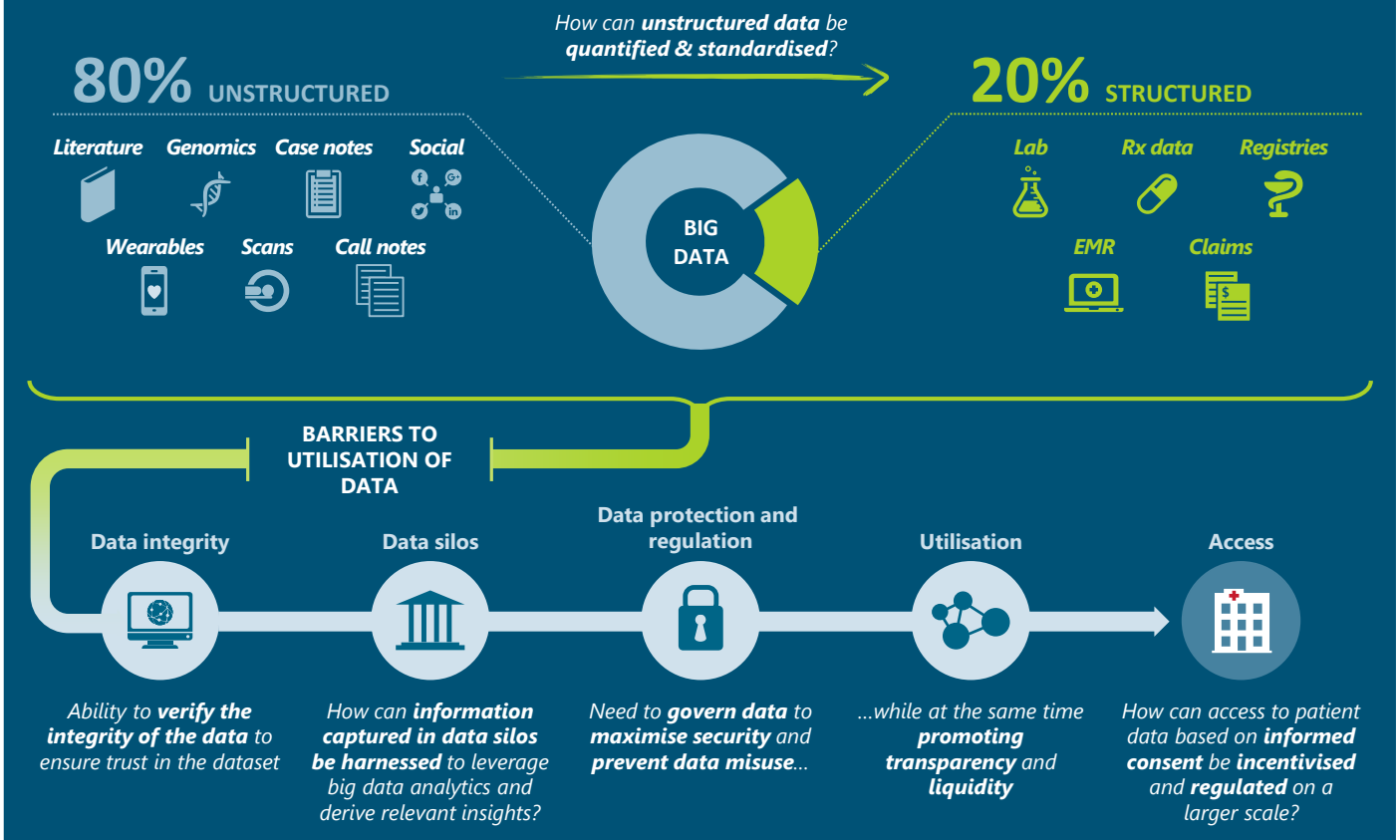
Take-aways from the panel

AI & Big Data analytics are expected to provide a quantum leap in efficiency gains by minimising administrative and clinical inefficiencies, reducing fraud and abuse, and co-ordinating care. Understanding how to connect data for new growth opportunities in a meaningful manner represents a prominent challenge faced by many sectors. However, compared with other sectors, data analytics in healthcare is even less utilised.

This is even more surprising, as a myriad of companies are developing solutions to harness the value of Big Data. Technologies such as genomic sequencing, machine-learning supported image analysis and digital pathology generate vast amounts of data that can be analysed to create actionable insights. These can be used to support the selection of treatments as well as empower patients and care providers. As such, Big Data analytics could be paving the way for the provision of integrated and efficient care in de-centralised systems.

However, while expectations are sky-high, substantial obstacles are hindering wide and near-term application in public healthcare. With data becoming increasingly fluid, some of the key challenges in harnessing the value of Big Data are the implementation of industry-wide data standards, the development of solutions that can structure, verify and harmonise data, as well as a regulatory landscape that ensures data protection while at the same time promoting transparency and liquidity.

BIG DATA ECOSYSTEM IN HEALTHCARE



MARKET VOICES

Andreas Weigend
Former Chief Scientist at Amazon.com

"To harness the benefits of Big Data, we must: (1) start with the problem, not the data, (2) embrace transparency, and (3) make the implicit explicit."

Ain Aaviksoo
CMO, Guardtime Health

"Data in healthcare can be used securely with confidence and at scale if tech is applied as response to the problem and not vice versa."

Lekan Wang
Head of Partnerships and Commercial, Roam Analytics

"Natural language can be transformed into structured data through the power of machine learning."

Michael Schmidl
Partner & Co-Head of German IT Group, Baker McKenzie

"Collecting and using medical data in compliance with privacy laws remains challenging. Pseudonymisation and technical measures will help overcoming hurdles and limits of consent."

Christoph Herborn
Managing Director, Asklepios Kliniken Gruppe

"Big Data combined with improvements in Precision Medicine hold great promises for more individual diagnostic applications and better therapeutic options."

PANEL 2: EMERGENCE OF PRECISION THERAPIES

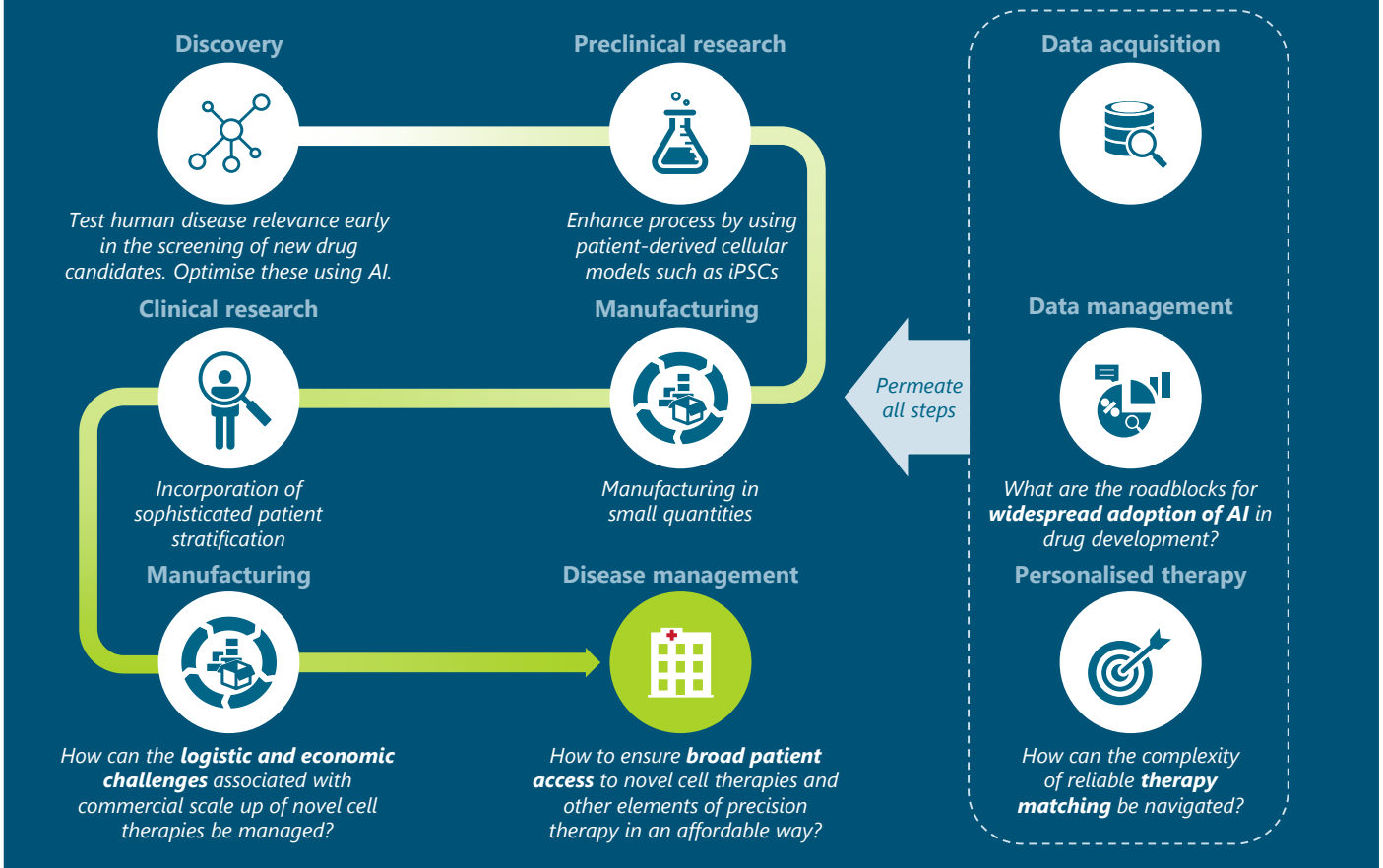
Take-aways from the panel

Precision medicine and advanced therapies is an area of breakthrough innovation expected to deliver a "moonshot" in cancer care and dramatically improve outcomes in many other disease areas. Tailoring therapy to individual patients through the use of genomic, phenotypic and other data such as biomarkers increase efficacy and hence clinical trial success rates, thus improving R&D productivity as well as outcomes for patients.

However, enabling broad access for patients to novel cell and gene therapies or to robotic surgery has challenging healthcare economic and logistical consequences. Manufacturing and delivering cell therapies is a complex process. Prices for new medicines are rising fast, with gene therapy Zolgensma recently setting a record of $2.1m for a single dose. Installing a da Vinci robotic surgery system costs c.$2m and a room for proton therapy up to $30m.

A key ingredient is for the different actors in the ecosystem to work together and cross-feed patient and other data back into the discovery and development process. Human disease relevance needs to be tested as early as possible in the drug discovery process to increase success rates. Personalised oncology requires cell biological in addition to genomic data, based on high-quality tissue and liquid biopsies. Harmonised clinical and commercial global networks are needed to reduce costs and increase the quality of cell therapy products whilst ensuring commercial sustainability.

OPTIMISING THE DRUG DEVELOPMENT PROCESS



MARKET VOICES

Craig Johnstone
COO, Evotec

"Precision Medicine of the future requires precision discovery and development; made possible through application of cutting edge technologies."

Hartmut Juhl
CEO, Indivumed

"Combining a multi-omics cancer database with bioinformatic & AI-tools can accelerate drug R&D and help oncologists to identify optimal treatments for patients."

Robert Preti
CEO, Hitachi Chemical Advanced Therapeutics Solutions

"Technological innovations will help streamline and automate cell processing, leading to faster scale up, appropriate COGS and robust quality of cell therapies."

Thomas Heydler
Former CEO, Definiens

"AI-powered character-isation of patients' tumour micro-environment can be used to match patients to the best cancer therapies."

Jeff Staples
COO, United Family Healthcare

"Returns on investment in robotic surgery need to go beyond financial terms as it gives status and helps maintain top surgeons."

5TH GOETZPARTNERS COMPASS SEMINAR AT A GLANCE

goetzpartners SECURITES

2 High-calibre panels

Policymakers, Companies, Clinicians, Solicitors, **6+** Investors, Industries, Health economists

8 Roundtable discussions

10 Panel experts & C-level industry leaders

International attendees

300min Expert debates

THANKS TO OUR PANELISTS

ASKLEPIOS · Baker McKenzie. · DATA · DEFINIENS the tissue phenomics company · evotec · guardtime · Hitachi Chemical Working On Wonders · indivumed · ROAM · 和睦家医疗 United Family Healthcare

GOETZPARTNERS YOUR PARTNER FOR LIFE SCIENCES

INTERNATIONAL PRESENCE

13 OFFICES WORLDWIDE IN **11** COUNTRIES

INTEGRATED SERVICE PORTFOLIO

AMONG THE MOST ACTIVE HEALTHCARE ADVISORS

Diagnostics · Specialty Pharma · OTC · 75+ Transactions · Digital Health · CDMO · Medtech · Veterinary Health · Biotech · Hospital Services

ACCESS TO ALL POOLS OF INVESTORS IN LIFE SCIENCES

- Institutional Investors (Healthcare)
- Institutional Investors (small cap)
- Family Offices
- Venture Capital
- Corporate Investors
- Private Equity

>3,000 Institutional Investors & Family Offices (75% in North America, 25% in Europe)