2020 global life sciences outlook Creating new value | Building blocks for the future

new ways to create value and new metrics to make sense of all the newly available data

LS organizations will continue to look for

LS organizations will pay greater attention to human experiences – of patients, workforce and ecosystem partners and their affect on business outcomes



adopted, they will now inform operations and business models to personalized

As patient-centric models have been

Companies will adopt goals of creating

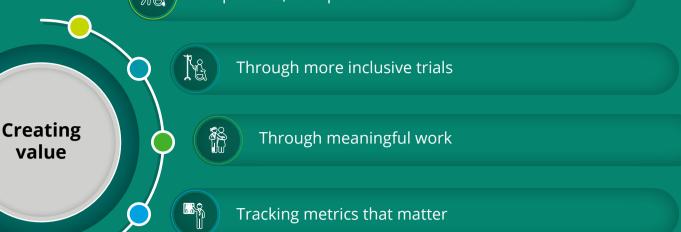
value for all stakeholders, and aspire to find real value for themselves and shareholders

Top issues

To prepare for the future and remain relevant in the ever evolving

Creating new value

health care landscape, biopharma and medtech companies will discover sources of significant new value creation. For patients, care providers and care teams



It's trending – A holistic patient experience that maps out all the touchpoints experienced by patients in their journey of care—from diagnosis to maintenance. How are stakeholders dealing with this?

Through portfolio decisions, technology,

therapeutic focus, and manufacturing excellence



medtech devices Offer patient centered services in non-clinical settings

Adopt advanced technologies such as AI, Machine Learning

Understand consumer needs to develop more user-friendly

- Develop inclusive clinical trials that address the concerns of minorities in a population Move beyond skills, next-gen talent will focus on actions that

Creating value by technology Barriers to accessing clinical trials

resonate with their beliefs

identify gaps in care

Intelligent safety monitoring by wearables to predict events and

patients and their caregivers

Medication adherence tools to

- provide early intervention
- Creating value for the market

Deals and acquisitions



Structural barriers include access to a clinic and absence of an available trial

Concerns around patient safety

- Clinical barriers include patients not being eligible due to narrow criteria

The first half for 2019 was robust, but showing signs of a

slowdown for life sciences M&A.

for the same time in 2018.

Number of deals for the year may be trending downward but the value of the deals is higher for the first three quarters of 2019 at US\$181.7 billion, bullion, bullion



In 2020, pharma companies will likely bet on cell and gene therapies, focused on oncology and rare diseases. Manufacturing is expected to be a key differentiator!



In Q1 & Q2 2019, medtech surpassed 2018's M&A total that included eight multibillion-dollar deals at a total of US\$29.5 billion.

Life sciences companies announced deals acquiring 37 technology providers in 2019.

status, which are privately held startups with a value over US\$1 billion.

A number of health-based technology companies joined the ranks of unicorn

Cloud investments will continue to be a top priority for life sciences



Growth in technology



efficiencies.



Almost 180 startups were involved in applying AI to drug discovery. It's trending – Al startups are specifically working on repurposing existing drugs or generating

How are stakeholders dealing with this?

go-to-market cycle for drugs

US\$2.9 billion in 2018-25 at a CAGR of 52.9%.

Build cloud computing capabilities to extend collaboration with other biopharma companies, smaller biotech companies, research institutions, and academia

novel drug candidates using Al, machine learning, and automation.

The focus will be on accelerating R&D with technology and operational

AI market in drug discovery expected to 🎓 from US\$159.8 million to

A service for unlocking many data sources that have traditionally been locked in siloes across multiple organizations remains a critical need. The goal is to enable health care stakeholders to

Leverage partnerships to explore Al-driven R&D and lay groundwork for more advanced data strategies.

Digitize the core along with intelligent automation in manufacturing can help companies reduce the

create scalable and secure collaborative business models and reimagine how they approach research, clinical trials, pharmacovigilance, population health, and reimbursement.

Beginning in 2020, it's anticipated that there will be over **200** new applications for gene and cell therapies per year. Number of approvals for proprietary medical algorithms continues to rise. An Al algorithm embedded on-device was recently approved.

Building blocks for the future

around patients

Novel pricing and access approaches





Responsibility

New priorities

innovation and social good

Managing



Innovating Digital Building Corporate around **Transformation** Trust Social

Trial transparency

Data ownership

Data-driven devices

Tech partnerships





sustainability and social responsibility—driving more positive social change and combating the stigma attached to health issues that may prevent optimal care.

Drivers of growth are expected to be: Accelerated drug approvals

Looking ahead, sales trajectories

Oncology is expected to have

worldwide market by 2024 and

are expected to have double the

CAGR of non-orphan drugs, at

almost a 20% share of the

a 11.4% in CAGR growth. Worldwide orphan drug sales Global medical devices market

Amplified sales from oncology therapies

Emerging markets focus on domestic medtech companies—e.g., China wants domestically produced medical devices to account for half the medical devices

Why do medtech companies need to implement cost-reduction strategies and remain competitive? Increased market entry of non-traditional

 Downstream pricing pressures. Stringent regulations Operational inefficiencies

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players such as tech giants.

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Who owns the data? Patient-centered platforms and consumer health apps are now collecting more data, but lack of clarity leaves the patient with lack of trust in government and organizations alike. Organizations can grow trust and build better relationships with patients by: Sharing data transparently in clinical trails Addressing data ownership Keeping data private and secure

their products and research, but also shift toward preventive care.



from orphan drug sales

Increased potential for an additional US\$109 billion







In 2018, 53% were biotech

products as compared with

was valued at US\$425.5 billion in

2018 and is expected to reach

US\$612.7 billion by 2025.

34% in 2010.

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