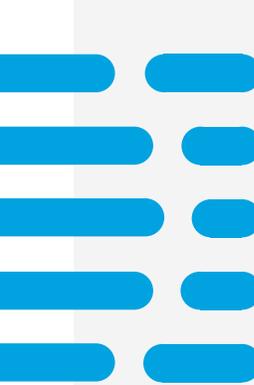




# Global Executive Briefing

*COVID-19 Update: June 2020*





# Agenda

## + **Pandemic Status: Updated Spread of COVID-19, Transitioning to Stability**

*An update on the spread, and a measure to assess reopening indicators*

*Speaker: **Murray Aitken**, SVP, IQVIA and Executive Director, IQVIA Institute for Human Data Science*

## + **Medical Outlook: Virology, Disease Sequela, and R&D Progress**

*New learnings, new concerns, and the progress toward treatments and vaccines*

*Speaker: **Jeff Spaeder**, Chief Medical & Scientific Officer, IQVIA*

## + **Resuming momentum in clinical trials**

*Moving from response to recovery*

*Speaker: **Costa Panagos**, President, R&D Operations, IQVIA*

## + **COVID-19: A catalyst of change**

*A look ahead to 2021 and beyond, and the long term impact and implications for life sciences*

*Speaker: **Marla Kessler**, SVP, Strategy Marketing and Communications*

*Speaker: **Alistair Grenfell**, President Europe, Middle East, Africa, and South Asia*

*Speaker: **Murray Aitken***

# Executive Briefing: COVID-19 Update

## Section 1: Transition to stability

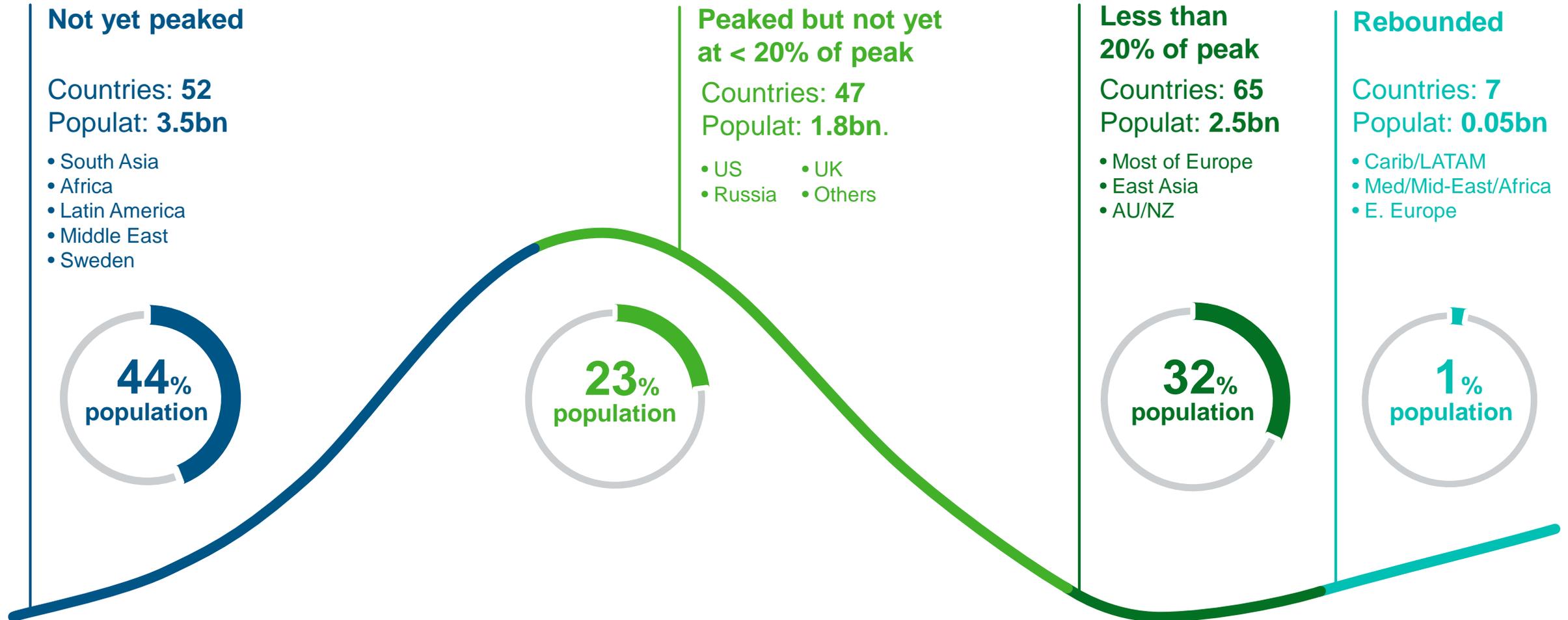
***Murray Aitken***

*SVP, IQVIA*

*Executive Director, IQVIA Institute for Human Data Science*

June 2020

# Global look at where we are in the COVID-19 pandemic



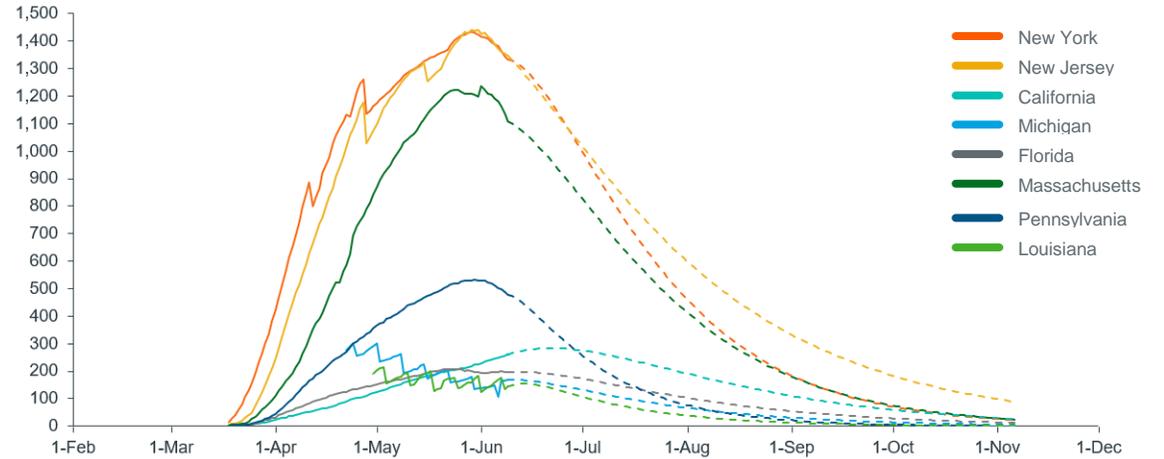
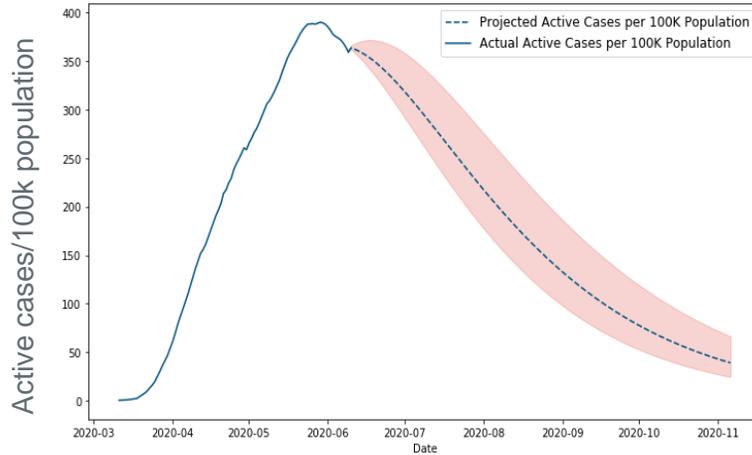
# Future COVID-19 impact is regional and heterogeneous

Significant international and regional variation: disproportionate impact on lower socio-economic + minority groups



USA

Projected total confirmed cases per 100k: **855**  
(range: 748-1025)



Hungary  
**45** (44-48)

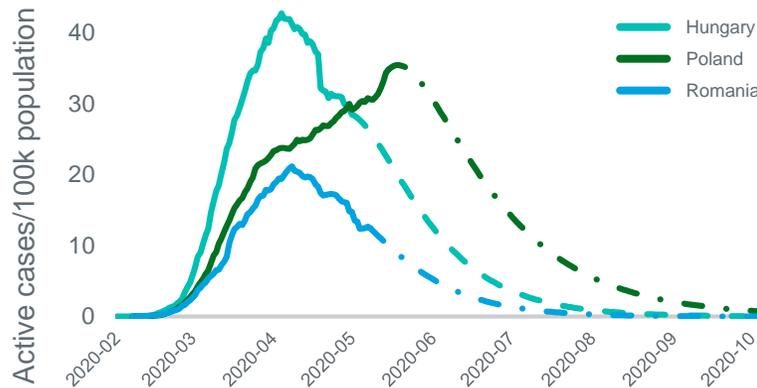


Poland  
**91** (87-100)



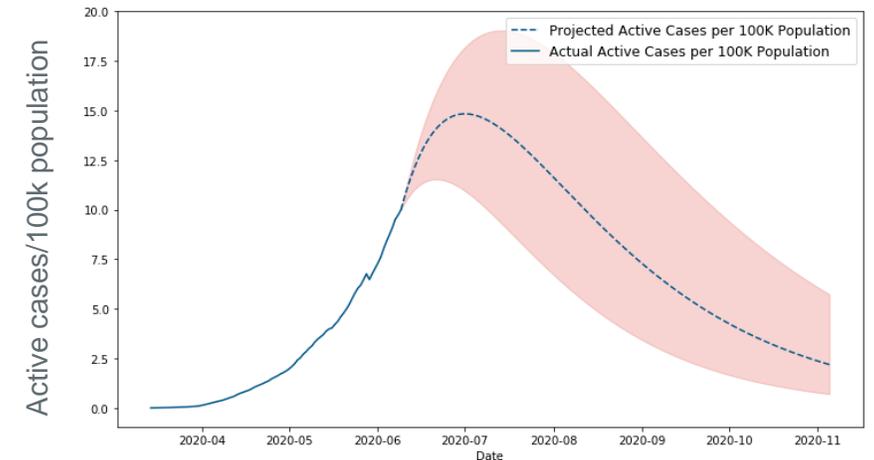
Romania  
**110** (102-119)

Projected total confirmed cases per 100k:



India

Projected total confirmed cases per 100k: **39**  
(range: 31-53)



# Transitioning to stability

*Readiness to reopen alignment with health system utilization*

**106**

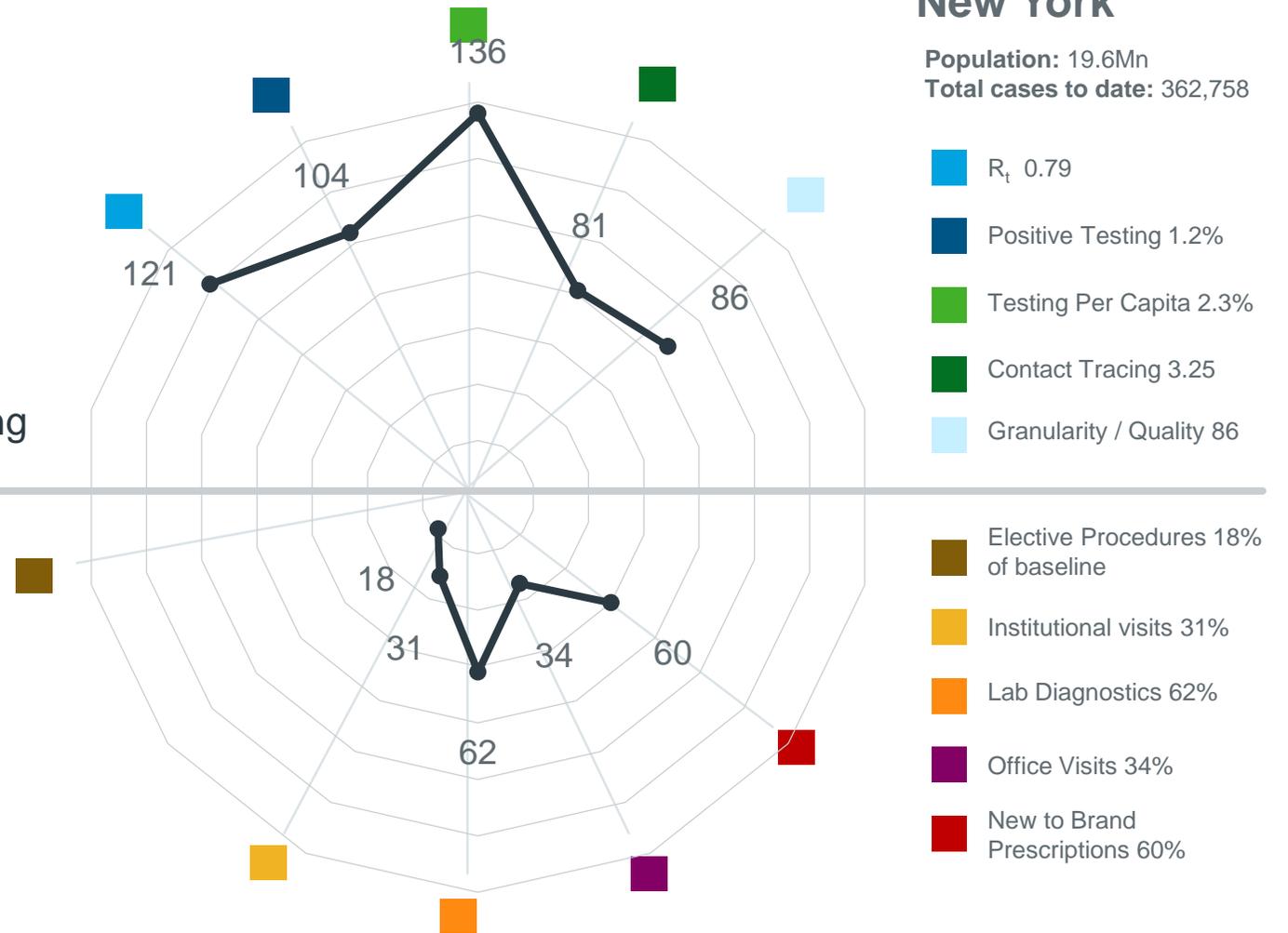
## Re-opening Readiness Index

- Rt level
- Positive testing ratio
- Testing level per capita
- Contact tracing planning and implementation
- Granularity and quality of case reporting

**41**

## Health Services Utilization Index

- Elective procedures
- Institutional visits
- Diagnostic lab tests
- Office visits
- New to brand prescriptions





# Executive Briefing: COVID-19 Update

## Section 2: Medical update and outlook

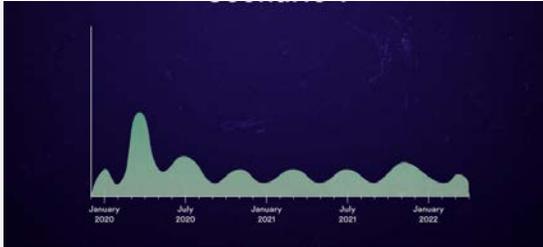
*Dr. Jeffrey Spaeder, M.D.*  
*Chief Medical and Scientific Officer, IQVIA*

June 2020

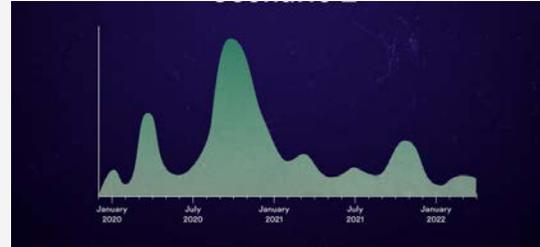
# Learning from history, how do pandemics spread and end?

## Perspectives on future scenarios

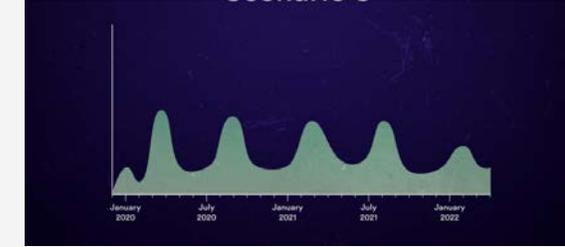
SPREAD



Persistent community spread



Spanish flu version 2.0

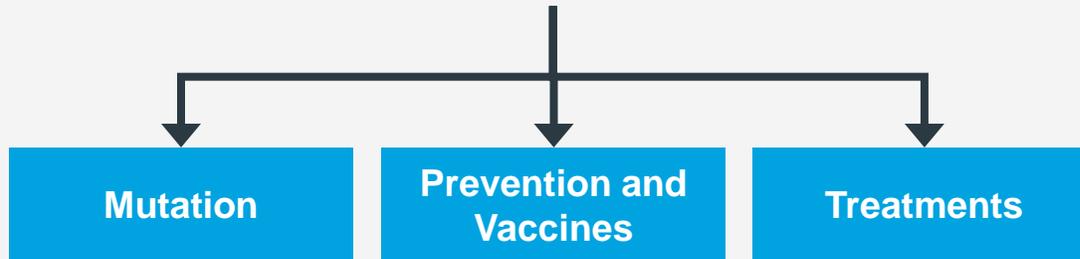


Repeated large outbreaks

END

### 'Medical' end

Virus impact minimized by development of medical interventions, or mutates



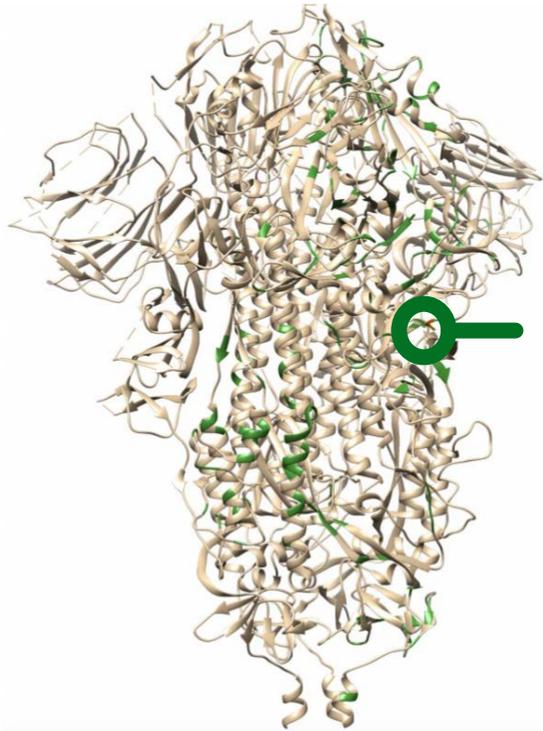
### 'Social' end

Societies adopt varying philosophies to respond to the virus



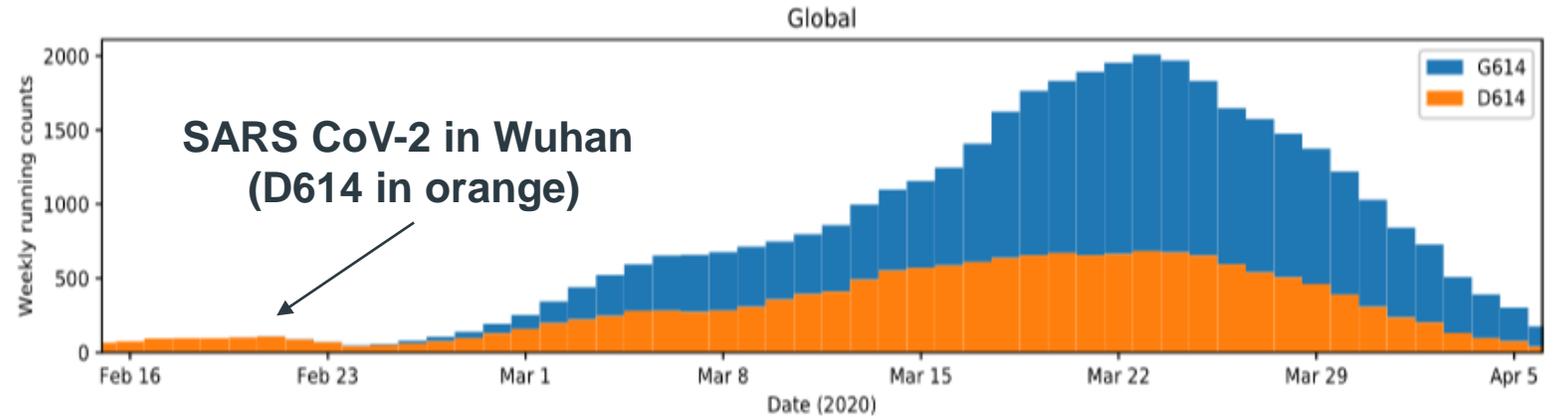
# SARS CoV-2 mutations are relatively infrequent although D614G mutation has quickly become dominant globally

*Adaptive pressures could impact future transmission as well as efficacy of vaccines based upon earlier viral characteristics*



## SARS-CoV-2 spike protein

- SNP mutations (green)
- D614G mutation (red)

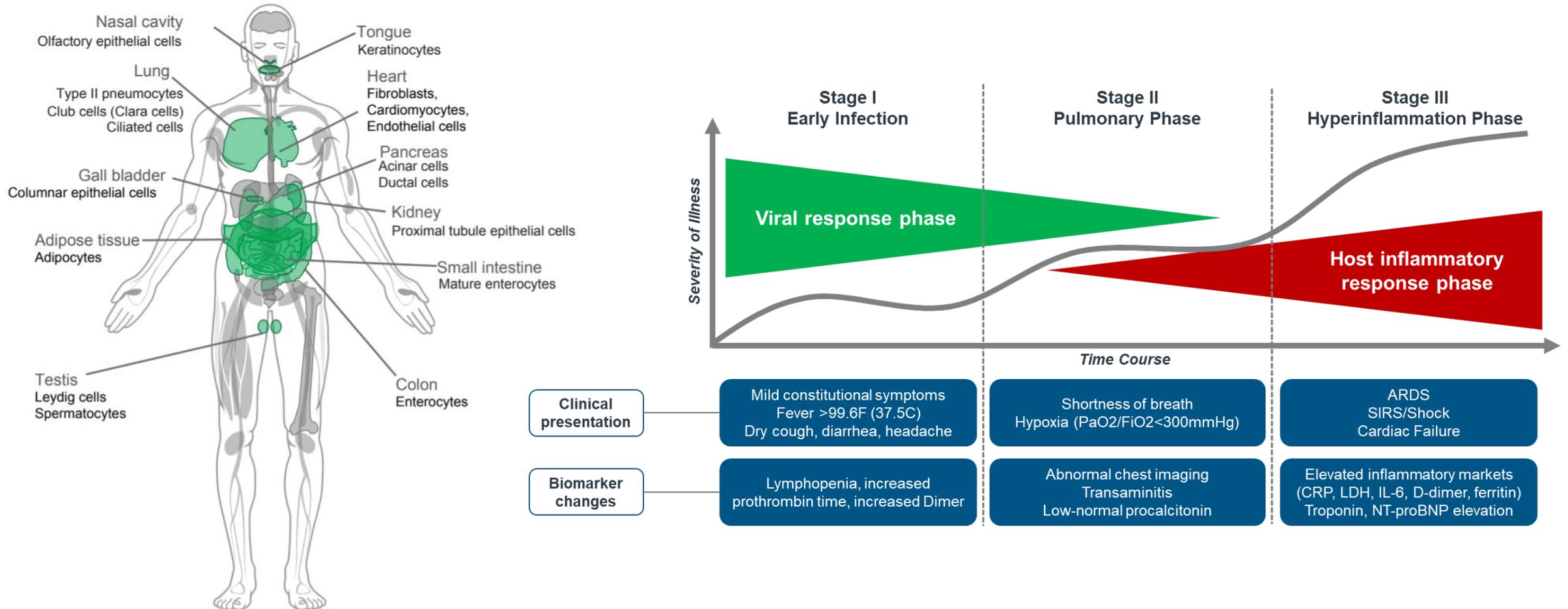


## Impact of viral mutations:

- Increased likelihood of mutations as infections increase
- Efficacy of vaccines based upon earlier versions of virus
- Accuracy of diagnostic tests
- Transmission capacity
- Severity of infection
- Potential need for booster vaccines

# COVID-19 is more than just a respiratory disease

*Diffuse distribution of ACE2 and two-phase immune response complicates clinical course including neuropsychiatric effects*



# The components of successful vaccine development

*Treatments save patients, vaccines save populations*

## Scientific components

- Correct target
- Successful and long-term generation of protective immunity

## Successful execution of studies

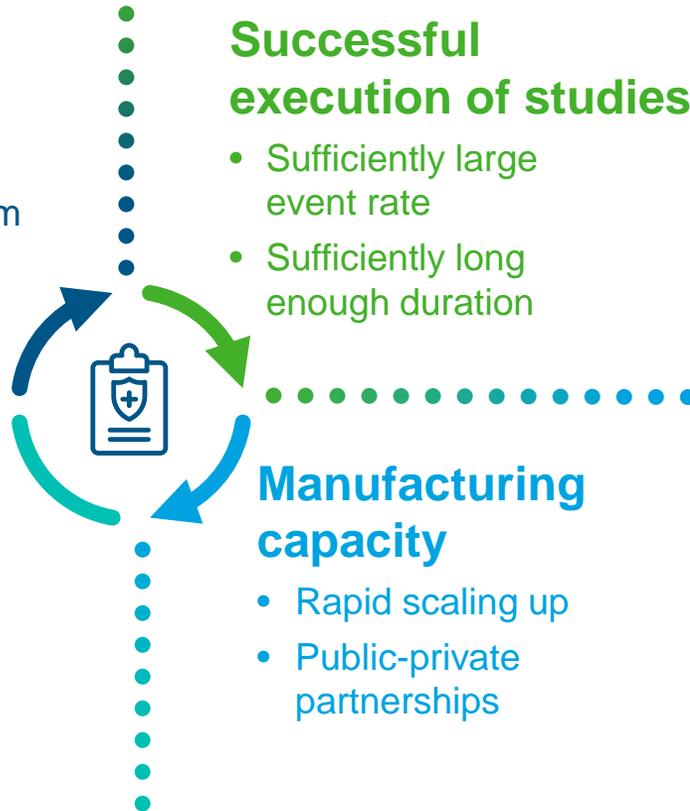
- Sufficiently large event rate
- Sufficiently long enough duration

## Distribution capability

- Prioritization and coordination
- “Last mile” efforts

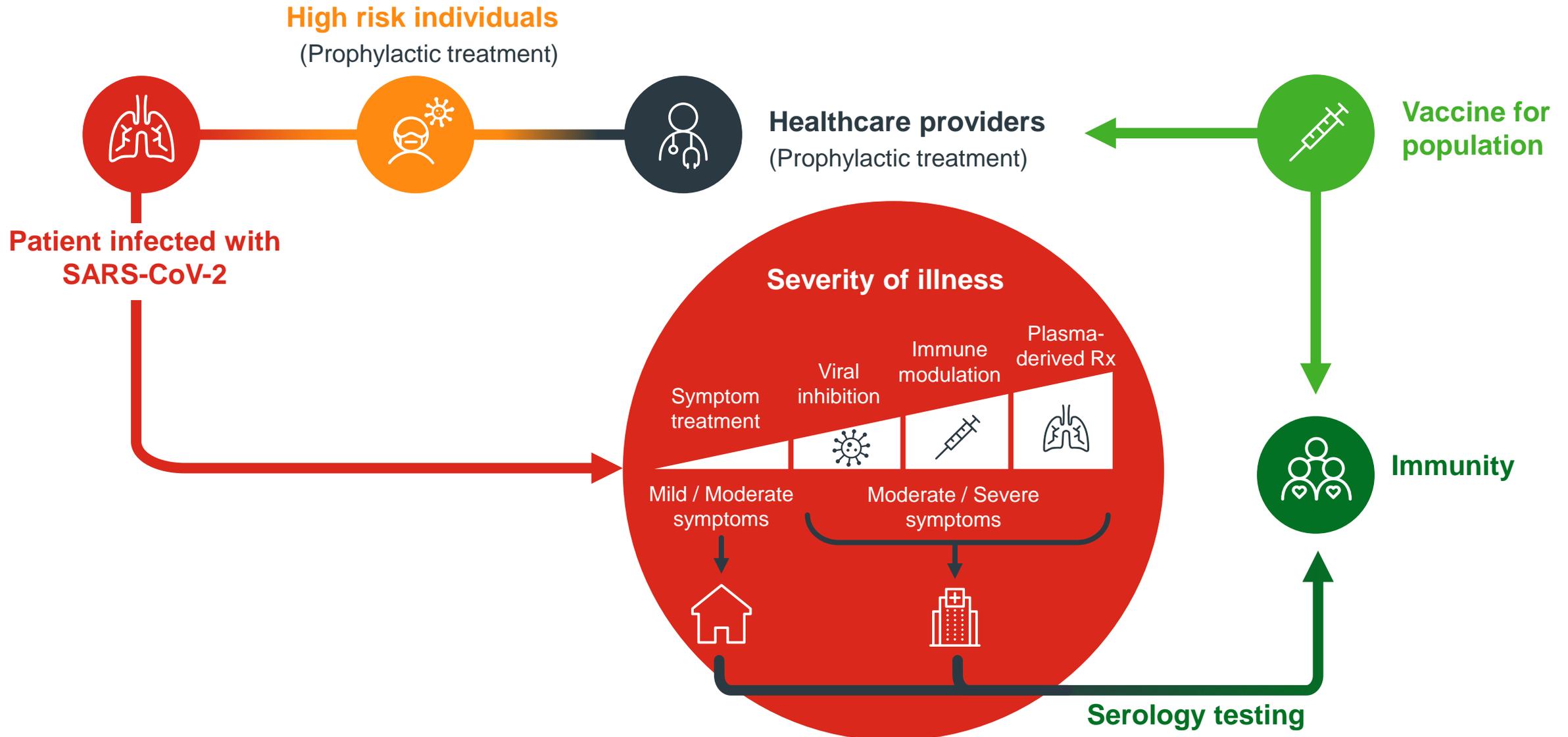
## Manufacturing capacity

- Rapid scaling up
- Public-private partnerships

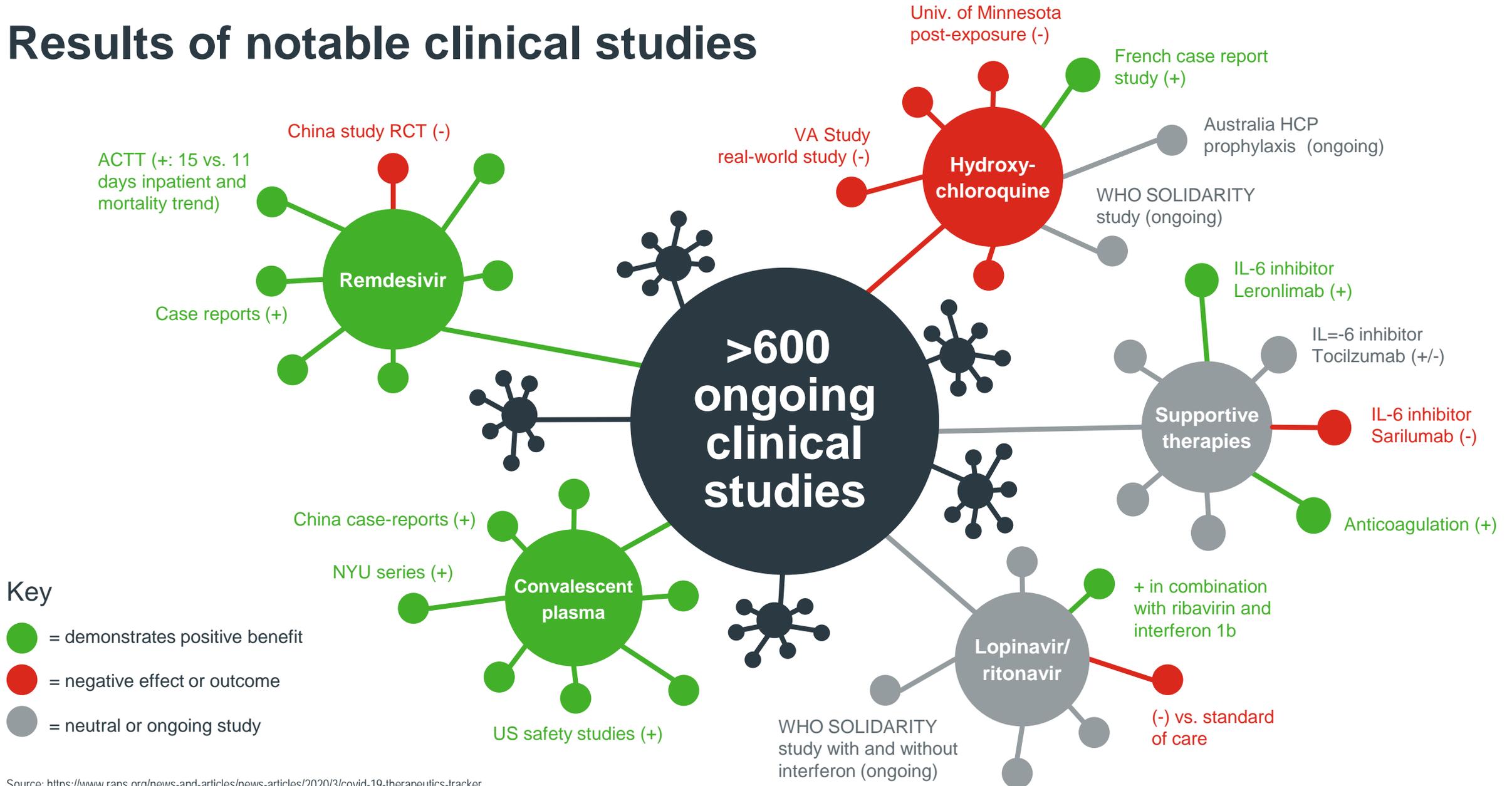


Compound	Institutions	Vaccine platform or delivery mechanism	Phase
AZD1222	Univ. Oxford & AZ	Adenovirus vaccine	2b/3
Ad5-nCoV	CanSino Biologics	Adenovirus vaccine	2
mRNA-1273	Moderna	mRNA vaccine	2
Unnamed	Beijing Institute of Biological Products & Sinopharm	Inactivated vaccine	1/2
BNT162	BioNTech & Pfizer	mRNA vaccine	1/2
NVX-CoV2373	Novavax	Protein subunit	1/2
PiCoVacc	Sinovac	Inactivated virus with adjuvant	1/2
Unnamed	Beth Israel Deaconess & Janssen	Adenovirus vaccine	

# Potential integration of therapies under development



# Results of notable clinical studies



**Key**

- = demonstrates positive benefit
- = negative effect or outcome
- = neutral or ongoing study

Source: <https://www.raps.org/news-and-articles/news-articles/2020/3/covid-19-therapeutics-tracker>  
 IQVIA Global Executive Briefing: COVID-19 June 2020; Copyright 2020 IQVIA.

# Executive Briefing: COVID-19 Update

## Section 3: Recovery in R&D

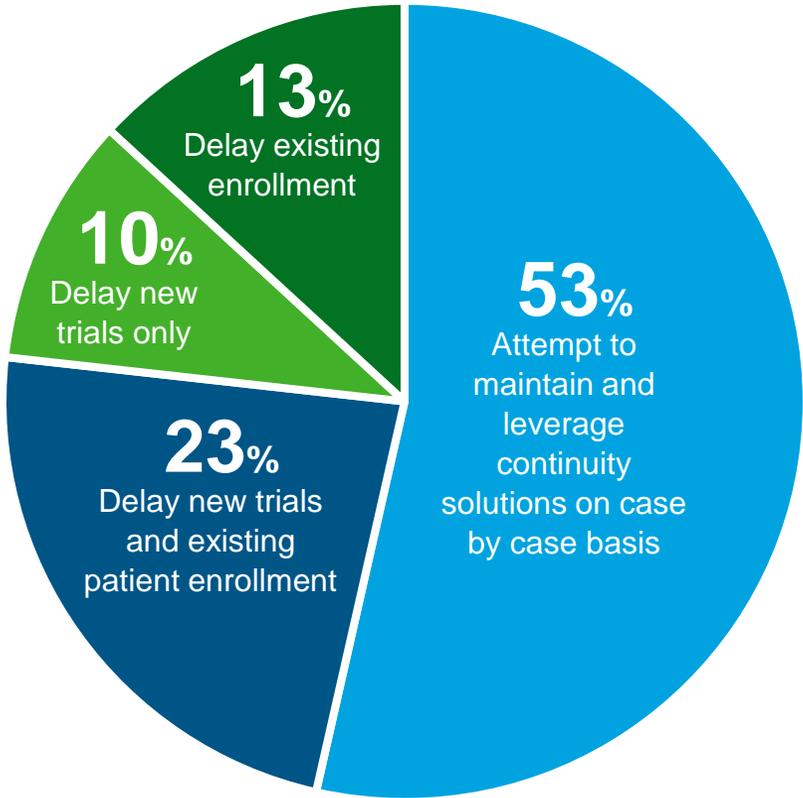
***Costa Panagos***

*President, R&D Operations, IQVIA*

June 2020

# Pharmaceutical company decisions on clinical trial continuity have largely remained stable since end of April

Clinical trial continuity among top 50 pharma (n=30 companies with public statements)



## Selected clinical trial continuity statements – April/May 2020



*“While Biogen does expect there will be some impact to timelines for some of its clinical programs, it still expects the vast majority of the 10 remaining near-term readouts to occur before the end of 2021.”*



*“Clinical trials are continuing and we are leveraging our digital tools to limit the disruption caused by the pandemic. We are seeing slowdowns in new enrollments in ongoing clinical studies and start-up with new studies. At this time we remain confident the impact on our ongoing clinical trials is manageable. Looking ahead for the remainder of the year, **we do not expect delays in our planned 2020 regulatory submissions.**”*

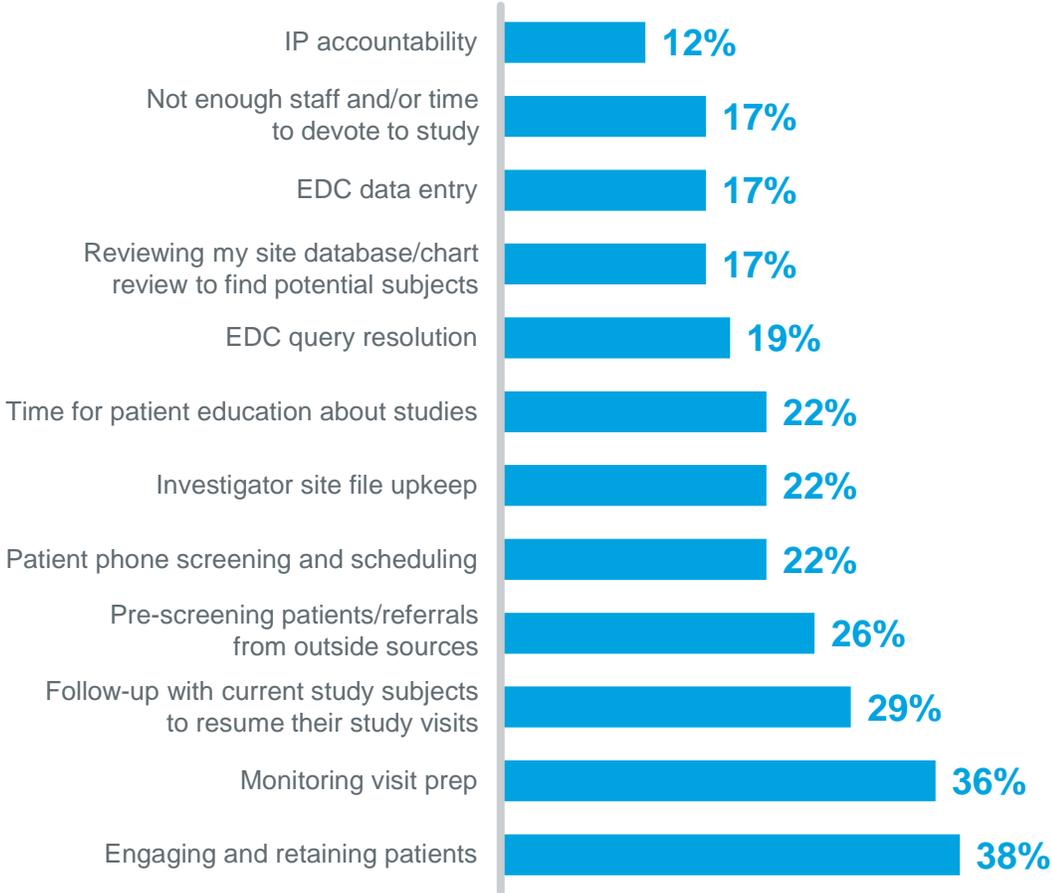


*“While some of our clinical trial sites remain paused for new patient recruitment, we endeavor to continue our clinical research programs with the wellbeing of our patients as our guiding principle. We assess the situation continuously and where it is safe for patients and in line with local regulations, we have restarted patient recruitment at some sites for most of our ongoing studies..”*

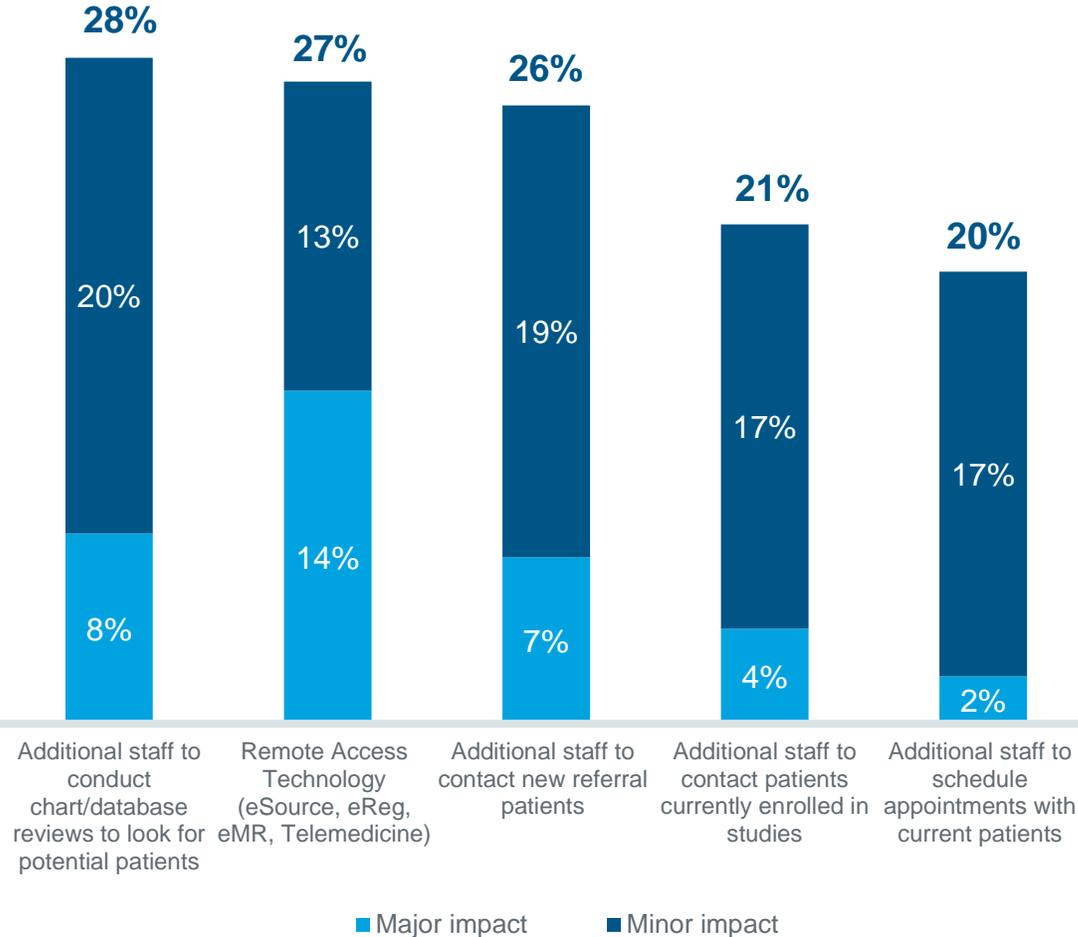
Source: IQVIA secondary research; company websites and press releases. IQVIA Global Executive Briefing: COVID-19 June 2020; Copyright 2020 IQVIA.

# The site perspective: Challenges and opportunities for support

## Key challenges during COVID-19



## What would help



Source: IQVIA US and Canada Site Survey (n=138).  
 IQVIA Global Executive Briefing: COVID-19 June 2020; Copyright 2020 IQVIA.

# COVID post-containment operational recovery framework

*Enabling exit, limiting disruption from COVID-19 at a project portfolio level*





## Managing recovery with timely, adaptable forecasting powered by machine learning



### Recovery curve forecast

Rate at which sites and patients return to pre-COVID activities



### Forecast site reopen dates

- By country and region
- By US state
- By therapeutic area



### Forecast patient activity

- Early: screening and randomization activities
- Late: post randomization



### Forecast site reopen at a study-site level



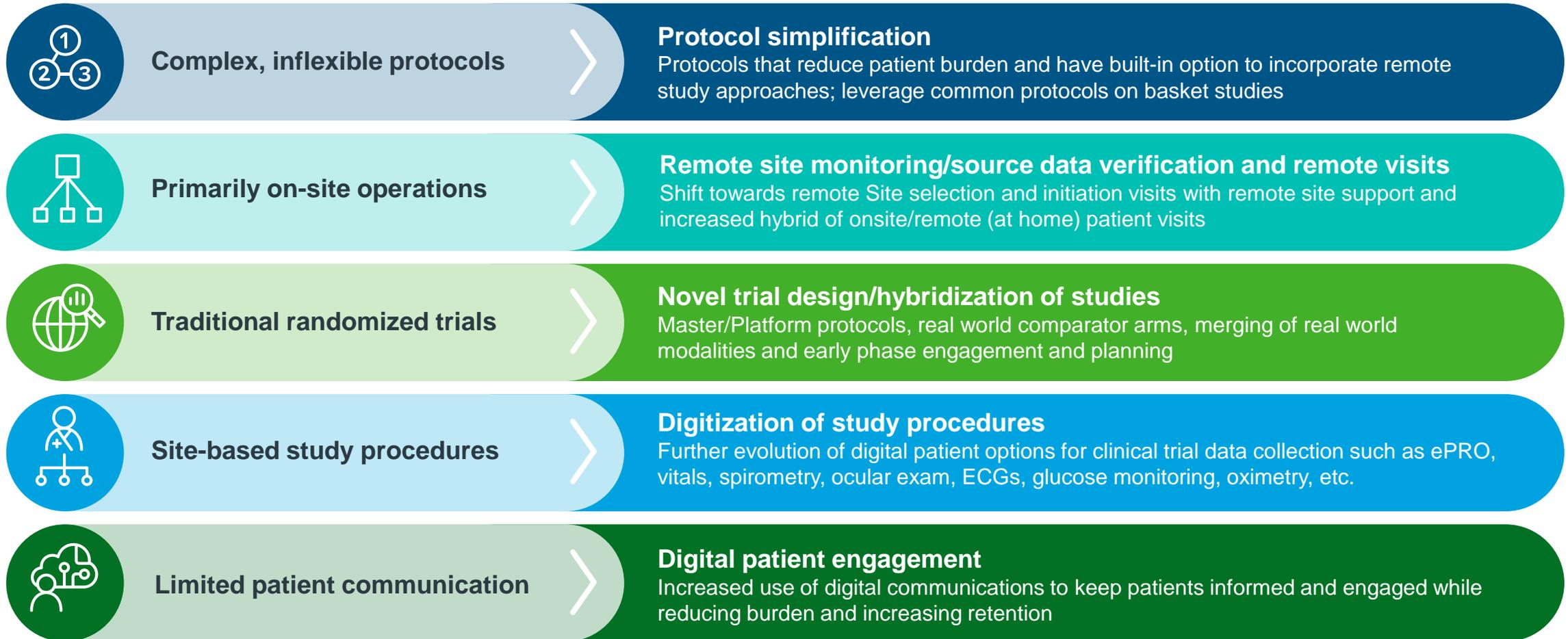
**Scenario planning simulations** on shifting peak dates (5, 10, 15 days) and government regulations scenarios (none; mild; strict)

# Accelerated innovation is paving the way for a new normal

*Achieving agility with patient-centric design and the right technological infrastructure*

Pre-COVID

Post-COVID



# Executive Briefing: COVID-19 Update

## Section 4: COVID-19: A catalyst for change

***Marla Kessler***

*SVP, Strategy, Marketing, and Communications, IQVIA*

***Alistair Grenfell***

*President, Europe, Middle East, Africa and South Asia, IQVIA*

***Murray Aitken***

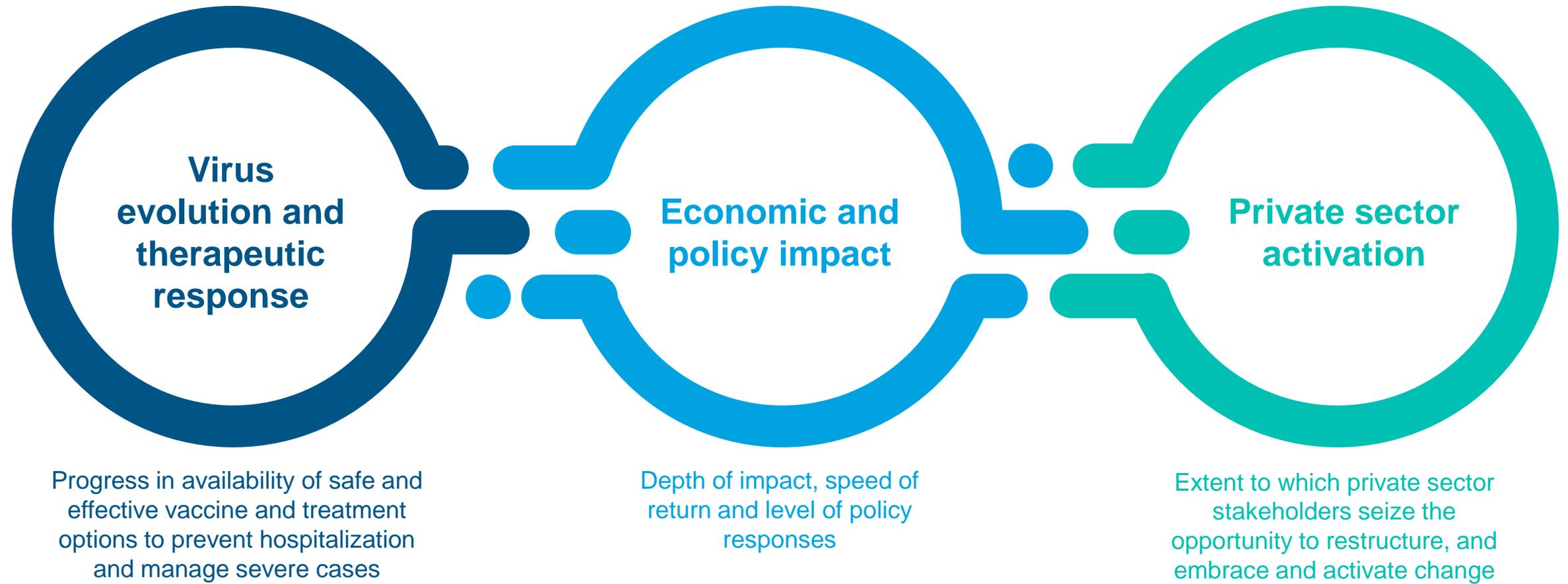
*SVP, IQVIA*

*Executive Director, IQVIA Institute for Human Data Science*

June 2020

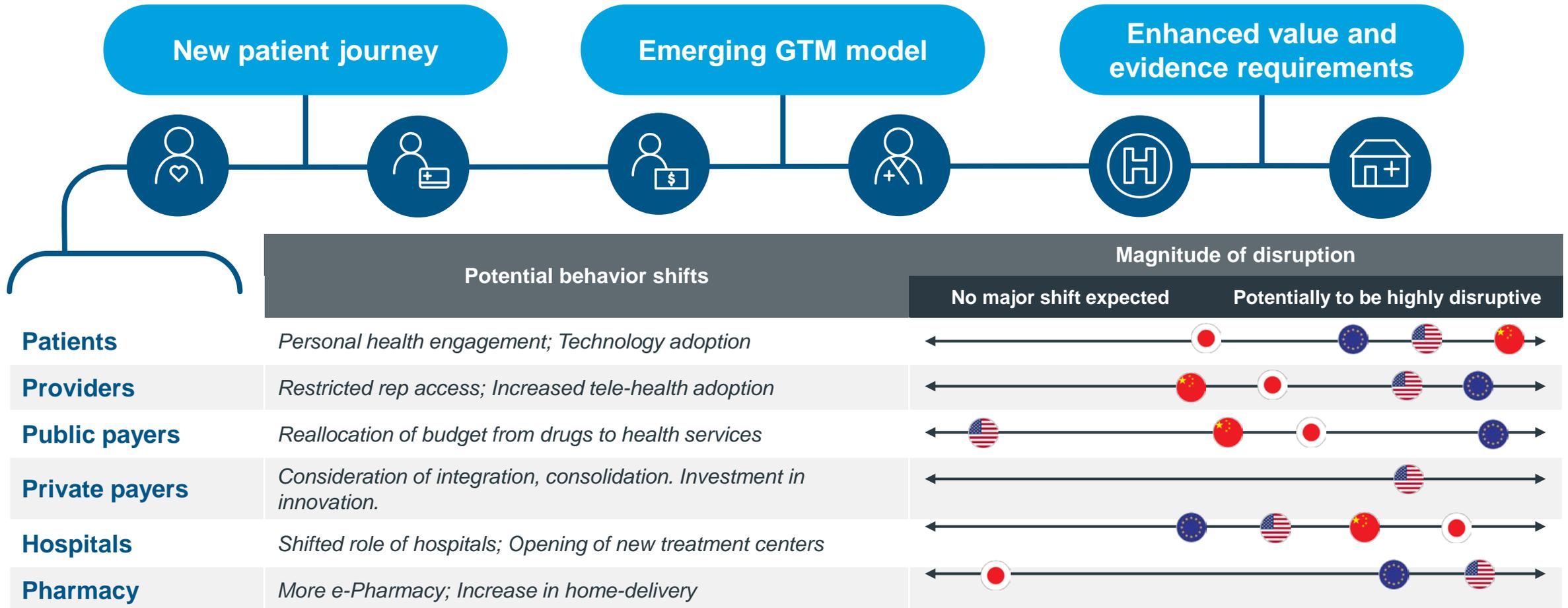
# Looking to 2021

*Driving forces that could shape the healthcare landscape*



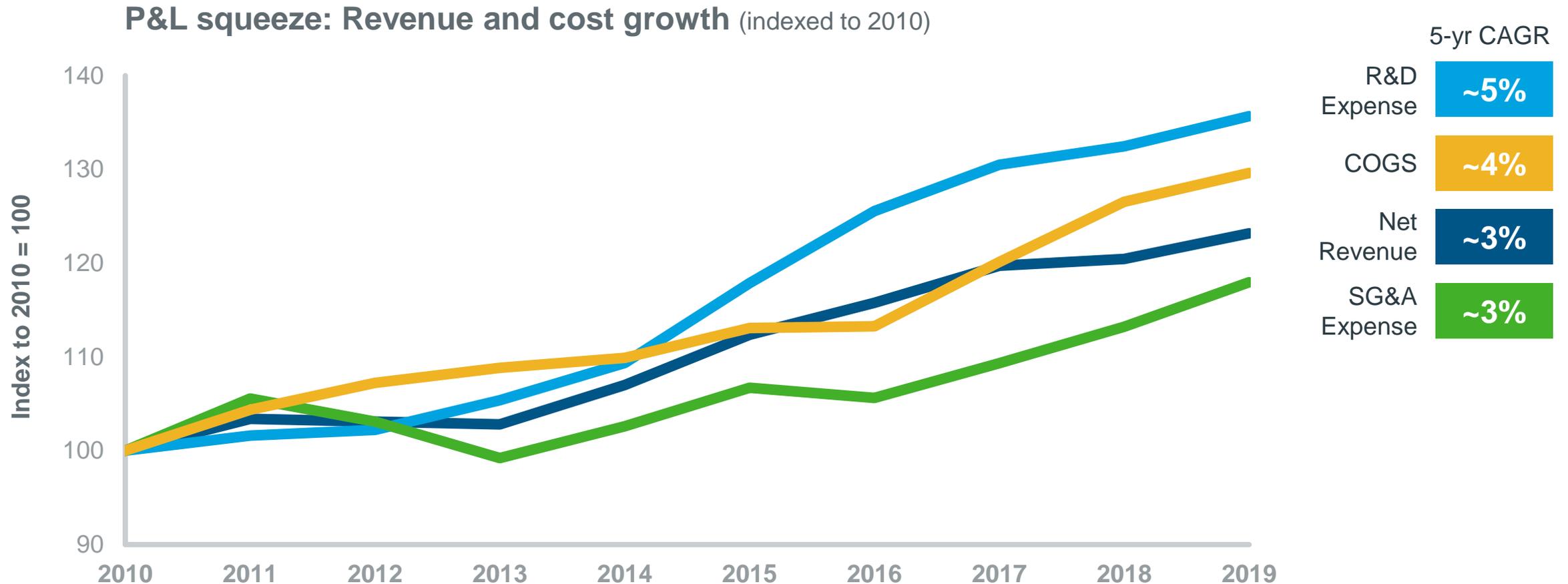
# Behavior shifts

Driving forces shift behaviors



# Business model under pressure

*Pre-COVID costs growing faster than net revenue, eroding returns*



Aggregated industry P&L, top 25 Pharma companies,  
Source: Company Financial Report ; IQVIA Thought Leadership analysis 2020  
IQVIA Global Executive Briefing: COVID-19 June 2020; Copyright 2020 IQVIA.

# Implications for life sciences

*New capabilities to adapt across the value chain*

	TODAY	FUTURE
 <b>R&amp;D / Portfolio Strategy</b>	<ul style="list-style-type: none"> <li>• Focus on oncology and specialty</li> <li>• On-site complex protocol studies</li> </ul>	<ul style="list-style-type: none"> <li>✓ Refocus portfolio strategy on <b>high-unmet need areas</b></li> <li>✓ Innovative use of <b>RW evidence</b></li> <li>✓ <b>Tech-enabled execution</b></li> </ul>
 <b>Safety</b>	<ul style="list-style-type: none"> <li>• Traditional PV requirements</li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Long-term</b> follow-up COVID-19 patients</li> <li>✓ Evidence on <b>COVID-19 impact</b></li> </ul>
 <b>Supply and Manufacturing</b>	<ul style="list-style-type: none"> <li>• Dependent on foreign API</li> <li>• Consistent and frequent distribution / wholesale</li> </ul>	<ul style="list-style-type: none"> <li>✓ Consider <b>domestic / collaborative manufacturing</b> to prevent any supply issues or policy changes</li> </ul>
 <b>Pricing and Market Access</b>	<ul style="list-style-type: none"> <li>• Price benchmarks</li> <li>• External technology review</li> </ul>	<ul style="list-style-type: none"> <li>✓ Plan for <b>new evidence requirements</b></li> <li>✓ Accelerated <b>focus on value demonstration</b></li> </ul>
 <b>Patient Support and Engagement</b>	<ul style="list-style-type: none"> <li>• Disease state and treatment education focus</li> <li>• On-site specialist referrals</li> <li>• Hospital driven treatment and care</li> </ul>	<ul style="list-style-type: none"> <li>✓ Enhance <b>support for patients within</b> new care sites</li> <li>✓ <b>Strengthen pathways</b> and guidelines to empower patients in care seeking behaviors</li> <li>✓ <b>Remote monitoring</b> and <b>tele-health continuation</b></li> </ul>
 <b>GTM Model</b>	<ul style="list-style-type: none"> <li>• Share of voice based customer engagement</li> <li>• Coverage and frequency models (F2F focus)</li> <li>• Key account management</li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Local precision</b> and coordination</li> <li>✓ Call-center based <b>remote engagement</b></li> <li>✓ <b>Scientific / clinically</b> focused field-team</li> </ul>

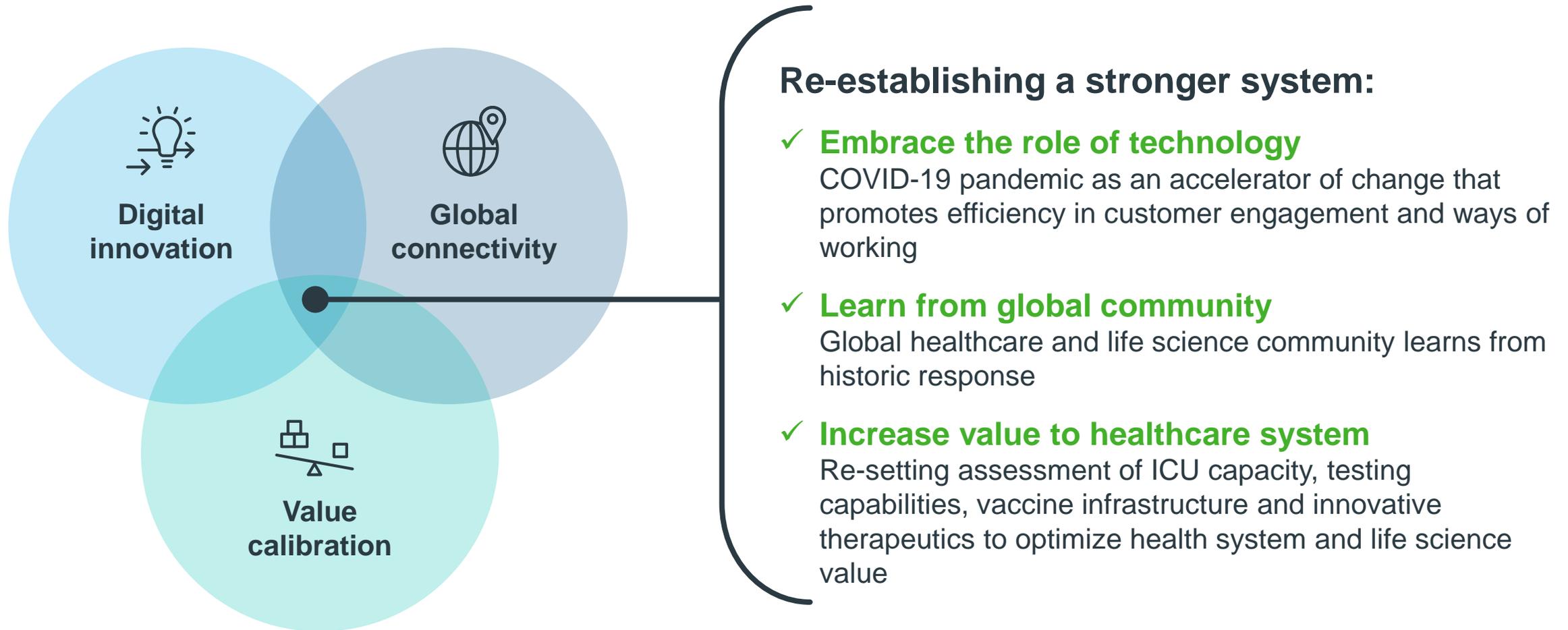
# Profitability impacts

*Operating margin at some risk (2021-2022)*

	Large pharma baseline* 2019 actual	Impacts	Rationale
Net sales	100%	▼	Disruption in demand from April to June, offset by forwarding buying in March, and return in July-Dec at 95% of 2019 level
COGS	28%	▲	Slight increase due to shifting some production to more expensive locations
SG&A	27%	▼	Initial investment in virtual technology off-set by more significant rebalance of field force investment
R&D	19%	=	Maintain program at same absolute level
Operating margin	25%	?	Management priorities and actions to maintain operating margin

# Building a more resilient ecosystem

*Transitioning to the future with a stronger healthcare system*





# Thank you

For more information, please visit  
[IQVIA.com/COVID19](https://www.iqvia.com/COVID19)

Or contact us at  
[insights@iqvia.com](mailto:insights@iqvia.com)



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