



COVID-19 Global Executive Briefing

Driving Business Continuity

April 20, 2020



Agenda

- + **Spread of COVID-19**
- + **Perspective on COVID-19 treatment paradigm**
- + **Business impact and continuity for R&D**
- + **Business impact and continuity for Rx Demand**
- + **Business impact and continuity for Launch**
- + **Looking forward**

COVID-19 Briefing Speakers



Murray Aitken

*Senior Vice President, IQVIA and
Executive Director, IQVIA Institute
for Human Data Science*

Murray.Aitken@iqviainstitute.org



Jeffrey Spaeder, M.D.

*Chief Medical and
Scientific Officer*

Jeffrey.Spaeder@iqvia.com



Richard Staub

*President, Research and
Development*

Richard.Staub@iqvia.com



Jon Resnick

*President, United States
and Canada*

Jon.Resnick@iqvia.com



Alistair Grenfell

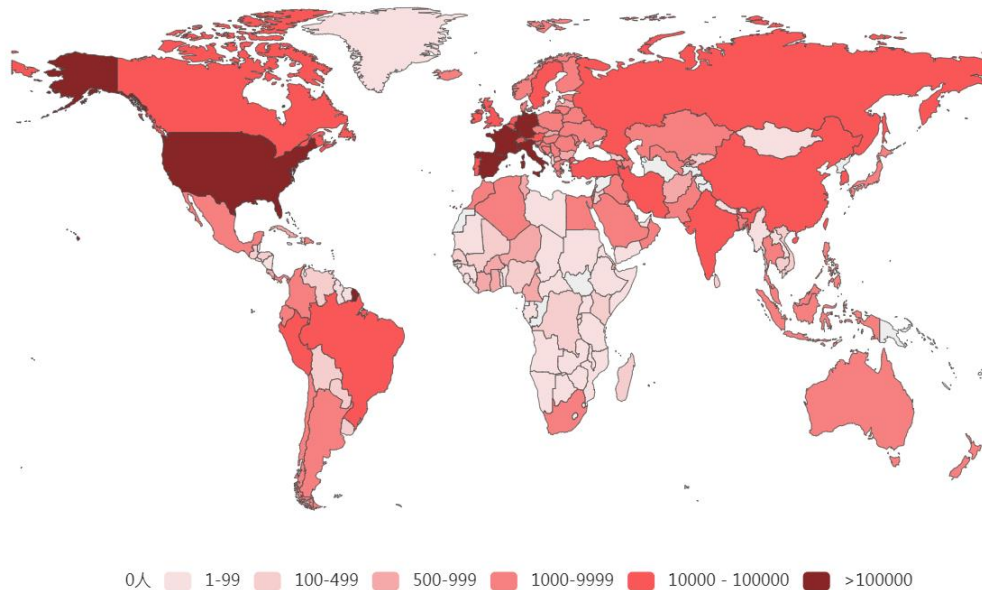
*President, Europe, Middle
East, Africa and South Asia*

Alistair.Grenfell@iqvia.com

Rapid expansion

COVID-19 spread rapidly to more than 200 countries with varying national impact

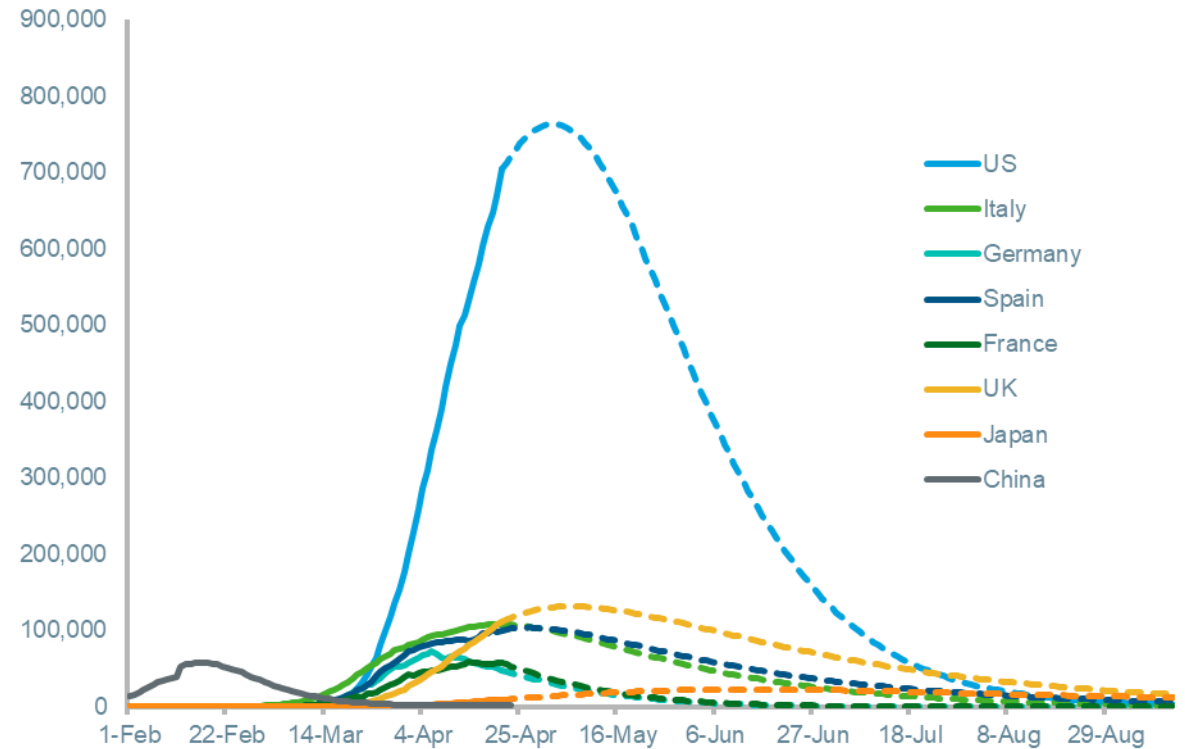
Cases are expanding rapidly worldwide



As of April 21, 2,402,250 confirmed cases, 163,097 deaths, 213 countries, areas or territories with cases

Source: JHU, CSSE, <https://systems.jhu.edu/research/public-health/ncov/>, as of April 17, 2020.
Source: WHO, <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>, as of April 16, 2020.
Source: IQVIA Institute for Human Data Science, AI Dynamic SEIR Model simulates the number of active COVID-19 cases, April 17.
IQVIA COVID-19 Executive Briefing. © IQVIA 2020. All rights reserved.

Number of active cases globally (Feb – Future)

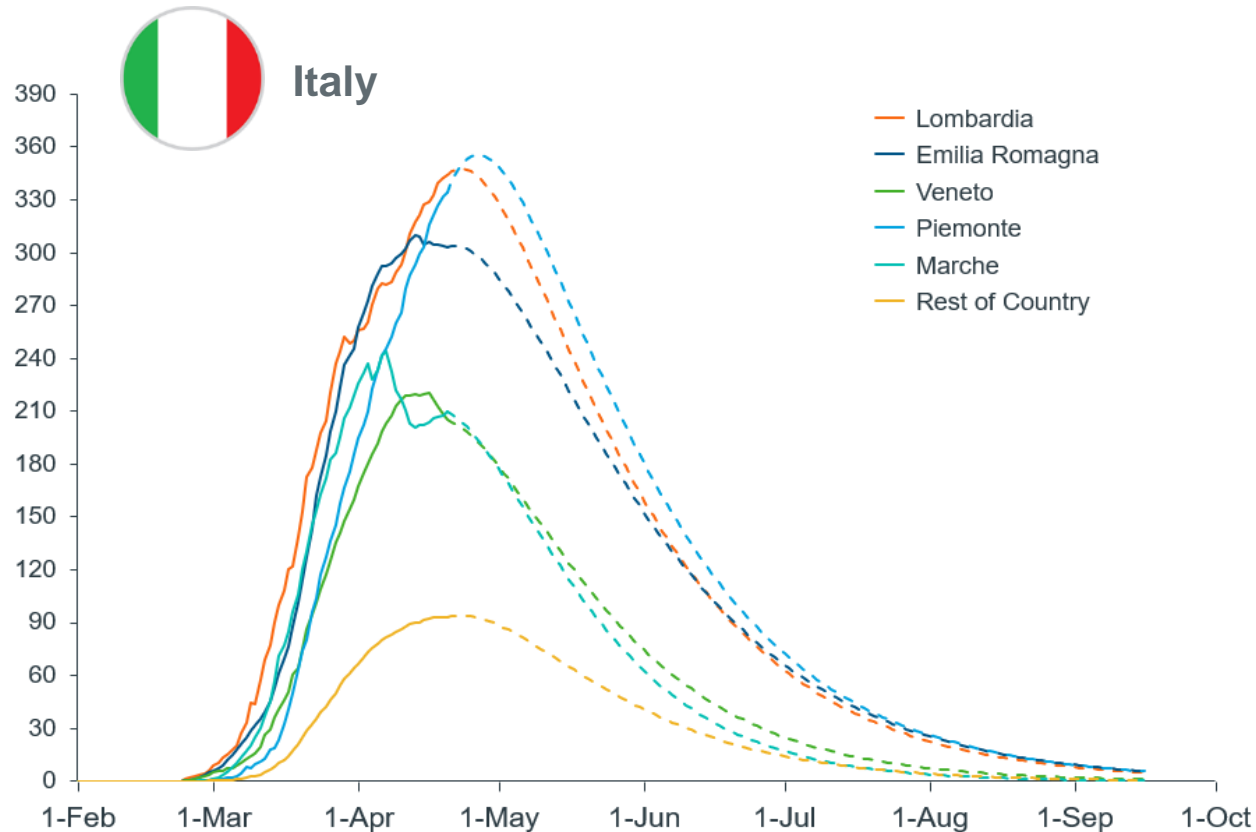


**Assumes continuation of current mitigation strategy.
Interpret with caution.**

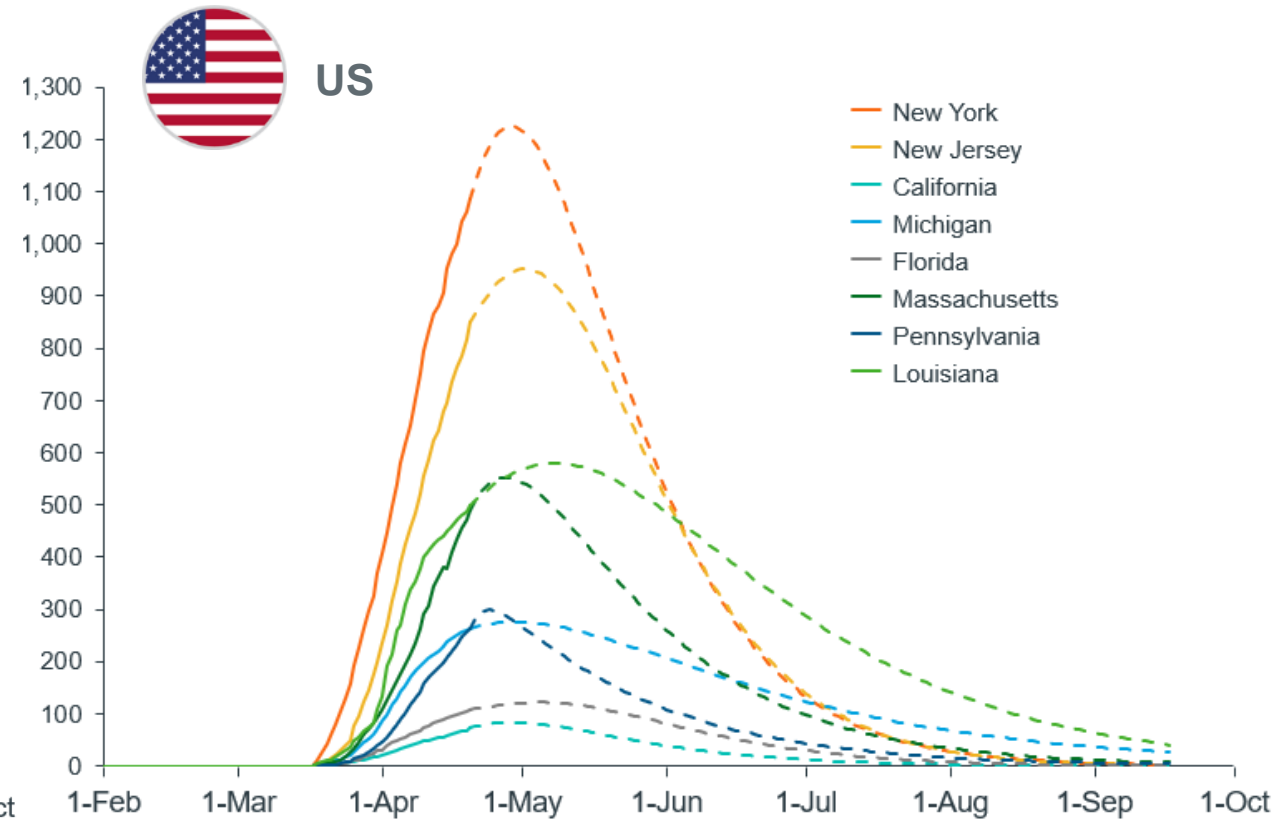
Local variation

Simulations highlight the need to understand local variability

Number of predicted active* COVID-19 Cases per 100k population



**Assumes continuation of current mitigation strategy.
Interpret with caution.**



**Assumes continuation of current mitigation strategy.
Interpret with caution.**

*Active cases are those confirmed diagnosed cases, excluded those that have recovered or died.
Source: IQVIA Institute for Human Data Science, AI Dynamic SEIR Model illustrates a simulation of the number of active COVID-19 cases, April 17.
IQVIA COVID-19 Executive Briefing. © IQVIA 2020. All rights reserved.

China re-emerges using technology

Indicators show a return of activity, although still isolated

Manufacturing



- **>90%** manufacturing reopened outside Hubei, **49.3%** in Hubei
- Pharmaceutical, chemical and electronics industries have recovered to **~70%** of original capacity
- Government has taken actions to stimulate the economy, including low interest loan, tax subsidy and deferral

Commerce



- Service sector has recovered to **67%** of level seen in 2019 Q4 nationwide, **~30%** in Wuhan
- **90%** of supermarkets, retail stores, restaurants and hotels have re-opened nationwide

Transportation



- Nearly **100%** of cross-state highways reopened and **80%** local traffic resumed nationwide
- Other than Wuhan, **Hubei unblocked all communities** on Mar 18th

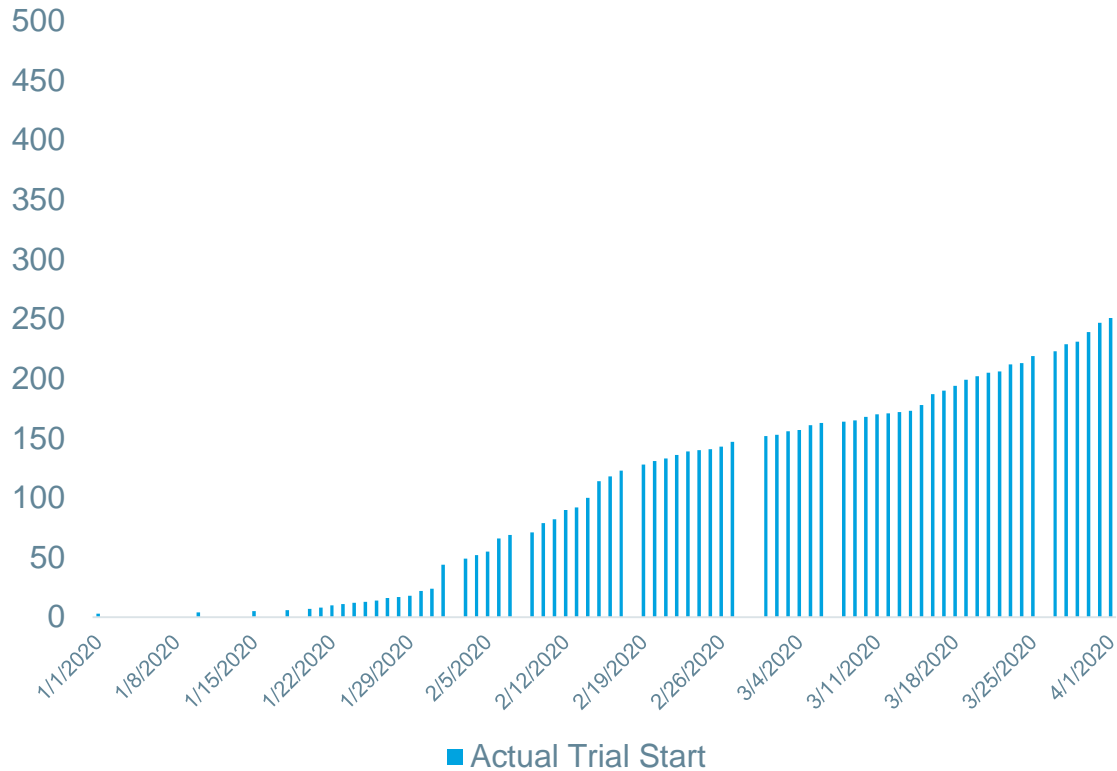


Re-opening enabled by significant lockdown measures and aggressive digital tracking and tracing

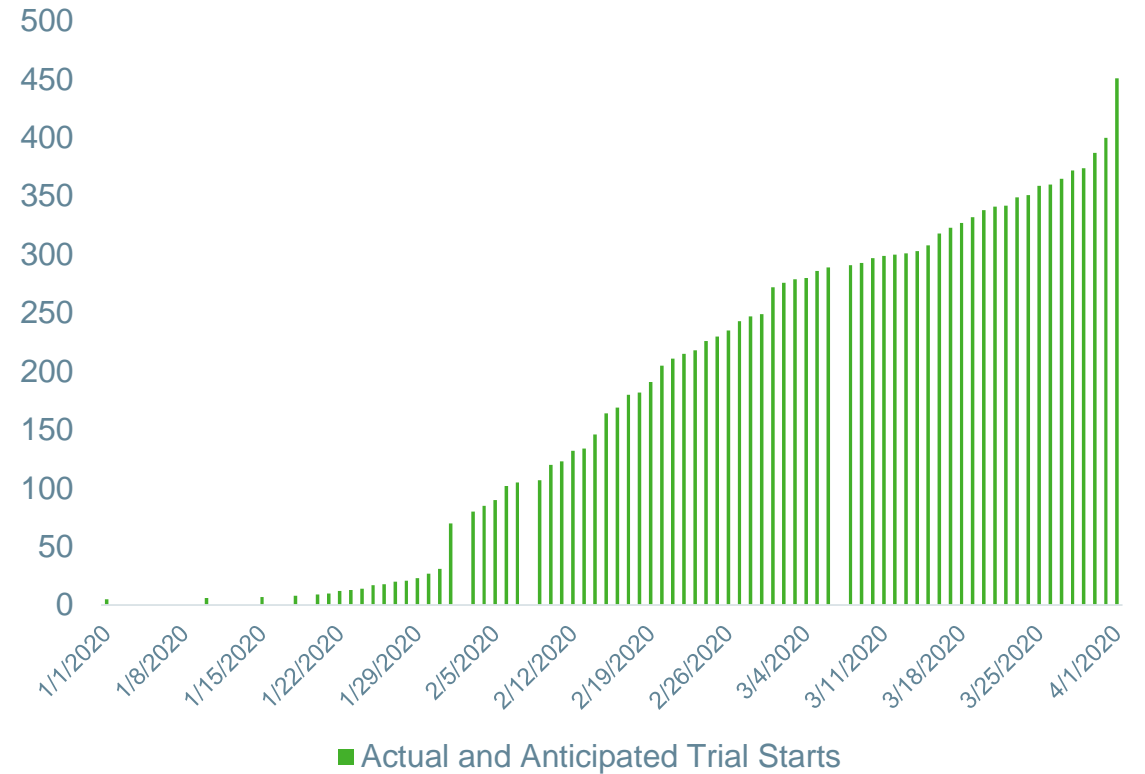
COVID-19 trial progress to date

Significant increase in actual and planned starts since January

Cumulative - Actual Trial Starts, January 1 – April 1, 2020



Cumulative - Actual and Anticipated Trial Starts, January 1 – April 1, 2020



Source: Trialtrove Pharma Intelligence. April 8, 2020; IQVIA Institute. April 14, 2020

Notes: Clinical trials Phase I through IV. Includes interventional trials. Terminated trials were removed. Includes both academic, government, and industry sponsored trials
IQVIA COVID-19 Executive Briefing. © IQVIA 2020. All rights reserved.

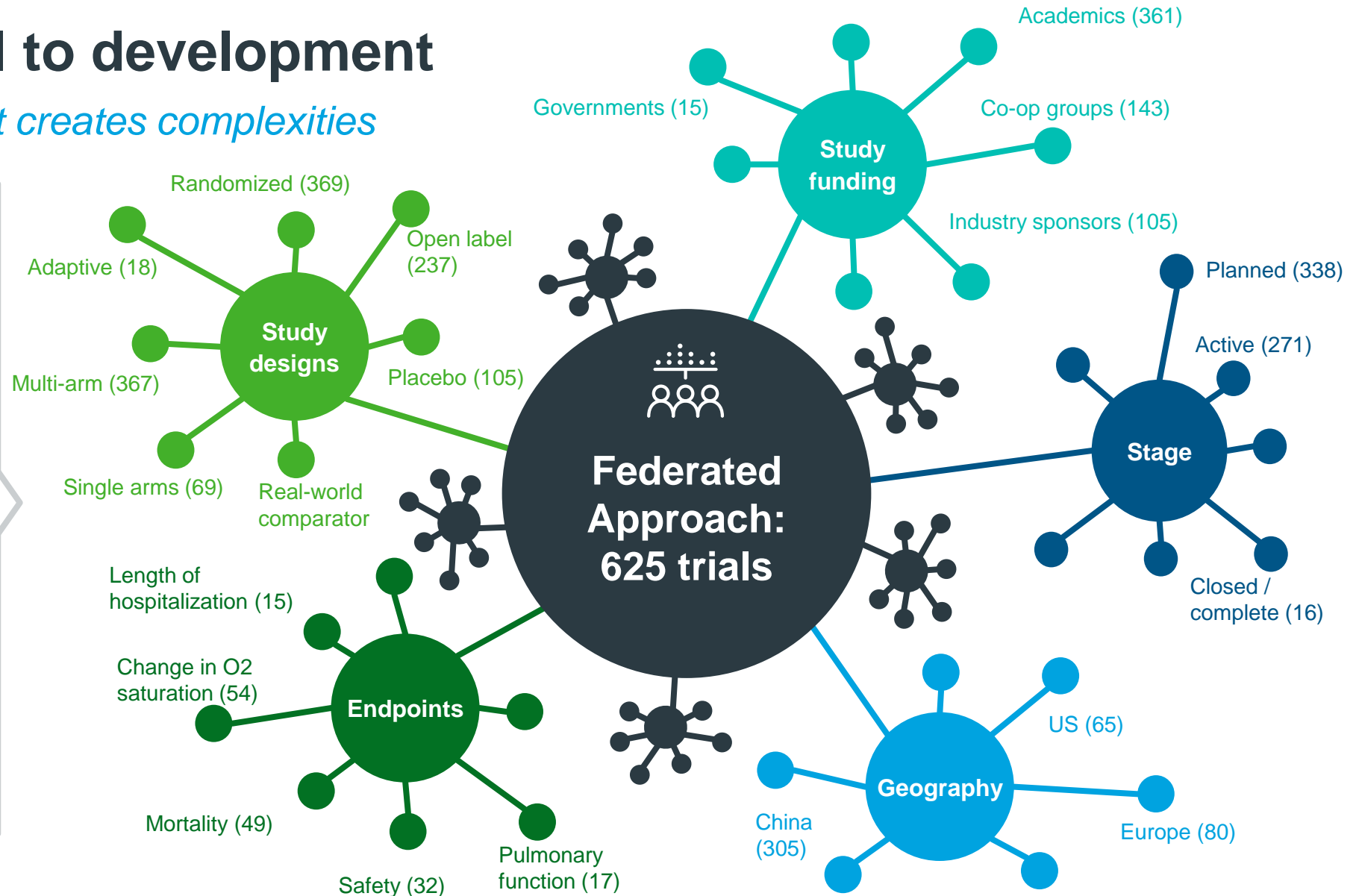
Federated model to development

Accelerates timing, albeit creates complexities



It normally takes a decade, sometimes even more, to develop a vaccine but obviously we are in an unprecedented situation, the need is incredibly urgent. We are partnering with regulators to try and go as fast as we safely can."

Emma Walmsley
CEO GSK

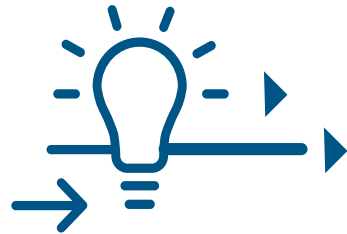


Source: AdisInsight; Trialrove Pharma Intelligence. April 8, 2020; IQVIA Institute. April 14, 2020.

Notes: Drugs were counted within programs; Repurposed investigational medicines includes one registrational product. Clinical trials Phase I through IV. Includes interventional trials. Terminated trials were removed. Includes both academic, government, and industry sponsored trials. IQVIA COVID-19 Executive Briefing. © IQVIA 2020. All rights reserved.

Known targets accelerate R&D

Diverse set of therapies being investigated to treat COVID-19



Starting with what we know

Targets for clinical research based upon:

1. Experience from SARS outbreak
2. Scientific insights specific to coronaviruses since SARS outbreak
3. Downstream inflammatory pathways



Categorization of treatments being pursued:

Prevention of infection

- Vaccines
- Post-exposure prophylactic therapy for individuals at high risk



Viral inhibition

- Anti-viral therapies
- Plasma-derived therapy

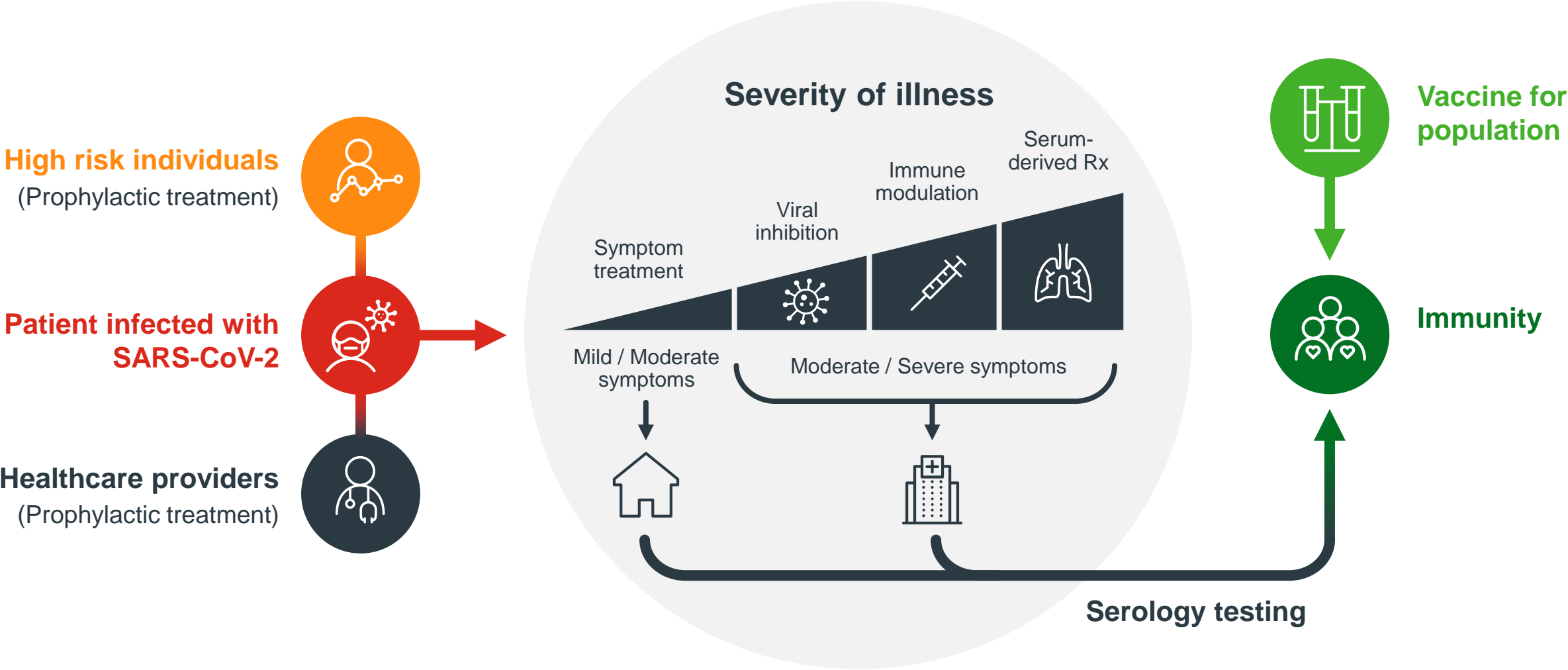


Immune modulation

- Mitigation of over-expressive immune response

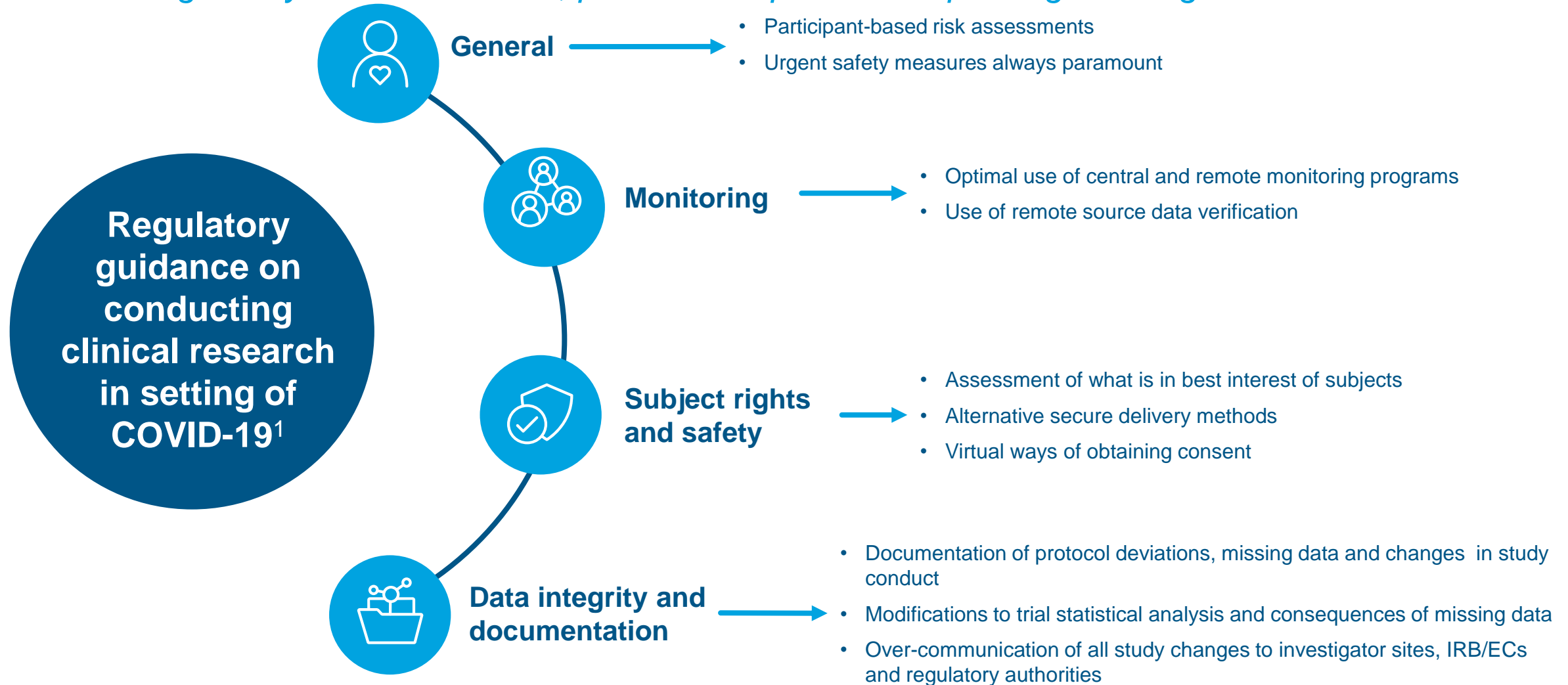
Treatment options fit together

Multiple therapies under development offer valuable alternatives



Regulatory response

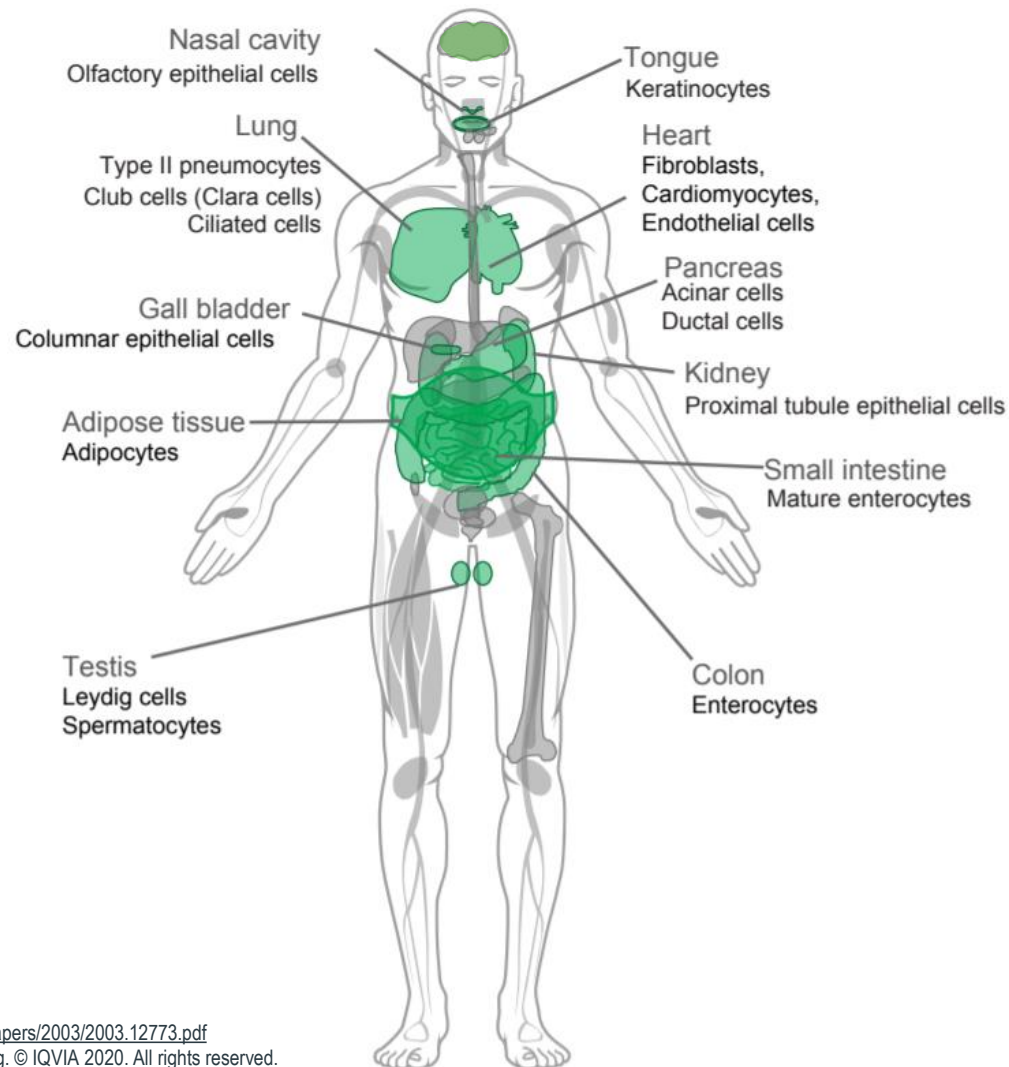
Near term regulatory accommodation, potential for permanent paradigm change



¹The MHRA, FDA, EMA, and PMDA have provided consistent guidelines. IQVIA's guidelines were created in alignment with the principles included in the regulatory guidance. IQVIA COVID-19 Executive Briefing. © IQVIA 2020. All rights reserved.

Post COVID-19 clinical needs

Sequelae may create additional, serious medical conditions

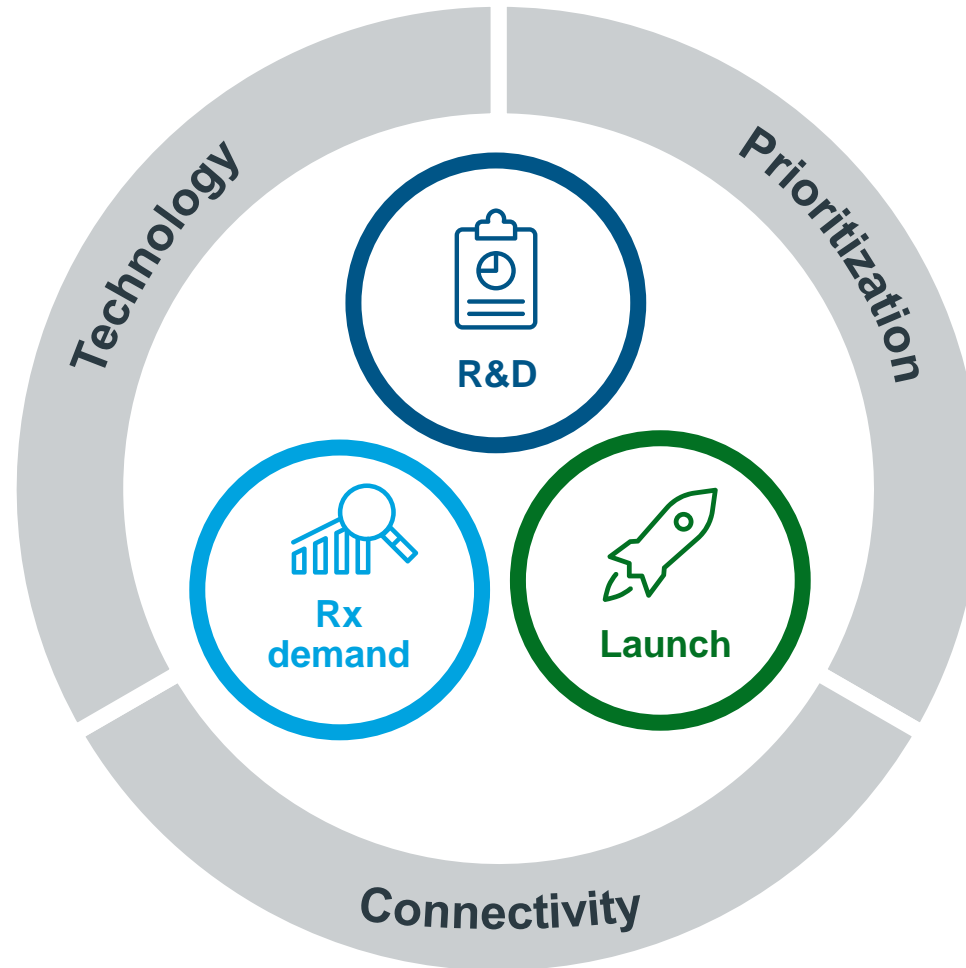


Potential long-term complications of COVID-19 infection may include:

- Heart failure
- Pulmonary fibrosis
- Renal insufficiency
- Exocrine insufficiency
- Neuropsychiatric impact

Broad business impact

Business continuity planning depends on depth and length of disruption

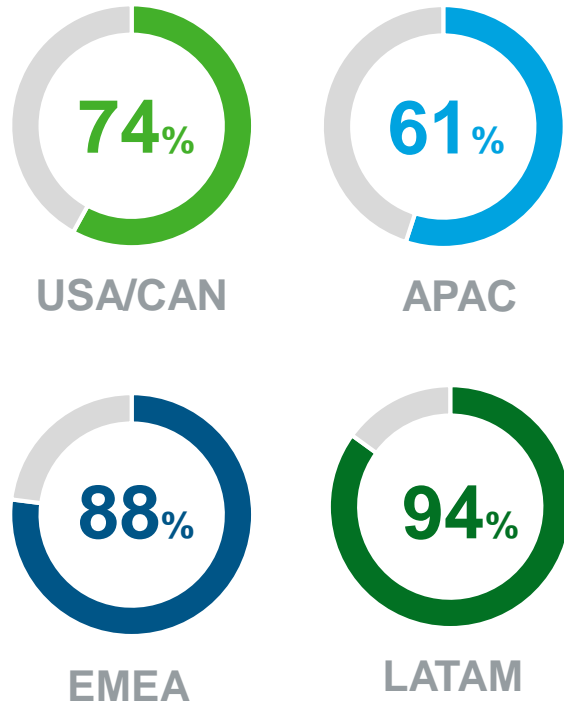




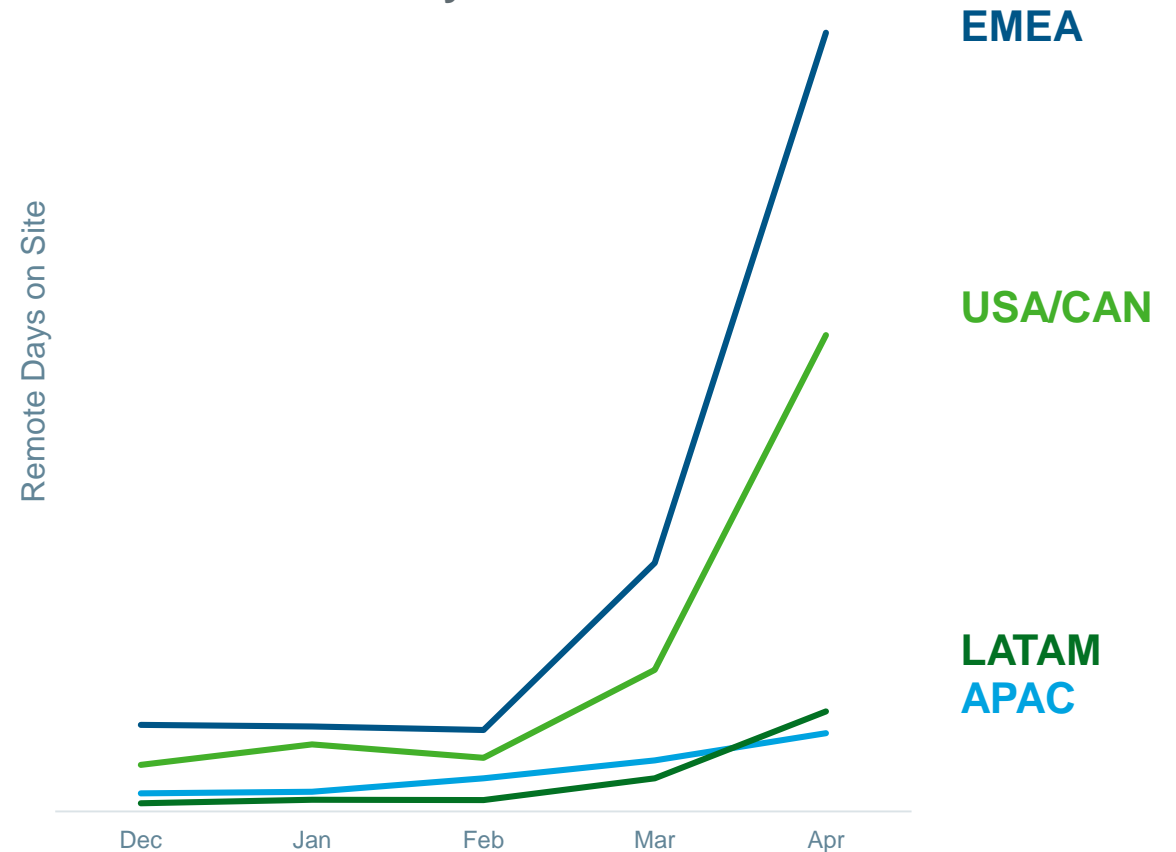
Quick response to R&D site disruption

Agility is possible with technology infrastructure

% of sites with no CRA visits permitted



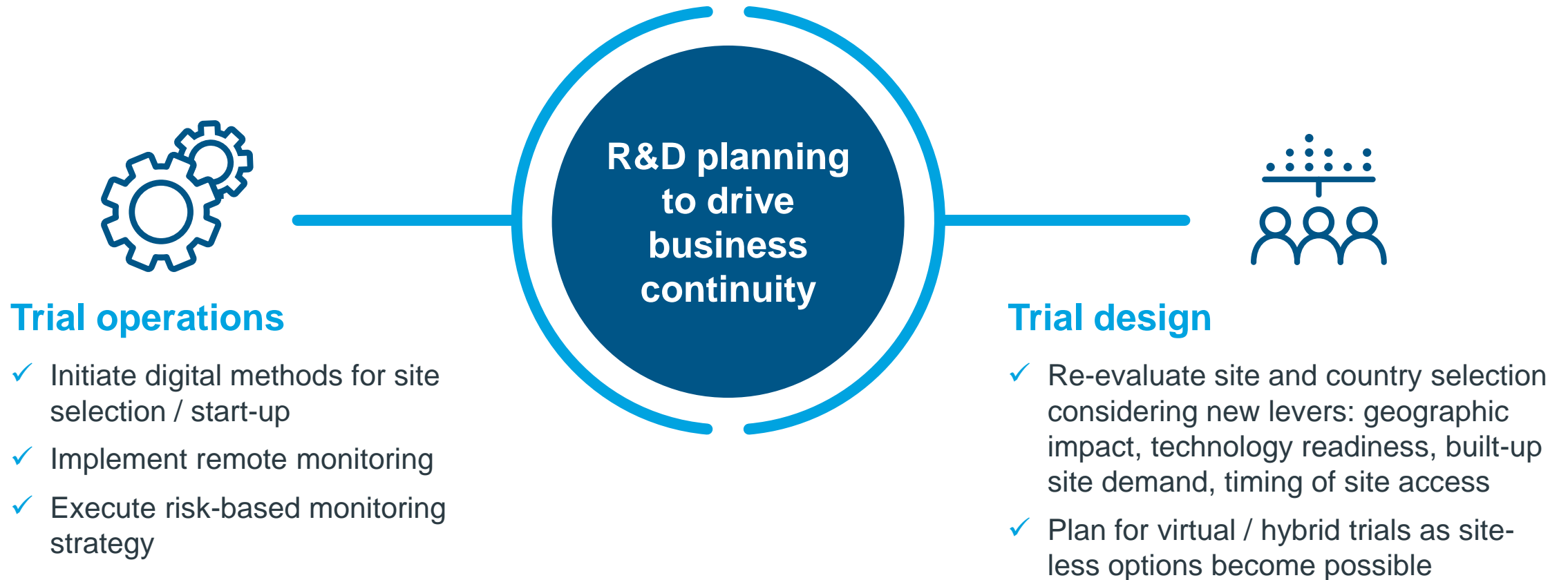
Virtual Days on Site





R&D planning adaptation

Virtualization of R&D processes to manage integrity of ongoing trials





Maintaining R&D momentum

Adjusting approach for start up activities



120%
increase

Challenge

Maintain site selection momentum during COVID-19 pandemic outbreak

Response

- ✓ Proactively leverage existing solutions – ~700 sites to be telephonically selected
- ✓ Remote site training implemented for immediate enrollment as restrictions lift

Results

After 5 weeks, team is ahead of schedule by 44 sites



Rapid response

Patients first approach enabled rapid response to ensure study continuity

Challenge

- Highly complex and challenging study with many assessments that needed to be conducted at a physical site
- Due to COVID-19, patients cannot travel to sites and sites cannot perform all assessments

Response

- ✓ **Protocol simplification** – Reassessed the protocol and removed study activities that were not critical
- ✓ **Patient diaries** – Moved to electronic patient reported outcomes (eCOA) for electronic diary entries
- ✓ **Drug delivery and lab assessments** – Implemented drug delivery and home-health services for at-home administration and lab draws
- ✓ **Remote visits** – Pushed to telehealth visits to ensure continuity of contact between site and patient

Results

Rapid response ensured study continuity

2

office-based patient assessments removed

1

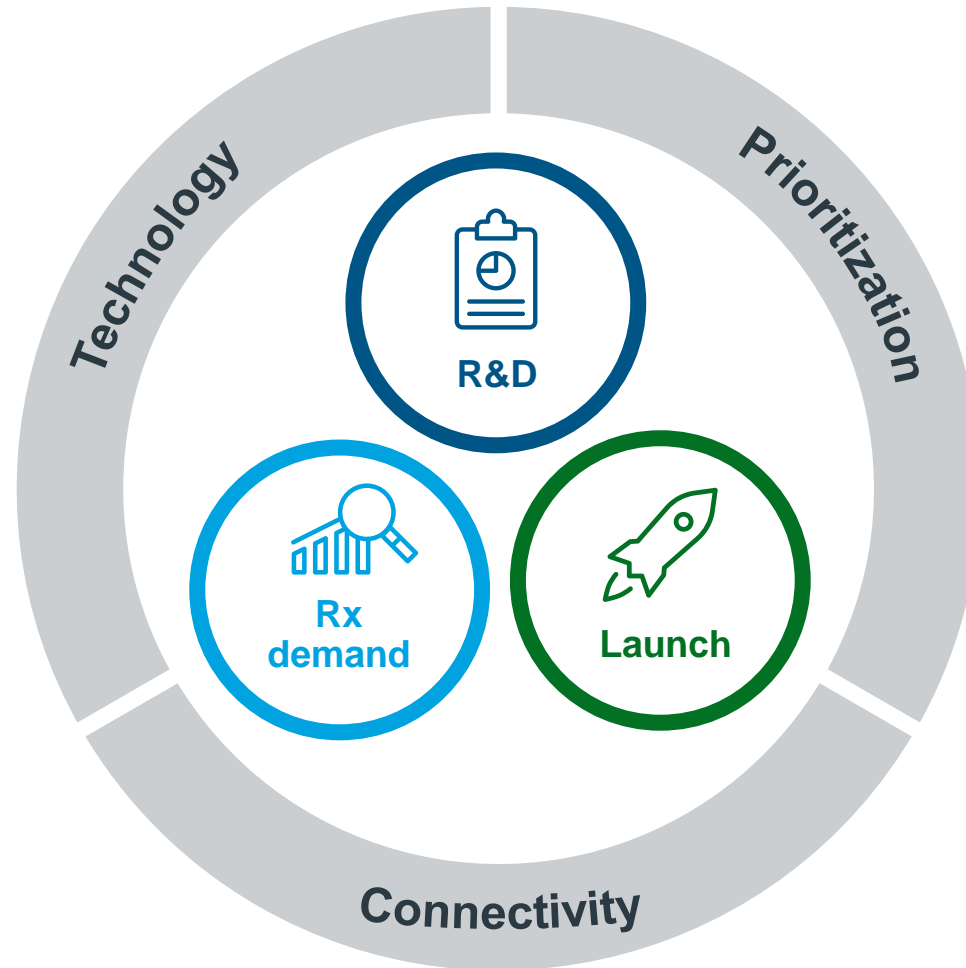
week to convert to electronic diaries

47

home visits completed

Broad business impact

Business continuity planning depends on depth and length of disruption

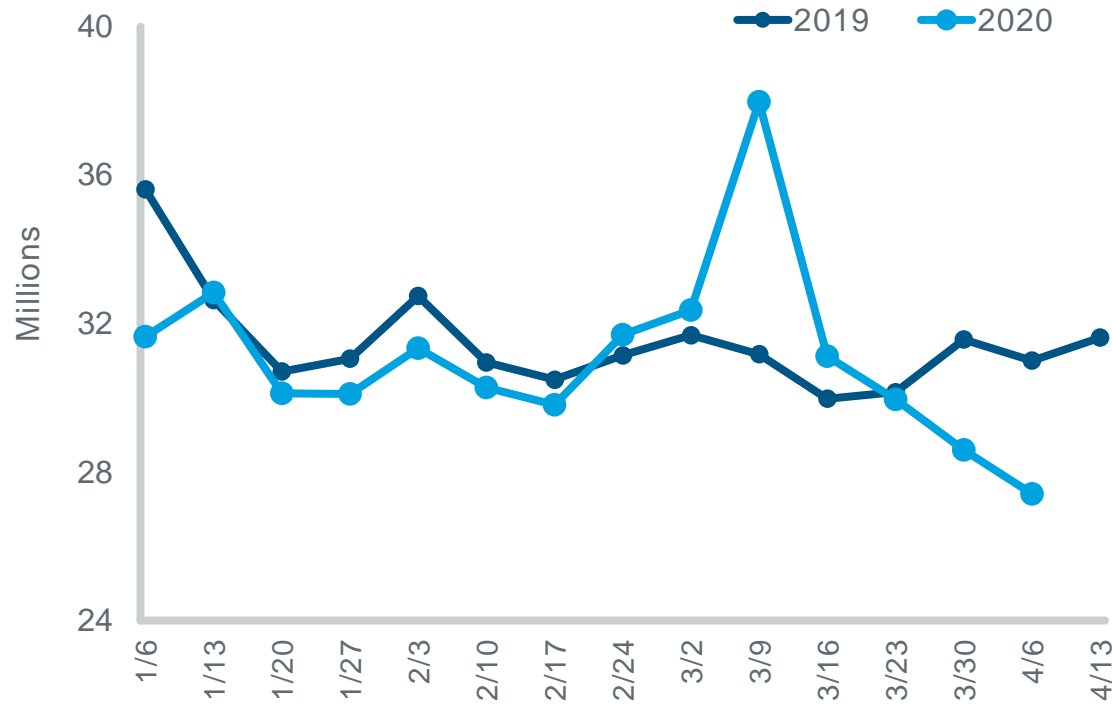




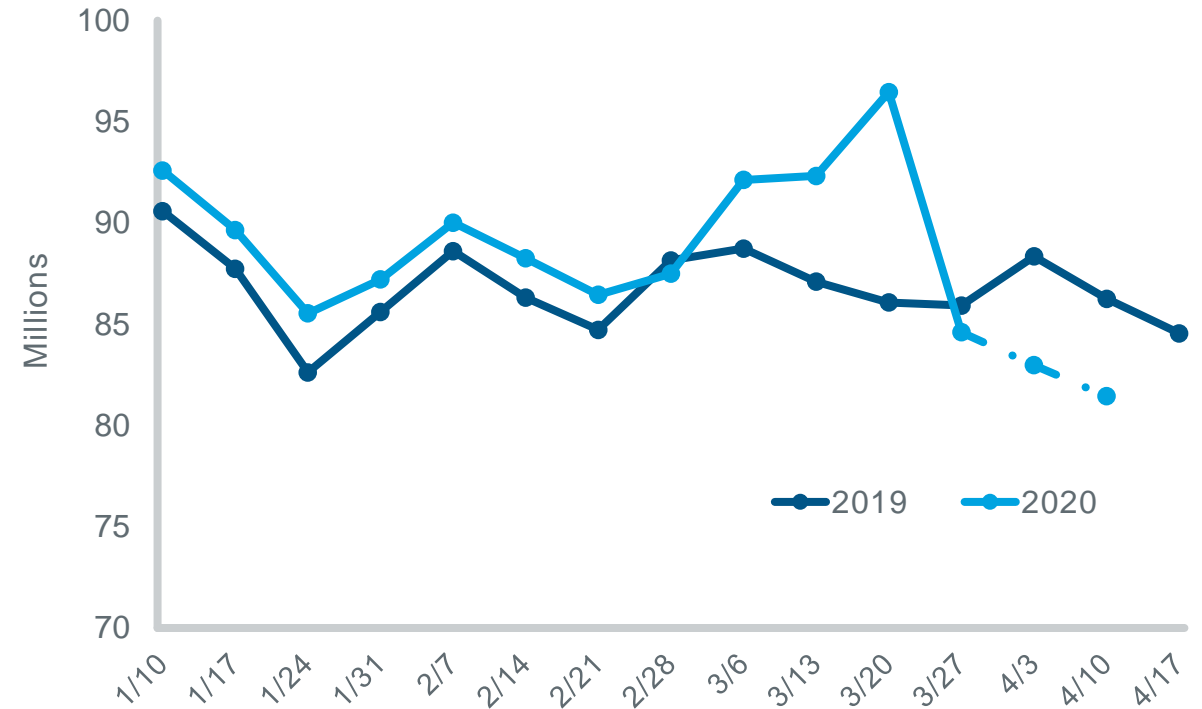
Rx market slows after initial stockpiling

Fewer visits, less prescribing, more affordability issues

TRx Volume YoY - Italy



TRx Volume YoY - US



Source: IQVIA National Prescription Audit (NPA). Week ending 4/10 based on Sat-Wed vs prior week retail only
IQVIA COVID-19 Executive Briefing. © IQVIA 2020. All rights reserved.



Lasting impact of COVID-19

Global trends, US examples



Shift to digital

>1500%

Increase in telehealth claims from pre-COVID baseline

~3-4x

Increase in remote detailing from baseline, led by specialty



Physician strain

80%

Clinicians report “severe” or “close-to-severe” financial strain on practice

72%

Reduction in Dx visits from pre-COVID baseline, creating significant healthcare backlog



Affordability and access

>20%

Increase in copay card claims in second week of March vs. 2019

~10 to 25%

Anticipated increase in 2020 Medicaid enrollment vs. 2019



Actions to support ongoing Rx demand

Multiple approaches needed to stabilize Rx demand



Health system support

Identify new ways to support health systems during and post-COVID (e.g., backlog management)

Explore alternate sites of care for therapy administration

Accelerate value-based evidence demonstration



HCP engagement

Move forward with proven virtual engagement approaches and plan for return to in-person detailing

Rethink physician targeting and segmentation

Optimize omnichannel promotion approaches



Patient experience

Reassess and understand the new patient journey

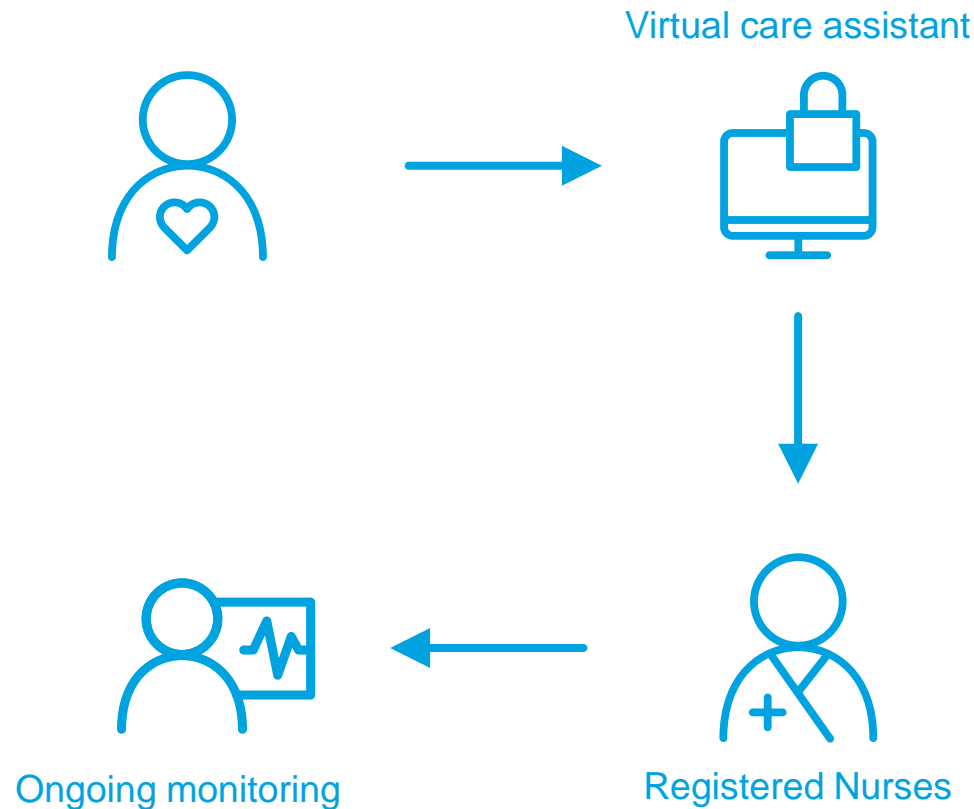
Enhance offerings to support patients through services and financial assistance

Develop mobile health strategy to address patient adherence and engagement



Addressing healthcare system challenges

Expanding care capacity for COVID patients



Challenge

Current HCPs and facilities extremely burdened, unable to screen or provide care for less severe COVID-19 patients

Response

- ✓ Developed virtual care solution to:
 - Evaluate potential symptoms based on CDC guidelines
 - Enable risk-based escalation to RNs for additional care assessment as needed
 - Allow continued monitoring of those who have been exposed or diagnosed

Results

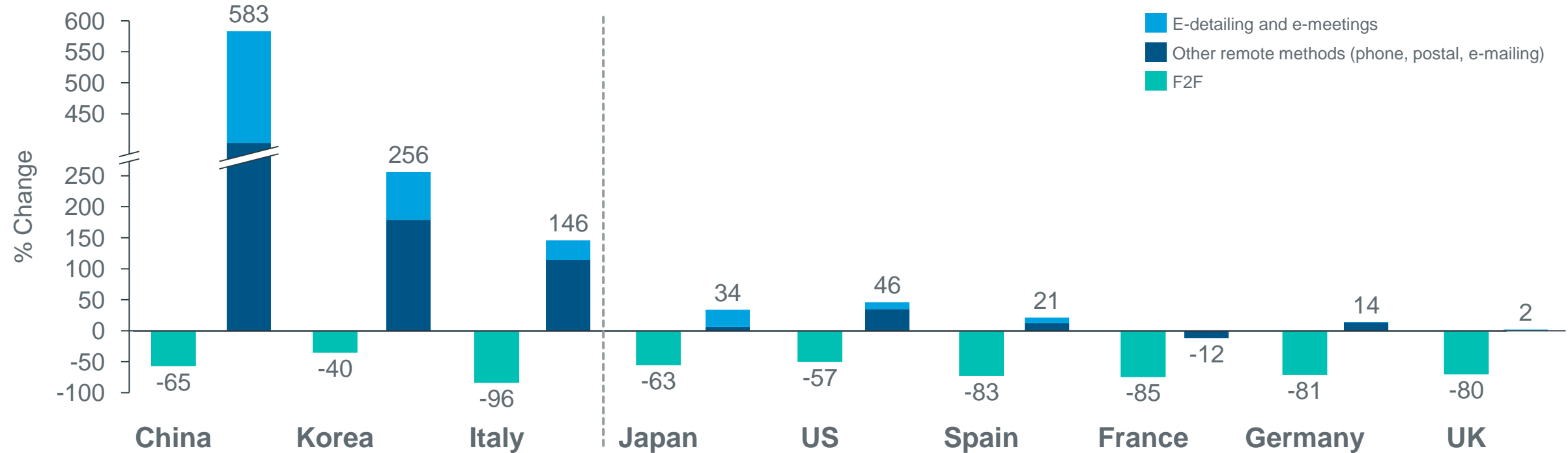
- **Efficient, cost-effective and data-driven approach** to help monitor COVID-19 patients, while also limiting additional population exposure



Remote detailing accelerates

Global markets show varying readiness for e-detailing models

Week of 12 Apr 2019 vs week of 12 Apr 2020 – % Change in absolute recorded promotional volume



Net change in promotional activity

-14%

-28%

-76%

-2%

-23%

-70%

-51%

-15%

-27%



Engagement model changes

Remote interactions with e-Reps

KPIs	Duration	14 minutes Average duration of the remote interactions	129 Active medical reps; 100 active reps per day as an average
		5,000 Remote calls	6,000 Participants
		4 calls Per day and per rep as an average	30% Of remote calls performed on Monday and 35% between 9 and 11 AM

Key learnings

- ✓ Platform enables compliant environment
- ✓ Change management training critical
- ✓ Focus on patient support, in addition to product and medical information

Challenge

Current COVID-19 situation where medical reps cannot visit HCPs face to face anymore

Response



Quickly implemented technology and training to allow medical reps to perform remote detailing calls to replace their face to face calls

Results

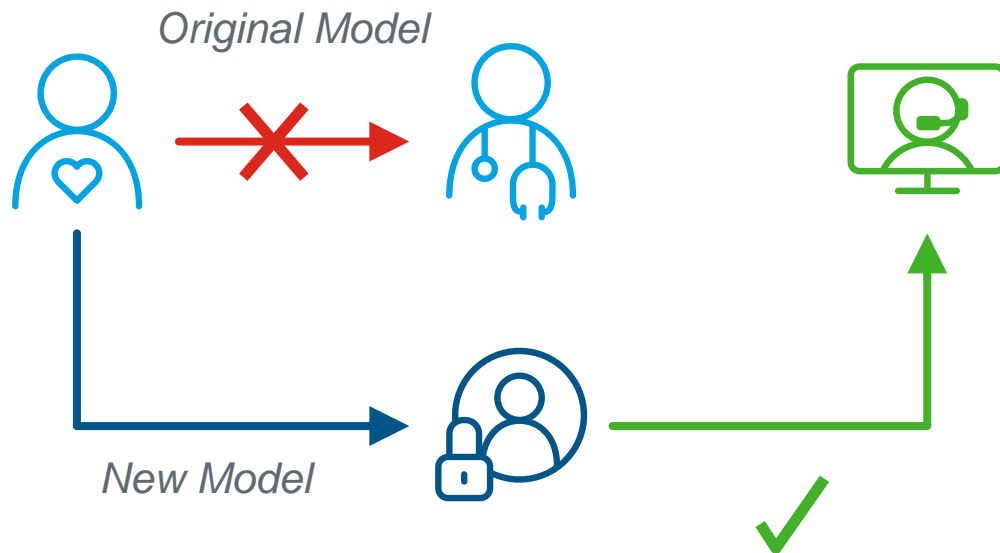
Strong performance on KPIs

- After 3 weeks, medical reps have already performed 5,000 remote calls (4 remote calls per rep and per day as an average)
- 22 contents have been used and 7 contents represent 80% of the usage



Providing direct patient assistance

Pharma call centers to support patients and provide leverage for health systems



Key learnings

- ✓ Increase direct connections to patients in times of HCP strain
- ✓ Proactively evolve patient support beyond Tx initiation to ongoing management

Challenge

Patients are unable to reach their physicians who have been called into service for COVID-19 response

Response

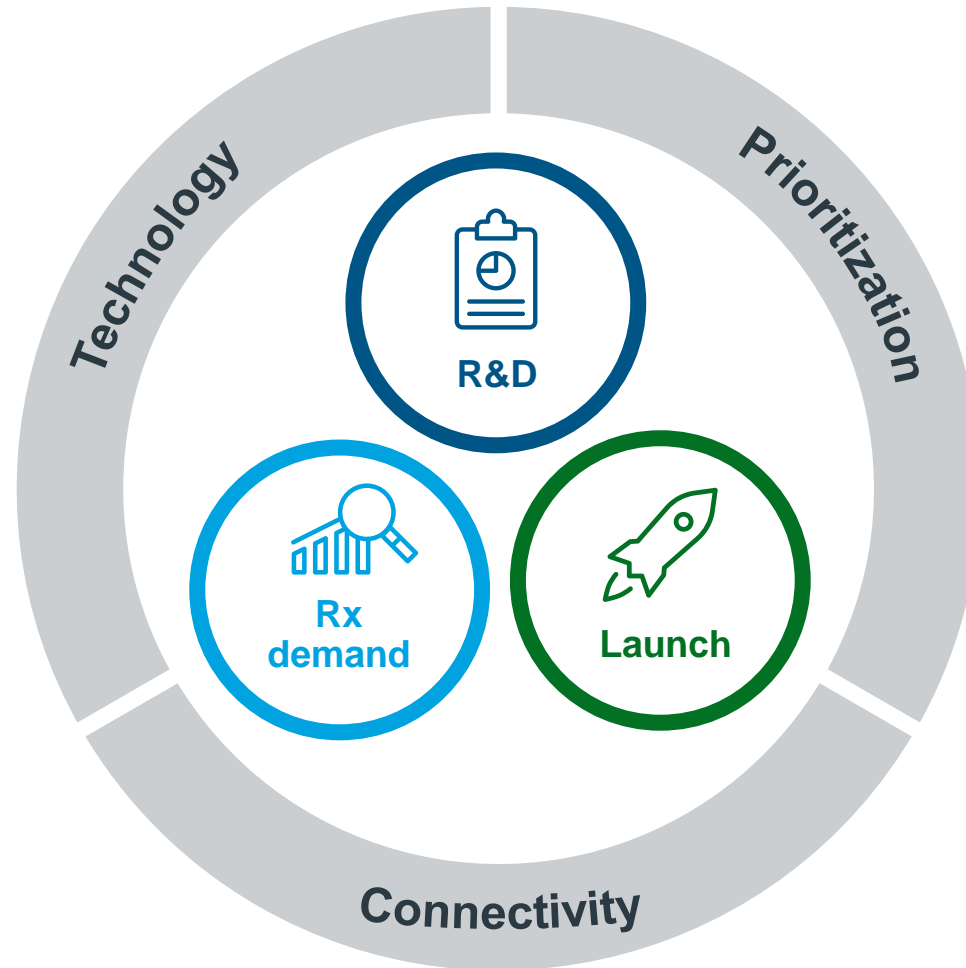
- ✓ Quickly stand-up call centers for patients to call directly into manufacturer to triage product questions
- ✓ Ensure compliance with EU and local privacy and regulatory environment

Results

96% patient satisfaction; ongoing efforts to highlight role of manufacturer as support for patients and health systems

Broad business impact

Business continuity planning depends on depth and length of disruption





Launch segments

Variable demands across launch segments

109
products

Recently launched in 2018-2019

- Early stakeholder traction
- Field teams in place
- Delivering messages
- Varying challenges in patient acquisition

50+
products

Ready to launch in 2020

- Approved or filed
- Field teams prepped
- Market shaping in progress
- Medical education in progress
- Early access discussions

340+
products

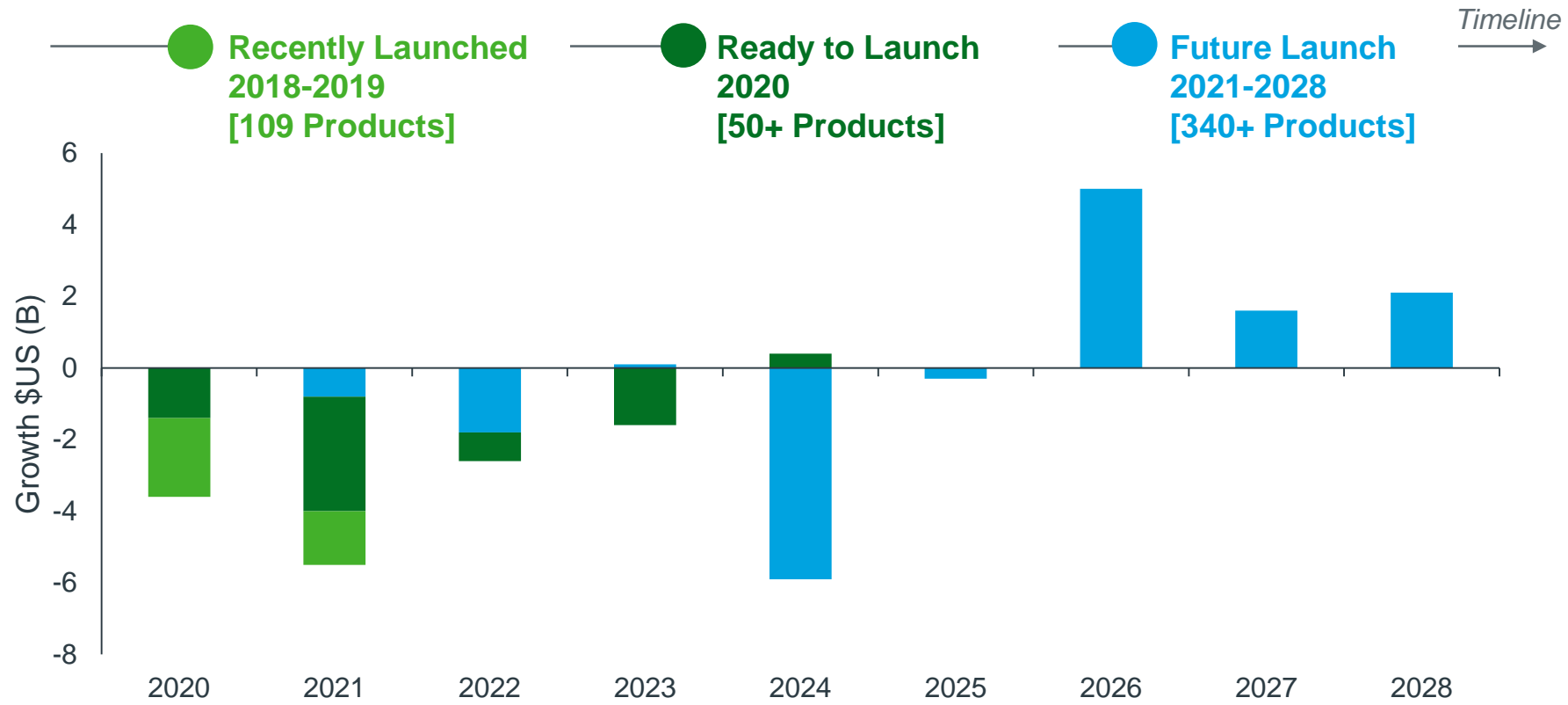
Future launch in 2021-2028

- Not yet filed
- Finalizing positioning
- Finalizing launch plans
- Preparing organization



Launch disruptions

Neutral long term impact of current launches; yet concern for recent launches



2020-2028
-\$10B
cumulative
impact

*Driven by recent /
current launches
underperformance*

Net impact **-3.6B** **-5.5B** **-2.6B** **-1.4B** **-5.4B** **-0.3B** **+5.0B** **+1.6B** **+2.1B**



Post COVID-19 launch plans

Prioritize launches, drive virtualization to navigate logjam

Re-prioritizing investments across portfolio of launch assets will be critical based on revised market expectations and product differentiability

FUTURE LAUNCH PRODUCTS

- Devise risk mitigation strategies
- Develop virtual platforms for engagement
- Prepare for logjam and focus on creative approaches to drive engagement



Time Minus Launch

READY TO LAUNCH PRODUCTS

- Make product available, selectively choose to execute full launch activities
- Prepare for asymmetric geographic launch
- Utilize in market presence to listen and learn
- Execute scalable, virtual solutions; apply a local level response



Time 0 Launch

Sales



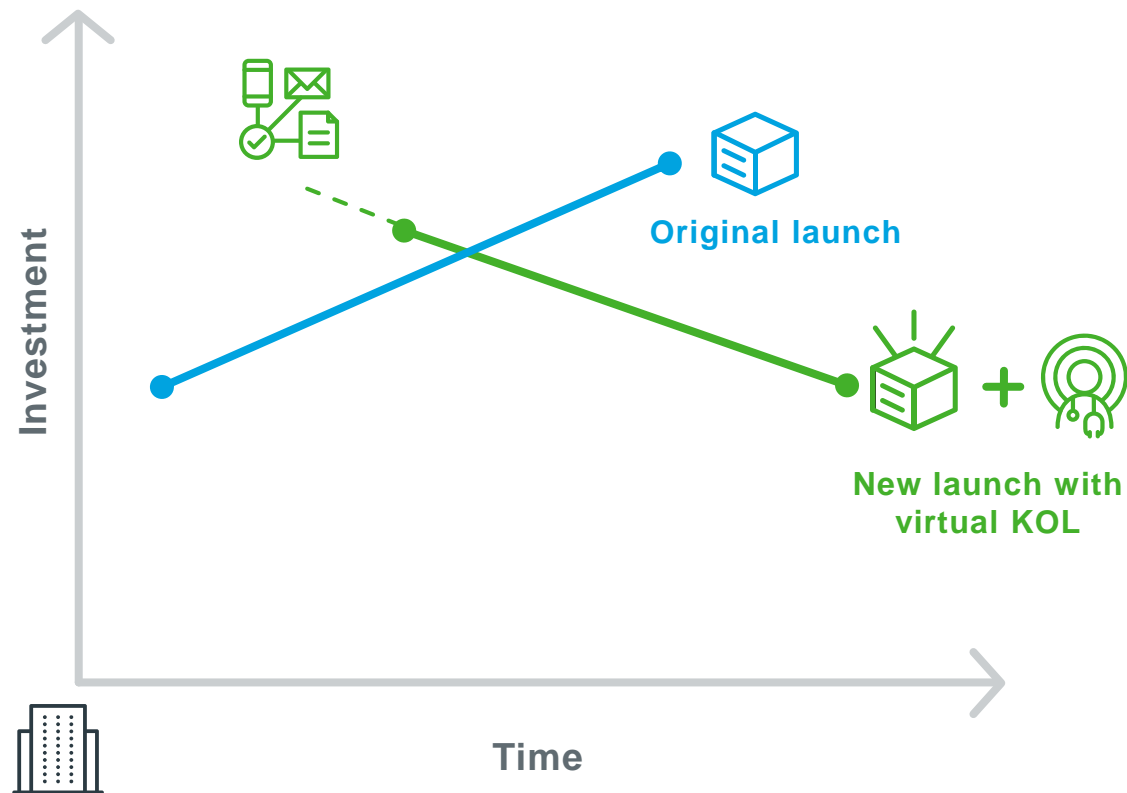
RECENTLY LAUNCHED

- Rebalance key in-market activities (e.g., access, education, market development)
- Time promotional investment to access changes and sensitivities of patients / HCPs
- Tailor programs to patient and community needs



Virtual launch

Agile launch plans to meet stakeholder needs



Challenge

Small EBP is trying to determine if they should launch or wait given environment and limited access to physicians and patients

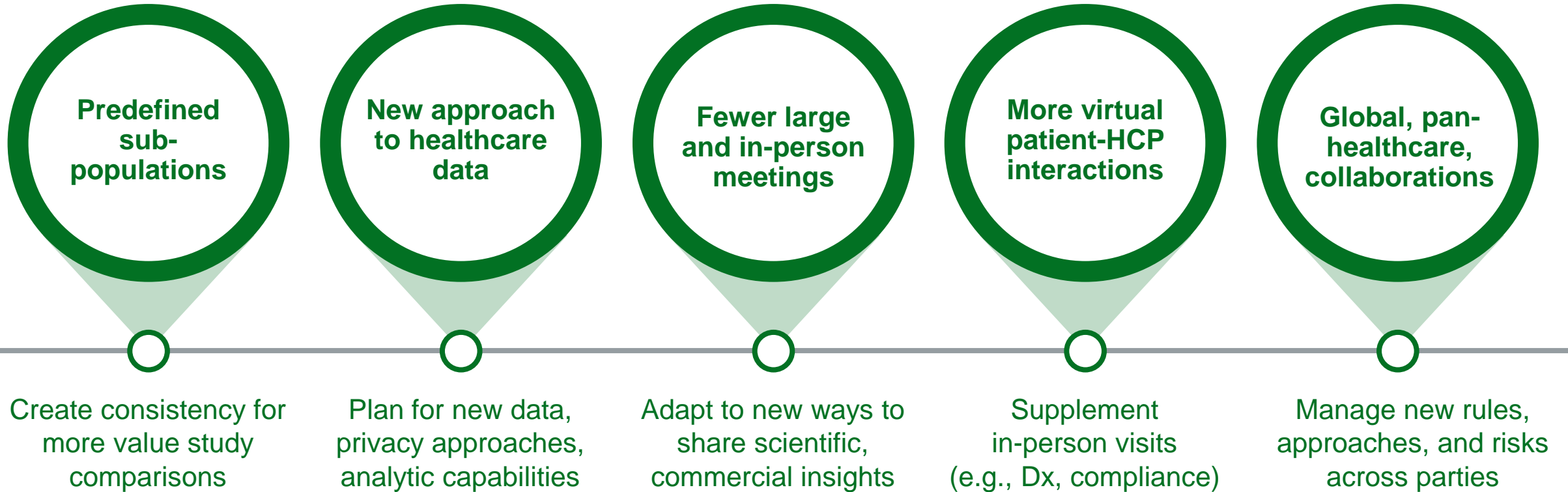
Response

- ✓ Virtual thought-leader identification and engagement
- ✓ Integrating omnichannel marketing with telehealth data

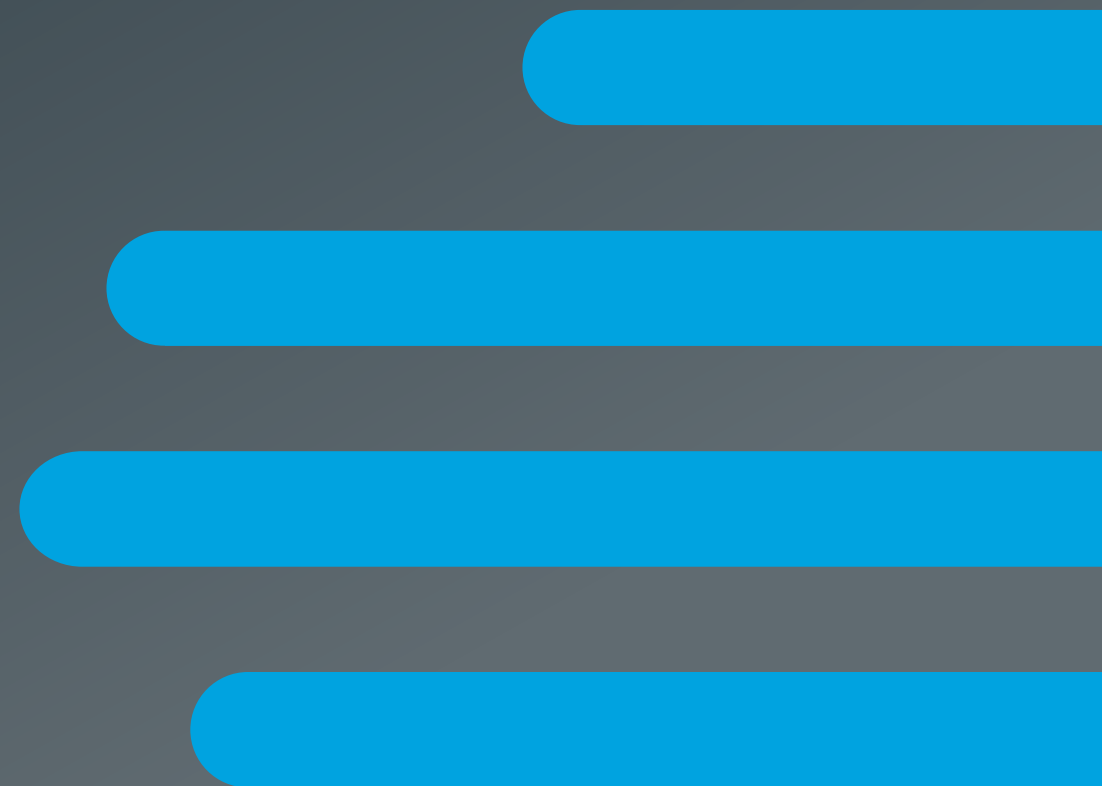
Results

Planned virtual launch given benefit of oral therapeutic option

Moving ahead: What if?



Appendix



Disclaimer

The analyses, their interpretation, and related information contained herein are made and provided subject to the assumptions, methodologies, caveats, and variables described in this report and are based on third party sources and data reasonably believed to be reliable. No warranty is made as to the completeness or accuracy of such third party sources or data.

As with any attempt to estimate future events, the forecasts, projections, conclusions, and other information included herein are subject to certain risks and uncertainties, and are not to be considered guarantees of any particular outcome.

IQVIA reserves all rights relating to reproduction, quotation, broadcasting and publication. No part of this presentation may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without express written consent of IQVIA.

Copyright © 2020 IQVIA. All rights reserved. IQVIA® is a registered trademark of IQVIA Inc. in the United States and various other countries.