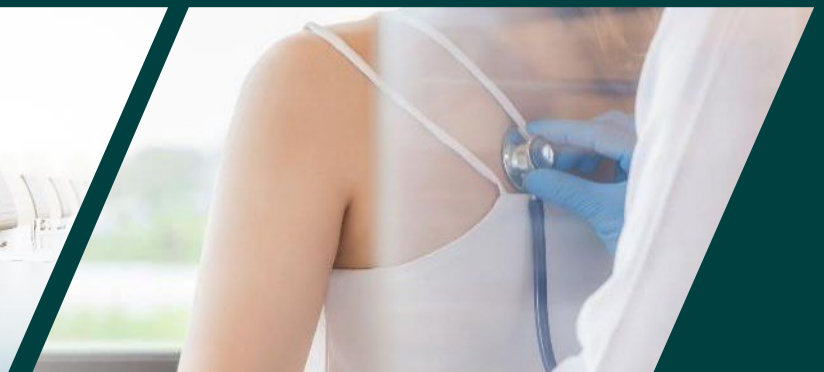

hVIVO

formerly Open Orphan plc

Full Year Results Presentation

April 2023

Ticker: HVO

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Who we are

hVIVO

formerly Open Orphan plc

Mission

Delivering today's healthcare by empowering tomorrow's innovation.

Vision

To transform global healthcare by revolutionising the drug development process through scientific ingenuity.

Values

- *Innovation & Agility*
- *Growth*
- *Integrity & Welfare*
- *One Team*

2022 – A Transformational Year

hVIVO
formerly Open Orphan plc

Strong Financial Performance	**£50.7M** FY22 Revenue	**17.9%** FY22 EBITDA Margin	**£28.4m** Cash Balance at 31 Dec 2022
Exceptional Operational Execution	**7** Challenge Trials in Quarantine in 2022	**413** Volunteer Inoculations in 2022	**120k+** FluCamp Leads Generated in 2022
Building on Solid Foundations	**11+** Challenge Study Models	**70+** Challenge Trials Completed	**4,000+** Volunteers Inoculated since Foundation
Well Positioned for Future Growth	**£76m +** Contracted Orderbook at 31 Dec 2022	**£55m** FY23 Forecast Revenue	**Mid-high teens** Target FY23 EBITDA Margin

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Stephen Pinkerton

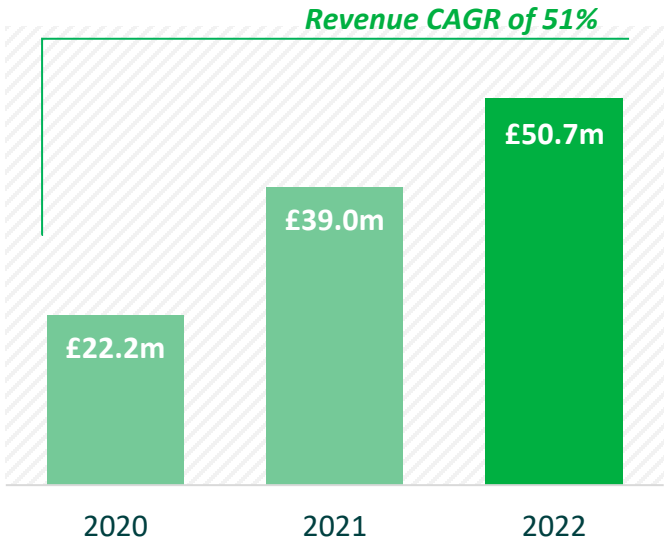
Chief Financial Officer

Financial performance review

A Growing Profitable Business

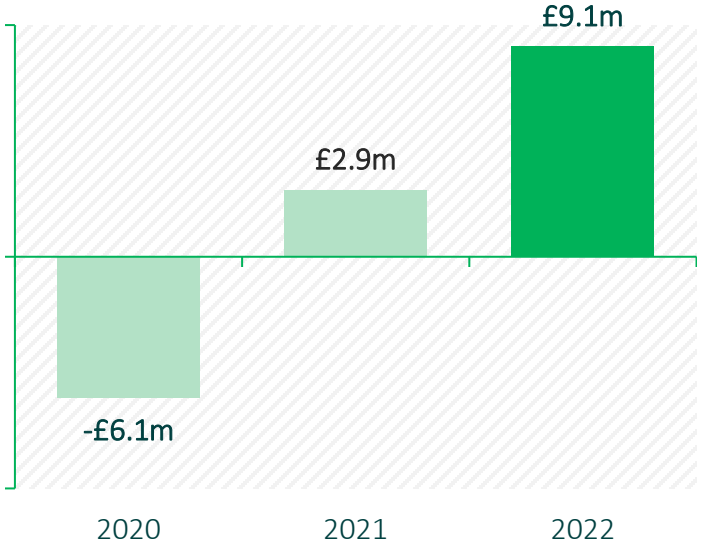
formerly Open Orphan plc

Revenue



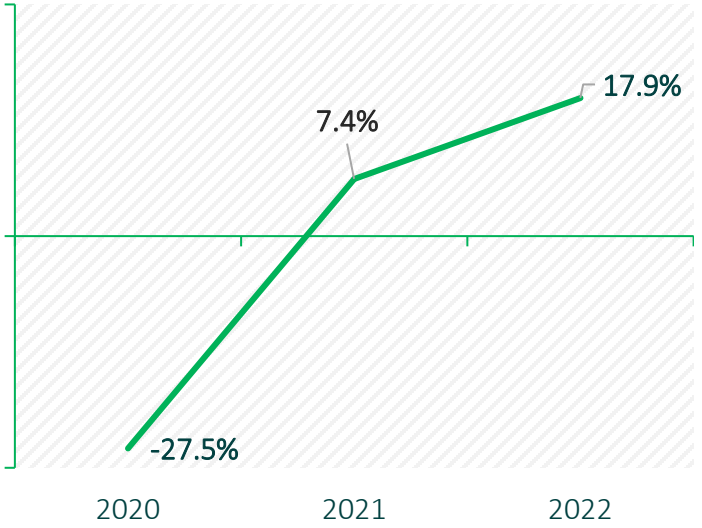
- Revenue increase of 30% year-on-year
- More full-service human challenge contracts, increased number of active studies and more volunteers per study
- Clear validation of long-term sustainable growth model

EBITDA



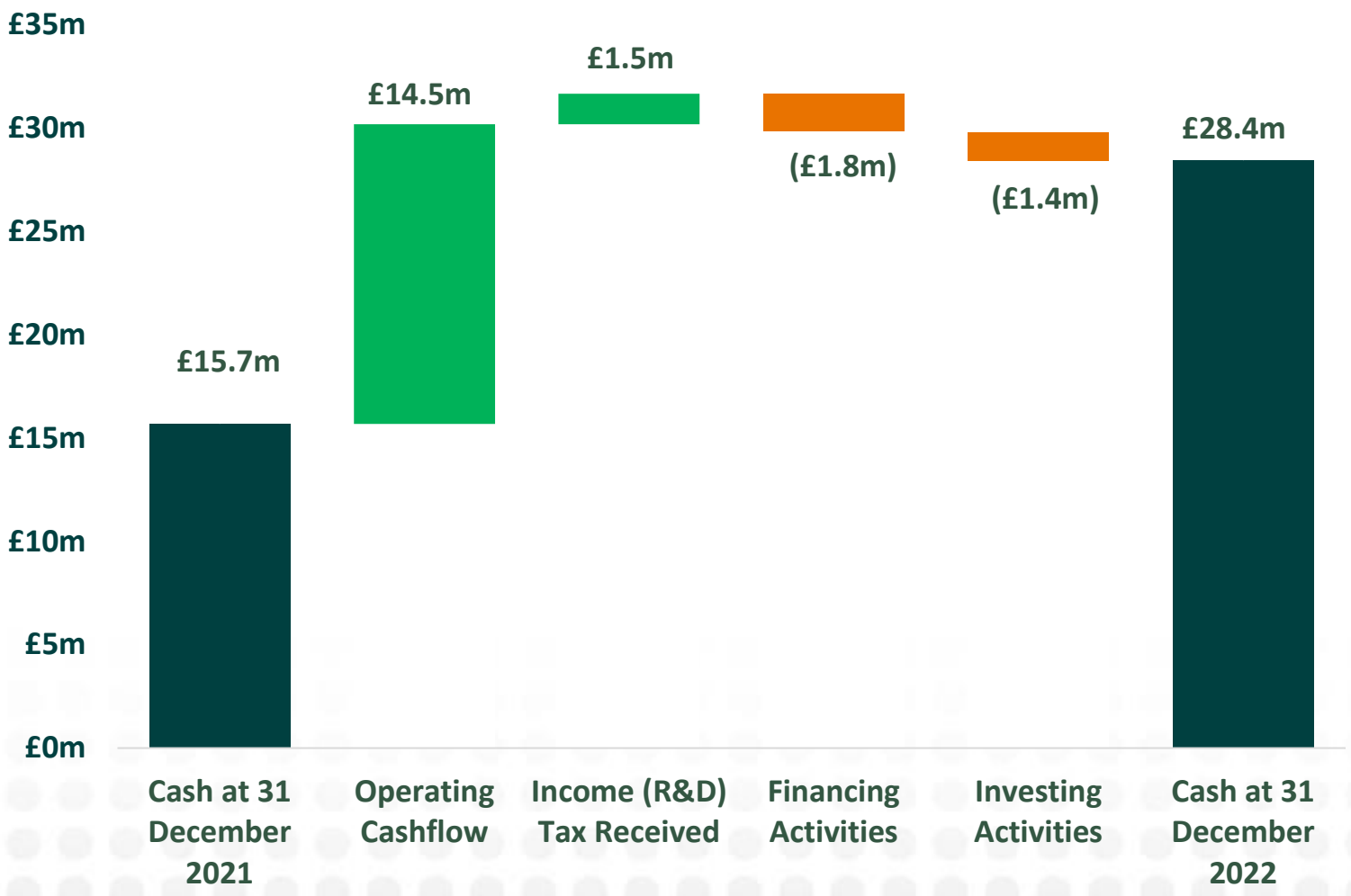
- 2022 EBITDA of £9m driven by strong trading in H2 2022
- Significant operational efficiencies and improvements generated by conducting multiple concurrent trials

EBITDA Margin



- 2022 EBITDA margin of 17.9%
- One-time positive impact from recognition of postponement and cancellation fees for an aggregate of over £1m

A Sustainable Cash Generative Business



Exceptional year end cash position

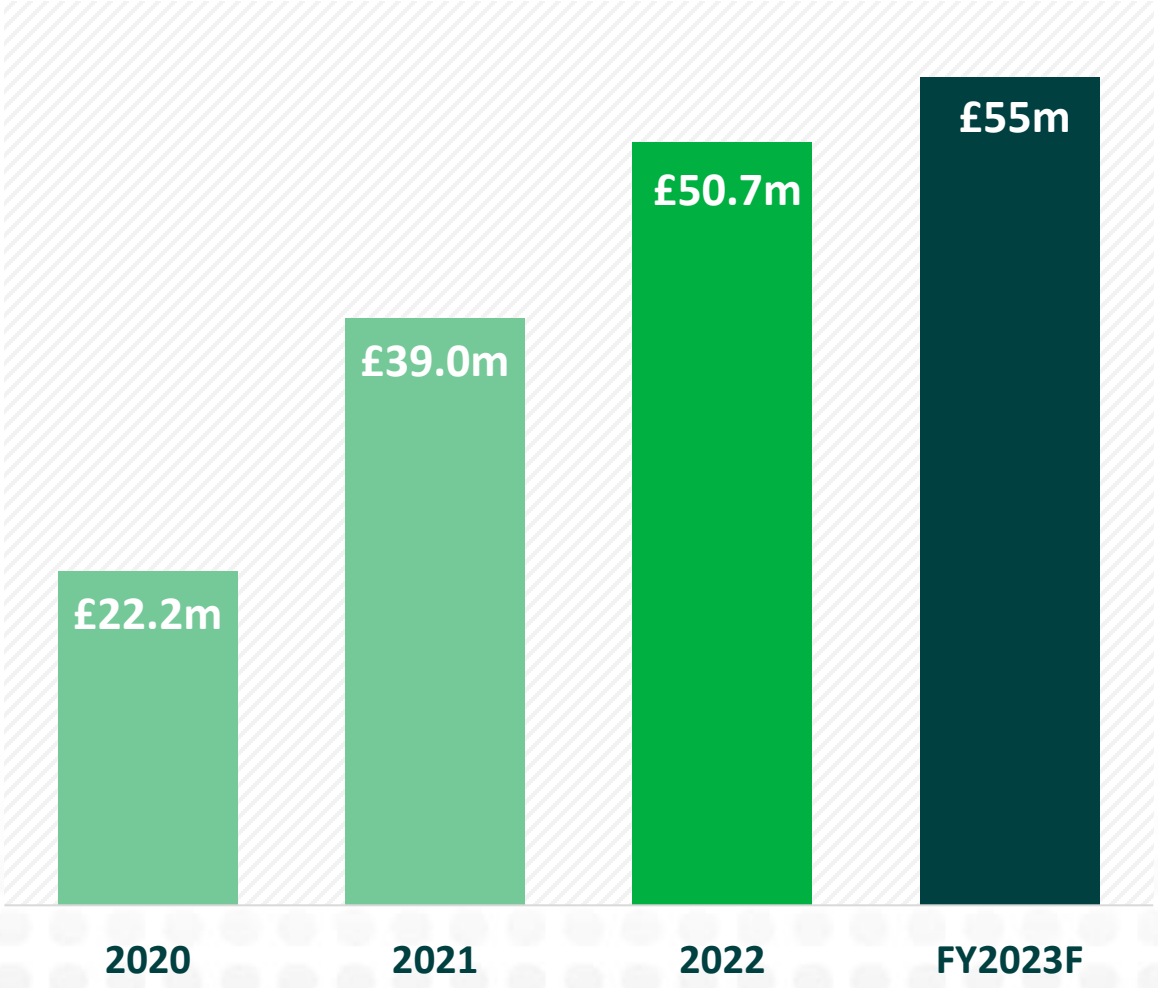
- Strong cash position with £28.4m as at 31 December 2022
- No debt at year end
- Robust net working capital position
- Key drivers:
  1. Advanced fees from record sales
  2. Efficient operational delivery
  3. Disciplined allocation of capital resources

Rewarding our Shareholders

Special, one-off dividend of 0.45p per share, equating to an aggregate of c.£3m to be approved at the Annual General Meeting, reflecting exceptional cash generation in addition to our robust balance sheet

25 April	Financial Results announcement date
4 May	Ex-dividend date
5 May	Record date
23 May	Shareholder approval at AGM
9 June	Payment date

Strong Momentum into 2023 and Beyond



Well positioned for future growth

- Full year guidance of £55m revenue for 2023
- Full visibility for FY23 and into H1 2024
- Targeting 2023 EBITDA margin in the mid-to-high teens
- Key focus for 2023:
  1. Conversion of contracted orderbook to revenue
  2. Operational improvements to continue profitable momentum
  3. Increased focus on diversifying into new revenue streams

hVIVO

formerly Open Orphan plc

Yamin “Mo” Khan

Chief Executive Officer

A long-term sustainable growth model

Increase in Recognition of Challenge Trial as a Concept

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1. Academia

- Zika
- Escherichia coli
- Norovirus
- Shigella
- Hepatitis C

2. Regulators

- FDA
  - 4x Fast Track
  - Pending Pfizer RSV vaccine
- MHRA
  - Pending Pfizer RSV vaccine
  - Direct customer interactions

Market Influencers

3. Commercial

- Reviral RSV
  - Series A funding - acquired
- Cidara Flu
  - Asset acquired
- Pfizer RSV
  - Faster to market

4. Non-Profit Organisation

- Wellcome Trust
- HIC-Vac
- 1Day Sooner
- CEPI / WHO

The Expanding Human Challenge Trial (HCT) Market

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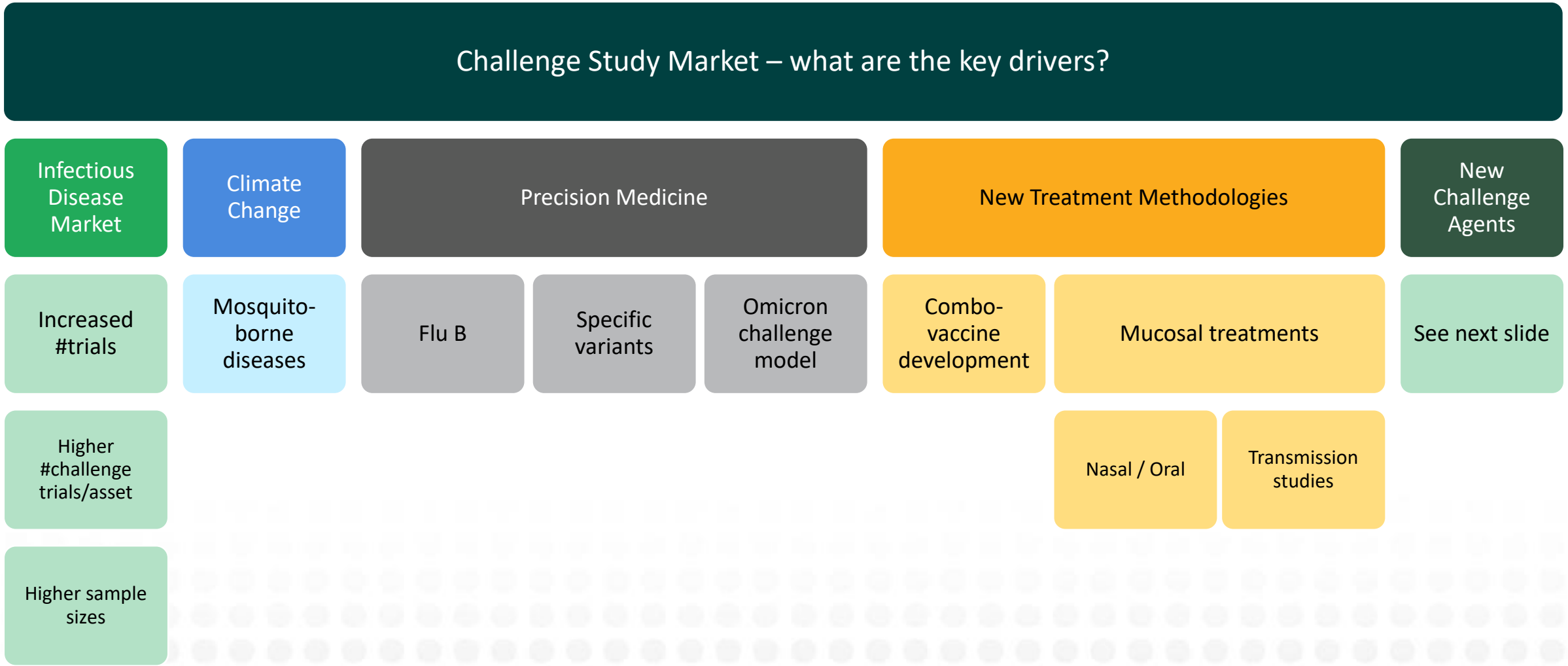
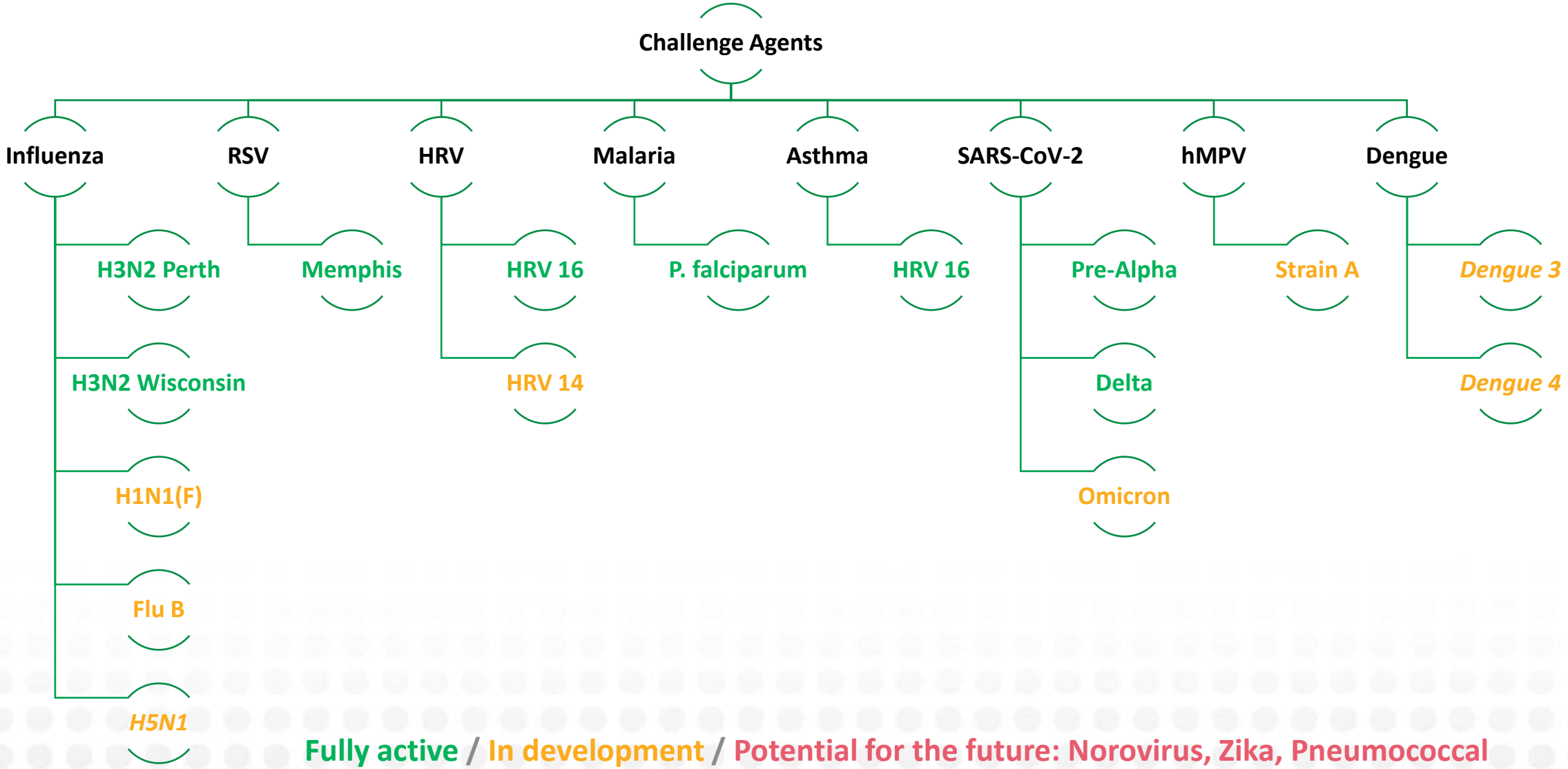


World Leading Human Challenge Model Offering



Fully active / In development / Potential for the future: Norovirus, Zika, Pneumococcal

Unique End-to-End Human Challenge Service

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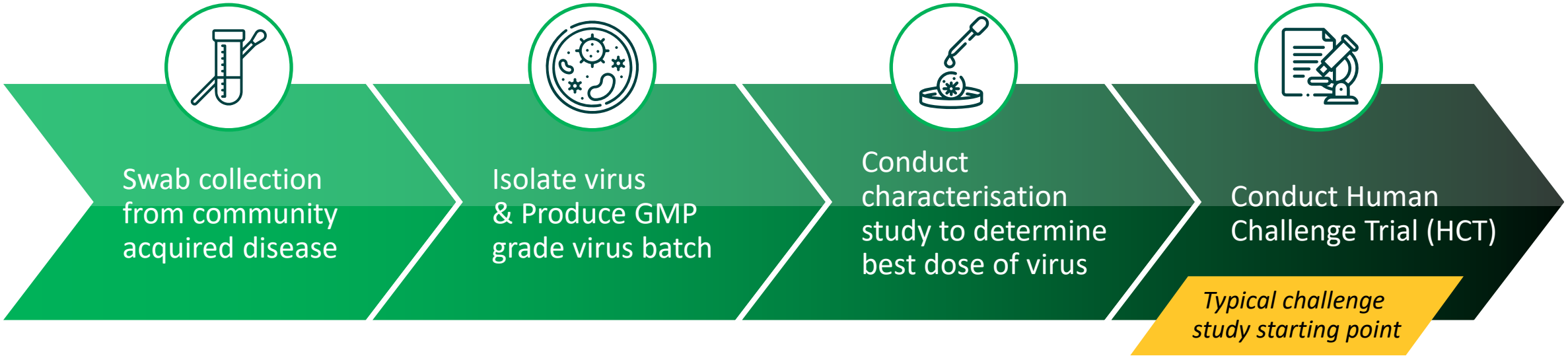


1. Broader scope of work resulting in increased revenue
2. Bespoke challenge agents to match specific target strain
3. Increased market opportunities as potential to test new products that require new virus strain

2022 Contracts

- Bespoke Influenza model with Big Pharma client (£14.7m)
- New Influenza model with Big Pharma client (£10.4m)
- Omicron COVID-19 challenge model with Vaxart Inc

FluCamp Recruitment Platform

formerly Open Orphan plc

80% *More than 80% of clinical trials in the US fail to meet their patient enrolment timelines[1]*

55% *Patient recruitment issues account for 55% of cancelled clinical trials[2]*

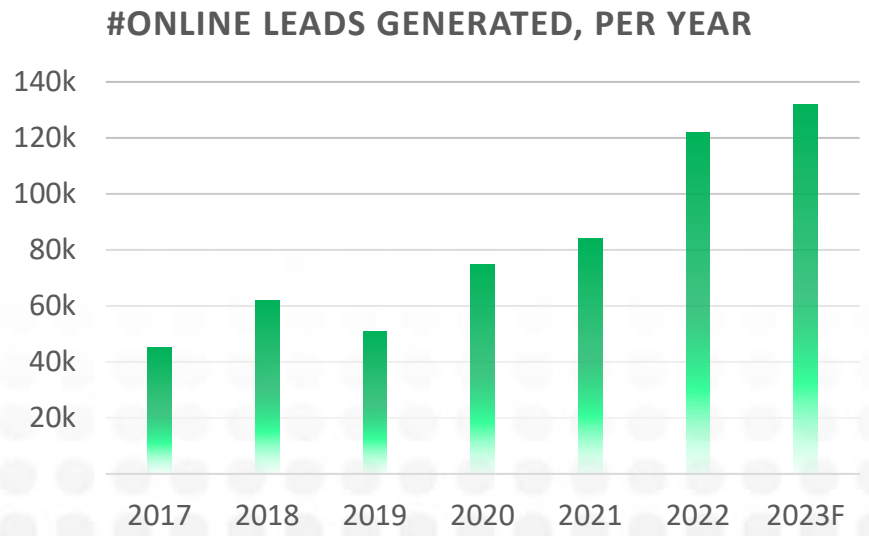
250,000+
Active Volunteers in Existing Database

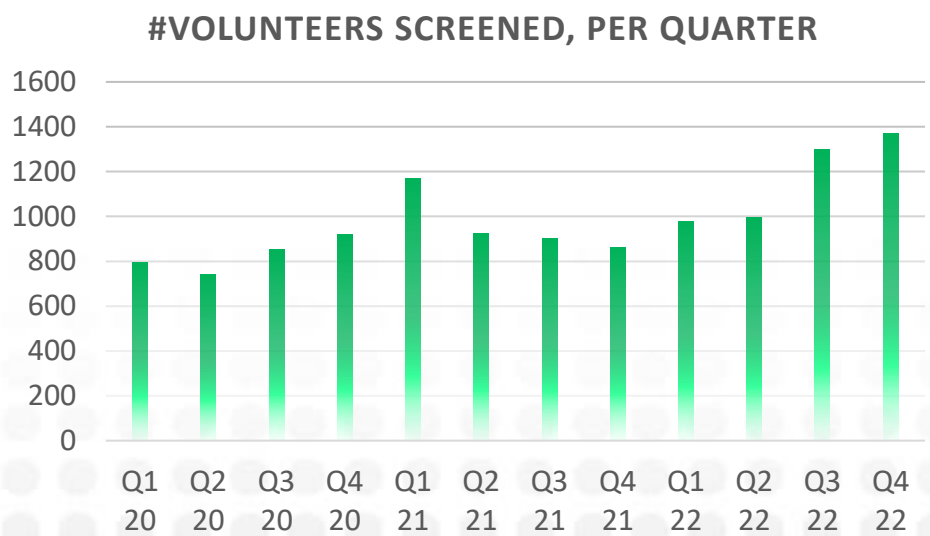
100%
Trial Recruitment Success

c.85%
FluCamp Volunteers can be utilised in non-challenge trials

2022 FluCamp Improvements

- Online Self Booking
- New CMS system
- Online pre-screening for volunteers/patients
- Increased capacity (London & Manchester)
- Expanded marketing channels





Note (1): Sources: Perspective in Clinical Research
Note (2): Sources: GlobalData

A Growing Trend

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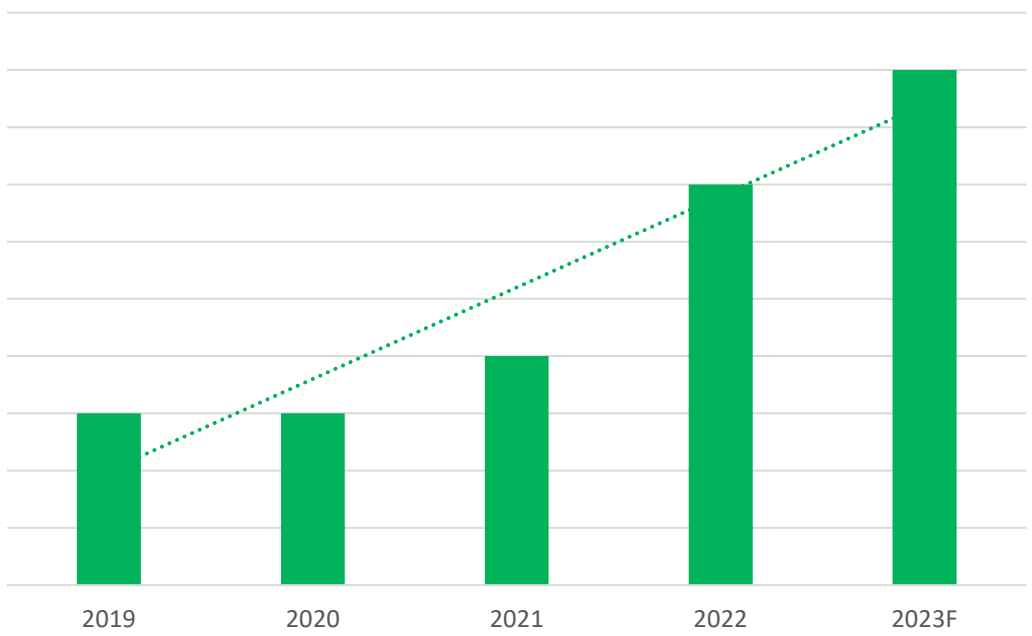
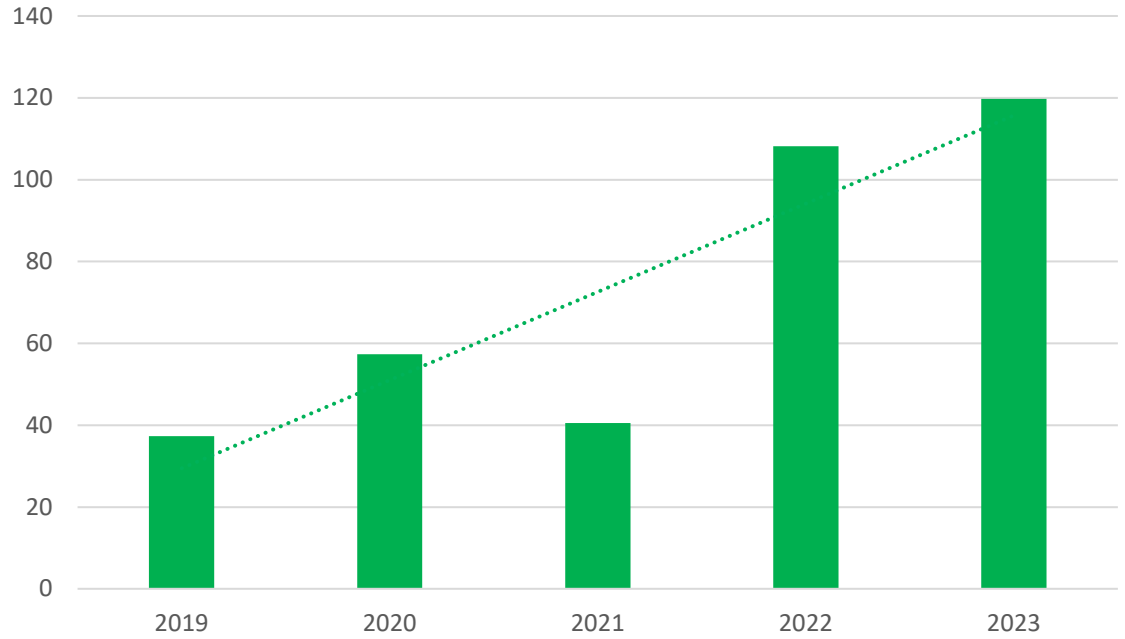
Increasing Number of Active HCTs



Increasing Number of Volunteers per HCT



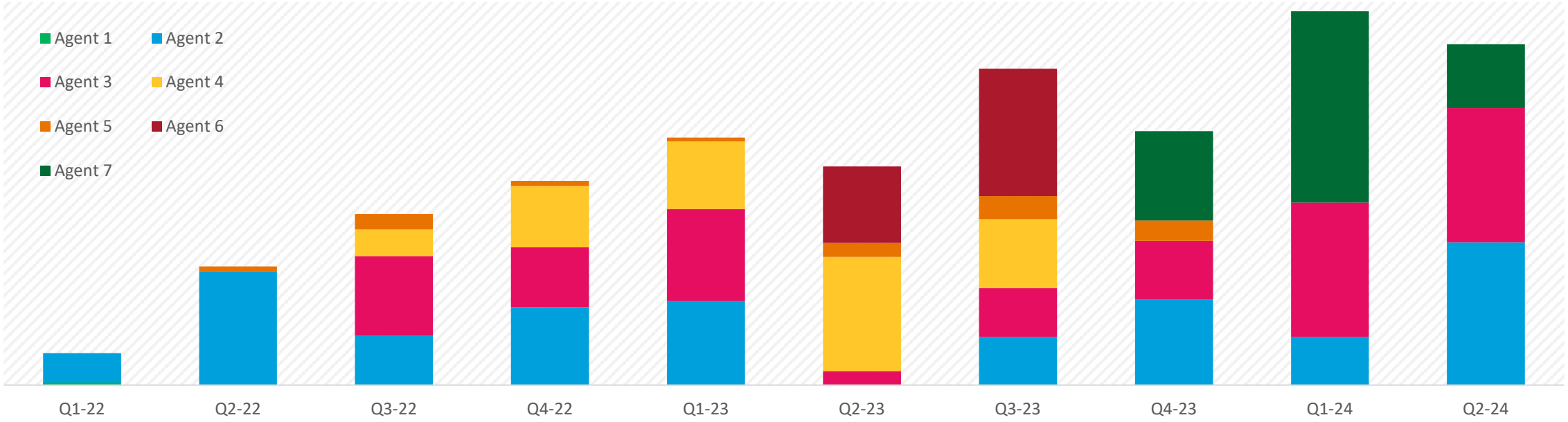
- Higher number of HCTs:
  - Increased demand for HCTs
  - Multiple challenge agent models
  - Improved volunteer recruitment
  - Concurrent conduct of trials

- Larger sample size (#volunteers/trial)
  - To achieve greater utility of data
  - Targeting lower frequency endpoints
  - Comparing dose regimens
  - Optimising platform selection

Multiple Challenge Agents – Driving Efficiency

formerly Open Orphan plc

#Inoculations per Quarter per Challenge Agent (Contracted)



- Volunteers screened against multiple challenge agents
- Fewer screenings per inoculated volunteer
- Improved volunteer conversions rates
- Increased quarantine utilisation
- Leverage efficiencies to enhance delivery
- Increased profit margin
- Long-term planning
- Principle of scarcity
- Investments in new models
- New models generating revenue

Case Study

hVIVO
formerly Open Orphan plc

Biotech

CIDARA THERAPEUTICS

janssen PHARMACEUTICAL COMPANIES OF Johnson & Johnson

SAN DIEGO, March 01, 2023 — Cidara Therapeutics, Inc. (NASDAQ: CDTX)

Cidara Therapeutics announces promising interim Phase 2a data assessing the safety and efficacy of a single dose of CD388 in an influenza challenge model

The study is being conducted under an exclusive worldwide license and collaboration agreement with Janssen Pharmaceuticals, Inc.

Big Pharma

RSV vaccines are expected to hit the market in 2023, accelerated through the use of human challenge

Pfizer

The FDA is expected to make a final decision on the approval of this RSV vaccine in 2023

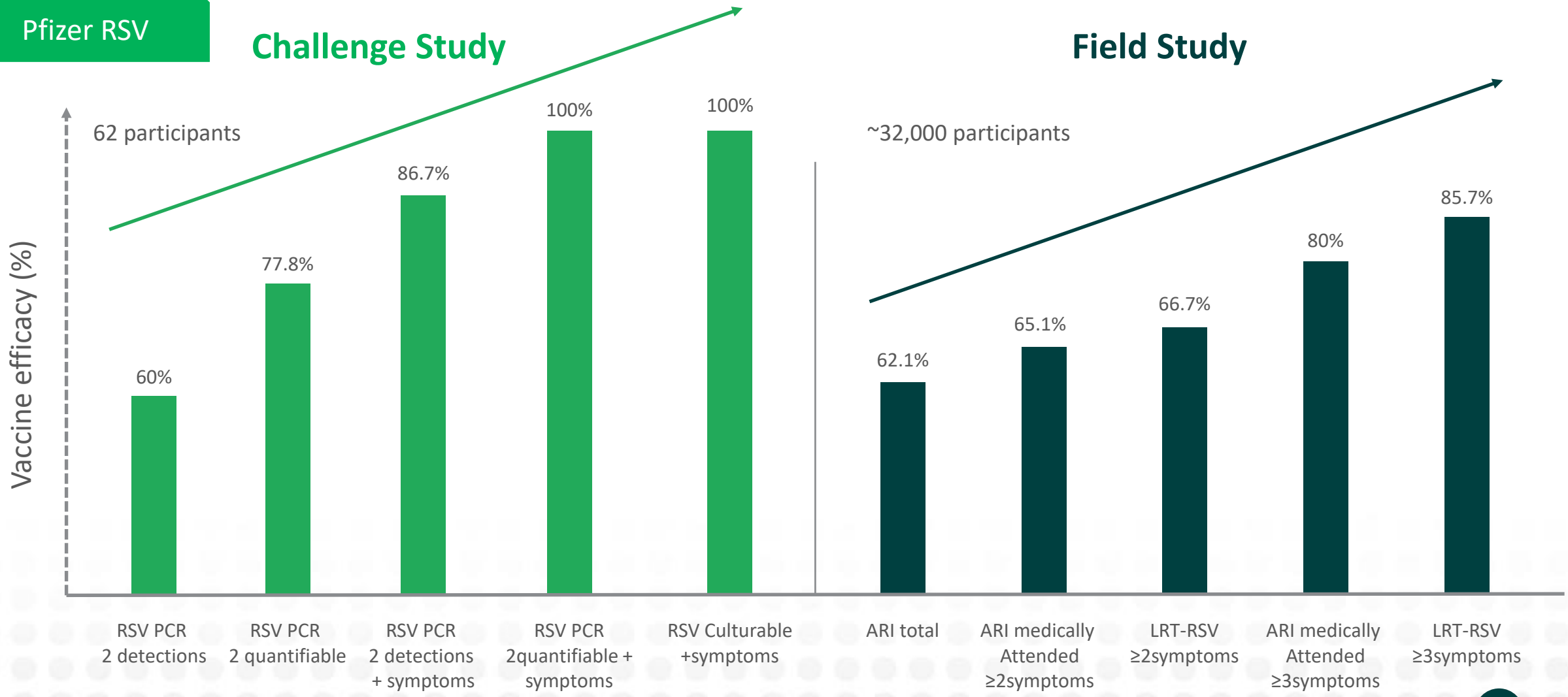
FDA Breakthrough Designation - 2022

*"Primarily informed by the positive results of a proof-of-concept, Phase 2a study evaluating the safety, immunogenicity, and efficacy of a single dose of 120 µg RSVpreF in a **human viral challenge model** in healthy adults"*

Correlation Between Field and Challenge Trial Data

formerly Open Orphan plc

Pfizer RSV

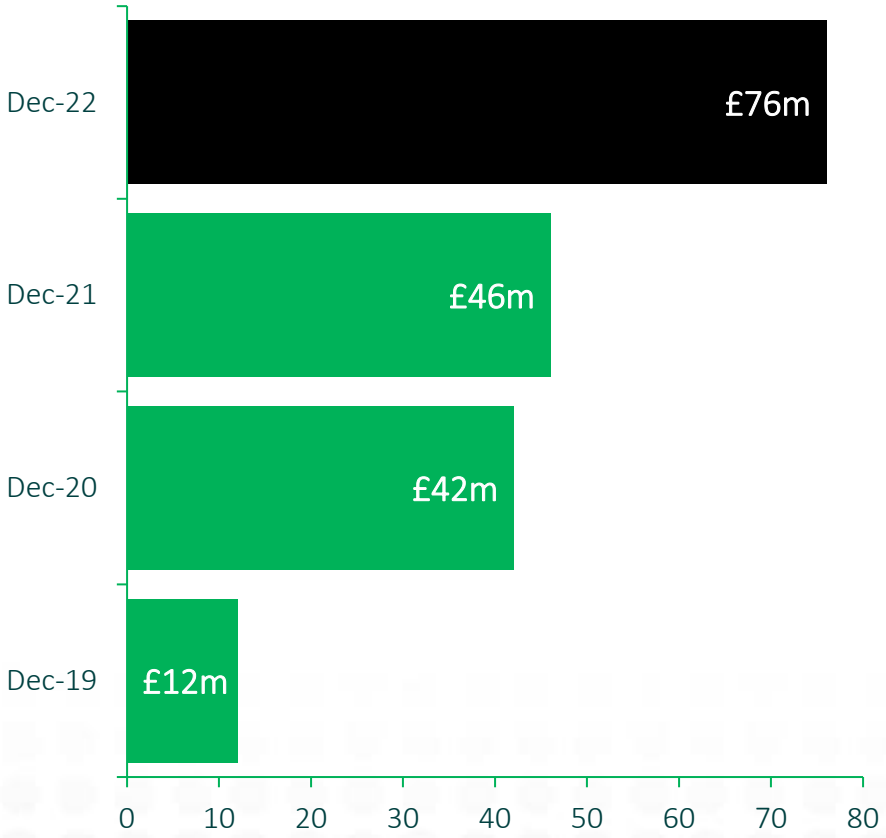


Schmoele-Thoma *et al.* 2022, Pfizer 2023

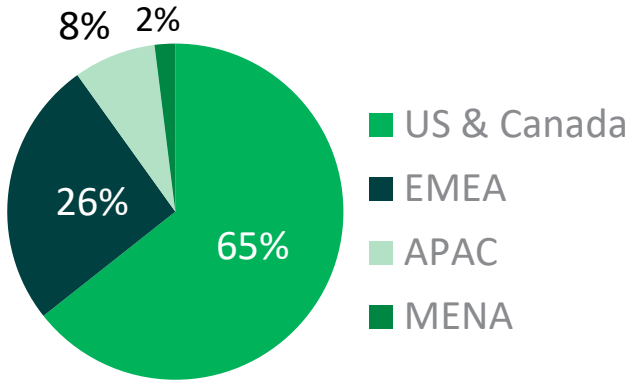
Diverse and Growing Sales Pipeline

formerly Open Orphan plc

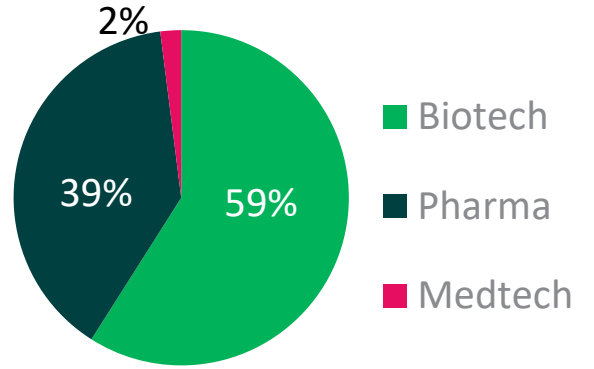
Record Contract Orderbook



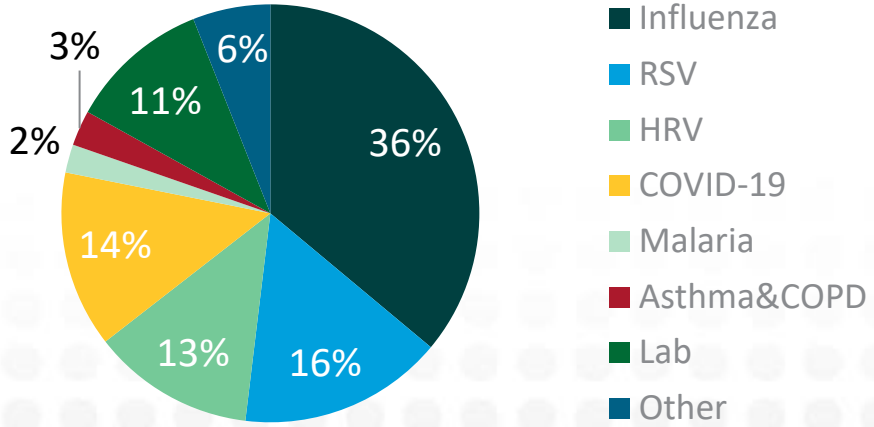
Pipeline Distribution by Region



Pipeline Distribution by Client Type

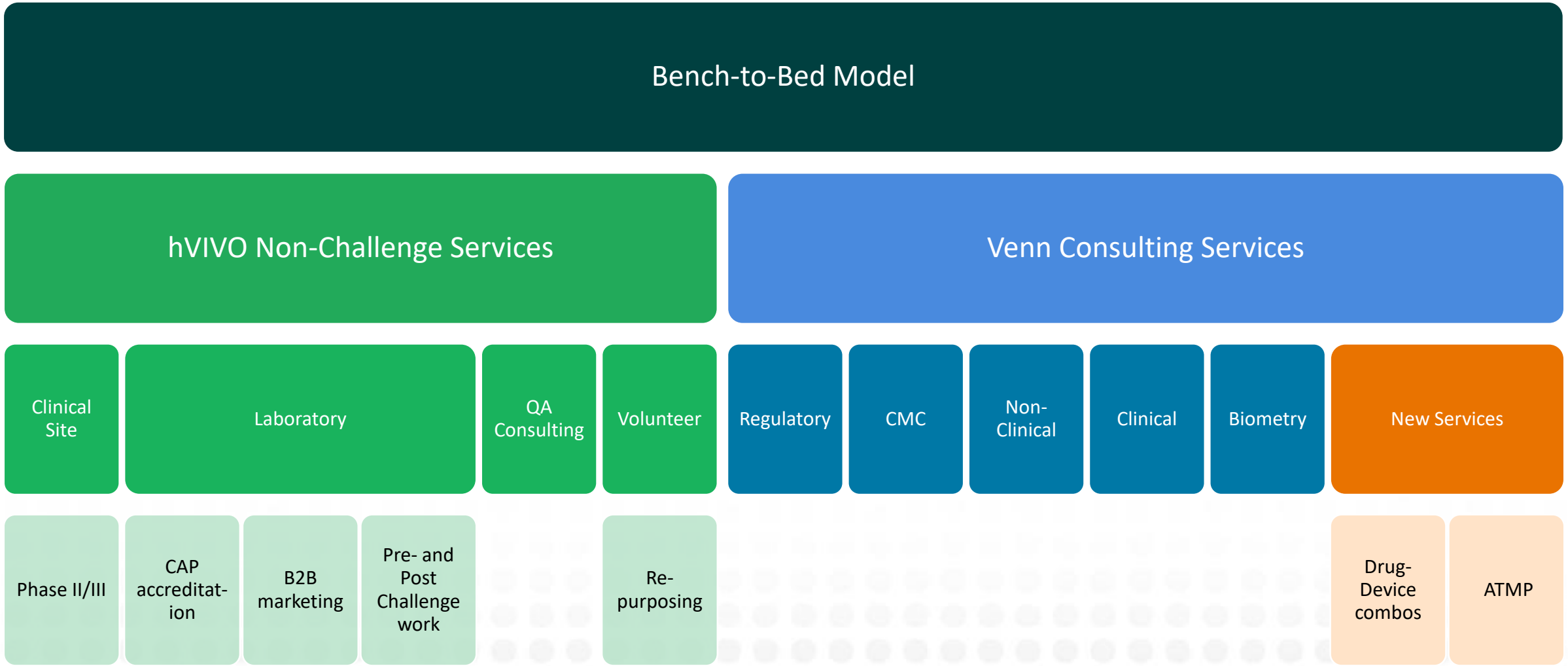


Pipeline Distribution by Model



Non-Challenge Offerings

hVIVO formerly Open Orphan plc



Venn - Continuing to Grow and Expand

formerly Open Orphan plc

25 Years

Strong relationships with repeat customers

€3.2m

2-year contract announced with major global pharma client

Investment in key growth areas - ATMP & Drug Device Consulting

Paris

Delivering key services to hVIVO's challenge studies

Cross-selling clients across group - field trials / labs

Cross-selling clients to hVIVO challenge studies

New office at Leiden Bio Science Park

Driving collaboration & interaction with potential customers from the largest life science community in Benelux

Seamless drug development support service ("Bench-to-Bed")

Attractive Market Dynamics

formerly Open Orphan plc

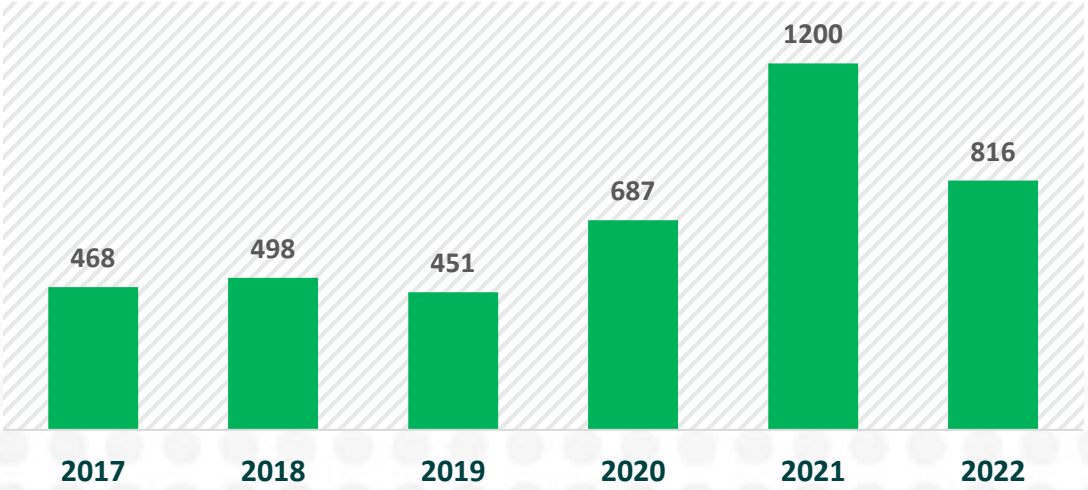
£700m+

The estimated market size for challenge study CRO services by 2028[1]

2,500+

Active vaccine, anti-viral and respiratory compounds currently in development – 86% increase from 2019 to 2021[2]

The number of vaccines studies is increasing every year…



Note (1): Source: Liberum
Note (2): Sources: Pharmaprojects; Citeline
Note (3): Source: clinicaltrials.gov

$5.5B+

The infectious disease clinical trial market is projected to reach over $5.5 billion by 2027[4]

2,500+

Active vaccine, anti-viral and respiratory compounds currently in development – 86% increase from 2019 to 2021[5]

$67.2B

Global vaccines market is projected to reach $67.2 billion by 2026[6]

Tighter funding environment for biotech's increase the appeal of human challenge study data

Note (4): Sources: Global Market Insights
Note (5): Sources: Pharmaprojects; Citeline
Note (6): Source: Markets & Markets

hMPV & Dengue – New Market Potential

formerly Open Orphan plc

Human metapneumovirus (hMPV)

Increasing focus by biopharma

4-18%	***Of people with lower respiratory tract infections have hMPV*** [1]
5-16%	***Of children infected with hMPV develop more severe symptoms*** [2]
>16K	***Deaths worldwide in children under 5 years could be attributed to hMPV*** [3]
0	***No vaccine or specific antiviral treatment approved to treat hMPV*** [4]

Dengue

One of the top ten global health threats according to WHO

>50%	***Of the worlds population is at risk of dengue infection*** [5]
141	***Countries effected*** [5]
390M	***Infections per year resulting in up to 36,000 deaths*** [5]
0	***No specific antiviral treatment approved with just 1 vaccine approved*** [6]

(1) Howard LM, et al. 2021
(2) American Lung Association
(3) Wang X, et al. 2021
(4) CDC
(5) World Mosquito Program
(6) Clinical Trials Arena

Update on Non-Core Assets

formerly Open Orphan plc

PrEP Biopharm

- hVIVO holds 62.62% of PrEP Biopharm Limited
- PrEP Biopharm Limited to commence solvent liquidation in 2023

Imutex

- hVIVO holds 49% of Imutex Limited, joint venture with PepTcell
- Full impairment of the £7m carrying value of the investment in Imutex is prudent

Disease in Motion

- Postpone all activities relating to the spin-out

Focus on core activities – delivering challenge and non-challenge services

Environmental, Social & Governance

formerly Open Orphan plc

hVIVO's success is underpinned by rigorous governance and a growing focus on its environmental & social impact

hVIVO has a long history of scientific research and discovery which has helped to advance global health

A focus on a culture of equality, inclusion and diversity supporting our team with 62% female employees

Driving corporate social responsibility initiatives across the Group

ISO14001 accreditation planned in 2024

QCA guidelines adopted by our diverse Board

ESG Group established for initiating, progressing, and monitoring our ESG objectives

hVIVO's ESG Values

1. *Commitment to ethical & compliant business practices*
2. *Advancing Heath & Research*
3. *Commitment to Volunteers & Patients*
4. *Commitment to our Staff*
5. *Social & Community Investment*
6. *Operating Sustainably*

Investment Case

formerly Open Orphan plc

Strong Fundamentals

- Record revenue, EBITDA and Sales
- Strong cash position
- Improving operational efficiencies and margins

World Leading Capabilities

- The only HCT-dedicated CRO
- Team with unique experience and expertise
- Sole HCT provider for Big Pharma

Expanding Market

- Significant expansion in HCT market, number & size
- Tangible advantages of human challenge trials
- New biotech and new Big Pharmas targeted
- High hurdle to entry

Positive Outlook

- Guiding £55m revenue, mid-to-high teens EBITDA margin
- Full visibility on 2023 revenue, into 2024
- New markets, new HCT indications, new services
- Strongest ever sales pipeline

A long-term sustainable growth model

hVIVO

formerly Open Orphan plc

Appendix

History of hVIVO

formerly Open Orphan plc

1946
UK Government establishes the human challenge Common Cold Unit in Salisbury, UK.

1989
Common Cold Unit closes. Retroscreen Virology is founded by Prof John Oxford & Pat Meeking

2001
Retroscreen's first human challenge trial

2001-2007
Retroscreen recruits 800+ influenza volunteers

2008
Dedicated Volunteer recruitment platform

2011-2015
Major investment in facilities & challenge model development

2015
Retroscreen Virology rebrands as hVIVO

June 2019
Venn acquired by Open Orphan

Dec 2019
hVIVO acquired by Open Orphan

2020
hVIVO partner with UK Government to conduct world's first COVID-19 challenge trial

2021
Spin out of infectious disease product portfolio: Poolbeg Pharma plc

2022
Expanded facilities; increased lab offering and expanded clinical trial offering

Open Orphan plc rebranded to hVIVO plc

Continuing to expand offering to drive new streams of revenue

Facilities Overview

formerly Open Orphan plc

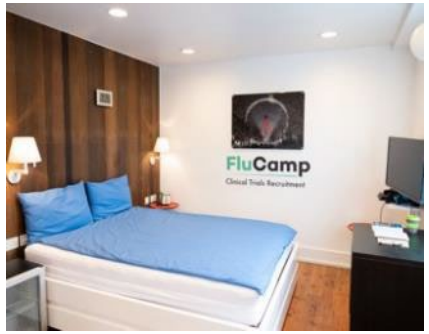
QMB Clinic

QMB Laboratories

Facilities Overview

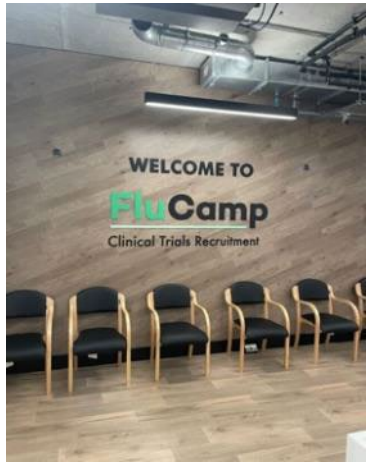
formerly Open Orphan plc

Whitechapel Clinic and Screening Centre



Plumbers' Row Corporate Office & Screening Facility




Manchester Screening Centre

Biobank

hVIVO

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Stay in touch

Ticker: HVO