



Company Presentation

March 2024

Disclaimer

The contents of this presentation and the information which you are given at the time of the presentation have not been approved by an authorised person within the meaning of the Financial Services and Markets Act 2000 (the “Act”). Reliance on this presentation for the purpose of engaging in investment activity may expose an individual to a significant risk of losing all of the property or other assets invested. This presentation does not constitute or form part of any offer for sale or subscription or solicitation of any offer to buy or subscribe for any securities in Poolbeg Pharma Limited (to be re-registered as a public company) (the “Company”) nor shall it form the basis of or be relied on in connection with any contract or commitment whatsoever. No reliance may be placed for any purpose whatsoever on the information contained in this presentation and/or opinions therein. This presentation is exempt from the general restriction (in section 21 of the Act) on the communication of invitations or inducements to engage in investment activity on the grounds that it is made to: (a) persons who have professional experience in matters relating to investments who fall within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the “Order”); or (b) high net worth entities and other persons to whom it may otherwise lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as “relevant persons”). Any person (whether a relevant person or otherwise) is recommended to seek their own independent financial advice from a person authorised for the purposes of the Act before engaging in any investment activity involving the Company’s securities. Any recipient who is not a relevant person should return this presentation to the Company’s registered office and should not act upon it. By accepting this presentation and not immediately returning it, each recipient warrants, represents, acknowledges and agrees that it is a relevant person.

This presentation does not constitute or form part of any offer or invitation or inducement to sell, issue, purchase or subscribe for (or any solicitation of any offer to purchase or subscribe for) the Company’s securities in the UK, US or any other jurisdiction and its distribution does not form the basis of, and should not be relied on in connection with, any contract or investment decision in relation thereto nor does it constitute a recommendation regarding the Company’s securities by the Company or its advisers and agents. Nothing in the presentation shall form the basis of any contract or commitment whatsoever. The distribution of this presentation outside the UK may be restricted by law and therefore persons outside the UK into whose possession this presentation comes should inform themselves about and observe any such restrictions as to the distribution of this presentation. The Company has not registered, and does not intend to register, any securities under the US Securities Act of 1933, as amended or to conduct a public offering of any securities in the US. The securities of the Company have not been approved or disapproved by the U.S. Securities and Exchange Commission or by any U.S. state regulatory authority, nor have any of the foregoing passed on the accuracy or adequacy of this presentation. Any representation to the contrary is a criminal offence.

This presentation contains “forward-looking” statements, beliefs, estimates, forecasts and opinions, including statements with respect to the business, financial condition, results of operations and plans of the Company and its group (“Group”), which constitute “forward-looking statements” within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. These forward-looking statements involve known and unknown risks and uncertainties, many of which are beyond the Company’s control and all of which are based on the current beliefs and expectations of the directors about future events. Recipients should note that past performance is not necessarily an indication of future performance and no assurance can be given that they will be attained. Forward-looking statements are sometimes identified by the use of forward-looking terminology such as “believes”, “expects”, “budgets”, “schedules”, “forecasts”, “may”, “might”, “will”, “will be taken”, “occur”, “be achieved”, “would”, “may”, “will”, “could”, “should”, “shall”, “risk”, “intends”, “estimates”, “aims”, “plans”, “predicts”, “continues”, “assumes”, “positioned” or “anticipates” or the negative thereof, other variations thereon or comparable terminology or by discussions of strategy, plans, objectives, goals, future events or intentions. These forward-looking statements may and often do differ materially from actual results.

The significant risks related to the Company’s business which could cause the Company’s actual results and developments to differ materially from those forward-looking statements appear in a number of places throughout this presentation and include statements regarding the intentions, beliefs or current expectations of the directors of the Company with respect to future events and are subject to risks relating to future events and other risks, uncertainties and assumptions relating to the Group’s business, concerning, amongst other things, the results of operations, financial condition, prospects, growth and strategies of the Group and the industry in which it operates. No one will publicly update or revise any forward-looking statements or any other information contained herein, either as a result of new information, future events or otherwise.

In considering the performance information contained herein, recipients should bear in mind that past performance is not necessarily indicative of future results, and there can be no assurance unrealised return projections will be met. Certain of the past performance information presented herein may not be representative of all transactions of a given type. Actual events could differ materially from those projected herein and depend on a number of factors, including the success of the Group’s development strategies, the successful and timely completion of clinical studies, securing satisfactory licensing agreements for products, the ability of the Group to obtain additional financing for its operations and the market conditions affecting the availability and terms of such finances. The forward-looking statements included in this presentation are expressly qualified by the cautionary statements herein.

The Company reports under International Financial Reporting Standards as issued by the International Accounting Standards Board. Where foreign currency equivalents have been provided for convenience in this presentation, the exchange rates applied are those used in the relevant financial statements from which the figures have been extracted. This presentation is confidential and is being supplied to each recipient of it solely for its information. While this presentation has been prepared in good faith, no representation, warranty, assurance or undertaking (express or implied) is or will be made, and no responsibility or liability is or will be accepted by the Company or by its officers, employees or agents in relation to the adequacy, accuracy, completeness or reasonableness of this presentation, or of any other information (whether written or oral), notice or document supplied or otherwise made available to any recipient. This presentation has been prepared to assist a recipient in making its own evaluations and does not purport to be all-inclusive or contain all of the information a recipient may desire.

Forward Looking Statements

This presentation may contain forward-looking statements containing the words “expect”, “anticipate”, “intends”, “plan”, “estimate”, “aim”, “forecast”, “project” and similar expressions (or their negative) identify certain of these forward-looking statements. The forward-looking statements in this communication are based on numerous assumptions and Poolbeg’s present and future business strategies and the environment in which Poolbeg expects to operate in the future. Forward-looking statements involve inherent known and unknown risks, uncertainties and contingencies because they relate to events and depend on circumstances that may or may not occur in the future and may cause the actual results, performance or achievements to be materially different from those expressed or implied by such forward-looking statements, and actual results could differ materially from those currently anticipated due to a number of risks and uncertainties. These statements are not guarantees of future performance or the ability to identify and consummate investments. Many of these risks and uncertainties relate to factors that are beyond each of Poolbeg’s ability to control or estimate precisely, such as future market conditions, the course of the COVID-19 pandemic, currency fluctuations, the behaviour of other market participants, the outcome of clinical trials, the actions of regulators and other factors such as Poolbeg’s ability to obtain financing, changes in the political, social and regulatory framework in which Poolbeg operates or in economic, technological or consumer trends or conditions. The delivery of this presentation shall not give rise to any implication that there have been no changes to the information and opinions contained in this presentation since the time specified. Subject to obligations under the London AIM Market (“AIM”) and Securities and Exchange Commission (“SEC”) (as applicable and as amended from time to time), none of the Company, the Group, their affiliates and advisers and their respective directors, officers, partners, representatives, employees and agents, undertakes to publicly update or revise any such information or opinions, including without limitation, any forward-looking statement or any other statements contained in this presentation, whether as a result of new information, future events or otherwise. In giving this presentation none of the Company, the Group, their affiliates and advisers and their respective directors, officers, partners, representatives, employees and agents, undertakes any obligation to provide the recipient with access to any additional information or to update any additional information or to correct any inaccuracies in any such information which may become apparent.

Certain industry and market data contained in this presentation has been obtained from third party sources. Third party industry publications, studies and surveys generally state that the data contained therein have been obtained from sources believed to be reliable, but that there is no guarantee of the accuracy or completeness of such data. While the Company believes that each of these publications, studies or surveys has been prepared by a reputable source, the Company has not independently verified the data contained therein. In addition, certain of the industry, scientific and market data contained in this presentation comes from the Company’s own internal case studies, research and estimates based on the knowledge and experience of the Company’s management in the market in which it operates. While the Company believes that such research, estimates and results from its case studies are reasonable and reliable, they, and their underlying methodology and assumptions, have not been verified by any independent source for accuracy or completeness unless otherwise stated and are subject to change without notice. Risks and uncertainties affecting the Company are outlined further in the Company AIM and SEC filings.

Poolbeg Pharma's Business Model

- Poolbeg Pharma plc is focused on the development and commercialisation of innovative medicines for high unmet needs with a growing emphasis on rare and orphan diseases
- Poolbeg is looking to generate sustainable revenues with a pathway to profitability
- The enhanced management team took Amryt Pharma from £50m market cap in 2016 to \$1.48bn exit in 2023 – plans in place to repeat this with Poolbeg



Poolbeg Well Positioned for Success

Industry Leading Team

- Experienced executive team successfully built 3 public life science companies & achieved multiple exits
- Three key former Amryt Pharma leaders joined Poolbeg with a track record of establishing and scaling sales infrastructures in the US & ROW

Revenue Focused Business Model

- Targeting near term revenue generation from commercial stage rare and orphan products
- Focused on partnering to maximise value from in-house programmes

High Value Programmes for Partnering

- POLB 001 – Phase 2 ready – >\$10bn market opportunity in cancer immunotherapy-induced CRS. Treatment for severe influenza
- Oral encapsulation technology – targeting obesity with Oral GLP-1R agonist – entering clinic H1 2024
- AI-led discovery programmes with CytoReason (Influenza) and OneThree Biotech (RSV)

Strong Financial Position

- Cash balance of £14.1m (30 June 2023)
- Focused on revenue generation and cashflows

Proven Leadership Team

Experience in commercialising and developing innovative medicines



Cathal Friel
Chairman



- ✓ Founder of Raglan Capital, completing 4 IPOs (Amryt Pharma, hVIVO & Poolbeg Pharma)



Jeremy Skillington PhD
Chief Executive Officer



- ✓ Employee #1 at Inflazome - €380m+ exit to Roche
- ✓ Extensive BD experience with Genentech & HS Lifesciences



Ian O'Connell
Chief Financial Officer



- ✓ Co-founder of Open Orphan plc (renamed hVIVO plc) and one of Amryt Pharma's first team members
- ✓ Chartered Accountant with deep corporate finance experience

Additional Former Amryt Pharma Executive Team Members Joined Poolbeg:



David Allmond
Chief Business Officer



- ✓ Former CBO at Amryt Pharma – pivotal in establishing sales & marketing in EU, US and ex-US
- ✓ Previously CVP Global Marketing at Celgene and EMEA lead at Aegerion Pharmaceuticals



John McEvoy
Chief Legal Officer



- ✓ Former GC at Amryt Pharma – pivotal in rapid growth through acquisition & Nasdaq listing
- ✓ Qualified lawyer in the US (New York), England & Wales, and Ireland











Laura Maher
VP Clinical Operations



- ✓ Former AD of Clinical Operations at Amryt Pharma
- ✓ Led the clinical research in Amryt Pharma's pipeline including Filisuvez®, the world's first approved epidermolysis bullosa treatment

High Value Programmes

Actively engaging in partnering discussions

Product / Programme		Pre-Clinical	Phase I	Phase II	Phase III	Key Catalysts
POLB 001 Cancer immunotherapy-induced CRS						<ul style="list-style-type: none"> Positive data from Phase 1b & <i>in vivo</i> study. Phase 2 enabling activities ongoing. Partnering ready
POLB 001 Severe influenza						<ul style="list-style-type: none"> Positive data from Phase 1b challenge trial received - partnering ready
Oral Encapsulated GLP-1R Agonist Obesity & diabetes treatment						<ul style="list-style-type: none"> Proof of technology clinical trial expected to commence H1 2024
Influenza AI Programme Utilising unique licensed human viral challenge data						<ul style="list-style-type: none"> Outputs received Q2 2023 Validation in 2024
RSV AI Programme Utilising unique licensed human viral challenge data						<ul style="list-style-type: none"> Drug candidates identified and now prioritised following positive outputs from lab-based analysis

Other Partnerships/Collaborations

✓ Strategic collaboration with Nasdaq listed company for the development of an optimised oral drug to treat a metabolic condition

✓ €2.3m in non-dilutive grant funding secured to develop a Phase I clinical trial ready oral vaccine candidate; Poolbeg led consortium including AnaBio Technologies, UCD and TCD

POLB 001

Opportunity across multiple disease areas

Cancer Immunotherapy-
induced CRS

Severe Influenza



Phase 2 Ready, Orally Administered p38 MAPK inhibitor

Serving high unmet medical needs in patients receiving cancer immunotherapies

Compelling Data	<ul style="list-style-type: none">• Phase 2 ready oral small molecule, excellent bioavailability• Strong pre-clinical data package• Proven safety and well tolerated in Phase 1 clinical trial• Efficacy demonstrated in Phase 1b LPS human challenge trial supports partnering• Efficacy demonstrated in reducing cancer immunotherapy-induced CRS in an in vivo model
Strong Patent Portfolio	<ul style="list-style-type: none">• Cancer immunotherapy-induced CRS patent applications filed, potential for protection out to 2043<ul style="list-style-type: none">• Recent data enhances & facilitates expansion of patent applications• Granted patents for severe influenza out to 2038
Major Market Opportunity	<ul style="list-style-type: none">• Cytokine Release Syndrome (CRS) is a barrier to broader uptake of cancer immunotherapies, attractive to large pharma seeking a product differentiator• POLB 001 potential market > US\$10 billion• CRS induced by cancer immunotherapies has the potential to be a rare / orphan indication

¹Grand View Research. CAR T-Cell Therapy Market Analysis 2023-2030; Bispecific Antibodies Market Size, Share & Trends Analysis Report

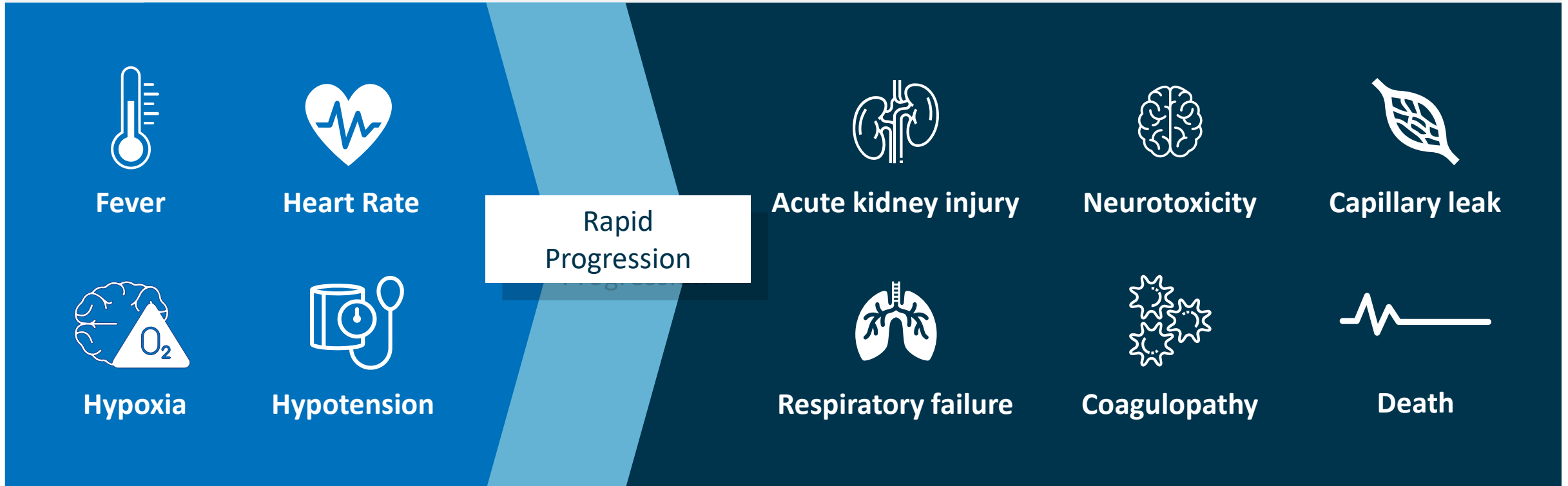
²Datamonitor Healthcare. Forecast: Diffuse Large B-Cell Lymphoma and Multiple Myeloma, 2023.

What is Cytokine Release Syndrome?

Severe life-threatening side effect of cancer immunotherapies

A severe inflammatory response, which may be encountered as a side effect of some therapies and infections

Clinical Manifestations of CRS



CRS is a Rate Limiting Side Effect Associated with Emerging Cancer Immunotherapies

Even mild to moderate CRS impacts seamless delivery of potentially life-saving treatments

- CRS impacts >70%¹ of patients undergoing CAR T or Bispecific Antibody therapies and cannot be predicted
- Severe cases of CRS are life-threatening and may require intensive supportive care
- Mild to moderate CRS can result in extended hospitalisation and high consumption of healthcare resources
- Advancements of cancer immunotherapies is driving the need for effective CRS management



Oral administration of POLB 001 to prevent or treat CRS has the potential to enable broader use of cancer immunotherapies

Novel strategies are needed for the management of CRS to enable outpatient delivery of cancer immunotherapies

¹ Average rate from Summary of Product Characteristics (SmPCs) for Yescarta, Tecartus, Abecma, Kymriah, Carvykti, Breyanzi, Elrexio, Columvi, Epkinly, Tecvayli and Talvey

POLB 001 Demonstrated Strong Efficacy/Safety Profile

Phase 1b LPS Human Challenge Clinical Trial



Excellent safety & tolerability profile



Major reduction of key inflammatory markers

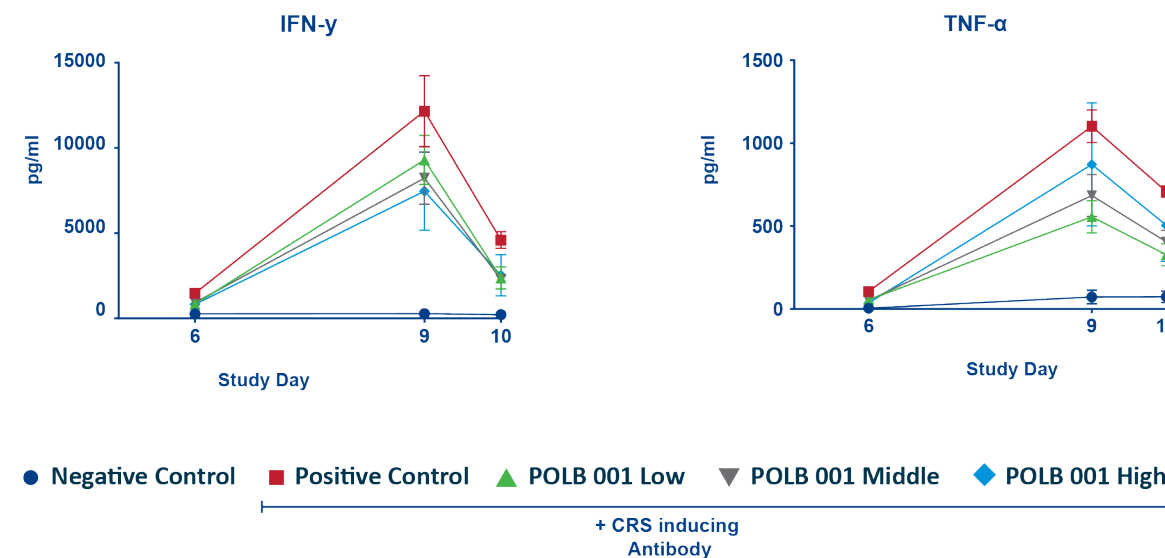


Potent target inhibition confirmed



Clear dose response relationship observed

Positive *In Vivo* Results Validate POLB 001's Potential to Address Cancer Immunotherapy-Induced CRS



- Well tolerated drug that attenuates excessive immune responses without completely ablating the immune system
- Shows promise it will not unduly suppress effectiveness of immunotherapy in already immunocompromised patients

ASH Abstract And Poster Presentation



Presentation at 65th American Society of Hematology (ASH) Annual Meeting to provide insight into POLB 001's potential to treat CRS associated with cancer immunotherapies

#2093. POLB 001, an oral broad-spectrum anti-inflammatory with the potential to prevent Cytokine Release Syndrome

Emma Searle, MD, Liam Tremble, PhD, Rakesh Popat, MBBS, PhD, Digna de Bruin, MD. PhD., Matthijs Moerland, PhD., and Brendan Buckley, Prof, MD.

- POLB 001 has the potential to revolutionise the impact of cancer immunotherapies by enabling safer and broader use in an outpatient setting

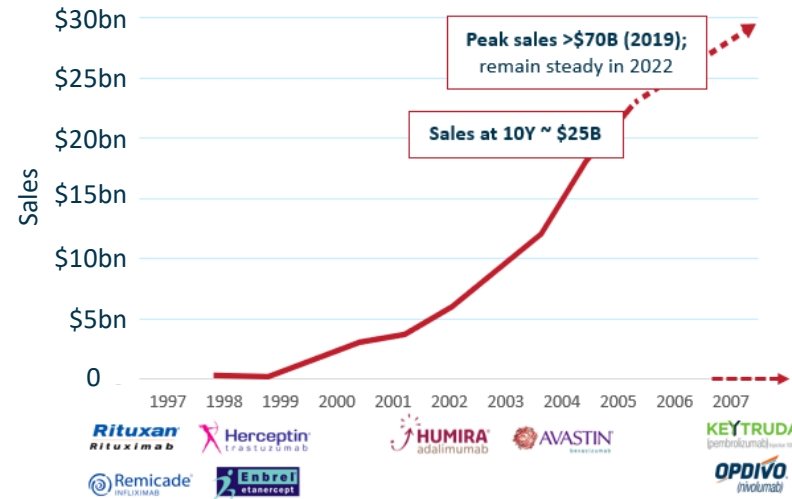
Significant Market Opportunity in a Rapidly Growing Field

Cytokine Release Syndrome (CRS) is rate limiting in delivering cancer immunotherapies

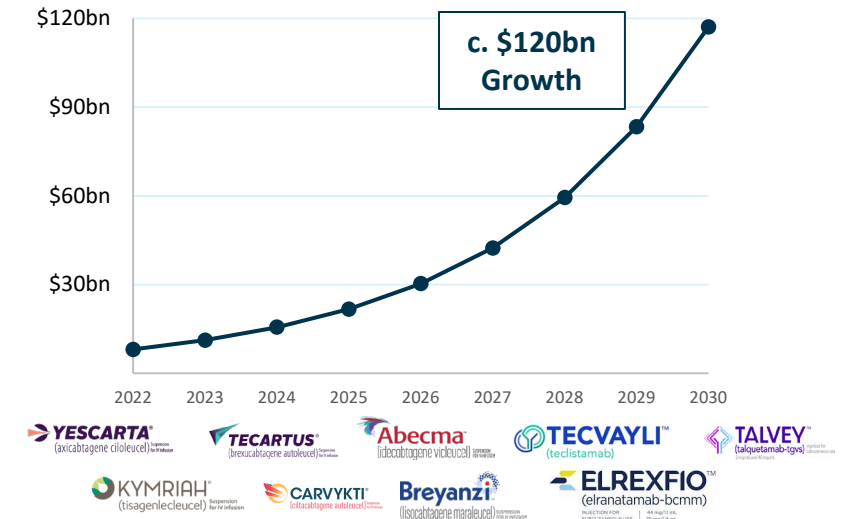
Bispecific Antibody and CAR T Therapy market expected to show **exponential growth**, similar to antibodies in the early 2000s



Monoclonal Antibodies



Bispecific Antibody & CAR T Therapy¹⁻³



- The field of cancer immunotherapies, including CAR T and bispecific antibodies, is expanding rapidly and expected to grow to c. \$120bn USD by 2030¹⁻³
- Due to CRS risk, these potentially life-saving therapies can only be delivered in specialist cancer centres, requiring hospitalisation and significant use of healthcare resources - limiting the number of patients that can receive these therapies
- There are currently very few approved therapies for the management of CRS and no approved therapies for prevention of CRS
- POLB 001 has the potential to enable broader, safer delivery of these therapies to the cancer patients who need them

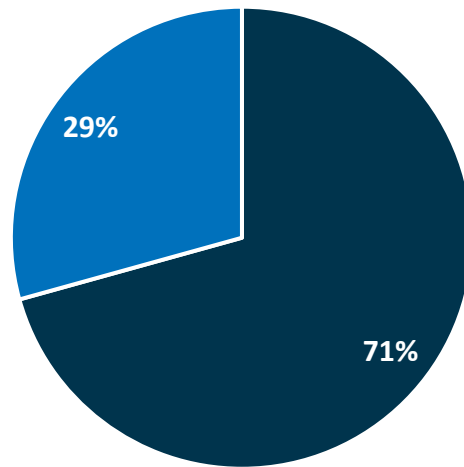
CAR T, Chimeric Antigen Receptor T-cell therapy; **CRS**, Cytokine Release Syndrome

1. Grand View Research. CAR T-Cell Therapy Market Analysis 2023-2030. **2.** Grand View Research. Bispecific Antibodies Market Size, Share & Trends Analysis Report. **3.** Datamonitor Healthcare. Forecast: Diffuse Large B-Cell Lymphoma and Multiple Myeloma, 2023.

Preventative Therapy Of CRS Represents A Significant Market Opportunity of >\$10bn

A significant opportunity exists for POLB 001 as adjunct therapy to BsAb and CAR T treatment

Addressable MM and DLBCL population by 2030 in the US and EU5

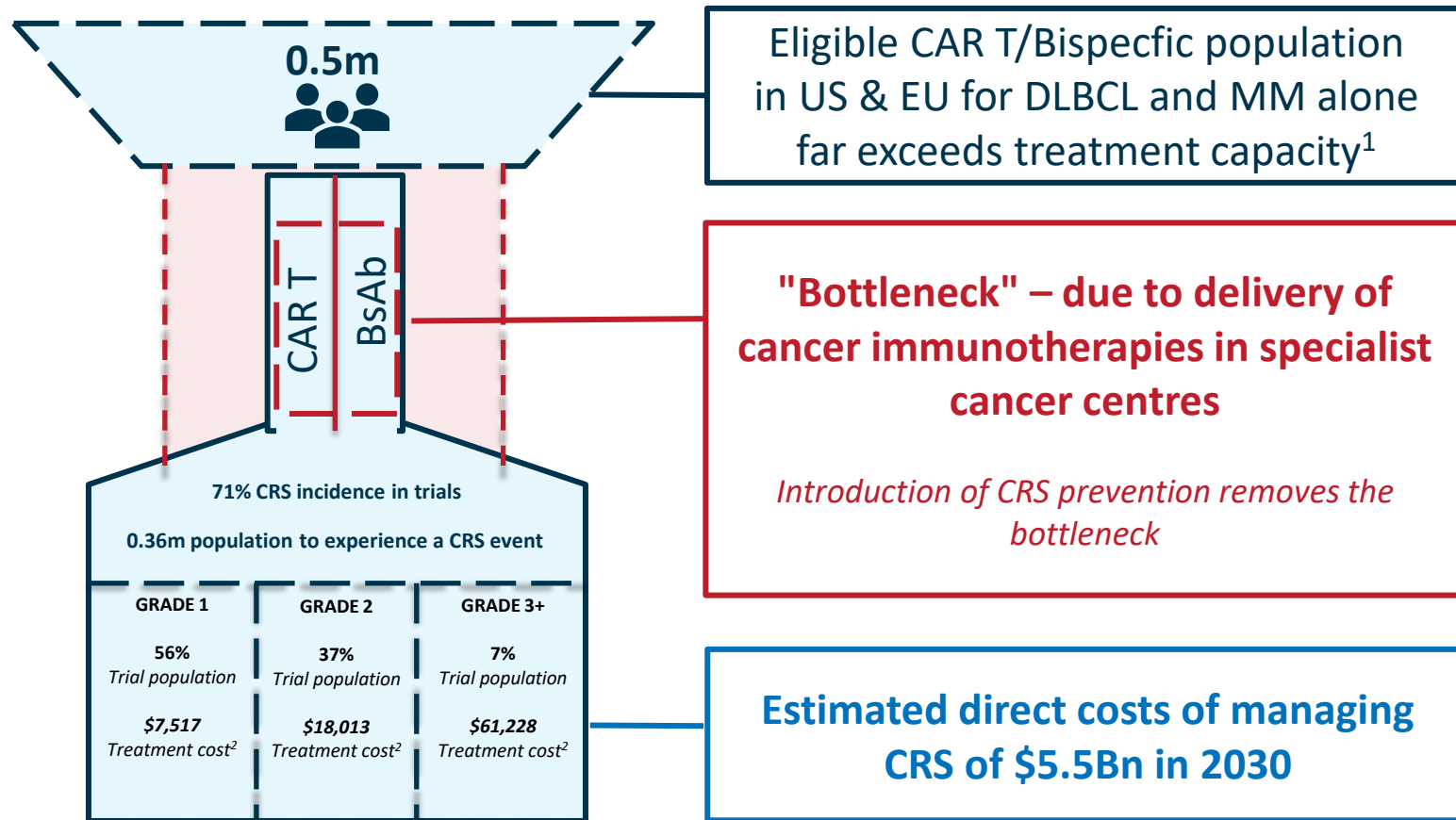


■ MM ■ DLBCL
n = ~500,000 patients¹

- Cancer immunotherapies are used to treat a growing number of cancers including multiple myeloma (MM), diffuse large B-cell lymphoma (DLBCL) and other cancers
- **1st, 2nd and 3rd line+ MM and DLBCL patients in the US and EU5, receiving CAR T and Bispecific Antibody therapy¹**
- Increased cancer immunotherapy penetration to 2040 due to wider adoption and transition **outpatient administration²**; the launch of a CRS preventative would enable wider uptake in addressable patients
- **Significant upside** potential across additional haematological malignancies, solid tumours, immune inflammatory diseases and future indications in separate therapeutic areas such as severe influenza

CRS Creating a "Bottleneck"

Effective prevention of CRS may enable broader access to cancer immunotherapies



BsAb, Bispecific Antibody; **CAR T**, Chimeric Antigen Receptor T-cell therapy; **CRS**, Cytokine Release Syndrome; **DLBCL**, Diffuse Large B-Cell Lymphoma; **MM**, Multiple Myeloma

1. Datamonitor Healthcare. Forecast: Diffuse Large B-Cell Lymphoma and Multiple Myeloma, 2023 2. Abramson JS et al. Cytokine release syndrome and neurological event costs in lisocabtagene maraleucel-treated patients in the TRANSCEND NHL 001 trial. Blood Adv. 2021 Mar 23;5(6):1695-1705.

- “If there was something oral or more efficacious in preventing CRS in the first place, a whole lot of infrastructure requirement falls away.” Dr Martin Kaiser, Royal Marsden

Key Opinion Leaders Supportive of POLB 001's Significant Potential

"CAR T therapy inpatient capacity is a challenge; hence, measures that reduce hospital stay or make treatment mobile are needed."

Lymphoma specialist, UK

"The development of an oral CRS preventive therapy will mean no or shorter hospital stays."

Myeloma specialist, FR

"If there was something oral or more efficacious in preventing CRS in the first place, a whole lot of infrastructure requirement falls away. The problem is the only treatment currently available has to be given as an IV treatment"

Dr Martin Kaiser, Myeloma specialist, UK

"Bispecific antibodies will only be delivered in specialist cancer centres until there is a way to make them safer. POLB 001 could make treatment safe enough to extend bispecifics to a much wider patient population."

Professor Gareth Morgan, US

- Access to CAR T and Bispecific Antibody therapy is restricted to specialist centres and limited by inpatient capacity due to management of CRS
- Prevention of CRS would allow for outpatient administration to enable safer broader delivery of cancer immunotherapies
- POLB 001 profile attractive as a potential oral therapy to prevent and treat CRS

Oral Platform

Proprietary encapsulation to
enhance API stability and uptake

Oral Encapsulated
GLP-1R Agonist

Metabolic Diseases

Oral Vaccines



Proprietary Oral Delivery Platform

Capital light prototype and piloting process enables further strategic collaborations

Poolbeg Pipeline Programme

Obesity: Oral GLP-1 Agonist

- Preparing a proof-of-technology clinical trial to determine that a Glucagon-like Peptide 1 receptor (GLP-1R) agonist can be successfully delivered orally in humans
- GLP-1R agonist market expected to exceed \$150bn by 2031¹
- **Oral GLP-1R agonist trial expected to commence H1 2024**

Partner Programme

Strategic Collaboration With a Nasdaq Listed Biopharma Company

- To produce a prototype oral drug for a metabolic condition
- Potential to expand to a full licensing agreement
- Opportunity to do other similar deals

Oral Vaccine Programme

- €2.3m in non-dilutive grant funding secured to develop a Phase I clinical trial ready oral vaccine candidate
- Poolbeg led consortium including UCD, TCD, and AnaBio Technologies

¹The Economist, March 2023

Artificial Intelligence Programmes

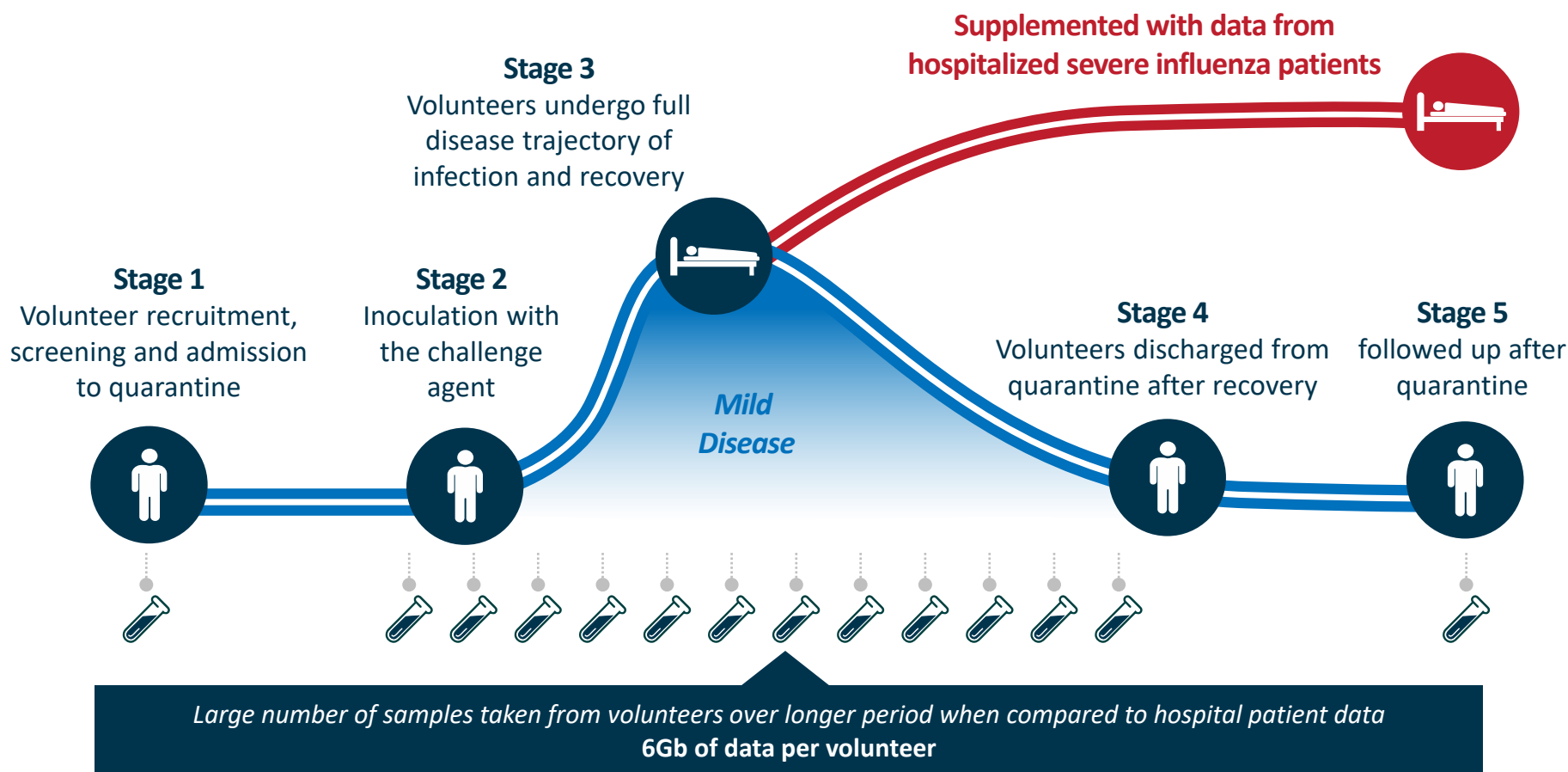
Unlocking insights from unique
human challenge trial data

Influenza





RSV

AI Underpinned by Unique Human Challenge Trial Data

Proprietary data set enables training of cutting-edge AI algorithms leading to higher quality outputs



Benefits of Challenge Data

-  **Multi-parametric dataset – clinical, biological and digital**
-  **Known infection time and dose**
-  **Clean data – maximised signal, minimized noise**
-  **Verifiable clinical assessment – Controlled environment**

Two Ongoing AI Discovery Programmes

Extensive database suitable for computational ingestion



- ✓ AI analysis of Influenza data
- ✓ Novel influenza drug targets identified
- ✓ Candidates prioritised

CytoReason's Partners



- ✓ AI analysis of RSV data
- ✓ Unique RSV drug targets and treatments identified
- ✓ Candidates prioritised following positive outputs from lab-based analysis

OneThree Biotech's Partners



Poolbeg Well Positioned for Success

Industry Leading Team

- Experienced executive team successfully built 3 public life science companies & achieved multiple exits
- Three key former Amryt Pharma leaders joined Poolbeg with a track record of establishing and scaling sales infrastructures in the US & ROW

Revenue Focused Business Model

- Targeting near term revenue generation from commercial stage rare and orphan products
- Focused on partnering to maximise value from in-house programmes

High Value Programmes for Partnering

- POLB 001 – Phase 2 ready – >\$10bn market opportunity in cancer immunotherapy-induced CRS. Treatment for severe influenza
- Oral encapsulation technology – targeting obesity with Oral GLP-1R agonist – entering clinic H1 2024
- AI-led discovery programmes with CytoReason (Influenza) and OneThree Biotech (RSV)

Strong Financial Position

- Cash balance of £14.1m (30 June 2023)
- Focused on revenue generation and cashflows



Appendix

Non-Executive Directors

A long history of success in the life sciences industry



Prof Luke O'Neill
Non-Executive Director



Trinity
College
Dublin
The University of Dublin



INFLAZOME
Targeted Therapies for Inflammatory Diseases



- ✓ Co-Founder Inflazome which was acquired by Roche in 2020 for €380m + milestones
- ✓ Previously scientific advisory board member of GSK & Pfizer



Eddie Gibson
Non-Executive Director



- ✓ Market access expert
- ✓ Supported numerous drug companies secure pricing and reimbursement



Prof Brendan Buckley
Non-Executive Director



EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH



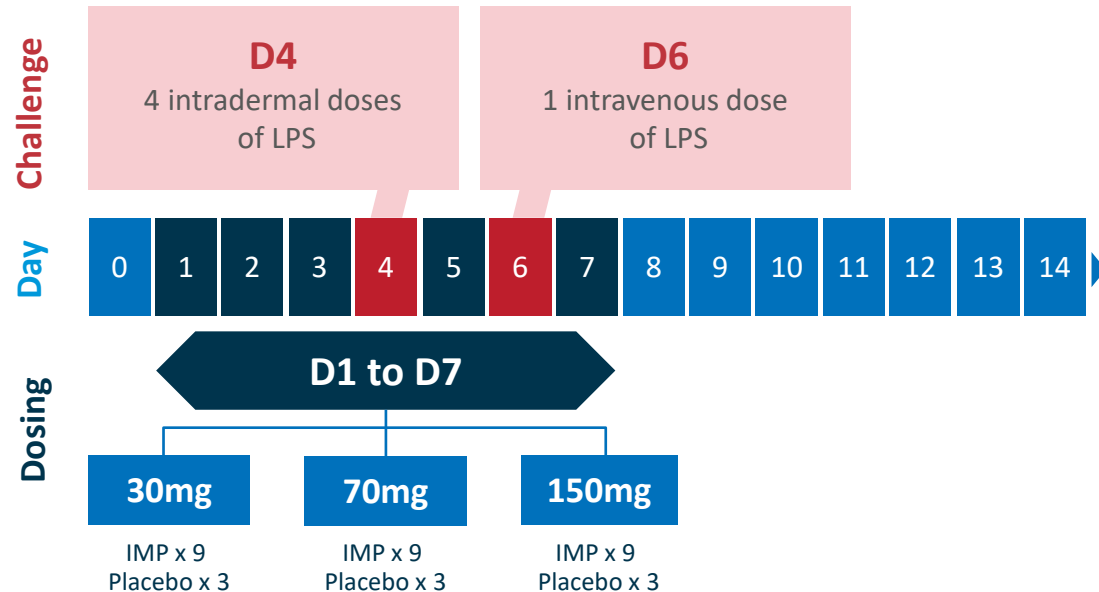
- ✓ Former Chief Medical Officer at ICON plc
- ✓ Former member of Committee for Orphan Medicinal Products & Scientific Advisory Group for Diabetes and Endocrinology at the EMA

POLB 001 – A Human LPS Challenge Trial

Evidence for benefit of POLB 001 in the therapy of LPS-induced inflammation

Randomised, double-blind, placebo-controlled, multiple dose, inflammatory challenge trial in healthy volunteers

Trial design



Endpoints

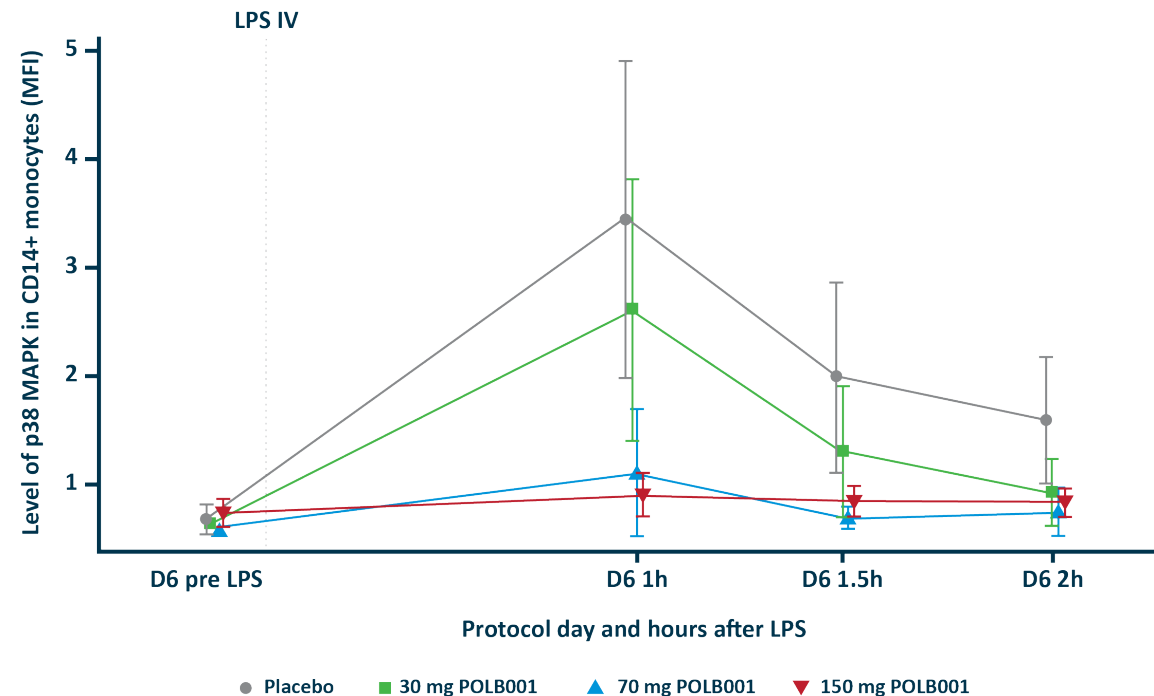
Intravenous LPS challenge

- Bloods (cytokines, vascular markers, CRP)
- *Ex-vivo* LPS response
- Safety & tolerability (inc. vital signs, AE's, ECG, Haematology)
- **Local inflammatory responses** were also measured

Potent and Selective Inhibition of p38 MAPK Signaling

Effective target engagement demonstrated in LPS human challenge trial

Levels of phosphorylated p38 MAPK in circulating monocytes

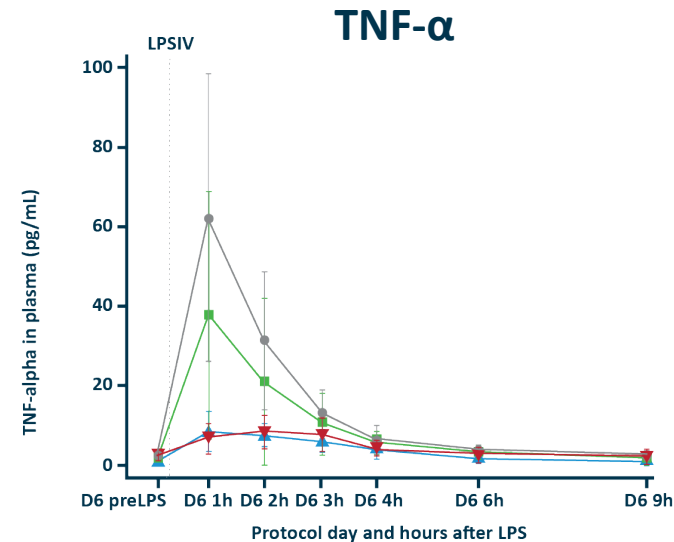


- POLB 001 was **widely distributed**
- POLB 001 **inhibited p38 MAPK activation**, direct measurement of activation
- POLB 001 **inhibited in vivo and ex vivo responses** to LPS-induced TNF- α , indirect measurement p38 activity

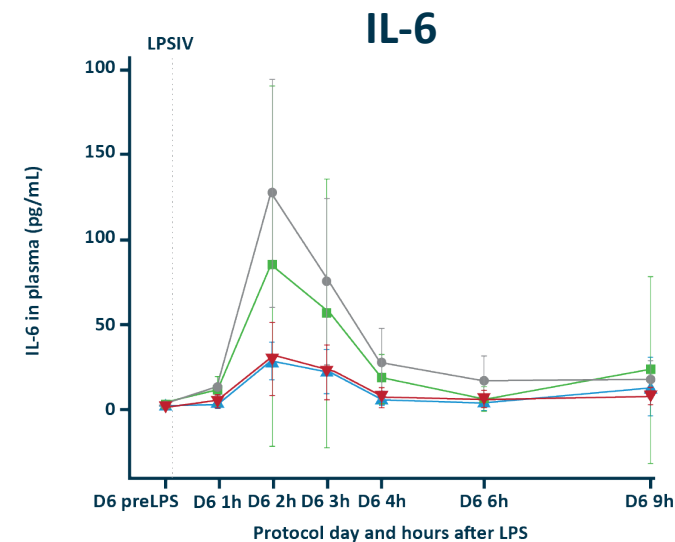
Blood samples were taken before and after administration of intravenous LPS. Peripheral blood samples were analyzed by flow cytometry. Monocytes were gated by FSC, SSC and CD14+. Data is presented as mean MFI values of phospho-p38 +/- SEM

Reduced Key Inflammatory Cytokines Following LPS Challenge

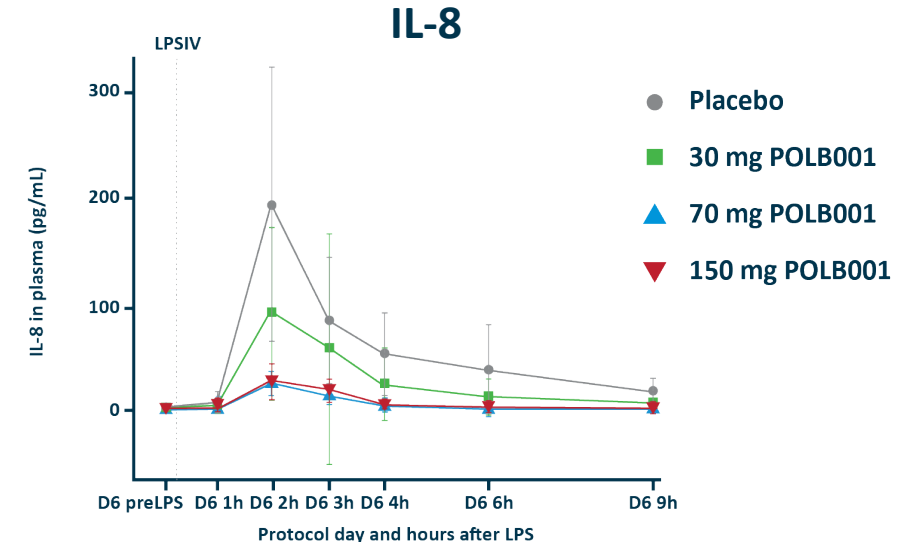
Dose dependent reductions, without ablation of immune function



TNF- α reduction of **73.5%** and **56.2%** seen for 70 mg and 150 mg doses respectively ($p = 0.0003^{\dagger}$)



IL-6 reduction of **57.4%** and **63.5%** seen for 70 mg and 150 mg doses respectively ($p = 0.0002^{\dagger}$)



IL-8 reduction of **80.7%** and **76.7%** seen for 70 mg and 150 mg doses respectively ($p < 0.0001^{\dagger}$)

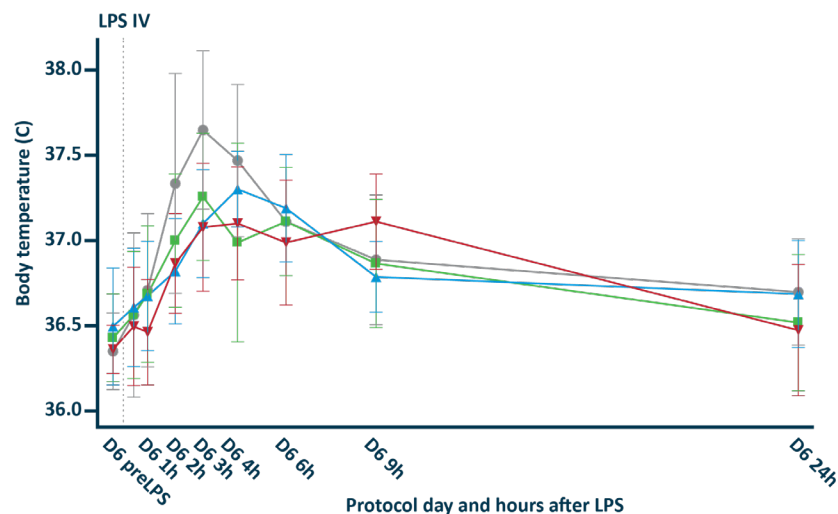
TNF- α , IL-6 and IL-8 levels decreased between 56-81% in subjects treated with 70 mg or 150 mg POLB 001 twice daily

† The exploratory analysis suggested statistically significant improvement in treatment ($p < 0.05$) for the endpoints examined.

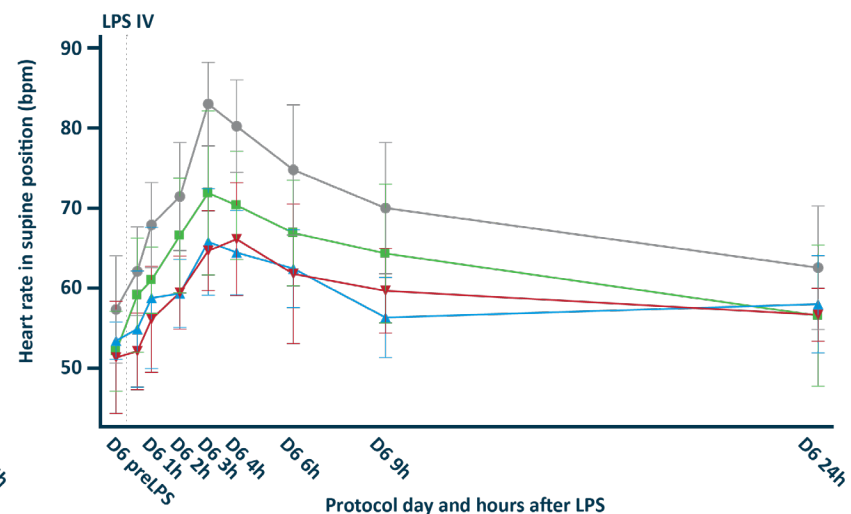
Reduced Key Indicators of LPS-Induced Systemic Inflammation

The reduction of systemic cytokines align with improvement in clinically meaningful endpoints

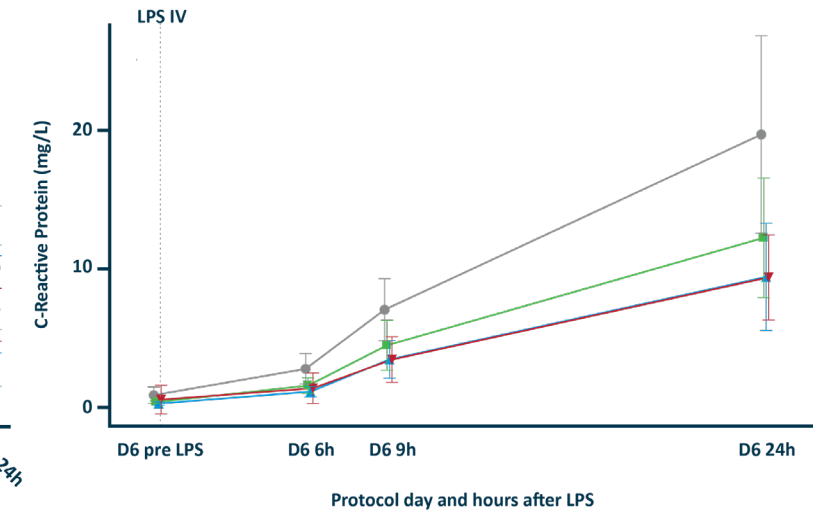
Mean Body Temperature



Heart Rate Rise (bpm)



C-Reactive Protein (CRP)



● Placebo ■ 30 mg POLB001 ▲ 70 mg POLB001 ▼ 150 mg POLB001

No significant effect on body temperature with a trend towards reduction compared to placebo.

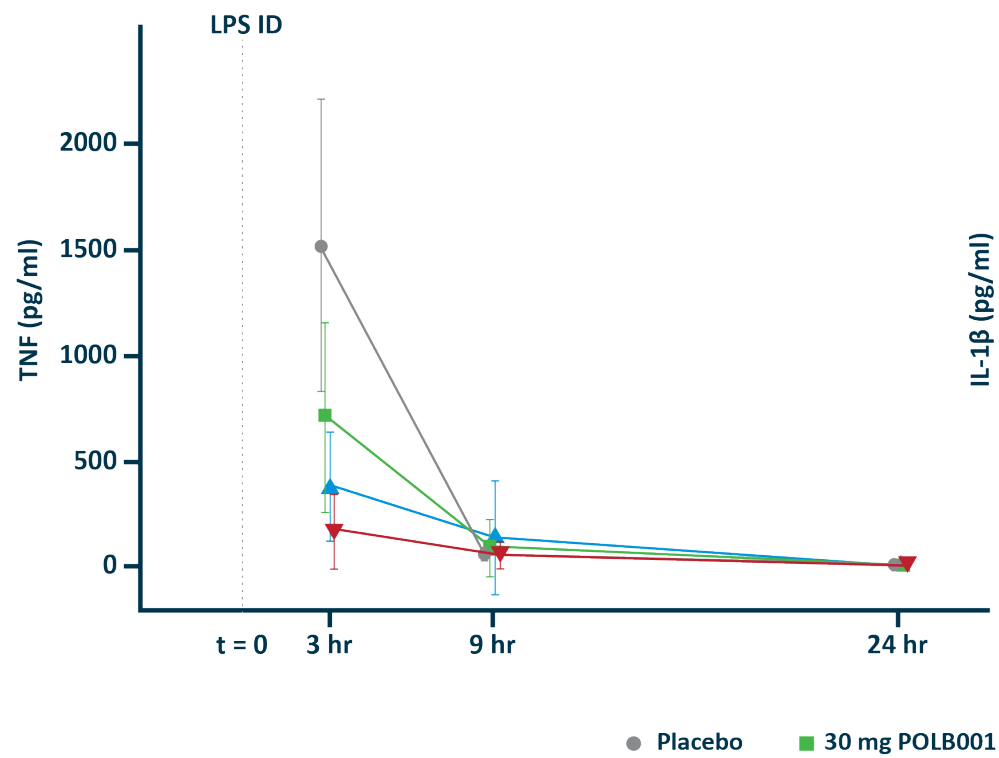
Suppressed increase in heart rate following IV LPS administration

CRP level reduction of **33.1%** and **33.3%** seen for **70mg** and **150mg** doses respectively

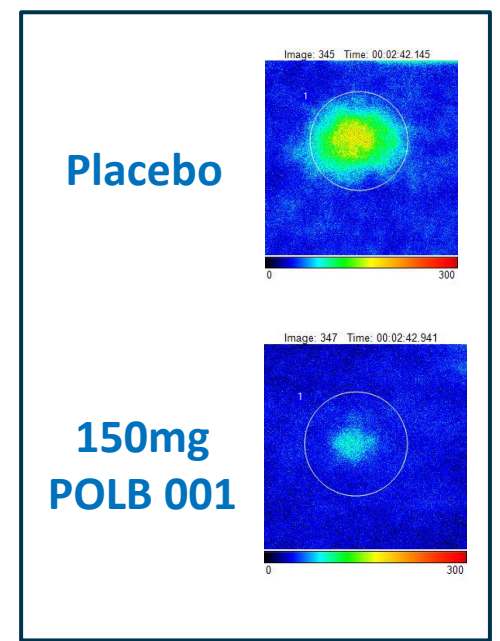
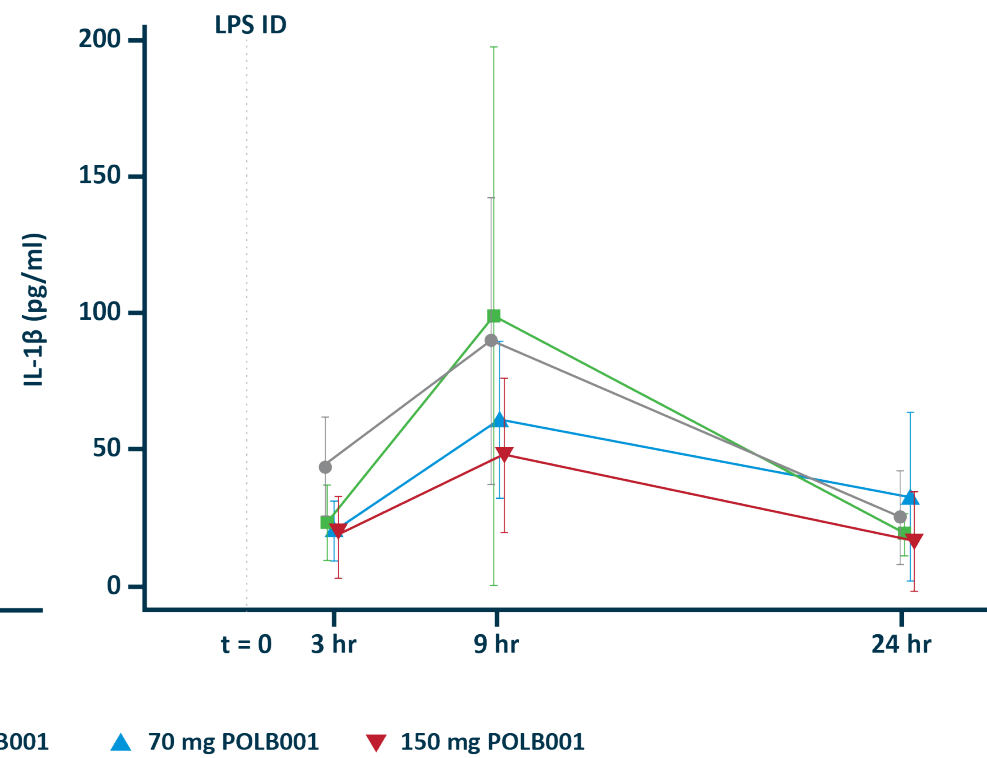
POLB 001 Effectively Reduced Inflammation in Tissue

POLB 001 150 mg significantly reduced IL-1 β [†] and TNF- α [†] responses in blister exudate compared to placebo in LPS challenge

TNF- α in blister exudate



IL-1 β in blister exudate



[†]The exploratory analysis suggested statistically significant improvement in treatment (p<0.05) for the endpoints examined.

POLB 002 – Respiratory Virus Infection Immunotherapy

First-in-class, broad spectrum, RNA-based

Overview

- Derived from 20 years research by world class researchers
- Single dose, intranasal, dual action prophylactic & therapeutic
- Triggers nasal cells into an antiviral state to protect against the virus
- Blocks the virus from replicating
- US & European patents granted & continuing to expand

5-20%

Global population
infected by seasonal
outbreaks¹

3M+

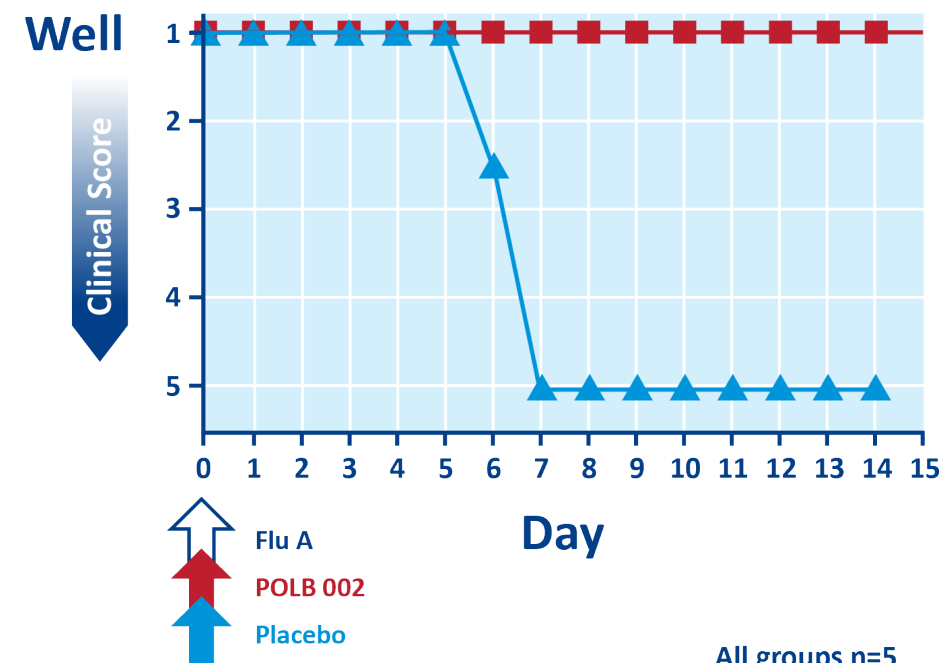
Annual deaths
worldwide¹

Top 5

Global cause
of death¹

In vivo influenza A challenge²

- Late preclinical stage with extensive preclinical data package
- No reduction in efficacy or safety issues after repeat dosing



POLB 003 – Melioidosis Vaccine Candidate

Late preclinical stage

Overview¹

- *Burkholderia pseudomallei* causes severe disease in humans & animals
- Infection routes: inhalation, percutaneous inoculation (through an open wound), & ingestion (food or water)
- Treatment: lengthy antibiotic treatment for up to 6 months
- CDC Designated Biothreat – stockpiling potential
- Global warming expected to change melioidosis epidemiology

165,000

Estimated global cases per annum²

Up to **54%**

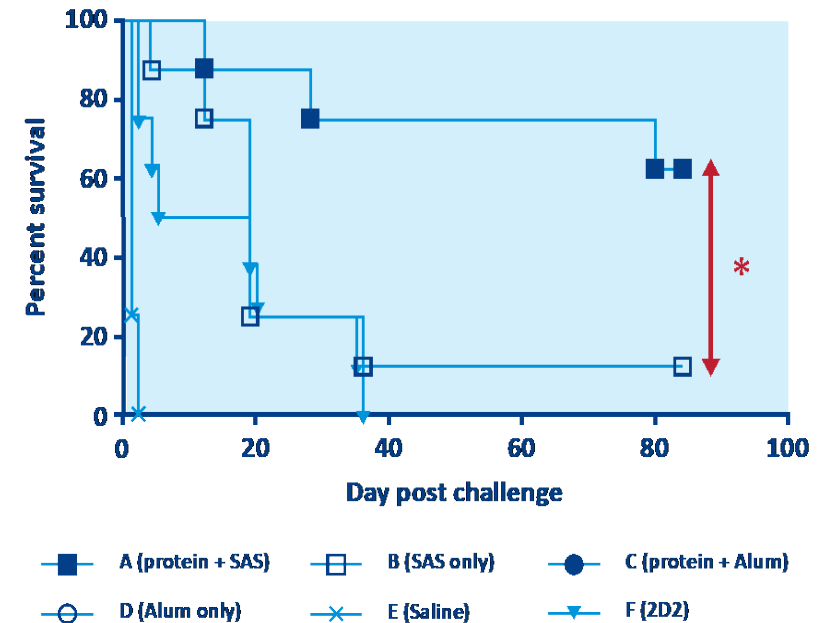
Of cases are fatal²

0

Vaccines available

Significantly enhances survival in a model of chronic melioidosis

- Late preclinical stage with extensive preclinical data package





Stay in touch

