Jefferies London Healthcare Conference 2022

15-17 November 2022
Disclaimer

Forward-Looking Statements

This document may contain forward-looking statements. Forward-looking statements are statements that are not historical facts and may be identified by words such as "plans", "targets", "aims", "believes", "expects", "anticipates", "intends", "estimates", "will", "may", "should" and similar expressions. Forward-looking statements include statements regarding objectives, goals, strategies, outlook and growth prospects; future plans, events or performance and potential for future growth; economic outlook and industry trends; developments in BenevolentAI’s markets; the impact of regulatory initiatives; and/or the strength of BenevolentAI’s competitors. These forward-looking statements reflect, at the time made, BenevolentAI’s beliefs, intentions and current targets/aims. Forward-looking statements involve risks and uncertainties because they relate to events and depend on circumstances that may or may not occur in the future. The forward-looking statements in this release are based upon various assumptions based on, without limitation, management’s examination of historical operating trends, data contained in BenevolentAI’s records, and third-party data. Although BenevolentAI believes that these assumptions were reasonable when made, these assumptions are inherently subject to significant known and unknown risks, uncertainties, contingencies and other important factors which are difficult or impossible to predict and are beyond BenevolentAI’s control.

Forward-looking statements are not guarantees of future performance and such risks, uncertainties, contingencies and other important factors could cause the actual outcomes and the results of operations, financial condition and liquidity of BenevolentAI or the industry to differ materially from those results expressed or implied by such forward-looking statements. The forward-looking statements speak only as of the date of this release. No representation or warranty is made that any of these forward-looking statements or forecasts will come to pass or that any forecast result will be achieved.
Clinical-stage AI-enabled drug discovery company

Uniting artificial intelligence with cutting-edge science to decipher complex disease biology and discover novel treatments
About us

$300m in platform investment

Board with deep expertise across AI, drug discovery & development, pharmaceuticals

Listed on EuroNext Amsterdam
April 2022

Cash runway to Q4 2024
providing sufficient capital for key value inflection points

TEAM
as at June 2022

Full molecular biology, medicinal chemistry and in vivo pharmacology capabilities for in-house experimentation

BOARD

Baroness Joanna Shields
CEO & Executive Director

François Nader
Chairman

Susan Liautaud
Non-Executive Director

Olivier Brandicourt
Non-Executive Director

Jean Raby
Non-Executive Director

Jackie Hunter
Non-Executive Director

Nigel Shadbolt
Non-Executive Director

John Orloff
Non-Executive Director
The Benevolent Platform™ is scientifically and commercially validated and has already delivered:

- **13** Named Platform-generated drug programmes
- **1** asset in Phase II
- **3** assets in pre-IND
- **+10** Exploratory stage programmes

- Identified a leading COVID-19 treatment that is now FDA approved
- Successful multi-target collaboration with AstraZeneca further validates our approach with a total of **5 novel targets** selected for AstraZeneca’s portfolio
- Well funded with key value inflection points in the near and medium term
The AI value proposition for pharma R&D

**Direct R&D Cost Savings**

**Discovery & Pre-Clinical**

"Faster and cost effective"

<table>
<thead>
<tr>
<th>INDUSTRY STANDARD</th>
<th>AI-ENHANCED</th>
</tr>
</thead>
<tbody>
<tr>
<td>$33m over 5.5 years</td>
<td>$15m over 3-3.5 years</td>
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</table>

Based on industry benchmarks and internal programmes

**Reduce pre-clinical cost by >50% and time to market by 2-2.5 years**

Note
Lab research and target identification costs and time not captured in industry data - likely to add significantly to the industry standard time and cost

**Increasing Probability of Success**

\textbf{Clinical Development}

"Get it right more often"

**Highest attrition is at Phase II (current 34% success rate)**

\~50% Phase II/III trial failures due to lack of efficacy

**Illustrative 25% PoS improvement at each clinical stage (Phase I-III)**

<table>
<thead>
<tr>
<th>INDUSTRY STANDARD</th>
<th>AI-ENHANCED (ILLUSTRATIVE)</th>
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<tbody>
<tr>
<td>PoS from Phase I to Market</td>
<td>12%</td>
</tr>
<tr>
<td># Phase I Candidates Required for 1 Approved Drug</td>
<td>9</td>
</tr>
<tr>
<td>Illustrative NPV(6)</td>
<td>c$60m</td>
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Notes and Sources: For illustrative purposes only; (1) Illustrative NPV for a theoretical $750m peak sales drug during initial 10Y on the market (assumes if peak sales reached 5 years post-launch, (ii) 90% gross margin, (iii) 20% S&M expenses, (iv) 20% tax, (v) a 10% discount rate, and (vi) excludes any terminal value). (2) Based on Paul et al Nat Rev Drug Discov 2010. (3) Based on Harrison, Nat Rev Drug Discov 2016. (4) Based on Biomedtracker/PharmaIntelligence 2021. (5) Based on Odyssey Due Diligence report.
BenevolentAI technology approach

Our data foundations integrate the world’s relevant and available biomedical data to surface insights through our tools, improving how scientists discover and develop new therapies.

1. Creating Data Foundations
   Integrated knowledge platform built to ingest, represent, and surface insights from large volumes of diverse data types.

2. AI Tools for Scientists
   Suite of AI-driven tools and workflows allow scientists to explore data and discover novel, high-quality targets.

- 85+ Data Sources
- 46% information proprietary

Data Sources:
- ‘Omics
- Molecules
- Experimental Data
- Literature
- Pathology
- Biological Systems

Experimental validation

Triage Evaluation

Predictive algorithms

Hypothesis-Driven Target ID

Progressibility Assessment

Portfolio Programmes
## How BenevolentAI’s approach compares to industry benchmarks

<table>
<thead>
<tr>
<th>Deployment run for chosen disease</th>
<th>ACCURACY AND EFFICIENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time from target to candidate</td>
<td>Potential increase in chance of a drug reaching the market vs industry benchmark (based on 25% increase in PoS at each clinical stage)</td>
</tr>
<tr>
<td>2 - 2.5 yrs</td>
<td>&gt;2x</td>
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</table>

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<thead>
<tr>
<th>Cost from target to IND</th>
<th>Potential cost benefit per IND relative to industry benchmarks</th>
</tr>
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<tbody>
<tr>
<td>$15m</td>
<td>$18m saving &gt;50%</td>
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</table>

What that equates to: higher productivity

Number of new INDs filed by year by pharma and biotech companies
Median number of Phase I starts over five years (2015-2020)*

Note *IND filing rate is based on Phase I trial starts with the company as the lead sponsor. Average adjusted for companies which started clinical development during time period; ¹ Market cap as of 06 September 2022.

Source: clinicaltrials.gov; Company websites: L.E.K. research & analysis
The BenevolentAI business model — leveraging our technology platform to generate new drug IP at scale

### AI-Discovery Tools

<table>
<thead>
<tr>
<th>Target Identification</th>
<th>Knowledge Graph</th>
<th>Molecular Design</th>
</tr>
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<tr>
<td>Precision Medicine</td>
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**Decision Criteria:**

<table>
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<tr>
<th>Pharma Collaborations:</th>
<th>Economic benefits</th>
<th>Platform validation</th>
<th>Data generated enriches the Benevolent Platform™</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selective platform collaborations which can leverage the Platform in areas outside our core competencies</td>
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</table>

<table>
<thead>
<tr>
<th>Non-commercial collaborations (DNDi, COVID-19)</th>
<th>ESG</th>
<th>Platform validation</th>
<th>Data generated enriches the Benevolent Platform™</th>
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</table>
Internal validation: pipeline generated from the Benevolent Platform™

- **BEN-2293** | Atopic Dermatitis
  - Stage: Phase Ib complete, Phase IIa ongoing

- **BEN-8744** | Ulcerative Colitis
  - Novel target - zero prior linkage to UC
  - 2 years from target validation to candidate selection

- **BEN-9160** | Amyotrophic Lateral Sclerosis

- **BEN-28010** | Glioblastoma Multiforme

- **Inflammatory Bowel Disease**

- **Amyotrophic Lateral Sclerosis**

- **Antiviral**

- **Oncology**

- **Oncology**

- **Parkinson's Disease**

- **Nonalcoholic Steatohepatitis**

- **Oncology**

- **Parkinson's Disease**

- **Chronic Kidney Disease**

- **Idiopathic Pulmonary Fibrosis**

- **Idiopathic Pulmonary Fibrosis**

- **Idiopathic Pulmonary Fibrosis**

- **Chronic Kidney Disease**

- +10 Exploratory stage programmes

**Balance of risk** between “best in class” and “first in class” drug candidates

**Broad disease coverage** given platform

11.12.2021
17.05.2022
27.01.2021
06.10.2022
06.10.2022
27.01.2021
15.12.2021
17.05.2022
06.10.2022
06.10.2022
Atopic dermatitis is the most common chronic inflammatory skin disease, characterized by intensely itchy, red, and swollen skin\(^1\)

- Affects \textbf{10-20\% of children} and up to \textbf{3\% of adults}\(^2\)
- Approximately \textbf{60-70\% of all cases} present with mild-moderate disease severity\(^3\)
- Prevalence is rising\(^3\), with market value in 7MM forecast to exceed $14 billion\(^2,4\)

Skin inflammation and chronic pruritus associated with atopic dermatitis negatively impact quality of life and psychosocial well-being\(^1\)

Clear unmet need in \textbf{mild to moderate patient} segment for treatment addressing itch and inflammation, without side effects of steroids

\textbf{BEN-2293: Topical best-in-class PanTrk inhibitor to relieve inflammation and rapidly resolve itch in patients with AD}

- \textbf{BEN-2293} is a PanTrk inhibitor targeting TrkA,B and C receptors. The Trk receptors were identified as part of an effort to find mediators of both itch and inflammation in AD. Using our Molecular Design expertise we were able to design a PanTrk inhibitor, equipotent against the 3 receptors

- \textbf{BEN-2293} is expected to treat \textbf{atopic dermatitis} by: inhibiting \textit{itch signaling} and blocking nerve sensitization (TrkA) in addition to inhibiting Th1 and Th2-mediated \textit{dermal inflammation} (TrkB, TrkC)

- \textbf{BEN-2293} will target \textbf{Mild, Moderate and Severe Atopic Dermatitis patients}, addressing unmet need in the treatment of mild to moderate Atopic Dermatitis as a steroid sparing alternative and in more severe patients undergoing treatment with biologics (e.g. dupilumab) that require add-on treatment
BEN-2293 - indicative data from Phase Ib
Eczema Area and Severity Index (EASI)

Caveats:
- Phase Ib was **NOT** powered to meaningfully assess efficacy - only 6 patients dosed with active per group
- Maximum duration of dosing 14 days (EASI score changes typically measured at 28 days)
Strategic validation: successful collaboration with AstraZeneca

Multi-year Target-ID collaboration is delivering multiple, novel targets for complex diseases with high unmet need

✔ Separate data environment established to integrate AstraZeneca's data into a bespoke Knowledge Graph

✔ BenevolentAI and AstraZeneca teams working in close collaboration to explore, identify and validate targets

✔ Deal structure of upfront license fee, milestone payments and downstream royalties

✔ Collaboration enables BenevolentAI to enrich its platform via the data generated as part of the collaboration but also further validate the use of our AI platform

**THERAPEUTIC AREAS**

**INITIAL DEAL (APRIL 2019)**

- Chronic kidney disease (CKD)
- Idiopathic pulmonary fibrosis (IPF)

**EXPANSION (DEC 2021)**

- Heart failure
- Systemic lupus erythematosus

**KEY MILESTONES**

To date, five novel targets have been validated & selected for AstraZeneca's portfolio

- CKD: Jan 2021
- IPF: Dec 2021
- IPF: May 2022
- CKD: Oct 2022
- IPF: Oct 2022
Regulatory validation: identified a COVID-19 treatment now fully approved for use by the FDA

✔ NOVEL
Our technology and AI workflows identified a previously unknown antiviral mechanism

✔ RAPID
The Benevolent Platform™ empowered scientists to rapidly formulate a hypothesis in just 48 hours

✔ EFFECTIVE
Baricitinib shown to reduce mortality from COVID-19 in randomised controlled trials: COV-BARRIER trial showed baricitinib reduces mortality by 38% in hospitalised patients, and by 46% in ventilated or ECMO patients

FDA U.S. FOOD & DRUG ADMINISTRATION
FDA approved the use of baricitinib to treat COVID-19 in May 2022 after first granting emergency use authorisation for baricitinib in combination with remdesivir in Nov 2020

BenevolentAI published research in Feb 2020

THE LANCET

Led to equity investment from Eli Lilly

Cash runway to Q4-2024 providing sufficient capital for key value inflection points

**Cash Runway**

- Cash at 30th June 2022: £165m
- H2 2022 cash spend: £36m-£40m
- BEN-2293 trial costs (c.£15m) fall away in 2023
- Cash runway guidance assumes no future capital from licensing or collaboration agreements
- Multiple assets at or close to key value inflection points and ready for out-licensing

**Capital allocation**

1. Fund Phase I/II trial for BEN-2293 in Atopic Dermatitis (before subsequent out-license)
2. Fund Phase I trial for BEN-8744 in Ulcerative Colitis and commencement of Phase II trial in 2024
3. Prioritisation of clinical spend on target Therapeutic Indications, with 2 Phase I trial starts by 2025
4. Continuous enhancement of the Benevolent Platform™
5. Investment to support listing status and further collaborations
**Multiple value inflection points expected**

<table>
<thead>
<tr>
<th>Year</th>
<th>BEN-2293 Atopic Dermatitis</th>
<th>BEN-8744 Ulcerative Colitis</th>
<th>BEN-28010 Glioblastoma multiforme</th>
<th>BEN-9160 Amyotrophlic lateral sclerosis</th>
<th>Pipeline depth and progression</th>
<th>AZ Collaboration</th>
<th>Other Platform Collaborations</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2 2022</td>
<td>Complete Phase IIa clinical study</td>
<td>File Clinical Trial Application (CTA) late 2022</td>
<td>Commence IND enabling studies</td>
<td>Commence IND enabling studies</td>
<td>Move at least 1 project into lead opt &amp; Initiate 2 - 4 new drug discovery programmes</td>
<td>Five targets selected and advancing (3 x IPF and 2x CKD) - extension of collaboration into two new disease areas (SLE and Heart Failure)</td>
<td>Discussions with a number of parties ongoing</td>
</tr>
<tr>
<td>2023</td>
<td>Full data package available Q1 2023 - Out-licensing</td>
<td>Begin Phase I study early 2023</td>
<td>Submit Clinical Trial Application (CTA)</td>
<td>Commence IND enabling studies</td>
<td>Expect to add 4-6 names drug programmes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2024</td>
<td></td>
<td></td>
<td>Initiate Phase I study</td>
<td>Initiate Phase I study</td>
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</tbody>
</table>

**Complete**

- Move at least 1 project into lead opt & Initiate 2 - 4 new drug discovery programmes

**Out-licensing**

- Full data package available Q1 2023

**Phase I study**

- Begin Phase I study early 2023

**Phase II**

- Phase I data package early 2024, with Phase II to follow shortly after

**Submit Clinical Trial Application (CTA)**

- Submit Clinical Trial Application (CTA) late 2022

**Initiate Phase I study**

- Initiate Phase I study

**Aim to progress 1-2 CTA/IND stage drug candidates every year**

**Extension of collaboration into two new disease areas**

- SLE and Heart Failure

**Discussions with a number of parties ongoing**