Beyond antibiotics

July 2024 Bioshares Fremantle







Disclaimer

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Antibiotics: A broken business model





2. Size of Global Antibiotics Market

By 2050, Antimicrobial Resistance (AMR) is forecast to cause 10m deaths and US\$100t economic loss per year¹

80% of the US\$71B² antibiotics market are off-patent, generic drugs³ – highly unusual in pharma

Patented antibiotics are expensive (e.g. AU\$250k/patient), cost >AU\$1.5b⁴ to develop and then get shelved as "last resort" to avoid new superbugs

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Obviously, it's time for an entirely different approach

Kållberg et al. 2021
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Our solution NeoX[™]: Universal Antibiotic Resistance Breakers (uARBs)

Water-soluble, small molecules that

- tame extensively drug-resistant (XDR) bacteria
- restore antibiotic efficacy

Novel, non-antibiotic, universal Mode of Action (505b2 lead drug + NCE at preclinical)

Host anti-inflammatory efficacy

Scalable, cost-effective companion to first-line antibiotics

Blockbuster potential in US\$71B global antibiotics market



First human health focus: Respiratory infection





Lix Our Team – Experienced biotech business builders



Maud Eijkenboom, PhD

Board



- Managing Director, Founder
- 30 years Life Sciences business building
- Mother of a child with AMR health concerns.



Andrew Barker, PhD

Science

- CSO •
 - 35 Years Biotech and Medtech R&D executive
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Martin Bennett Board

Bennett

- Chairman, Legal
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- Exceptional international commercial litigation, negotiation & dispute resolution



Kristen Houston

Clinical BLODESIGN

- **Strategic Projects**
- Senior Project Manager and BD professional
- Innovation & operational management



Craig Ridley

Board



- CFO Fellow Chartered Accountant
- >35 year accounting and business advisory



Prof Paul Rolan, MD



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- **Clinical Pharmacologist**
- (consultant, >800 trials)



Virginia Castro Quality



- **Quality and Compliance Manager**
- Pharmacist and Biochemist
- 10+ years Regulatory Affairs and Quality Assurance.

R&D Team

Dr Matthew Wee-Peng Poh Kathryn Green Dr Bikash Manandhar Cathy Abberton Ethan Haese





Simply solving a global crisis

- Short-term 5-10X inflection potential
- Blockbuster potential entering clinical trials
- Joint Development Agreement in negotiation
- Multi-industry licensing & risk mitigation model
- Experienced team

Bonus

- AU tax credit
- >\$2b global AMR non-dilutive grant opportunities



Expression of interest to: Maud Eijkenboom, PhD Managing Director <u>maud@lixa.life</u> +61 413 668 531 Australia

Use of funds	
Clinical trial Phase 1	AU\$1m (bridg funding)
Phase 2a	AU\$3m
Manufacturing upgrade	AU\$1m
Phase 2b	AU\$5m
Multi-industry R&D + patent portfolio expansion	AU\$2m

Current Cap table Investor class	# investors	% Holding
Management	2	29.82
University	1	6.58
Private investors	22	63.60
Total	25	100

Awards

- Bio Convention Startup Stadium finalist, San Diego, June 2024
- Innovator of the Year, well Being, Western Australia 2022
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Scientific risk that our methods are not accepted by the scientific community.

Technology risks where our human therapeutic resistance mitigation technology is at a preclinical stage of development and requires significant research, development and testing before advancing to market approval, and there remains uncertainty that our technology will meet the requirements of our future industry partners and regulatory authorities. This risk is less for industrial, Marine, Agriculture & Food, Animal Health and Personal Care product opportunities given the lower regulatory hurdles. Further, the human health technology risks are minimised compared to other projects by publicly available data on safety and pharmacokinetics of our lead development candidate.

Product development risks of a delay in achieving future safety or efficacy milestones in clinical trials or falling to clinically validate our product due to e.g. an inability to recruit enough patients, or that our products may harm patients or may not work as well as expected may have a negative impact on the cost, speed of development or future approval of our product. Our multi-partner commercialisation strategy intends to share this risk with multinational commercial partners.

Manufacturing risks where human therapeutic products must be manufactured for clinical trials and commercial sale using a cGMP compliant manufacturing process to assure the safety and quality of our products, and any unforeseen scientific difficulties in scale-up of our production process or any quality issues during production may result in our product not being cost-effective, insufficient volumes being available to meet demand, or the product not being released, recalled or rejected.

Financing risk where the Company has limited financial resources and may need to raise additional funds from time to time to fund ongoing product development & working capital, and there is no guarantee that the Company will be able to secure sufficient funding from grants, strategic collaborations, public or private equity raisings or debt financings or other financing sources on acceptable terms, when required or at all.

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Partnering risk where our success will depend upon our ability to market and license our intellectual property rights and find willing and able commercial partners for the ongoing clinical development and commercialisation of the product.

Regulatory risk of not meeting the specific regulatory requirements for medicine products, marine anti-foul, animal health, agricultural and others through relevant regulatory authorities in key markets globally (US, EU, Australia, Japan, China) and other regulators where we wish to commercially market our products, which may result in delayed market approvals or not achieving registration for our product that may inhibit full commercialisation.

intellectual Property (IP) risks where IP is a key asset of the project and its commercial value is legally protected through various intellectual property rights (IPRs) that if we fail to secure patents or other IPRs for our inventions in key jurisdictions, or if our patent claims are not sufficient to protect essential aspects of our technology, or if our patents infringe another parties patent rights, or if litigation is required to enforce our IPRs, or if there is a potential successful legal challenge to our patents will significantly impact our competitive position and performance.

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NeoX[™] | The Marine Antifouling Opportunity

Biofilm growth on surfaces are the foundational layer that enables fouling to attach.

Biofouling on ships hulls and industrial equipment causes:

62.5% Increased fuel consumption ▲ 55% More greenhouse gas emissions US\$117B Annual economic cost³

1. Investigation of fuel consumption on an operating ship due to biofouling growth and quality of antifouling coating, M L Hakim et al 2019 IOP Conf. Ser.: Earth Environ. Sci. 339 012037

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