



patrys

Corporate Overview:

8 January 2019

Dr James Campbell

CEO and Managing Director

patrys

Safe Harbour Statement

The following material is for general information purposes only and is not to be relied upon for the making of an investment decision. Any investment in Patrys Limited ACN 123 055 363 (Patrys) is subject to investment risk including the possibility of loss of capital invested and no return of income or payment of dividends. Neither Patrys nor any other entity or person in or associated with the Patrys group of companies guarantees any return (whether capital or income) or generally the performance of Patrys or the price at which its securities may trade.

In particular, this presentation is not a recommendation, offer or invitation to subscribe for or purchase Patrys securities. It is not for general distribution or third party reliance or use. While it has been prepared from sources Patrys believe to be reliable, Patrys cannot guarantee its accuracy or completeness and undertakes no obligation to advise of changes or updates to any such materials.

These materials are not exhaustive of all of the information a potential investor or their professional adviser would require. Nor do these materials take into account any specific objectives, financial situation or needs of investors. In addition, the past performance of Patrys cannot be assumed as indicative of the future performance of the company. For these and other reasons, before making any investment decision regarding Patrys securities you are strongly recommended to obtain your own up to date independent legal, financial and investment advice – those acting without such advice do so at their own risk.

Where this presentation does contain any forward looking statements, those statements are only made as the date of the presentation and are to be considered “at-risk statements” not to be relied upon as they are subject to further research and to known and unknown risks, uncertainties and other factors that may lead to actual results differing from any forward looking statement. This is particularly the case with companies such as Patrys which operate in the field of researching, discovering, developing, and commercialising potential drugs intended for safe and effective for human treatments or therapies.

Vision

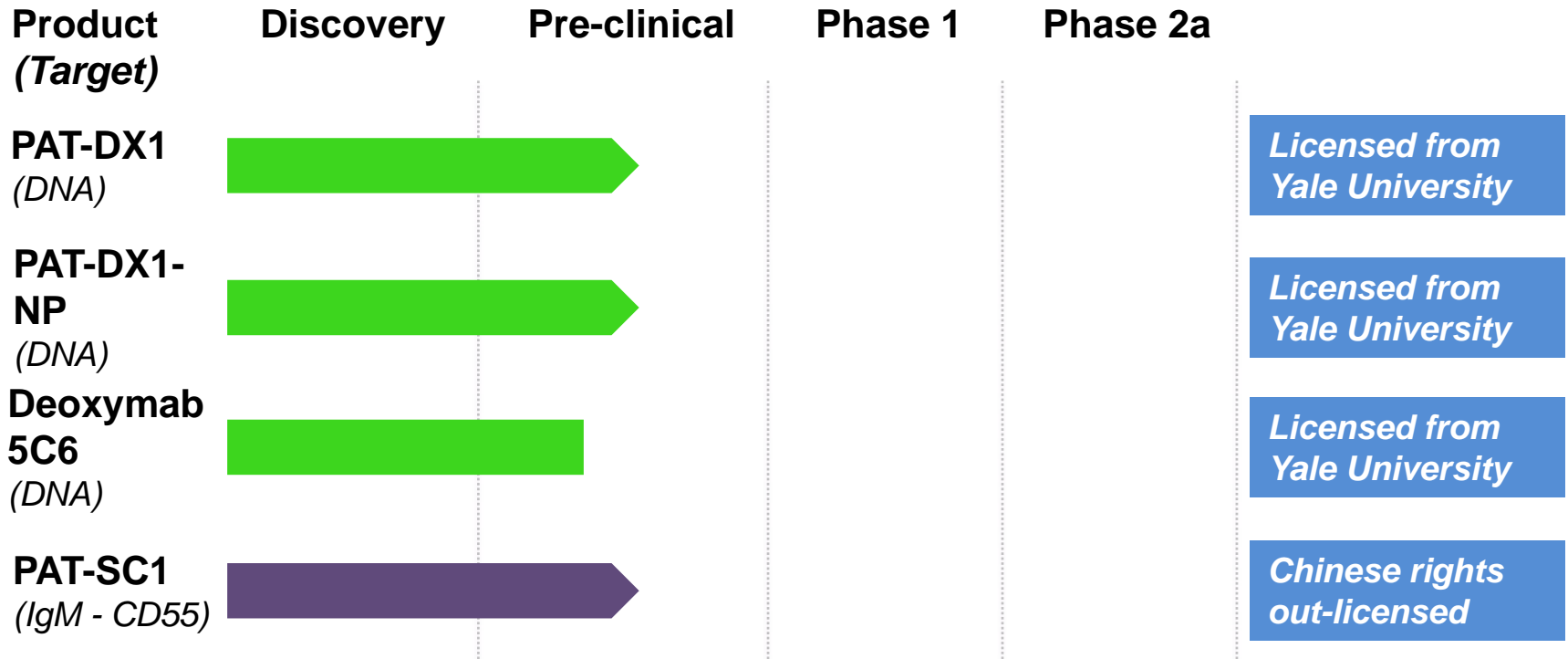
Patrys is a biopharmaceutical company devoted to the development and commercialisation of novel antibody technologies to improve the clinical outcomes for cancer patients



Company Overview

- Listed on ASX (PAB)
- Novel antibody platform technology from Yale University
 - Binds DNA fragments
 - Targets tumors
 - Enters cells
 - Enters nucleus
 - Impairs DDR mechanisms
 - Crosses BBB
- Streamlined operations, low cash burn, funded to phase 1
- Proven Board and Management
- Opportunities for shareholder returns via development and partnering
- Value being built and **realised**

Development Pipeline

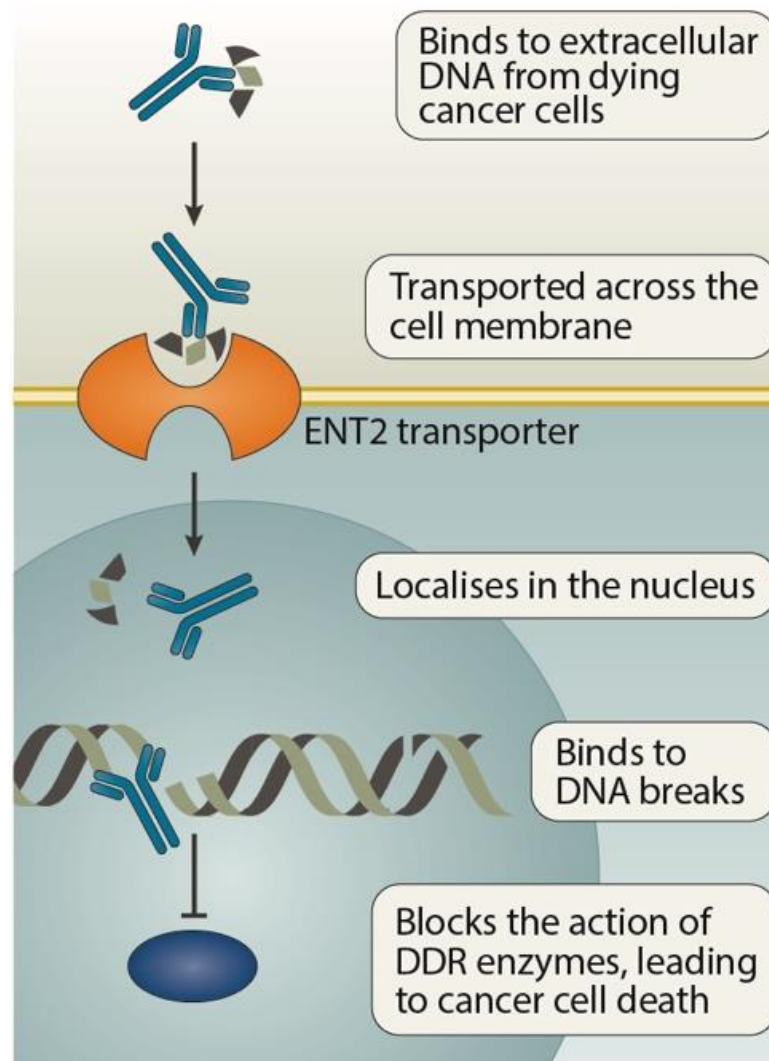


Deoxymab 3E10

- Anti-DNA autoantibody isolated from MRL/lpr lupus mouse model
- Penetrates live cell nuclei and inhibits key mechanisms of DNA repair (base excision repair/single-strand break repair, homology-directed repair of double-strand breaks)
- Not toxic to normal cells, but sensitizes cancer cells and tumors to DNA-damaging therapy (ionizing radiation, doxorubicin)
- Moderately toxic to HDR-deficient cancer cells by itself
- Proven utility as a molecular delivery vehicle
- Previous Phase 1 clinical trial in lupus* showed no safety issues
- Anti-cancer applications licensed from Yale University

*Spertini *et al.*, Idiotypic vaccination with a murine anti-dsDNA antibody: phase I study in patients with nonactive systemic lupus erythematosus with nephritis. *J. Rheumatol.* 1999;26:2602–2608

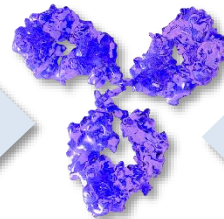
Novel Mechanism of Action



Nexus of two transformative anti-cancer therapies

Antibodies (Abs or mAbs)

- Bind cancer antigens
- Various strategies for use
- Used in brain, breast, CLL, colorectal, head and neck, Hodgkin's and Non-Hodgkin's lymphomas, lung, melanoma, prostate and stomach cancers
- Fewer side effects than small molecules
- Estimated Cancer Ab market in 2017 is US\$41B*



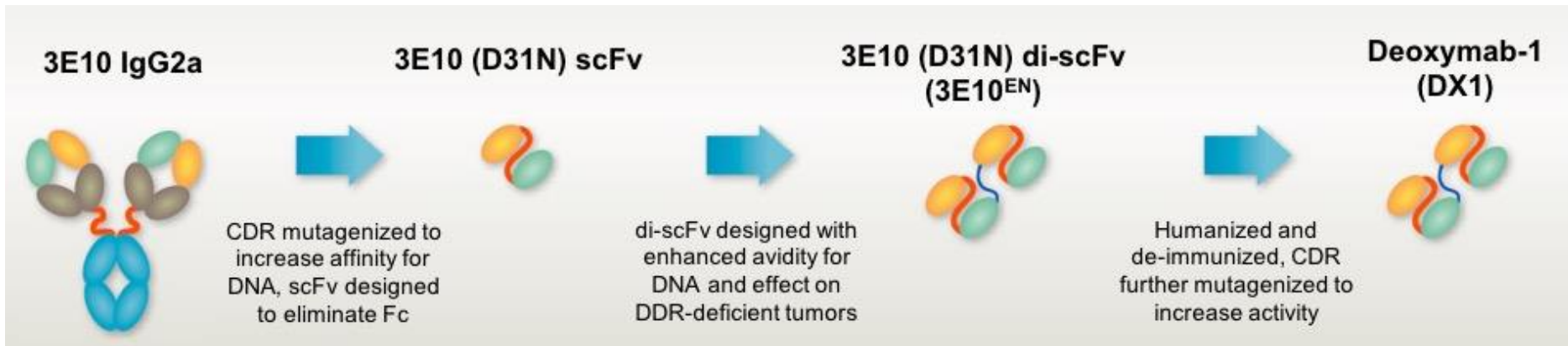
Deoxymab 3E10

DNA damage response (DDR)

- Uncorrected DNA damage can lead to cancer
- DDR protects cells from DNA damage
- Faulty DDRs allow cancer to develop
- DDR inhibition blocks 'back up' DDR systems, causing cancer cell death
- Healthy cells are resistant to DDR inhibition
- PARP inhibitors approved from 2014

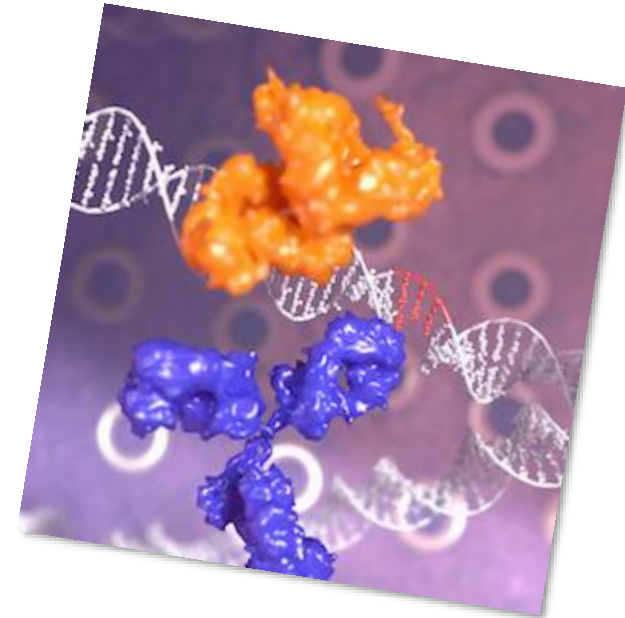
* <https://www.transparencymarketresearch.com/monoclonal-antibody-therapeutics-market.html>

Development Pathway to Date

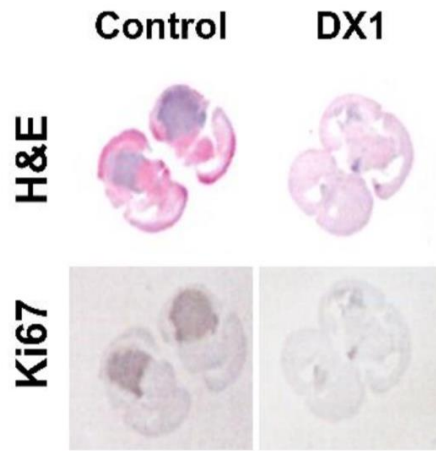


PAT-DX1 – Humanised Deoxymab 3E10

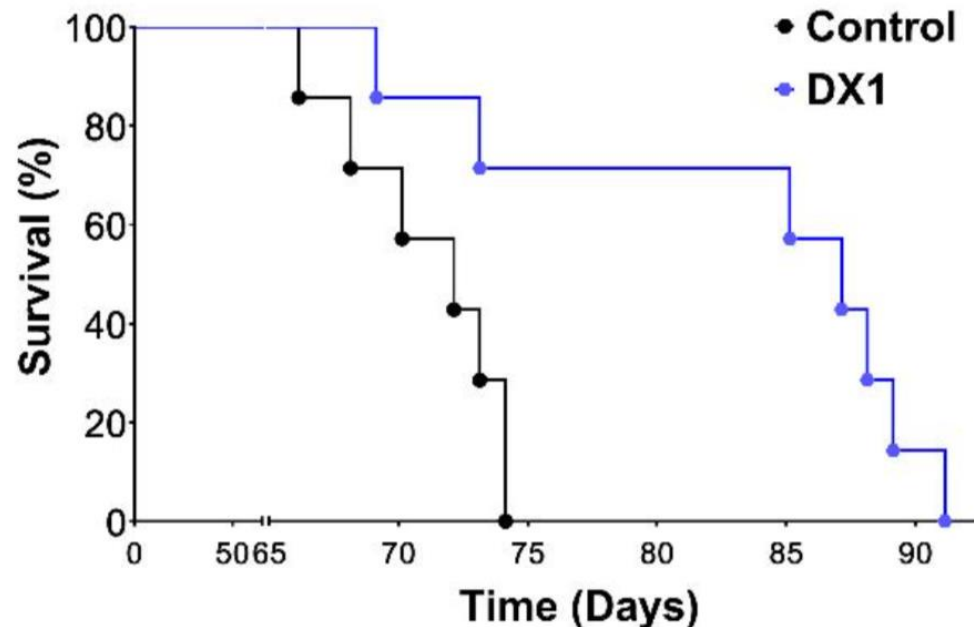
- Optimised for efficacy, manufacturability and novelty
- Novel mechanism of action and IP position
- Positive results in multiple pre-clinical studies
 - Kills colon, glioblastoma, breast cancer cells that lack key DNA repair enzymes (BRCA2, PTEN)
 - Targets and kills glioblastoma cancer stem cells
 - Synergizes with PARP inhibitor
 - Active in animal model of triple negative breast cancer (TNBC)
 - Crosses blood brain barrier, reduces tumour size and increases survival in both orthotopic glioblastoma and TNBC metastasis models
- Target indications, **TNBC and glioblastoma**



PAT-DX1 in Model of MGMT-Unmethylated GBM Derived from Human Tumour Explants



- Dark staining is glioblastoma, light staining is health brain tissue
- Translates as survival benefit



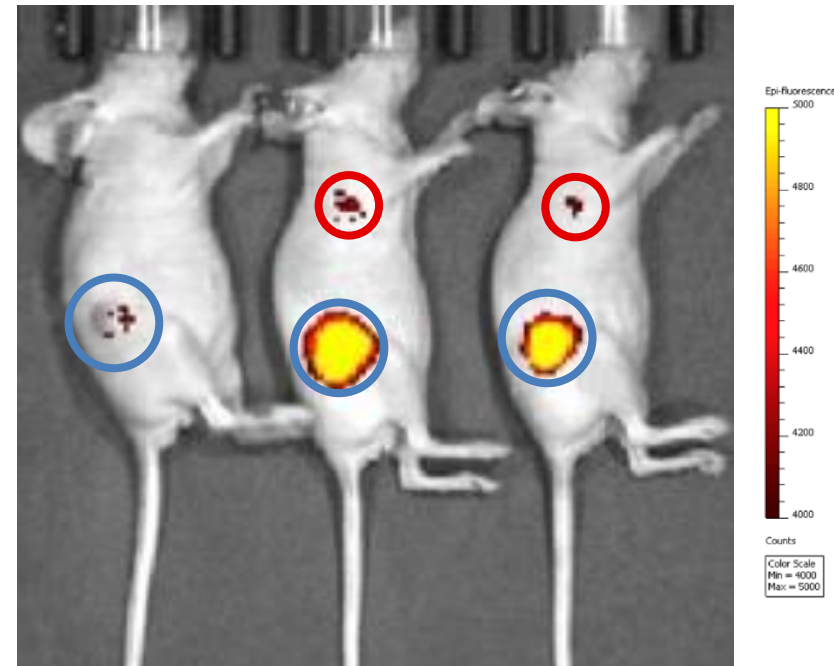
PAT-DX1 in a Mouse Model of TNBC Brain Metastases

- Brain metastases were generated by injection of luciferase-labelled, brain-seeking TNBC cells directly into circulation via intracardiac injection
- Ability of PAT-DX1 to reduce TNBC brain metastases seen after just one week of treatment
- After 4 weeks of treatment with PAT-DX1, treated mice showed 93% less brain metastasis than untreated mice, quantified by luminescence intensity
- PAT-DX1 treatment significantly improved survival, with 86% of the mice treated with PAT-DX1 still alive after all control mice had died
- No toxicity associated with PAT-DX1 treatment was observed

PAT-DX1 Nanoparticle Conjugates

- PAT-DX1 can be linked to nanoparticles (NPs) loaded with chemotherapeutic (or other) drugs
- PAT-DX1-NPs are preferentially attracted to tumor tissues and deliver payloads specifically to tumors
- PAT-DX1-NPs also localize to metastases, meaning that an eventual therapeutic could treat both primary and secondary tumors – potentially before the latter had even been identified

PAT-DX1-NP localisation in mice with triple negative breast cancer tumors



Free NPs PAT-DX1-NPs PAT-DX1-NPs

PAT-DX1-NP shows enhanced localisation of primary tumors (blue circles) and localisation of apparent axillary lymph node metastases (red circles)

Focussed on Progression to the Clinic

PAT-DX1 Progress to clinic

PAT-DX1 + radiotherapy

PAT-DX1 + chemotherapy




PAT-DX1 conjugation with nanoparticles

PAT-DX1 conjugation with other antibodies

PAT-DX1 conjugation with radionucleotides

PAT-DX1 conjugation with small molecules

PAT-DX1 diagnostic application

-  Patrys funded
-  BD opportunity
-  Grant funded

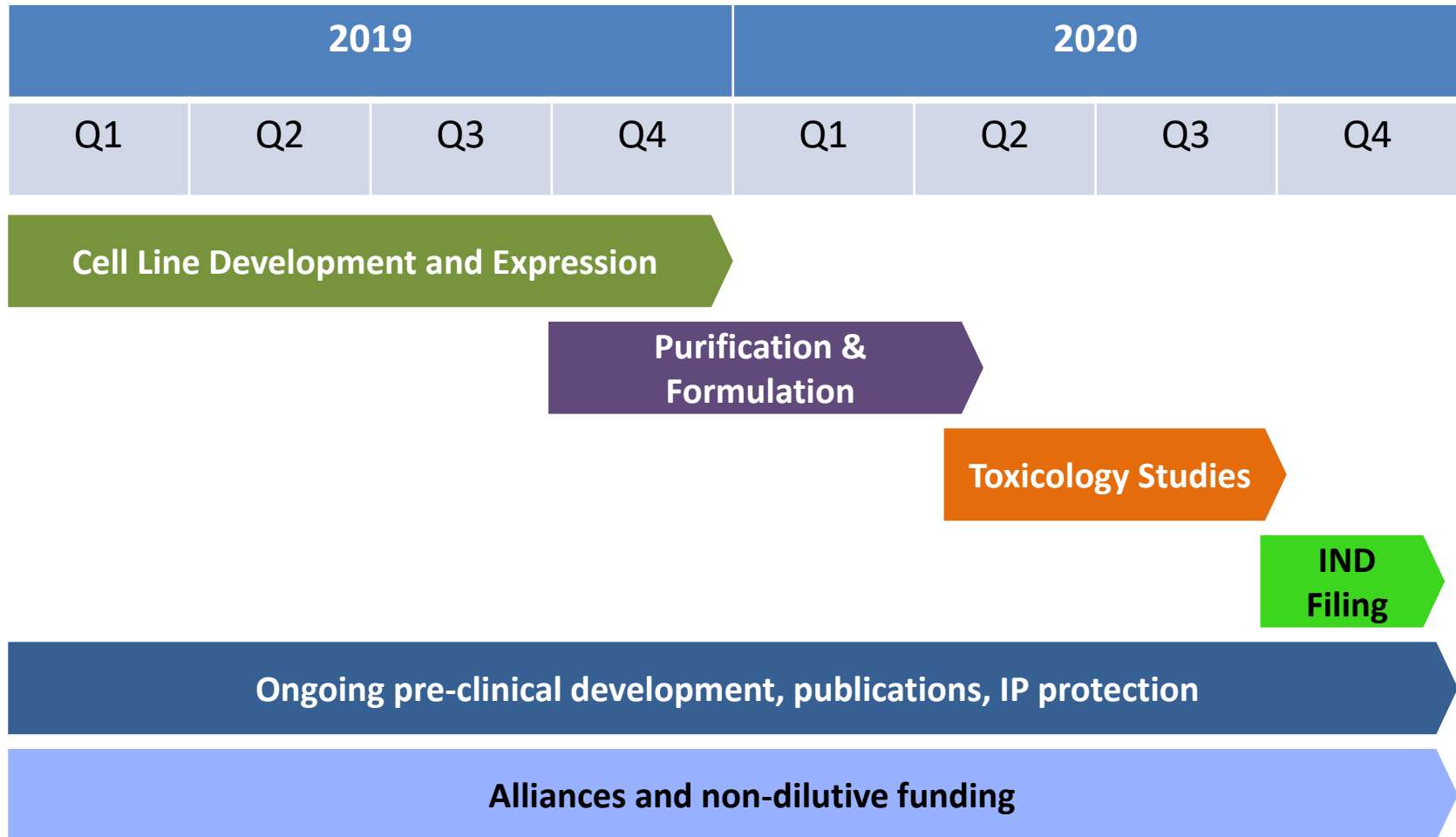
Targeted Clinical Indications

- Triple Negative Breast Cancer
 - 10-15% of the global 1.67 million new cases of breast cancer annually, the most aggressive and difficult to treat. TNBC progresses and recurs more frequently than other breast cancer subtypes
 - Associated with impaired homologous recombination that makes these cancer cells vulnerable to inhibition of DNA damage repair such as that mediated by PAT-DX1
 - Global market \$296 M in 2015, expected to increase to \$1.59 B by 2025¹
- Glioblastoma
 - Particularly aggressive, highly malignant form of brain cancer characterized by very fast cellular reproduction
 - 17% of all primary brain cancers, with almost 12,000 new cases diagnosed in the U.S. annually
 - Median survival period of 15 months, depending on disease severity
 - Global market \$662 M in 2017, expected to increase to \$1.4 B by 2027²

¹GlobalData Her2-/Her2+ and Triple Negative Breast Cancer- GlobalDrug Forecast and Market Analysis to 2025

²GlobalData Glioblastoma Multiforme, Opportunity Analysis and Forecasts to 2027

Development Pathway and Milestones



Recent Pre-clinical Cancer Antibody Deals

Date	Tech	Seller	Buyer	Total (USD)	Up Front (USD)
Feb-14	Nanobody platform	Ablynx	Merck	6.5B	27 M
Jan-15	Checkpoint regulators: GITR, OX40, LAG-3 and TIM-3	Agenus	Incyte	410M	60M
Aug-15	Anti-GDF15 MAb	Aveo Oncology	Novartis	326M	15M
Oct-15	Anti-TGF-beta MAb	Xoma	Novartis	480M	37M
Jan-16	Cell-penetrating alphabodies*	Complix	Merck	280M	N/A
May-16	Bi-specific Ab, alternative to CAR-T	Macro-Genics	Janssen	740M	75M
Jul-16	4 early stage Abs	Jounce	Celgene	2.6B	261M
Jun-17	Intracellular delivery platform	Feldan/Elasmogen	Amgen	N/A	N/A
Nov-17	Bi-specific antibody platform	Zymeworks	J&J	332M	50M
April-18	Bi-specific antibody platform	Compugen	Astra Zeneca	210M	10M
April-18	Checkpoint inhibitor: OSE-172 a SIRP alpha antagonist	OSE Immunotherapeutics	Boehringer Ingelheim	1.4B	18.4M

*Collaboration expanded in 2017

Experienced Board



John Read Chairman

- Experienced Chairman and Director in public, private and government organisations
- Extensive career in venture capital, private equity and commercialisation
- Chairman of CVC Limited (ASX: CVC), previously Eildon Capital Limited (ASX:EDC)



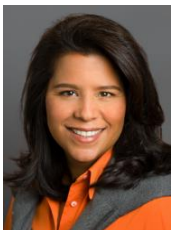
James Campbell

- >20 years of international biotechnology research, management and leadership
- Previously the CFO and COO of ChemGenex Pharmaceuticals Limited (ASX:CXS) and of Evolve Biosystems Inc.



Mike Stork

- Managing Director of Stork Holdings Ltd, active in Canadian technology start-up sector
- Director of a number of leading Canadian technology start-up companies



Suzy Jones

- Founder and Managing Partner of DNA Ink, a life sciences advisory firm in San Francisco
- 20 years at Genentech in BD, product development and immunology research - including managing the Rituxan team, the first Mab launched to treat cancer

Scientific Advisory Board



Dr Pamela M. Klein

- Medical training, then U.S. National Cancer Institute
- Vice President, Development at Genentech, led development of a large portfolio of drugs including all the HER (Herceptin, Tarceva, Perjeta), Apoptosis (antibodies and small molecules) and Hematology compounds
- Chief Medical Officer of Intellikine (acquired by Millennium/Takeda)
- Advisor to a range of different biotech and investment companies, with roles on Scientific Advisory Boards and Corporate Boards



Dr Allen Ebens

- PhD at UCLA and a Post-Doc at UCSF
- 5 years with Exelixis in the Discovery Biology group
- 11 years at Genentech in the Research Oncology working from concept to clinic across multiple therapeutic platforms including antibodies, small molecule drugs, antibody-drug conjugates, and cell-based therapies
- Established the oncology research lab at Juno Therapeutics
- Currently Chief Scientific Officer, TruCode Gene Repair

Research Partnered with Yale University

- James E. Hansen, MD (Principal Investigator)
 - Assistant Professor, Department of Therapeutic Radiology, Yale School of Medicine
 - Physician-scientist and practicing radiation oncologist specialising in treatment of cancers of the brain, head and neck, lung, skin, and lymphatic system
 - 16+ years of experience working with 3E10 and other cell-penetrating Abs
 - Lead inventor on patents pertaining to use of Deoxymabs against cancer



Financial Snapshot

Financial Parameter	Measurement
ASX: PAB	1,071 million shares
Daily volume (3 mth ave):*	2.2 million shares
Market Capitalization:*	\$30 million
Cash held:**	\$5.6 million (30 Sept) + \$3M +\$556k
Net burn rate:	\$2.0 million in 2017-18

* Effective 4 January 2019

** \$5.6 M reported as at 30 September, 2018. \$3.0 M insurance settlement received in Q4 2018. \$556k received from R&D Tax rebate as announced on 8 January 2019

Looking Ahead

DX1 + radiation – TNBC brain metastases animal data	Q1 2019
DX1 + radiation – GBM animal data	Q1 2019
DX1 + temazolamide – GBM animal data	H1 2019
Additional studies in relevant animal models	Ongoing
Completion of cell line and development	Q4 2019
Completion of purification and formulation studies	Q2 2020
Completion of toxicology studies	Q4 2020
IND filing	Q4 2020
Scientific publications	Ongoing
New IP filings and patent grants	Ongoing
Alliances and collaborations	Ongoing

Patrys Limited Overview

- Novel anti-DDR biologic with signals of activity in a range of DDR-impaired cancers, particularly TNBC and GMB
- Crosses BBB in multiple tumor models
- Application as delivery vehicle – into tumor cells
- Scope for alliances and collaborations facilitated by experienced Board and SAB
- Funded through to Phase 1
 - Strengthened balance sheet by \$7.6m in 2018
 - \$4.6M raised from existing shareholders, funds and HNWs
 - \$3.0M non-dilutive funding
 - Growing grant revenue
 - Ongoing Federal R&D Incentives

For Further Information

Contact Details:

Dr. James Campbell

Chief Executive Officer and Managing Director

Ph: +61 3 9670 3273

Email: info@patrys.com

Website: www.patrys.com