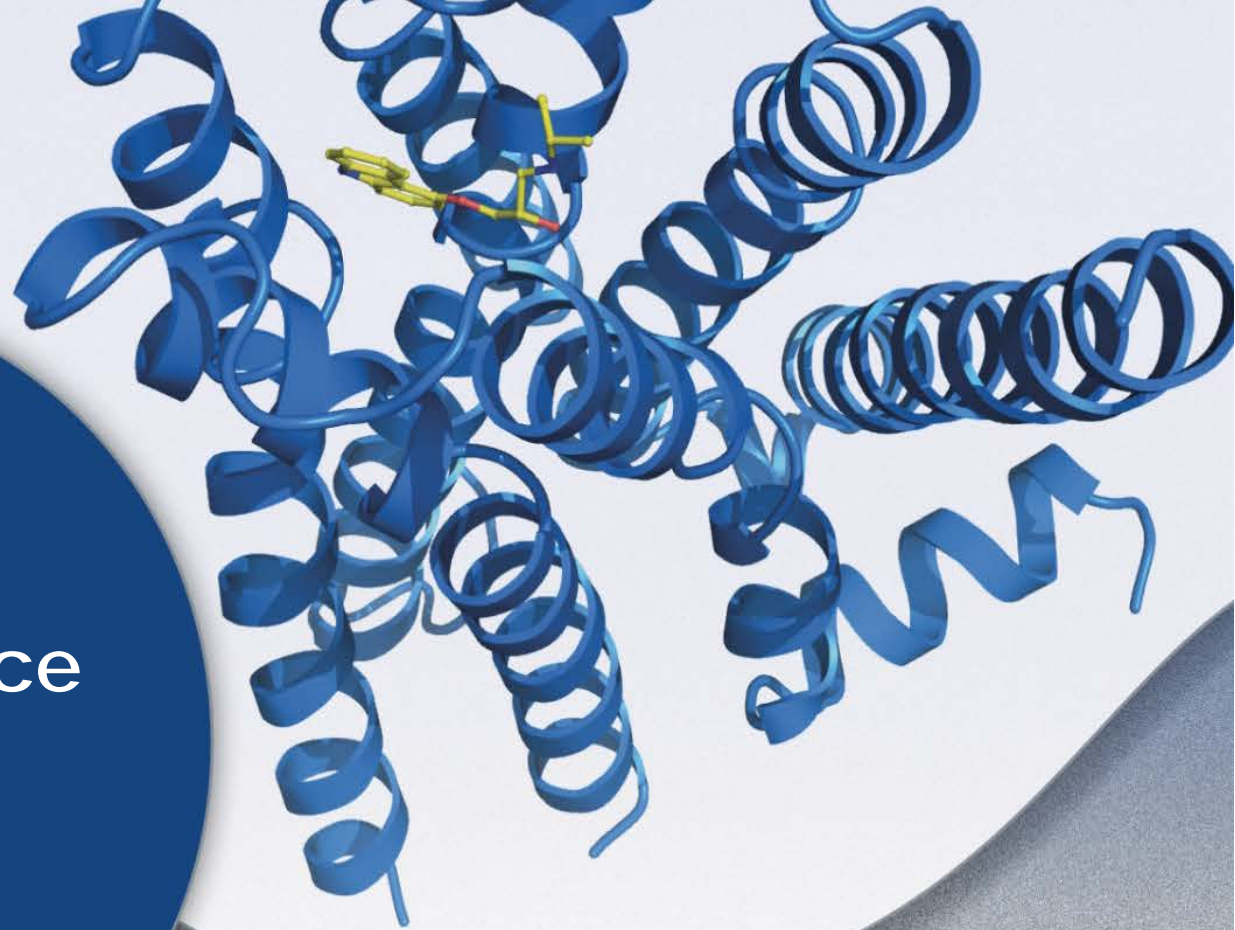


Sosei Group Corporation

UBS Global Healthcare Conference

21 May 2018



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References to "FY" in this presentation are to the Company's fiscal years, namely the 12-month periods commencing in each case on April 1 of the year indicated and ending on March 31 of the following year, unless specifically otherwise indicated.

A Japan-listed biotech with a difference

Listed 2004 in Tokyo (TSE Mothers: 4565)

Market capitalization: c.\$1.3bn

Global management team

Main scientific campus in the U.K.

- **World-leader in GPCR-focused drug design** based on unique IP protected StaR^{®1} GPCR technology & enabled SBDD² platform
- **Partnered clinical-stage pipeline** in neurology, immuno-oncology, CNS & other diseases, with \$5bn plus in potential economics
- **Proprietary pipeline** led by dementia with Lewy bodies (DLB) Phase 2 program in Japan, plus multiple novel candidates in development
- **Robust royalties from legacy respiratory products** provide source non-dilutive cash flows
- **Strong cash position of ~\$260m** to drive global growth strategy

Global operations and aspirations – aiming to build Japan's first global biotech champion

¹Stabilized receptor technology
²Structure-based drug design

Unique management team for a Japan-listed company

Significant pharma and biotech expertise



Peter BAINS

Chief Executive Officer

- Former Senior VP of International Commercial Development at GSK
- Former CEO of Syngene



Dr. Malcolm WEIR

Chief R&D Officer

- CEO and Co-Founder Heptares
- Former Head of Molecular Science Division at Glaxo Wellcome



Andrew OAKLEY

Chief Financial Officer

- Former CFO of Actelion Pharmaceuticals Ltd
- Former CFO of Vectura plc



Dr. Tim TASKER

Chief Medical Officer

- GSK and Former Executive VP of Clinical Development at Evotec

Scientific Advisory Board experience



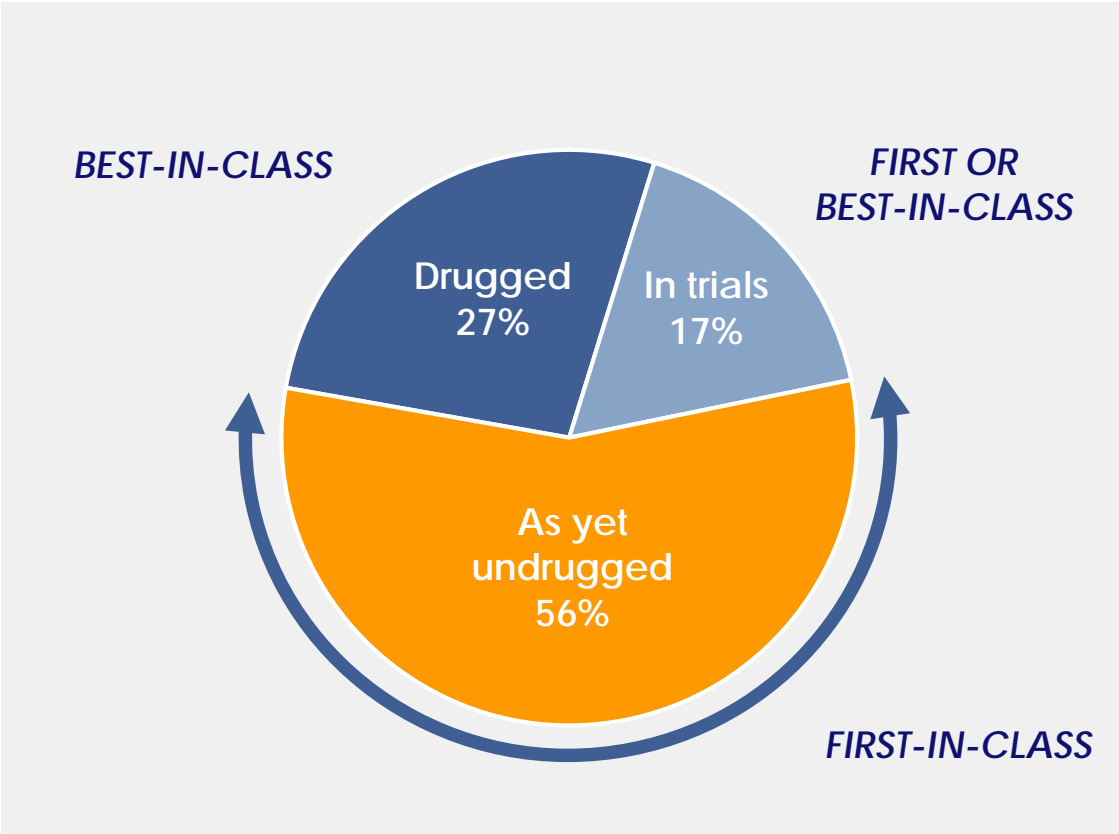
Why do we target G-Protein-Coupled Receptors (GPCRs)?

GPCRs are active in a wide range of disease areas

~400 GPCR targets active in diseases² ~34% of FDA approvals target GPCRs¹ 27% of global sales are GPCR drugs¹



Targeting a new FIC and/or improved BIC GPCR medicines



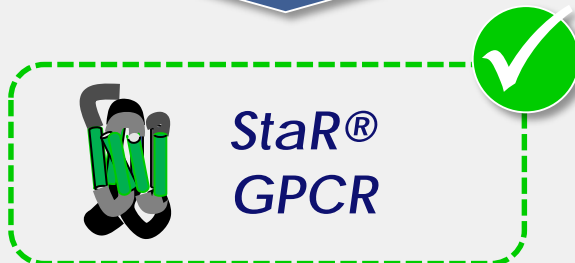
Huge opportunity to create new drugs or improve existing drugs

5 ¹ Source: "Trends in GPCR in Drug Discovery – new agents, targets and indications", Nature Reviews, 2017
² Source: "Unexplored opportunities in the druggable human genome", Nature Reviews, 2016

StaR® is Revolutionary for GPCR Structure-Based Drug Design

StaR® technology stabilizes and “unlocks” GPCRs

Native GPCRs are unstable, don't maintain shape, and are difficult to drug



Patent-protected
StaR® technology stabilizes GPCRs on a commercial level

With a StaR® GPCR, the high-tech tools of science can develop structures...

X-ray Crystallography

Biophysical Mapping

Cryo-EM **NEW**

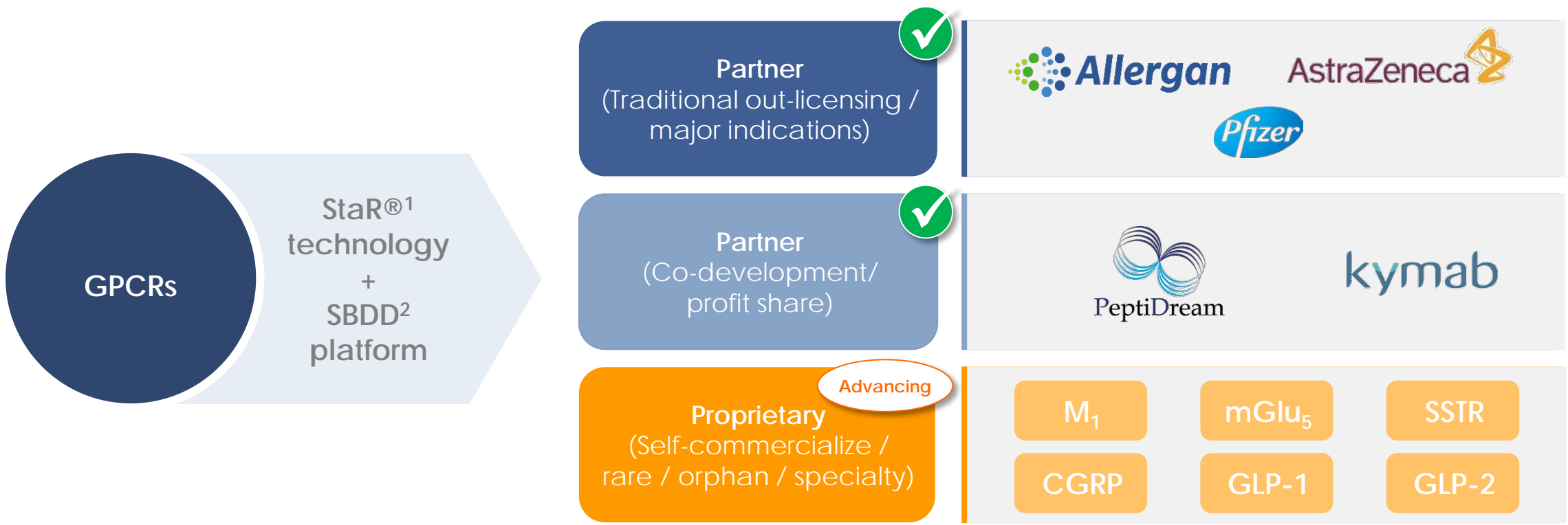
... and stable GPCR structures enable a variety of SBDD technologies for drug design

Structural information creates better, differentiated drug candidates

- ✓ Improved physiochemical properties
- ✓ Better safety and efficacy
- ✓ Reduced clinical attrition
- ✓ Small molecule, peptide or antibody discovery

Unique, scalable and sustainable platform, delivering differentiated pipeline candidates

Leveraging unique GPCR technology to deliver differentiated drug candidates





























Risk-balanced business model creates and captures optimal value

¹ Stabilized receptor technology
² Structure-based drug design

Advancing a Partnered GPCR pipeline in multiple therapeutic areas

Balanced and diversified

 : Current stage
 : Next 12-18 months progress

Product/Program	Modality ¹	Indication	Partner	Discovery	Preclinical	Phase 1	Phase 2	Phase 3	Marketed	
Partnered GPCR Pipeline (Traditional out-licensing/collaboration projects)										
M ₁ agonist	SME	Alzheimer's disease								See slide 9
M ₄ agonist	SME	Alzheimer's disease								
M ₁ /M ₄ dual agonist	SME	Alzheimer's disease								
A _{2a} antagonist	SME	Cancer I/O								See slide 11
A _{2a} antagonist	SME	Cancer I/O								
Multiple targets	SME	Pain								
Multiple targets	SME/mAb	Multiple indications								
Multiple targets	SME	Not disclosed								
Partnered GPCR Pipeline (Co-development/profit share)										
Multiple targets	Peptide	Inflammation								
Multiple targets	mAb	Cancer I/O								
Partnered Pipeline - Legacy Respiratory Products (Traditional out-licensing)										
Seebri®/Ultibro®	SME	COPD								
QVM149	SME	Asthma								

¹ Note: SME = small molecule; PEP = Peptide; mAb = monoclonal antibody

Muscarinic M₁ Agonist Program for Alzheimer's disease

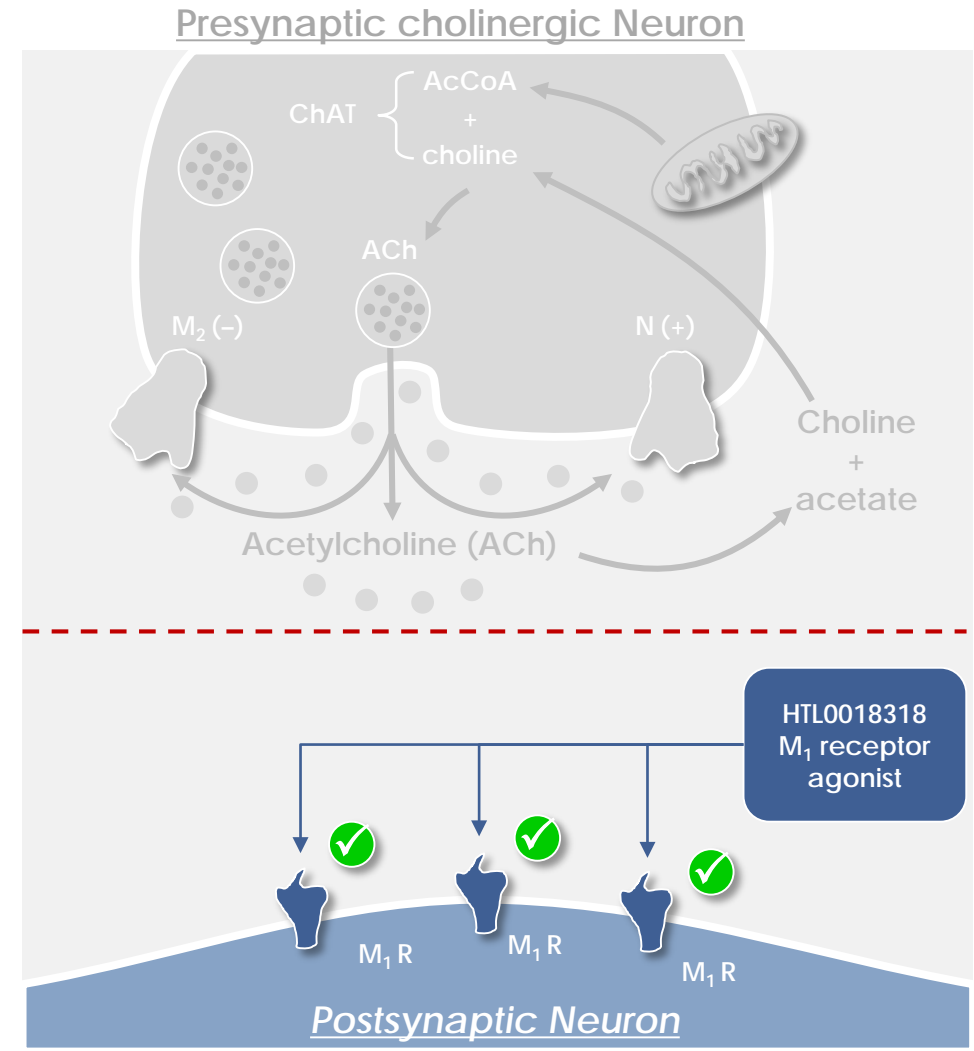
A novel approach for symptomatic treatment of AD



HTL0018318 represents a novel approach to stimulating M₁

- **Direct stimulation of M₁ receptor**, mediating cognition – different approach to donepezil
- **HTL0018318** bypasses presynaptic activity, and **does not** rely on ACh levels in the brain
- **Acts directly** to stimulate the M₁ receptor as an analogue of ACh post the synapse
- **Circumvents the underlying neurochemical deficit** in Alzheimer's disease patients
- HTL0018318 offers a potential first-in-class therapy

Selective muscarinic M₁ receptor agonism offers a potential first-in-class therapy for AD patients



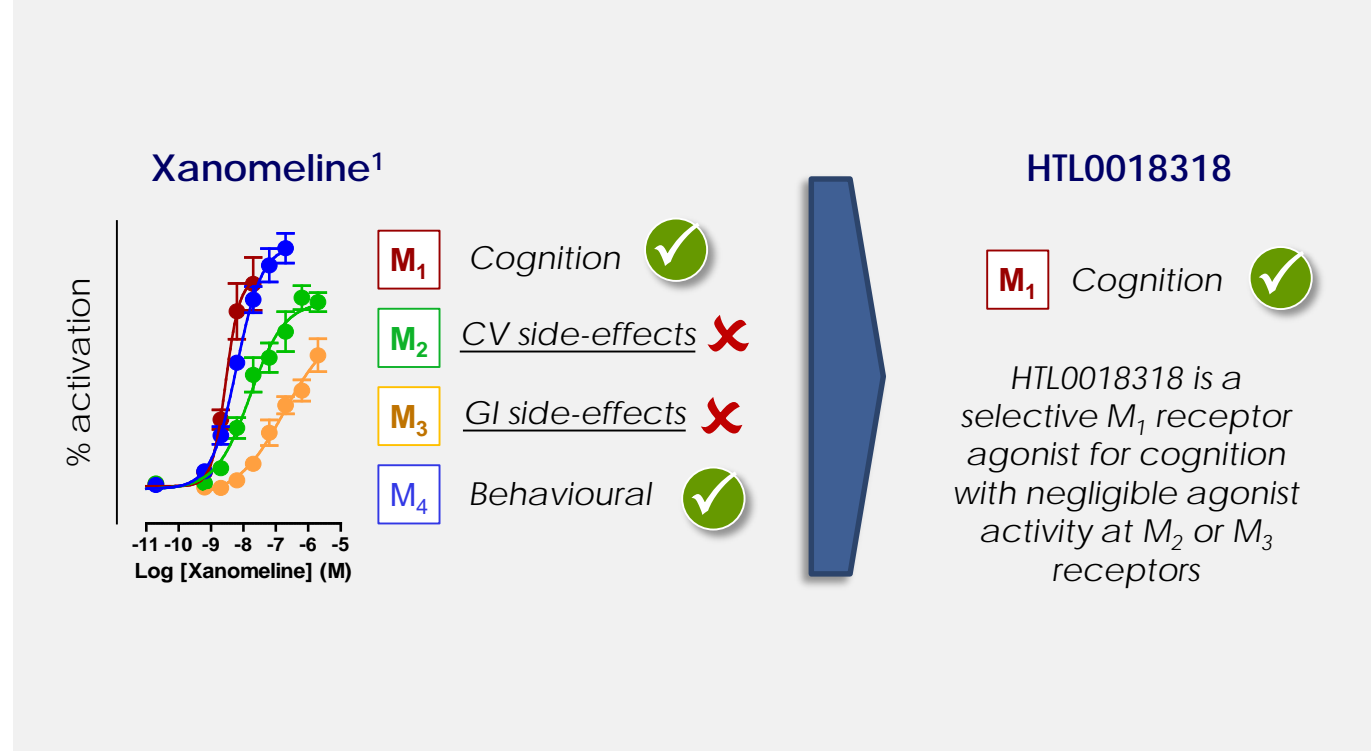
HTL0018318 is a potential first-in-class therapy for Alzheimer's disease

Highly selective M₁ receptor agonist derived from StaR® and SBDD



Overview of the HTL0018318 muscarinic M₁ agonist

- **Cognitive benefits of M₁ agonism supported** by Lilly's clinical studies of xanomeline¹
- Xanomeline's development stopped due to unacceptable CV and GI side effects linked to stimulation of M₂ & M₃
- **HTL0018318 is a potent muscarinic M₁ agonist with negligible M₂/M₃ agonism**
- **StaR® & SBDD "designed out" unwanted selectivity** over the M₂ & M₃ receptors



Receptor subtype selectivity is crucial. HTL0018318 has a differentiated mechanism of action with the potential to optimise symptomatic benefits in AD patients

Source: Internal analysis
¹ Bodick et. al. "Effects of Xanomeline, a Selective Muscarinic Receptor Agonist, on Cognitive Function and Behavioural Symptoms in Alzheimer's Disease" Arch Neurol. 1997;54@465-473

AZD4635 has emerged as a potential next-generation I/O therapy

First A2a R antagonist structurally derived from StaR® and SBDD

Partnered with:  **A2a**

Checkpoint inhibitors are a key cancer treatment

PD-L1	<ul style="list-style-type: none"> ➤ durvalumab (2017) ➤ avelumab (2017) ➤ atezolizumab (2016)
PD-1	<ul style="list-style-type: none"> ➤ nivolumab (2014) ➤ pembrolizumab (2014)
CTLA-4	<ul style="list-style-type: none"> ➤ ipilimumab (2011)

Checkpoint inhibitors are highly effective against certain types of tumors (e.g. lung, skin, and renal)



Next-gen I/O therapies to enhance treatment

AZD4635
A2a R antagonist

MONOTHERAPY

AZD4635
A2a R antagonist

+

durvalumab
Anti-PD-L1

COMBO THERAPY

NEW

AZD4635
A2a R antagonist

+

MEDI9447
Anti-CD73

COMBO THERAPY

Next-gen I/O may enhance efficacy of approved checkpoint inhibitors across more tumor types

AZD4635 has emerged as a potential next-generation I/O therapy

First A2a R antagonist structurally derived from StaR® and SBDD

Partnered with:
AstraZeneca



Excellent clinical progress to date

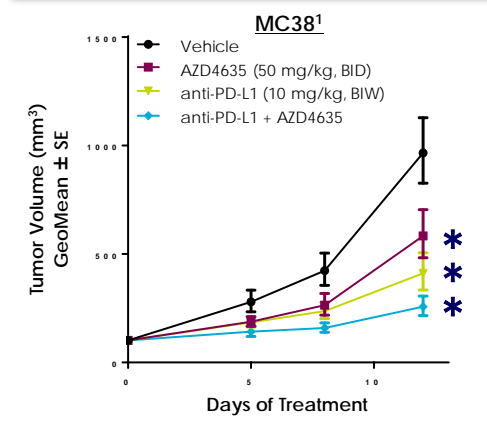
- Phase 1a maximum tolerated dose (MTD) achieved
- Phase 1b dose expansion and signal seeking in patients ongoing across multiple tumor types
- Monotherapy and combination with durvalumab (anti-PD-L1)
- NEW Phase 1b/2 study with MEDI9447 (anti-CD73 antibody, open and has started to enrol subjects)

New supportive preclinical data presented at AACR 2018

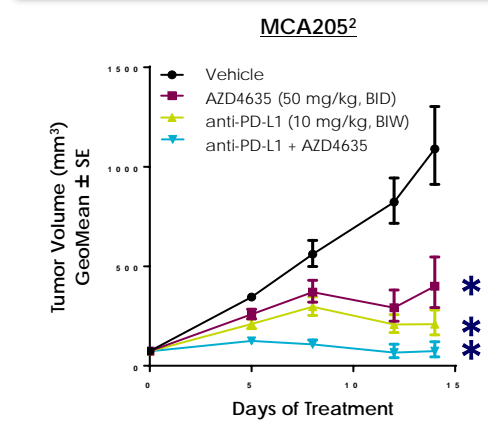
- AZD4635 alone and in combination with an anti-PD-L1 led to a **reduction in tumor growth in both adenosine high and adenosine low** syngeneic tumor models
- Inhibition of A2a R signaling by AZD4635 **in combination with anti-PD-L1 can act to increase host immune surveillance and response**
- AZD4635 **exhibits dose dependent tumor growth inhibition**, and requires a working host immune system for effects

New supportive preclinical data presented at AACR 2018

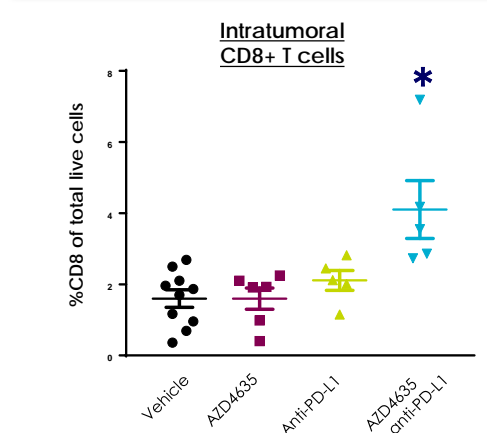
HIGH ADENOSINE TUMOR



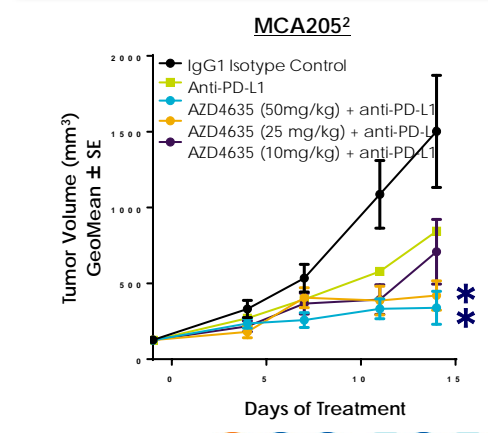
LOW ADENOSINE TUMOR



INCREASED IMMUNE RESPONSE



DOSE DEPENDENT



¹ MC38 syngeneic colorectal cancer

² MCA205 syngeneic fibrosarcoma cancer

Proprietary pipeline now led by M₁ DLB opportunity in Japan

Focus on selected rare/orphan and specialty indications or markets

Proprietary pipeline

Product	Modality ¹	Indication	Originator	Phase	Q2 CY18	Q3 CY18	Q4 CY18	H1 CY19	H2 CY19
Proprietary GPCR Pipeline (Go-to-market/commercialize)									
M ₁	SME	DLB (Japan)	Sosei	Phase 1	Phase 2a PoC clinical trial start				See slide 14
mGlu ₅	SME	Neurological disorders	Sosei	Preclinical	Phase 1 clinical trial start (healthy volunteers)				
SSTR	SME	Endocrine / Neuroendocrine disorders	Sosei	Preclinical	Phase 1 clinical trial start (healthy volunteers)				
CGRP	SME	Migraine and other severe headaches	Sosei	Preclinical	Phase 1 clinical trial start (healthy volunteers)				
GLP-1	SME	Metabolic diseases	Sosei	Preclinical	Phase 1 clinical trial start (healthy volunteers)				
GLP-2	SME	Intestinal failure	Sosei	Preclinical	Phase 1 clinical trial start (healthy volunteers)				

Investment in StaR® technology driving Proprietary GPCR pipeline progress – average of 3 novel drug candidates into clinical development every year commencing CY2018

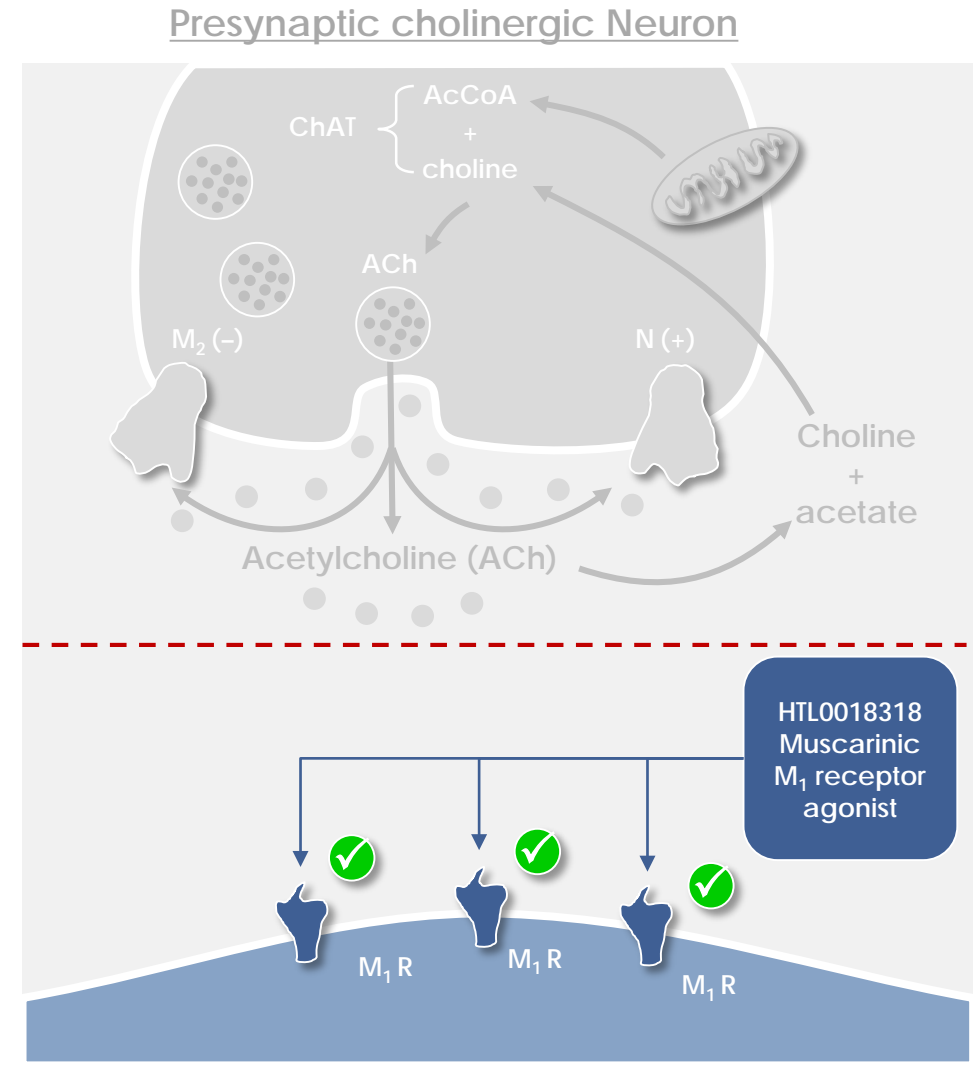
¹ Note: SME = small molecule

HTL0018318 for DLB in Japan

Great potential for M₁ agonist treatment for DLB in Japan

M₁ DLB

- ✓ DLB is the second most common form of dementia and **highly relevant in Japan**
- ✓ **Real patient need in Japan** – ageing population
- ✓ **Recognition and diagnosis** of DLB symptoms significantly more advanced in Japan
- ✓ **M₁ agonist will show activity more rapidly and easily in DLB** than in Alzheimer’s due greater cholinergic defect
- ✓ **Potential to have a superior profile to donepezil** as HTL0018318 acts independently of presynaptic system
- ✓ **Potentially favourable environment** – regulators in US/EU adapting dementia guidelines to meet increased disease understanding
- ✓ HTL0018318 represents a new treatment approach with **potential to show meaningful patient benefits**



HTL0018318 for DLB in Japan

Summary of clinical program to date

M₁ DLB

Summary of clinical progress

- HTL0018318 derived from Heptares' StaR® technology and SBDD
- **HTL0018318 - same compound being investigated in AD trials with our partner Allergan**
 - Allergan paid \$125 million upfront for a portfolio of muscarinic compounds, including HTL0018318
- In Phase 1a studies, **HTL0018318 demonstrated to be safe and well tolerated, including in elderly people**
- **Ethnic bridging studies were completed by Heptares - safe and well tolerated in Japanese subjects**
- HTL0018318 currently in a Phase 1b trial in patients with AD in Europe¹
- Agreed with Allergan that **Sosei has rights for approval and commercialization of HTL0018318 for DLB in Japan**

Clinical progress to date encouraging.
Advancing preparation to commence Phase 2 PoC study in DLB in Japan in Q3 CY18

¹ EU study of HTL0018318 in AD <https://www.clinicaltrials.gov/ct2/show/NCT03456349>

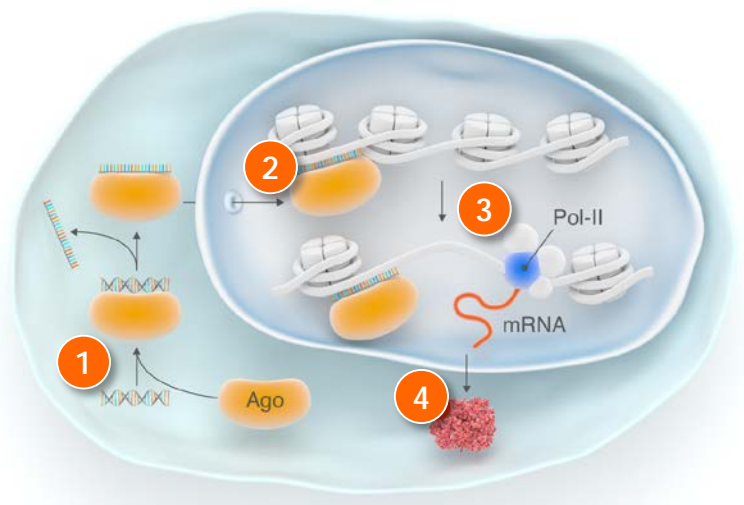
Strategic investment in saRNA technology

Exclusive option to move from 25.6% to 100% ownership at pre-determined economics

Pioneering RNA activation



- saRNAs are a new therapeutic class and reversibly activate gene expression
- **Novel platform** leveraging advances of siRNA therapeutics, including clinically validated delivery platform
- **Unique opportunity to address undruggable targets**
- **Recent deal with Boehringer Ingelheim** further supports MiNA/saRNA's potential



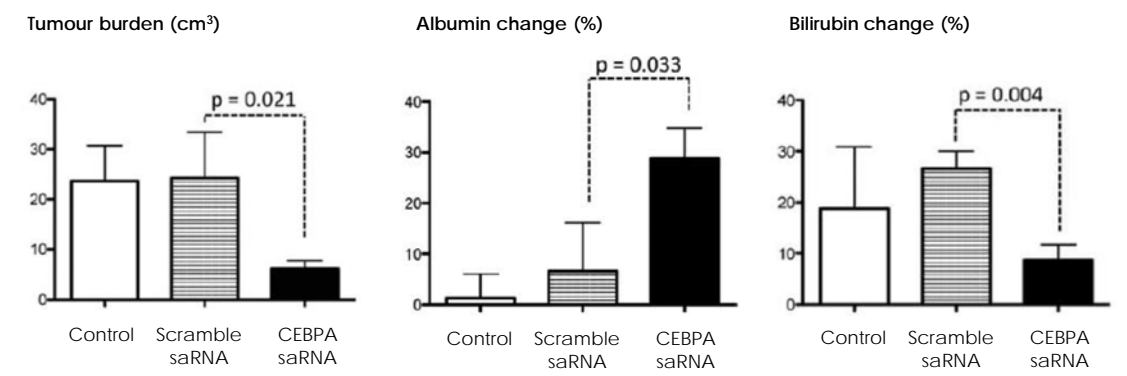
- 1 Loading of saRNA into Ago protein
- 2 saRNA-Ago targets gene promoter
- 3 saRNA-Ago activates gene transcription
- 4 Long lasting protein up-regulation

Lead candidate CEBPA¹ in Ph 1/2a for liver cancer

- **CEBPA regulates multiple pathways in the liver** and saRNA is a unique modality for targeting CEBPA
- MTL-CEBPA has **preclinical efficacy** across progression of liver disease
- MTL-CEBPA is the **first saRNA to reach the clinic** – currently in clinical trials in patients for liver cancer, an **orphan indication**



A Novel RNA Oligonucleotide Improves Liver Function and Inhibits Liver Carcinogenesis *In Vivo*



¹ CEBPA (CCAAT/Enhancer Binding Protein Alpha)



Balance sheet strengthened to scale and progress the business

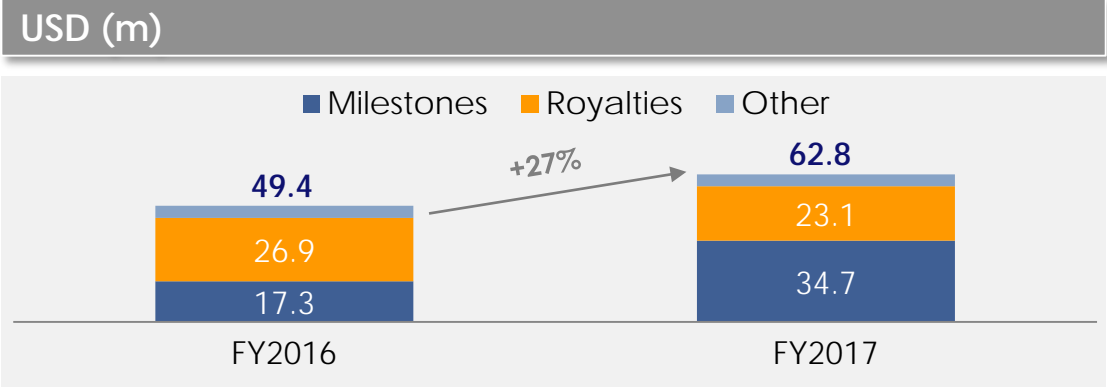
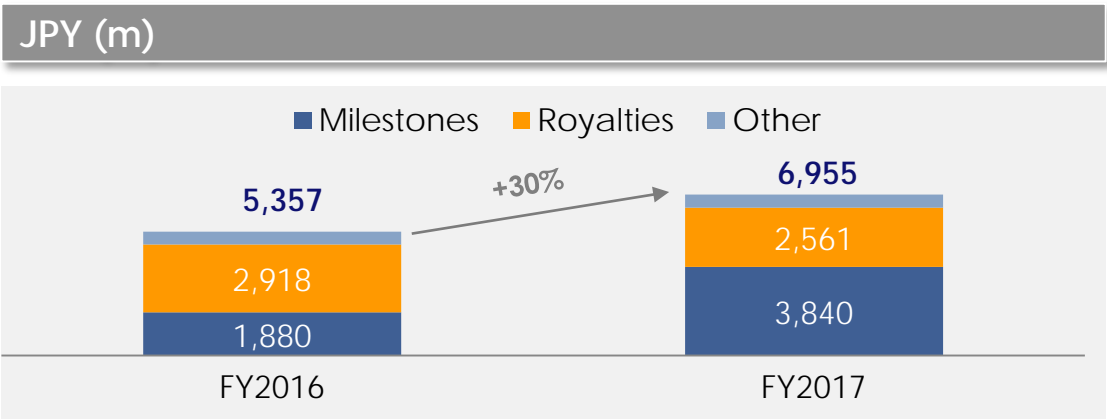
Allergan upfront milestone in FY2016 drives P&L variance

Summary financials (reported)

(JPY m) ¹	FY2016	FY2017
Revenue	18,901 ²	6,955
Cash Opex	5,496	7,790
Cash & cash equivalents	13,899	28,281
Interest-bearing debt	6,900	9,173

(USD m)	FY2016	FY2017
Revenue	174.4 ²	62.8
Cash Opex	50.7	70.4
Cash & cash equivalents	123.9	266.1
Interest-bearing debt	61.5	85.9

Revenue (ex Allergan upfront)



Successful ~\$200m raise in November 2017 via a Global Offering of shares to international investors. Current cash balance of ~\$260m provides runway of ~2 years based on organic business plan

¹ Reporting currency in JPY

² Includes USD 125m upfront payment from Allergan

Substantial economic returns secured from lead compounds

Provides potential source of non-dilutive finance for proprietary pipeline

Summary of potential economic returns from out-licensing / collaboration projects

Partner	Program / Indication	Upfront received (US\$m)	Total Development Milestones (US\$m)	Total Sales Milestones (US\$m)	Total UF + Milestones (US\$m)	Milestones Received (US\$m)	Royalty (US\$m)	Additional Details
	Muscarinic Receptor program	125	665	2,575	3,365	15	Tiered, double-digit	<ul style="list-style-type: none"> ➤ Exclusive global rights ➤ Allergan committed \$50m to a joint R&D program through Ph 2a
	A2a Receptor program	10	500		510	22	Tiered, double-digit	<ul style="list-style-type: none"> ➤ Exclusive global rights to AZD4635 ➤ Collaboration to discover further A_{2A} receptor blocking compounds for development
	Up to 10 targets	Nil	~189 per target	N.D.	1,890		Tiered (single digit)	<ul style="list-style-type: none"> ➤ Discovery of potential novel GPCR agents selected by Pfizer (up to 10 targets) ➤ Pfizer will be responsible for developing and commercializing any agents discovered
TOTAL		135			5,765	37		

\$5bn plus in potential development, regulatory and commercial milestones to come, in addition to royalties on sales

Global operations and aspirations – aiming to build Japan’s first global biotech champion

- **World-leader in GPCR-focused drug design** based on unique IP protected StaR^{®1} GPCR technology & enabled SBDD² platform
- **Partnered clinical-stage pipeline** in neurology, immuno-oncology, CNS & other diseases, with \$5bn plus in potential economics
- **Proprietary pipeline** led by dementia with Lewy bodies (DLB) Phase 2 program in Japan, plus multiple novel candidates in development
- **Strategic investment in saRNA therapeutics** with lead candidate in Phase 1/2a for liver cancer, an orphan indication
- **Robust royalties from legacy respiratory products** provide source non-dilutive cash flows
- **Strong cash position of ~\$260m** to drive global growth strategy

Thank you!

¹ Stabilized receptor technology
² Structure-based drug design

Locations

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