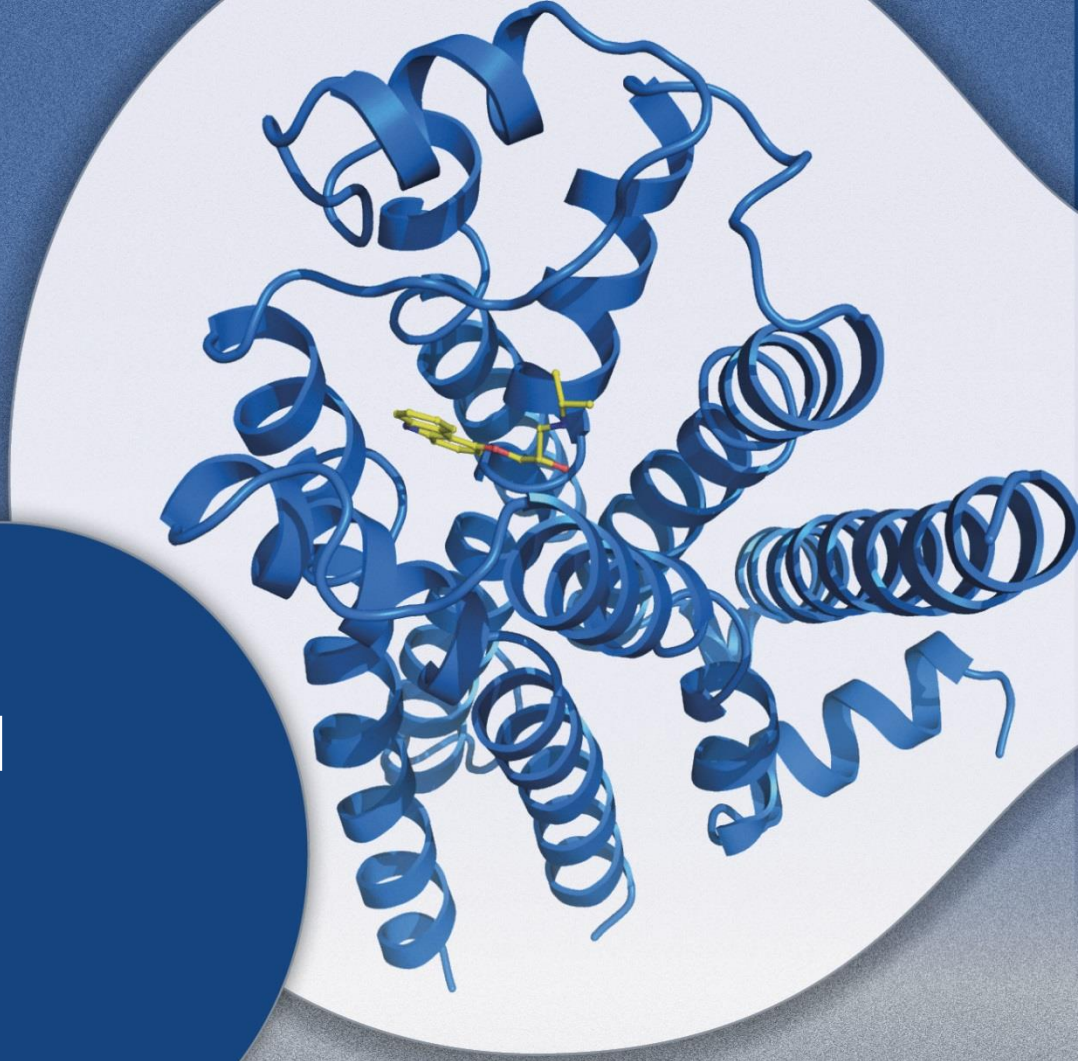


H1 FY2017
Financial results and corporate update

9 November 2017

sosei

Disclaimer

This presentation contains forward looking statements. The words “believe”, “expect”, “anticipate”, “intend”, “plan”, “seeks”, “estimates”, “will” and “may” and similar expressions identify forward looking statements. All statements other than statements of historical facts included in this presentation, including, without limitation, those regarding our financial position, business strategy, plans and objectives of management for future operations (including development plans and objectives relating to our products), are forward looking statements. Such forward looking statements involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward looking statements. Such forward looking statements are based on numerous assumptions regarding our present and future business strategies and the environment in which we will operate in the future. The important factors that could cause our actual results, performance or achievements to differ materially from those in the forward looking statements include, among others, risks associated with product discovery and development, uncertainties related to the outcome of clinical trials, slower than expected rates of patient recruitment, unforeseen safety issues resulting from the administration of our products in patients, uncertainties related to product manufacturing, the lack of market acceptance of our products, our inability to manage growth, the competitive environment in relation to our business area and markets, our inability to attract and retain suitably qualified personnel, the unenforceability or lack of protection of our patents and proprietary rights, our relationships with affiliated entities, changes and developments in technology which may render our products obsolete, and other factors. These factors include, without limitation, those discussed in our public reports filed with the Tokyo Stock Exchange. Further, certain forward looking statements are based upon assumptions of future events which may not prove to be accurate. The forward looking statements in this document speak only as at the date of this presentation and the company does not assume any obligations to update or revise any of these forward statements, even if new information becomes available in the future.

Agenda

1. **Highlights**
   Peter Bains, CEO
2. **H1 FY2017 Financial Results**
   Andrew Oakley, CFO
3. **Strategic and Operational Update**
   Peter Bains, CEO
4. **Q&A**

Significant strategic and operational progress across multiple fronts

- Partnered GPCR pipeline developing well, with zero clinical attrition to date – further validates our Structure-based Drug Design (SBDD) approach
- Multiple development milestones received (Allergan M_4, Teva CGRP, AstraZeneca A_{2A}) – evidence of our partners' progress
- Entered high potential field of RNA Therapeutics with strategic investment in MiNA – Boehringer Ingelheim deal supports the promising potential of MiNA's saRNA technology
- Integration of G7 Therapeutics complete, now Heptares Zurich – modest investment has significantly increased our annual StaR® GPCR structure output
- Investment in StaR® technology driving Proprietary pipeline progress – Up to 3 novel drug candidates to enter Phase 1 every year commencing CY2018
- Heptares Co-founder Dr. Richard Henderson awarded 2017 Nobel Prize for Chemistry – Cryo-EM knowledge now being applied to our SBDD approach
- Amendment to global agreement with Allergan for commercial rights to M_1 for DLB in Japan – first go-to-market opportunity in area of significant unmet medical need

StaR® and SBDD is consolidating our position as the world leader in GPCR medicine discovery and design – we are building Japan's first global biotech champion

Agenda

1 **Highlights**
Peter Bains, CEO

2 **H1 FY2017 Financial Results**
Andrew Oakley, CFO

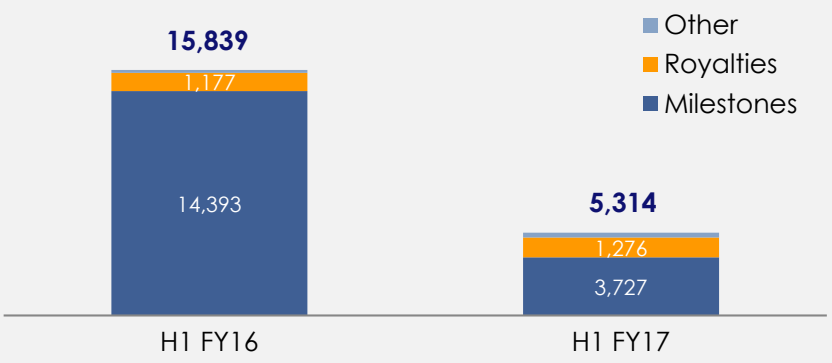
3 **Strategic and Operational Update**
Peter Bains, CEO

4 **Q&A**

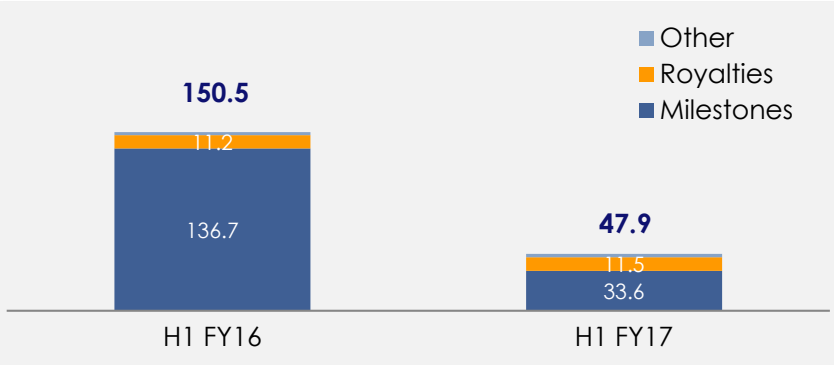
Allergan upfront milestone in FY16 drives variance

Revenues

JPY (m)



USD (m)



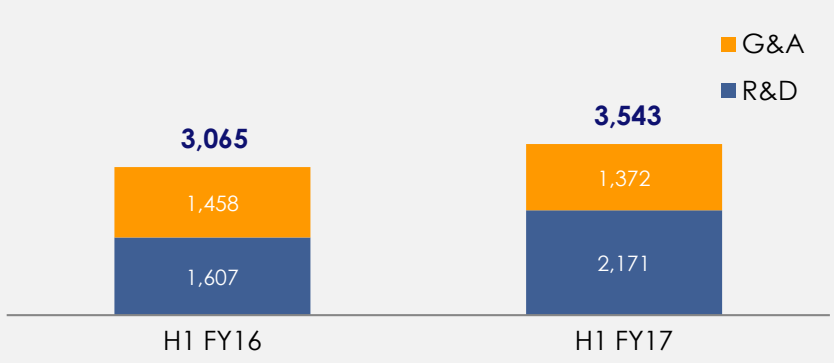
Commentary

M_R PRGM	➢ Muscarinic programs: One-off Allergan upfront $125m in FY16
M_4 SZ	➢ $15m from Allergan upon first healthy patient dosed in Ph. 1 trials
A_{2A}	➢ $12m from AstraZeneca – synergy milestone
CGRP	➢ $5m Teva option exercise
COPD	➢ Royalties up year on year

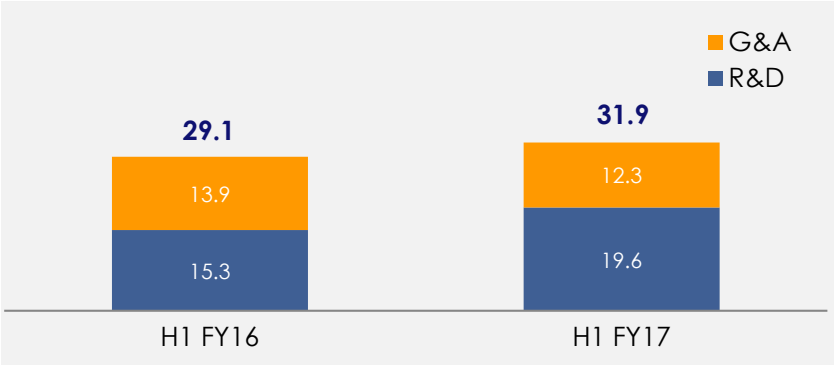
Cash Operating Expenditure linked to investments to advance and support progress across the Proprietary GPCR pipeline

Cash Operating Expenditure

JPY (m)



USD (m)



Commentary

R&D

- Ongoing investment in Partnered programs to develop back-up/follow-up molecules
- Investment behind Proprietary GPCR pipeline
- Start-up costs related to DLB (Japan) program
- Deconsolidation of JITSUBO and Activus

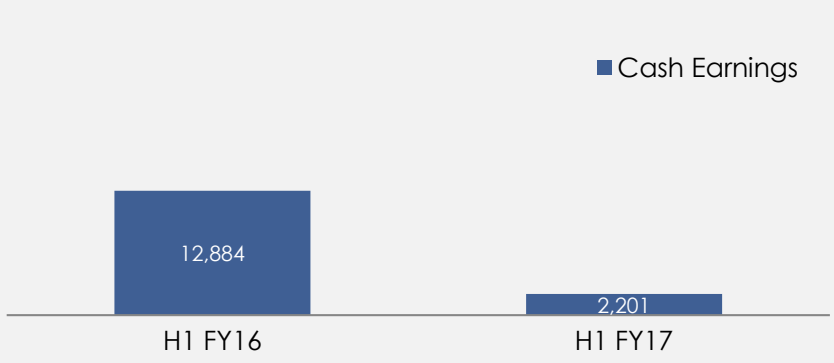
G&A

- Advisor fee in FY2016 for Allergan collaboration
- Strengthening corporate functions to support operational growth
- Several key positions filled

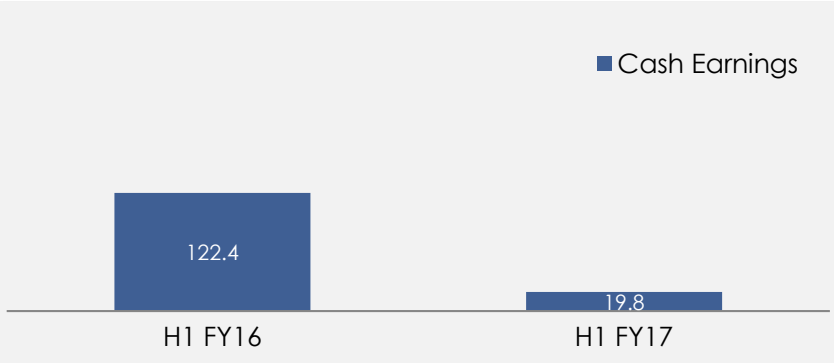
Cash Earnings[1]

Cash Earnings[1]

JPY (m)



USD (m)



Commentary

Revenue

- One-off $125m Allergan upfront in FY2016 main driver of variance
- Development milestones received (Allergan M_4, Teva CGRP, AstraZeneca A_{2A})
- Increase in royalties from sales of Seebri®/Ultibro®

Cash Opex

- Advisor fees related to Allergan collaboration in FY2016
- Investment in both Partnered and Proprietary pipeline
- De-consolidation of JITSUBO and Activus
- Strengthening corporate functions to support operational growth

[1] Cash Earnings = Revenues – Cash Operating Expenditure

Allergan upfront milestone in FY2016 drives variance

Summary Income Statement

Sep-17	JPY H1 FY17 JPY mm	JPY H1 FY16 JPY mm	USD H1 FY17 USD mm	USD H1 FY16 USD mm
Revenue	5,314	15,839	47.9	150.5
Other Income	429	110	3.9	1.0
Cash Opex	3,543	3,065	31.9	29.1
Cash Earnings[1]	**2,201**	**12,884**	**19.8**	**122.4**
Non Cash Costs	757	661	6.8	6.3
Fin, FX & Cont. Consid.	1,743	(1,023)	15.7	(9.7)
Equity Results & MI	235	(124)	2.1	(1.2)
Tax Expense	(37)	2,653	(0.3)	25.2
Net Income	**(498)**	**10,717**	**(4.5)**	**101.8**

Commentary

- Non-cash costs: increase in amortization of intangibles due to acquisition of G7 Therapeutics and stock comp
- FX: Losses in FY2017 vs. Brexit-related gains in FY2016
- Contingent consideration:
  - Represents additional purchase consideration related to Heptares
  - Charge related to $125m Allergan upfront included in FY2015
  - Annual charge is an accounting based methodology - not in line with underlying business performance
- Tax charge (benefit) driven by UK tax position

We are continuing to invest and scale which is driving significant progress across the pipeline

[1] Cash Earnings = Revenues – Cash Operating Expenditure

Guidance for FY2017 (March 2018)

Revenue	➢ "Biotech business model" – milestone dependent, timing difficult to predict with certainty ➢ Ultibron™ Neohaler® & Seebri™ Neohaler® now both launched in the United States[1]
Cash Opex	➢ R&D Cash Opex: USD 50 to 55 million (JPY 5.6 to 6.2 billion) ➢ G&A Cash Opex: USD 20 to 25 million (JPY 2.3 to 2.8 billion)
Cash Earnings[2]	➢ Cash Earnings[2] performance expected to be around breakeven for FY2017

Risk-balanced capital allocation framework will drive long term growth and value creation.
Company to change its year end to December effective December 2018

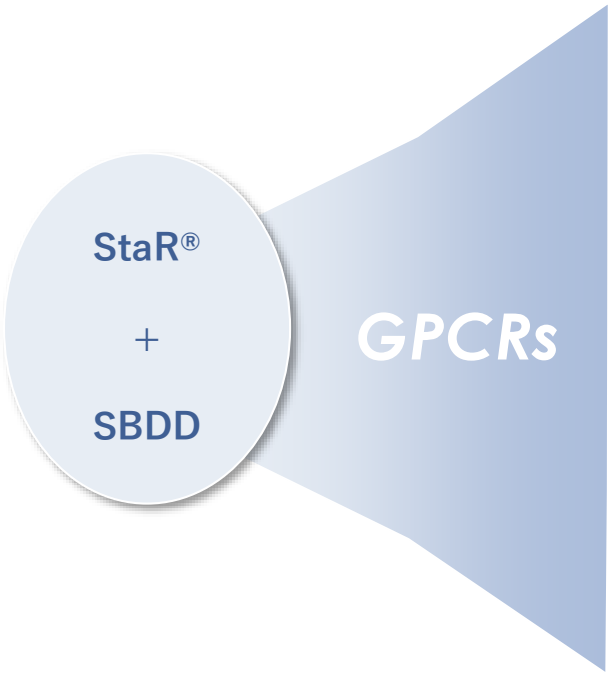
[1] As per announcement from Sunovion 20 October 2017
[2] Cash Earnings = Revenues – Cash Operating Expenditure

Agenda

1	**Highlights** Peter Bains, CEO
2	**H1 FY2017 Financial Results** Andrew Oakley, CFO
3	**Strategic and Operational Update** Peter Bains, CEO
4	**Q&A**

Risk-balanced capital allocation framework

Optimizes value capture



Partnered (Traditional out-licensing/ collaboration projects)

- Indications where we can leverage the strategic capabilities of partners (large development costs and/or significant SG&A)

Partnered (Co-development/ profit share)

- Indications where we can look for complementary capability and profit sharing with partners

Proprietary (go-to-market/ commercialize)

- Rare/orphan and specialty indications (CNS, GI, Inflammation core focus) where we can commercialize ourselves
- Selected markets (e.g. U.S., U.K. & Japan)

Reserving the right to choose which strategy is most appropriate for each drug candidate, with a goal to increasingly commercialize ourselves in selected indications and markets

NEW

M_1 DLB

Phase 2a ready

Sosei to advance clinical development in Japan of HTL0018318 in patients with dementia with Lewy Bodies (DLB)

Amendment to our 2016 global R&D and commercialization partnership with Allergan

- Amendment sees Sosei gain a license to develop and commercialize HTL0018318, a novel muscarinic M_1 receptor agonist, in Japan as a potential new treatment for patients with dementia with Lewy bodies (DLB)
- Initially, Sosei will undertake a Phase 2 proof-of-concept monotherapy study, expected to begin in Japan in 2018
  - Intention to advance HTL0018318 through Phase 2b/3, registration and onto the market in Japan
- Enables HTL0018318 clinical programs to run in parallel in dementia patients in AD and in DLB
- DLB is the second largest dementia population after AD, and a major healthcare issue globally
- Strong go-to-market opportunity for M_1 program in Japan
  - Leverages our expertise in DLB clinical capabilities, and broader track record of successful product development in Japan
  - Satisfies a key element of growth strategy – manageable indication treated in specialist centres, with sizeable market opportunity to build and retain more value for shareholders
- Allergan has retained the right to development HTL0018318 in DLB globally

Strong go-to-market opportunity for our lead M_1 program in Japan which is consistent with our growth strategy, and demonstrates our commitment to tackling a major Japanese health issue (dementia)

NEW

M_1 DLB

Phase 2a ready

What is dementia with Lewy Bodies (DLB)?

Significant unmet need for new therapeutic approach

Overview of DLB

- Dementia with Lewy Bodies (DLB) is the second most prevalent cause of dementia in elderly patients, and one of three major types of dementia
- Progressive neurodegenerative dementia characterized by significant cognitive fluctuations, distressing neuropsychiatric symptoms (e.g. visual hallucinations), and parkinsonism
- Recent advances in DLB diagnosis have increased awareness and opportunity to evaluate new treatments – in part due to approval of Aricept® for DLB and activities of Eisai to develop specialist centres
- Dementia is a social and 'political' priority in Japan

Patient population

- Up to 920,000 in Japan (c.20%[1] of 4.6 million[2] currently living with dementia)
- Sizeable DLB population in the US[3]

Significant unmet need

- Aricept® only conditionally approved in Japan for the treatment of DLB in 2014[4]
- No drugs approved in the US or EU

Cholinergic deficits

- Cholinergic deficits a prominent feature of DLB patients
- Cholinergic neurotransmission more dysfunctional in DLB than AD

Potential Muscarinic M_1 agonist for DLB

- Post-synaptic neurons (and muscarinic M_1 receptors) preserved in DLB
- Direct post-synaptic activation via M_1 receptors is independent of acetylcholine levels which decline as disease progresses
- An M_1 agonist that directly stimulates post-synaptic receptors would offer broad therapeutic potential in treatment of neurodegenerative conditions such as DLB

[1] Eisai press release, April 2015
[2] https://www.alz.org/jp/dementia-alzheimers-japan.asp
[3] https://www.lbda.org/content/incidence-lewy-body-dementias-general-population
[4] Japan PDMA review process ongoing

NEW

M_1 DLB

Phase 2a ready

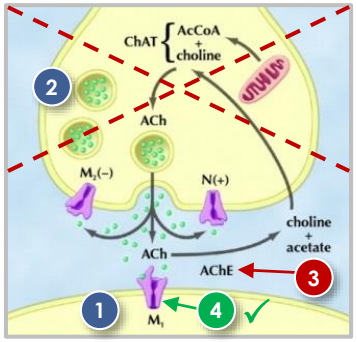
HTL0018318 is a potential first-in-class therapy for DLB

A selective M_1 agonist

Overview of the HTL0018318 muscarinic M_1 receptor agonist approach for DLB

- Cognitive benefits of M_1 agonist supported by clinical studies of xanomeline [1]
- However, xanomeline clinical development stopped due to unacceptable CV and GI side effects linked to stimulation of M_2 & M_3
- StaR® & SBDD to "design out" unwanted selectivity over the M_2 & M_3 receptors
- HTL0018318 is a potent muscarinic M_1 agonist with limited M_2/M_3 agonism

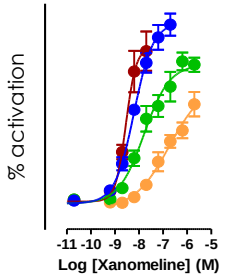
Pre synaptic cholinergic neuron



Post synaptic neuron

1. M_1 receptors in cortex and hippocampus are key in mediating cognitive effects of acetylcholine (ACh)
2. The loss of cholinergic neurons in dementia patients leads to decline in cognitive functions
3. Acetyl-cholinesterase (AChE) inhibitors (e.g. Aricept®) prevent the breakdown of ACh
   - Effects are limited however, due to dose-limiting side-effects and the loss of endogenous ACh levels as the disease progresses
4. M_1 agonist activates receptor independently of ACh levels
   - HTL0018318 derived from StaR® and SBDD, potentially driving comparable pre-clinical effects and a potentially differentiated profile to Aricept®

Xanomeline[1]



- M_1 *Cognition* ✓
- M_2 *CV side-effects* ✗
- M_3 *GI side-effects* ✗
- M_4 *Behavioural* ✓

HTL0018318

- M_1 *Cognition* ✓

HTL0018318 is a selective M_1 receptor agonist for cognition with no agonist activity at M_2 or M_3 receptors

HTL0018318 has a differentiated mechanism of action with the potential to optimise symptomatic benefits in DLB 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

Significant progress across partnered programs and collaborations

Program	Partner	TA	Indication	Progress last 6 months	
Partnered programs and collaborations					
NEW M_1 AD	Allergan	CNS	Alzheimer's disease	➢ Start of new Ph 1b clinical trial with selective M_1 agonist ➢ HTL0018318 selected based on its superior profile	✓
H1 17 M_4 SZ	Allergan	CNS	Neurobehavioral symptoms of Alzheimer's disease	➢ First healthy subject dosed with the first-in-class, selective M_4 agonist HTL0016878 in a Phase 1 clinical study ➢ US$15m milestone payment triggered	✓
NEW A_{2A}	AstraZeneca	ONC	Immuno-oncology Mult. tumor types	➢ AZD4635 Ph 1 trial progressing to signal seeking Ph 1b studies by year end CY2017[1] ➢ Currently in a Ph. 1 clinical trial as a single agent and in combination with AstraZeneca's IMFINZI™ (durvalumab)	✓
H1 17 CGRP	TEVA	CNS	Migraine	➢ Candidate nominated in 2Q17 is in preclinical with the aim of taking it into Ph. 1 clinical studies at the earliest opportunity – emerged from rigorous selection process	✓
NEW	Pfizer		Mult. Targets (SME/mAb)	➢ 11 pre-clinical milestones delivered to Pfizer (including StaR®, X-ray structures, and lead molecules), plus new intellectual property generated	✓
NEW	MiNA Therapeutics / Boehringer Ingelheim	LIVER	Mult. Targets (saRNA) Fibrotic Liver Diseases	➢ MiNA[2] deal with BI to develop novel treatment approaches for fibrotic liver diseases ➢ Upfront, R&D funding, plus milestones up to EUR 307m[3]	✓

[1] Signal seeking phase 1b expansion cohorts in a number of tumor types with monotherapy and/or in combination with IMFINZI™ are planned to open by end CY2017
[2] MiNA is 25.6% owned by Sosei
[3] MiNA also entitled to double-digit royalties on sales of selected products resulting from the partnership

Proprietary programs now led by M_1 DLB opportunity in Japan

Focus on selected rare/orphan and specialty indications or markets

Program	Partner	TA	Indication	Progress last 6 months	
Proprietary programs					
NEW **M_1 DLB**	sosei	CNS	Dementia with Lewy Bodies (Japan)	➢ License to develop and commercialize HTL0018318 for DLB in Japan – a novel muscarinic M_1 receptor agonist ➢ Ph. 2a POC monotherapy study starting CY2018 ➢ Intention to advance HTL0018318 through Ph.2b/3, and registration and onto the market in Japan	✓
NEW **$mGlu_5$**	sosei	CNS	Neurological diseases	➢ Preclinical work progressing well, potential best-in-class $mGlu_5$ NAM for CNS diseases ➢ 10-fold more potent than the most advanced clinical agent ➢ Mechanism validated in multiple CNS areas of high unmet need ➢ Ph. 1 clinical studies starting CY2018	✓

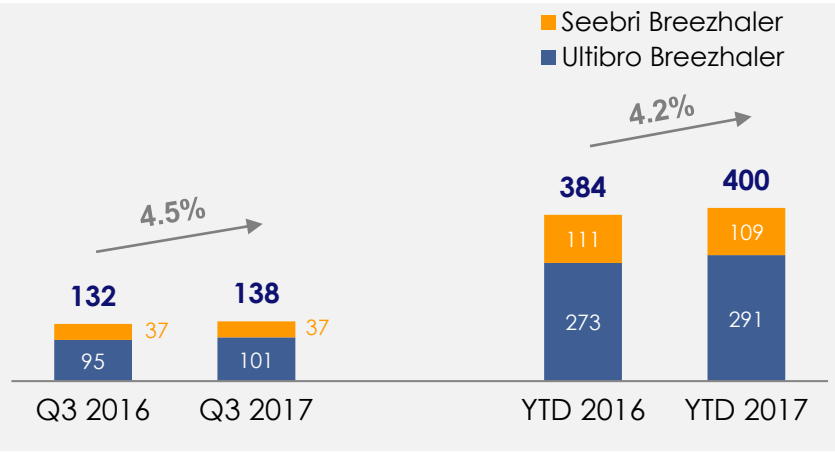
Partnered with: NOVARTIS

COPD

Strong and growing royalty from respiratory disease products Seebri®/Ultibro®

Novartis's reported product sales Q3 & YTD (ex-US)

USD (mm)



Commentary[1]

- In Q3, Ultibro® remained the leading LAMA/LABA with more than 50% of total class share (ex-US)
- Total reported Q3 net sales for Ultibro® grew 6%, impacted by short term normalization of stocking effects in certain territories outside Europe
- In Europe, which accounts for majority of reported net sales, Ultibro® grew +18% year-on-year despite increased competition, underpinned by notable performances in Germany and France
- Recent launches of Utibron™ and Seebri™ in the US by Sunovion may provide further upside

Product/Program	Indication	Partner	Discovery	Preclinical	Phase 1	Phase 2	Phase 3	Market
Other Medicines Partnered Pipeline (Traditional out-licensing)								
Seebri®/Ultibro®	COPD	NOVARTIS						
QVM 149	Asthma	NOVARTIS						

Ultibro® remains the leading LAMA/LABA with more than 50% of total class share (ex–US), with notable strong performance in Europe. Recent US[2] launches by Sunovion provide further upside

[1] Publicly available disclosures
[2] Marketed in the U.S. as Seebri™ Neohaler® and Utibron™ Neohaler® by Novartis' commercialisation partner Sunovion

MiNA[1] partnered with: Boehringer Ingelheim

NEW

Multiple saRNA targets

MiNA[1] agreement with BI further supports the potential for saRNA

Leading position in saRNA

- Demonstrates MiNA's leading position in saRNA therapeutics
- MiNA's lead saRNA candidate, CEBPA, currently in Ph. 1/2a clinical studies

Validates the technology

- Validates the saRNA technology, and enables the potential acceleration of the platform, which represents significant potential upside for Sosei

Expands capability, capacity and pipeline

- Enables MiNA to build-up capability (and capacity) ahead of any future decision regarding our strategic investment

Additional source of diversified non-dilutive financing

- Upfront payment, committed R&D funding plus potential research, development and regulatory milestone payments up to EUR 307 million
- Double-digit royalties on sales of selected products from the partnership

Product/Program	Modality	Indication	Partner	Discovery	Preclinical	Phase 1	Phase 2	Phase 3	Market
Partnered saRNA Pipeline (Traditional out-licensing)									
Multiple targets	saRNA	Multiple	Boehringer Ingelheim						
Proprietary saRNA Pipeline (Go-to-market/commercialize)									
MTL-CEBPA	saRNA	Liver cancer							
MTL-CEBPA	saRNA	Multiple							
MTL-Other	saRNA	Multiple							

: Current stage

: Next 12–15 mths progress

MiNA is collaborating with Boehringer Ingelheim, a world-leader in fibrotic liver diseases, to develop expertise in chronic administration, in addition to its potential acute treatment CEBPA for liver cancer

[1] MiNA, currently 25.6% owned by Sosei with an exclusive option to move to 100% at pre-determined economics

Agenda

1 **Highlights**
Peter Bains, CEO

2 **H1 FY2017 Financial Results**
Andrew Oakley, CFO

3 **Strategic and Operational Update**
Peter Bains, CEO

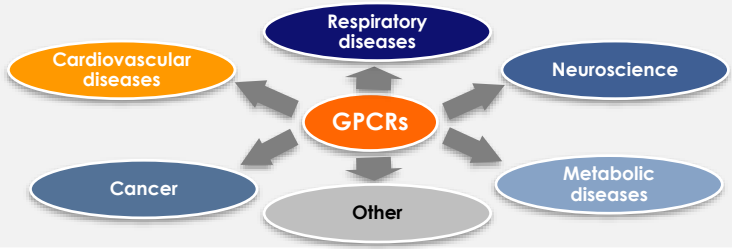
4 **Q&A – Thank you!**

Appendix

Building Japan's first global biotech champion

World-leader in GPCRs

- Exploiting the vast untapped opportunity to design drugs that target GPCRs



Patent-protected StaR® & SBDD platform

- Unique, scalable patent-protected StaR® technology building a deep pipeline with potential for lower attrition due to SBDD approach

Risk-balanced capital allocation framework

- Strategically advancing to include greater focus on go-to-market/profit share opportunities in selected indications (e.g. rare/orphan and specialty)and markets (US, UK, Japan)

M_1 DLB

Pharma partnerships in multiple therapeutic areas

- Partnered GPCR pipeline in neurology, immuno-oncology, CNS & other diseases – validates technology
- c.$6bn in potential development, regulatory & commercial milestones to come, plus royalties on sales

M_1 AD — Allergan

A_{2A} — AstraZeneca

Emerging proprietary GPCR pipeline

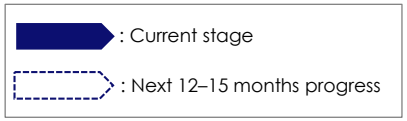
- Accelerate our Proprietary GPCR pipeline into clinical development and through to commercialization, with ability to enter up to 3 novel candidates into Ph. 1 every year

MGlu5

Plus continued growth from legacy Seebri®/Ultibro® royalties and our strategic investment in the exciting field of RNA Therapeutics with MiNA

World leader in GPCR medicines

Balanced and diversified pipeline

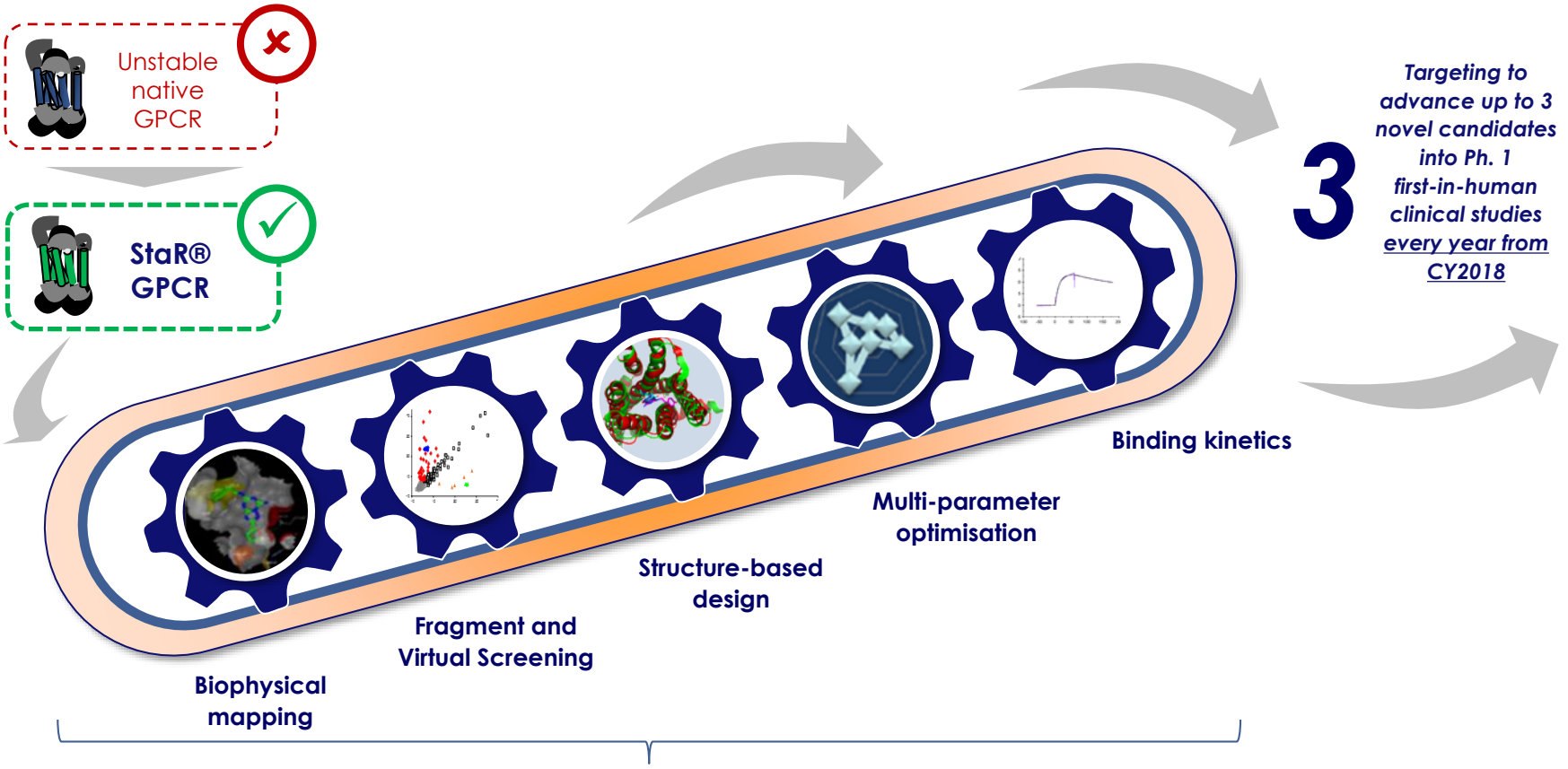


Product/Program	Modality	Indication	Partner	Discovery	Preclinical	Phase 1	Phase 2	Phase 3	Market
Partnered Pipeline - Legacy Respiratory Products (Traditional out-licensing)									
Seebri®/Ultibro®	SME	COPD	NOVARTIS						
QVM149	SME	COPD	NOVARTIS						
Partnered GPCR Pipeline (Traditional out-licensing/collaboration projects) – *formerly known as "Wave 1"*									
M_1 agonist	SME	AD/Sz Cognition	Allergan						
M_4 agonist	SME	AD/Sz Psychosis	Allergan						
M_1/M_4 dual agonist	SME	AD/Sz Psych. /Cog.	Allergan						
A_{2A} antagonist	SME	Cancer I/O	AstraZeneca						
CGRP antagonist	SME	Migraine	TEVA						
Not disclosed	SME	Pain	Daiichi-Sankyo						
Multiple targets	SME/mAb	Multiple indications	Pfizer						
Not disclosed	SME	Not disclosed	morphosys						
Partnered GPCR Pipeline (Co-development/profit share)									
Not disclosed	PEP	Inflammation	PeptiDream						
Multiple targets	mAb	Immuno-oncology	kymab						
Proprietary GPCR Pipeline (Go-to-market/commercialize) - *formerly known as "Wave 2"*									
M_1 agonist	SME	DLB (Japan)							
$mGlu_5$ NAM	SME	CNS							
Molecule 1	SME	Undisclosed							
Molecule 2	SME	Undisclosed							
Molecule 3	SME	Undisclosed							
Molecule 4	SME	Undisclosed							
Molecule 5	SME	Undisclosed							

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

SBDD underpinned by StaR® enables us to build a deep pipeline

Unique and scalable platform

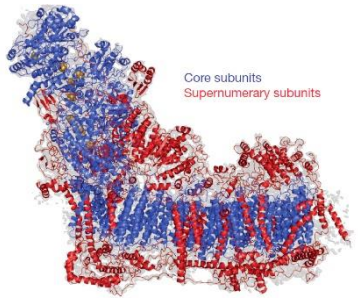


Our proprietary StaR® GPCR technology allows us to utilize a variety of SBDD approaches.
Up to 3 novel drug candidates entering Ph. 1 clinical studies every year from CY2018

Message from Dr. Richard Henderson
2017 Nobel Prize winner in Chemistry

Dr. Richard Henderson

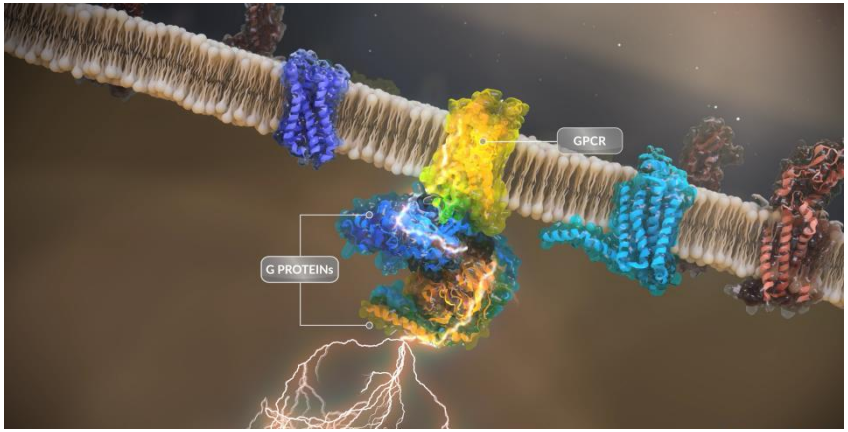
- Born 1945 in Edinburgh, Scotland.
- Ph.D. 1969, Cambridge University, UK.
- Programme Leader, MRC Laboratory of Molecular Biology, Cambridge, UK
- Co-founder of Heptares Therapeutics
- Scientific Advisor to Sosei/Heptares



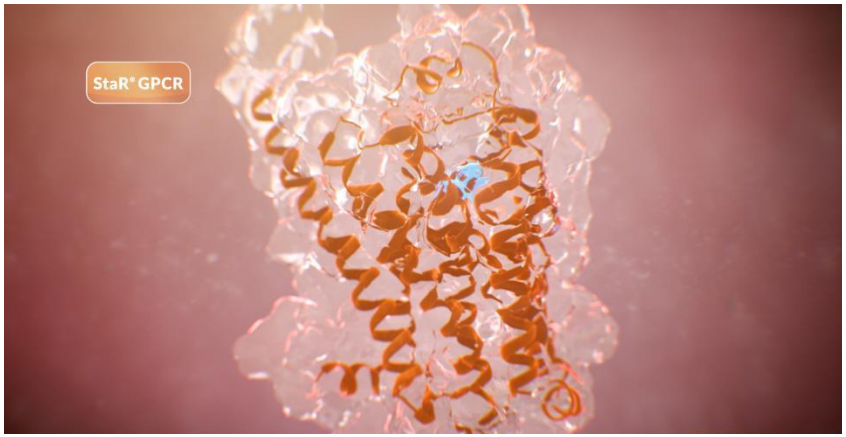
"I am proud to have co-founded Sosei's subsidiary Heptares where I continue to act as a scientific advisor to the company – a leader in GPCR medicine design and development. My work in the area of cryo-EM, for which I was jointly awarded the 2017 Nobel Prize in Chemistry, is a pioneering area of structural biology. Cryo-EM can reveal the structure of complex molecular assemblies to near atomic level. Together with the MRC Laboratory, where I am programme leader, Heptares is applying the techniques of cryo-EM to advance the discovery of new GPCR medicines. I look forward to speaking to Sosei shareholders in March 2018."
– Dr. Richard Henderson, Co-founder of Sosei's subsidiary Heptares Therapeutics

Special Nobel Prize honorary event for Sosei shareholders in March 2018 in Tokyo with Dr. Richard Henderson as keynote speaker. More details in early 2018 – see IR website

Check out our new StaR® GPCR & SBDD video!



English link:
https://www.youtube.com/watch?v=3lcoweP_z4M



日本語 (Japanese) link:
https://www.youtube.com/watch?v=E4KCDlZfdzg

StaR® GPCRs and SBDD is consolidating our position as the world leader in GPCR medicine discovery, design and development – we are building Japan's global biotech champion