

**BIOARCTIC AB (PUBL)
NASDAQ STOCKHOLM: BIOA B**

BioArctic Company Presentation

ABG Sundal Collier Life Science Summit

26 May 2020

Gunilla Osswald, PhD, CEO



Disclaimer

- This presentation has been prepared and produced by BioArctic AB (publ) (“BioArctic”) solely for the benefit of investment analysis of BioArctic and may not be used for any other purpose. Unless otherwise stated, BioArctic is the source for all data contained in this presentation. Such data is provided as at the date of this presentation and is subject to change without notice.
- This presentation includes forward-looking statements. These forward-looking statements involve known and unknown risks, uncertainties and other factors, which may cause BioArctic’s actual results, performance, achievements or industry results to be materially different from those expressed or implied by these forward-looking statements. Forward-looking statements speak only as of the date of this presentation and BioArctic expressly disclaims any obligation or undertaking to release any update of, or revisions to, any forward-looking statement in this presentation, as a result of any change in BioArctic’s expectations or any change in events, conditions or circumstances on which these forward-looking statements are based.
- This presentation does not constitute or form part of, and should not be construed as, an offer or invitation for the sale of or the subscription of, or a solicitation of any offer to buy or subscribe for, any securities, nor shall it or any part of it or the fact of its distribution form, or be relied on in connection with, any offer, contract, commitment or investment decision relating thereto, nor does it constitute a recommendation regarding the securities of BioArctic.
- The information in this presentation has not been independently verified.
- No regulatory body in Sweden or elsewhere has examined, approved or registered this presentation.

BioArctic – a unique Swedish biopharma company

Improving life for patients with central nervous system disorders



High unmet need for disease-modifying treatments for Alzheimer's and Parkinson's diseases creates **large commercial opportunity**



World-class research and development driven organization with basis in founder's breakthrough discoveries and fruitful collaborations with leading **academic researchers** and **pharma companies** generating and developing **innovative projects**



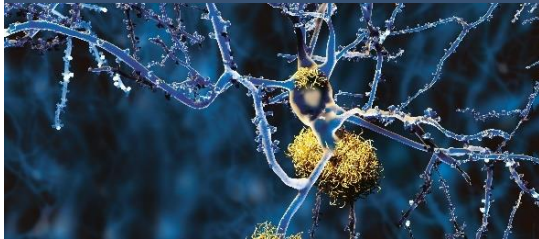
Attractive and well-balanced project portfolio with projects from discovery through Phase 3 and combination of both proprietary projects with substantial marketing and out-licensing potential and partnered projects generating income



Well-financed with BSEK >1 (MUSD >100) in cash, **net profitable** during the last seven years and **valuable collaboration agreements** totaling BSEK 9.6 (BUSD ~1) plus royalties

BioArctic R&D focuses on improving life for patients with Central Nervous System disorders

Alzheimer's disease



BAN2401

- Strong clinical Phase 2b results in early Alzheimer's
- 3 clinical trials underway or in planning
- Phase 3 confirmatory study ongoing by



Discovery stage programs

- 4 fully-owned preclinical stage disease modifying antibody programs with different mechanisms

Parkinson's disease



ABBV-0805

- Second part of Phase 1 study ongoing by partner

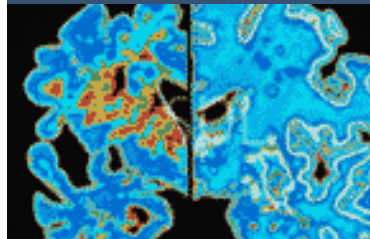
abbvie

Discovery stage projects

- Preclinical stage projects in research collaboration partnered with

abbvie

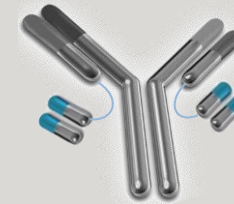
Other CNS disorders



Neurodegeneration research

- New indications and new targets

Blood-brain barrier technology



Blood-brain barrier technology platform

- Facilitate the passage of biologics over the blood-brain barrier

Diagnostics



Diagnostics

- Imaging and biochemical biomarkers

Attractive and well-balanced project portfolio combines fully-financed partner projects and cutting-edge proprietary projects

	Project	Partner	Discovery	Preclinical	Phase 1	Phase 2	Phase 3
ALZHEIMER'S DISEASE	BAN2401	Eisai, Biogen ¹	▶				
	BAN2401 back-up	Eisai	▶				
	AD1801		▶				
	AD1502		▶				
	AD1503		▶				
	AD2603		▶				
PARKINSON'S DISEASE	ABBV-0805 ²	AbbVie	▶				
	PD1601	AbbVie	▶				
	PD1602	AbbVie	▶				
OTHER CNS DISORDERS	BAN2401 Down's syndrome ³ Traumatic brain injury		▶				
	ND3014		▶				
BLOOD-BRAIN BARRIER TECHNOLOGY	BBB technology platform		▶				
DIAGNOSTICS	Imaging and biochemical biomarkers – Alzheimer's disease		▶				
	Imaging and biochemical biomarkers – Parkinson's disease	AbbVie	▶				

as of March 31, 2020

- 1) Partnered with Eisai for BAN2401 for treatment of Alzheimer's disease. Eisai entered partnership with Biogen regarding BAN2401 in 2014
- 2) AbbVie in-licensed BAN0805 in late 2018 and develops the antibody with the designation ABBV-0805
- 3) Dementia and cognitive impairment associated with Down's syndrome

Long-standing and extensive partnerships

Alzheimer's disease

Partner track record

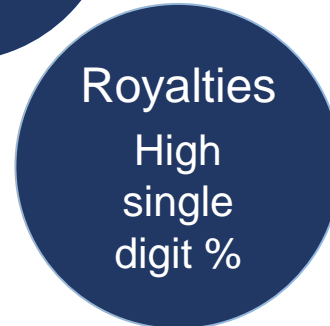
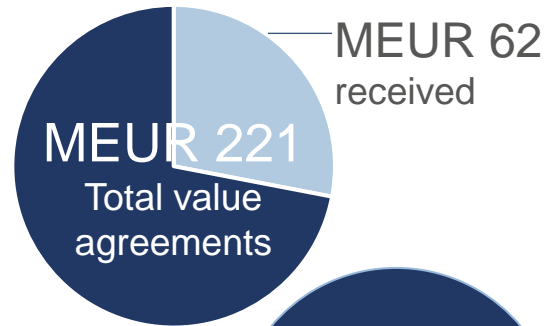


Discovered and developed world's best-selling medicine for symptoms in Alzheimer's



Industry-leading pipeline in dementia area

Collaboration and license



- BioArctic retains rights to BAN2401 in other indications and option to market in the Nordics

Parkinson's disease

Partner track record



World's all-time best-selling medicine (BUSD 20)

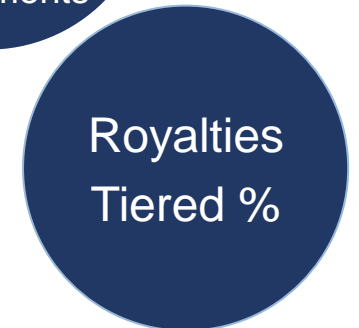
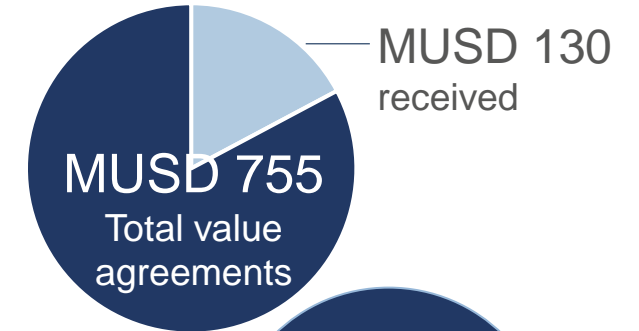


10 different indications in immunology

Approved product for symptoms associated with Parkinson's disease



Collaboration and license



- AbbVie global rights to alpha-synuclein portfolio for all indications

Sources: Eisai, AbbVie and BioArctic corporate information

Experienced management, innovative scientists and collaborations with universities to bring forward the next groundbreaking therapy

Experienced R&D Leadership

Gunilla Osswald, PhD
CEO

Former VP AstraZeneca (portfolio, projects, clinical, marketing)
30+ years relevant experience



Tomas Odergren, MD, PhD
CMO

Senior positions in clinical development at AstraZeneca and H Lundbeck
20+ years relevant experience



Christer Möller, PhD
CSO

Extensive experience from small biotech (research & development)
20+ years relevant experience



Johanna Fälting, PhD
VP Head of Research

Former AstraZeneca R&D (discovery & drug projects)
15+ years relevant experience



Mikael Moge, PhD

VP CMC

Former AstraZeneca (Pharmaceutical Development) and Syntagon (Head Development & Pilot Plant)
20+ years relevant experience



Nora Sjödin

VP Regulatory Affairs

Former Pharmalink, NDA Regulatory Service, AstraZeneca
20+ years relevant experience



Per-Ola Freskgård, PhD

Distinguished Scientist

Former Roche Head of Neurovascular Biology, AstraZeneca, Novo Nordisk
20+ years relevant experience



Lars Lannfelt, Professor, MD

Co-founder, SVP University Collaborations

Senior Professor, Uppsala University
Discovered the Swedish and Arctic mutations in Alzheimer's Disease
35+ years relevant experience



Innovative Scientists

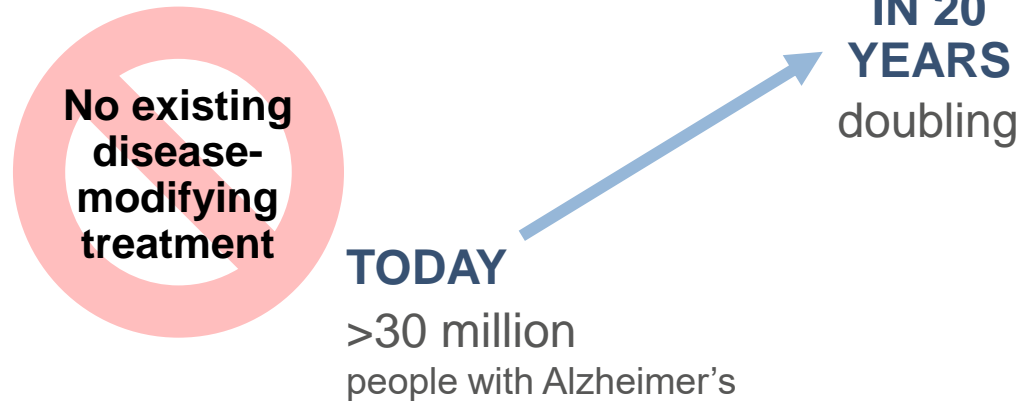


Collaboration with Universities



BAN2401: potential disease modifying antibody for Alzheimer's disease with positive Phase 2b results now in Phase 3

High unmet medical need



BAN2401 unique profile

Unique and targeted binding profile

- Highly selective for toxic forms of misfolded Abeta (oligomers/protofibrils)

Unique clinical fingerprint

- Rapid onset of clinical effect
- Consistent effects
- No titration required due to low frequency of ARIA-E

BAN2401 has positive Phase 2b results

- **Large trial:** 856 early Alzheimer's patients
- **Consistent effects** on clinical outcomes, imaging and neurodegenerative biomarkers
- **Effect increase over time**
- **Good safety profile**

Broad clinical program

- **Confirmatory Phase 3 study** ("Clarity AD") ongoing
 - Primary endpoint final readout expected 2022
- Phase 2b open label extension study ongoing
- Phase 3 prevention program ("AHEAD 3-45" comprised of 2 groups "A3" and "A45") in even earlier stages of AD
 - Preparing to start 2020

Broad BAN2401 clinical program

Clarity AD Phase 3 confirmatory study

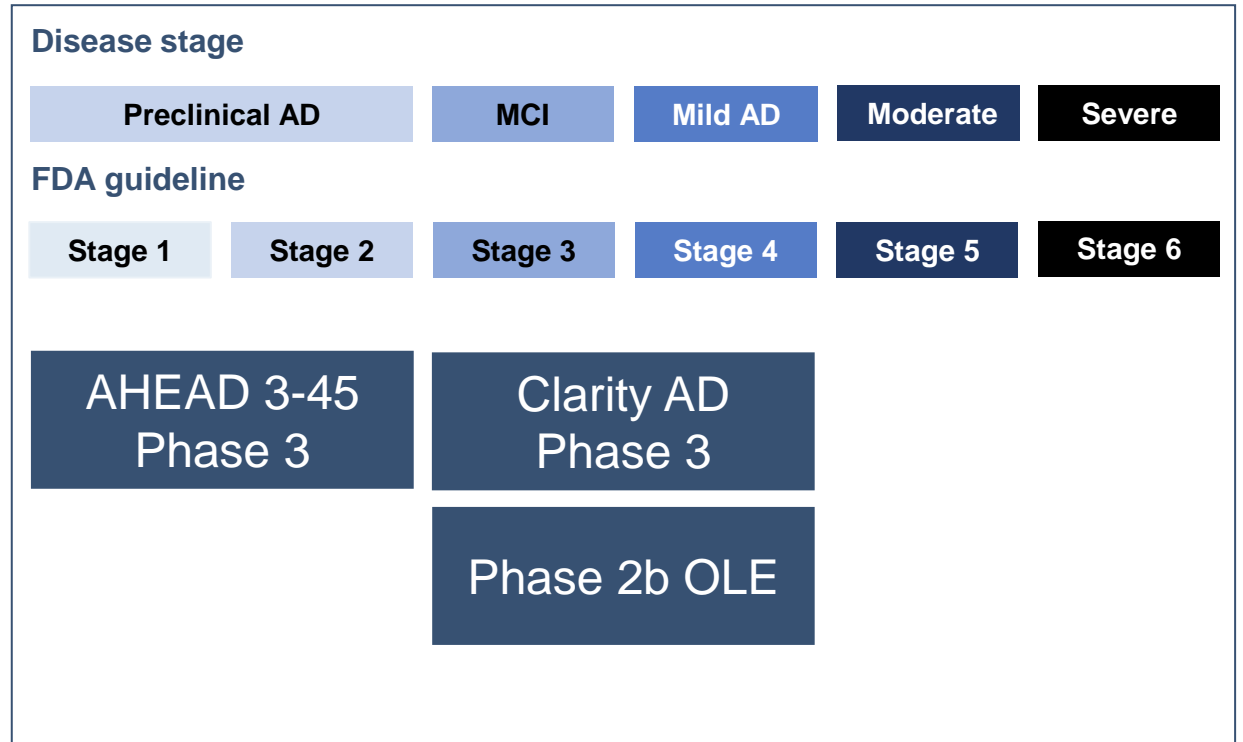
- Started May 2019, MEUR 15 milestone to BioArctic
- Study ongoing with target of 1566 early AD patients
- Primary endpoint readout expected 2022


Phase 2b OLE open-label extension study

- Ongoing with approx. 200 patients with early AD
- Baseline data presented at CTAD December 2019 showed maintenance of benefit after BAN2401 treatment conclusion

AHEAD 3-45 Program

- Eisai and ACTC planning to start A3 and A45 prevention study in 2020
- A45: ~1000 subjects with preclinical AD, little to no cognitive impairment and elevated levels of amyloid in the brain
- A3: ~400 subjects with early preclinical AD, cognitively normal with intermediate amyloid levels in the brain
- Biomarkers on amyloid, tau and neurodegeneration
- Clinical evaluation scale PACC5¹ for A45



Clinical program driven by: 

ABBV-0805: potential disease modifying antibody for Parkinson's disease with strong preclinical results now in Phase 1

High unmet medical need

No existing disease-modifying treatment

- 2nd most common neurodegenerative disease
- 6.2 million people with Parkinson's¹
- Younger patient group, still at working age

1) Dorsey and Bloem, JAMA Neurology 2018;75:9-10

Unique profile

Unique and targeted binding profile

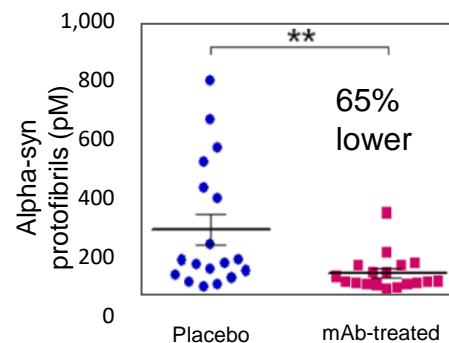
- Highly selective for toxic forms of misfolded alpha-synuclein (oligomers/protofibrils)

Built on genetic and pathology rationale

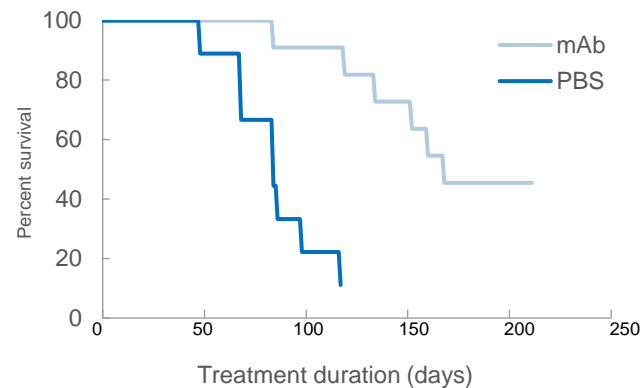
- Alpha-synuclein mutations lead to Parkinson's
- Alpha-synuclein oligomers/protofibrils are elevated in Parkinson's

Preclinical proof of concept

Reduction of neurotoxic alpha-synuclein oligomers/protofibrils



Delays disease progression and increases lifespan



ABBV-0805 in clinical development

- Phase 1 with ABBV-0805 ongoing by AbbVie
- BioArctic delivers follow-up antibodies in the continued collaboration with AbbVie

Continued progress in collaboration with AbbVie on alpha-synuclein

Collaboration highlights

- ABBV-0805 targeting disease modification in Parkinson's disease
- Potential to expand to earlier stage Parkinson's disease patients and other diseases where alpha-synuclein plays a role
- AbbVie is responsible for clinical development
- BioArctic delivers follow-up antibodies in the continued collaboration with AbbVie

ABBV-0805 advancing in clinical trials



Alpha-synuclein antibody portfolio licensed by AbbVie

Milestone of 50 MUSD for the license

ABBV-0805 IND-application approved by the US FDA

AbbVie started Phase 1 with ABBV-0805

Phase 1 study ongoing

- Aim to evaluate safety and tolerability
- Second stage of Phase 1 study in patients with Parkinson's disease now underway

Collaboration featured in *Drug Discovery Today* (March 2020)

Drug Discovery Today



feature

How partnership should work to bring innovative medicines to patients

Janice M. Twombly¹, jan@rhythmofbusiness.com, Johanna Färling², Marco Giorgetti³, Anna C. Maroney⁴ and Gunilla Osswald⁵

Scientists increasingly find themselves working in bilateral drug development alliances. Alliances are conceptually simple, but operationally challenging, resulting in the value-eroding misalignment and delays that alliances often experience. This case study of an exemplary collaboration between a small biotech and a global biopharmaceutical company is based on 15 interviews and a lessons-learned workshop conducted with the principal alliance team members. We outline five repeatable practices identified as contributing to their success that other alliance teams can follow.

BioArctic has a strong financial profile

- Listed on Nasdaq Stockholm Mid Cap, market capitalization of SEKbn 6.1¹ (~650 MUSD)²



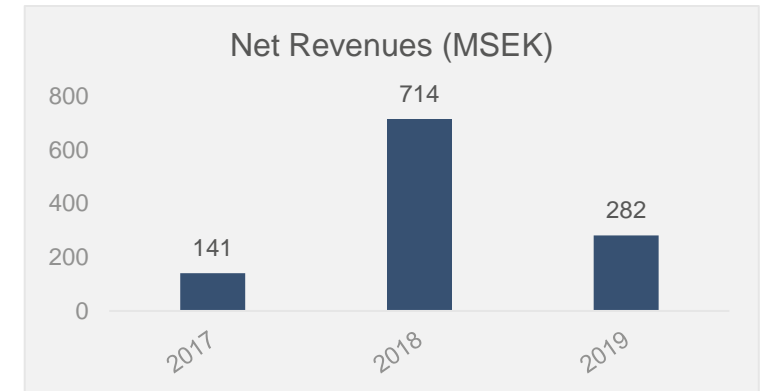
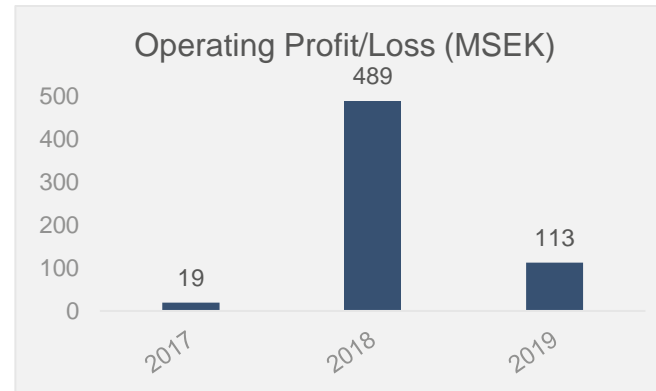
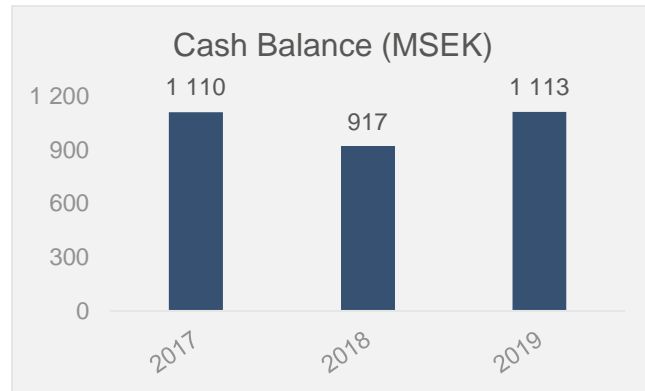
- More than 1 billion SEK (100 MUSD) in cash



- Net profit during the last 7 years
- Expected 2020 operating costs 180-230 MSEK



- Significant funding from partner research collaborations and license agreements, as well as grants
- Total potential collaboration deal value³ of ~SEKbn 9.6 (~1 BUSD) of which ~SEKbn 1.9 (~0.2 BUSD) received
- Additional future royalties potential
- Milestone payments one-time nature explain fluctuations in financial results



1) As of April 21, 2020.
 2) Calculated using relevant exchange rate as of April 21, 2020.
 3) Calculated using relevant exchange rate as of December 30, 2019.

Upcoming news flow

Alzheimer's disease



BAN2401 (Eisai)

- To present data at international congresses
- Phase 3 confirmatory study results 2022
- Phase 2b open label extension study results
- Phase 3 prevention study to start 2020

Discovery stage programs

- Advance into preclinical development

Parkinson's disease



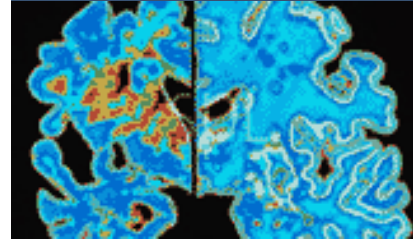
ABBV-0805 (AbbVie)

- Complete Phase 1 and start Phase 2
- Publications on the collaboration

Discovery stage projects

- Development in AbbVie collaboration

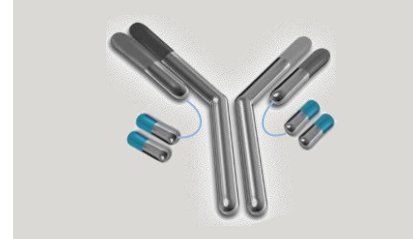
Other CNS disorders



Neurodegeneration research

- New project development
- New indications and new targets

Blood-brain barrier technology



Blood-brain barrier technology platform

- Continue development of platform

Diagnostics



Diagnostics

- Continue development of imaging and biochemical biomarkers

BioArctic: With Patients in Mind

Built on science



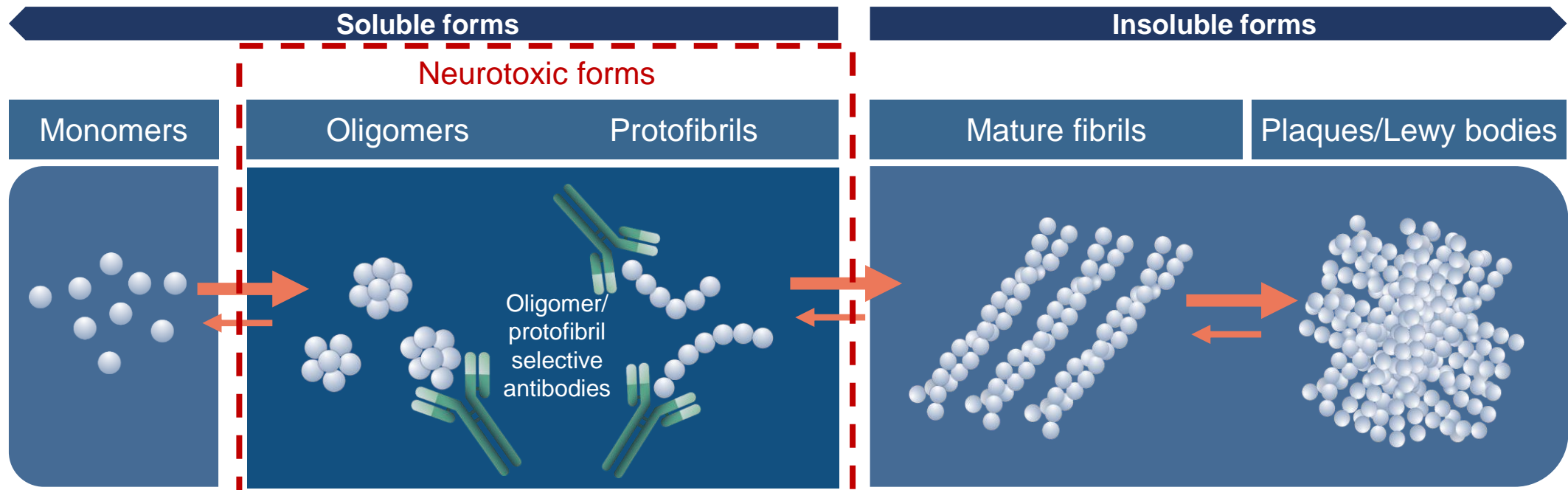
Projects in focus

	Project	Partner	Discovery	Preclinical	Phase 1	Phase 2	Phase 3
ALZHEIMER'S DISEASE	BAN2401	Eisai, Biogen ¹	[Progress bar]				
	BAN2401 back-up	Eisai	[Progress bar]				
	AD1801		[Progress bar]				
	AD1502		[Progress bar]				
	AD1503		[Progress bar]				
PARKINSON'S DISEASE	ABBV-0805 ²	AbbVie	[Progress bar]				
	PD1601	AbbVie	[Progress bar]				
	PD1602	AbbVie	[Progress bar]				
OTHER CNS DISORDERS	BAN2401		[Progress bar]				
	Down's syndrome ³		[Progress bar]				
	Traumatic brain injury		[Progress bar]				
	ND3014		[Progress bar]				
BLOOD-BRAIN BARRIER TECHNOLOGY	BBB technology platform		[Progress bar]				
	Imaging and biochemical biomarkers – Alzheimer's disease		[Progress bar]				
DIAGNOSTICS	Imaging and biochemical biomarkers – Parkinson's disease	AbbVie	[Progress bar]				

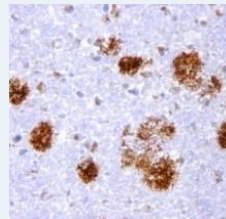
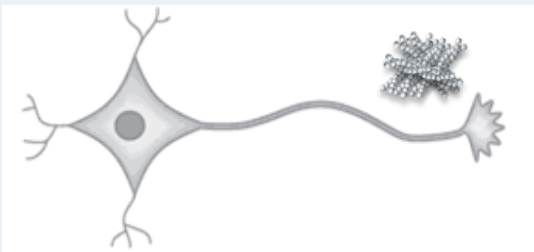
Value-driven leadership



Targeting neurotoxic forms of aggregated misfolded proteins is important when designing therapies for neurodegenerative diseases



Alzheimer's disease: misfolded amyloid beta results in amyloid plaques



Parkinson's disease: misfolded alpha-synuclein results in Lewy Bodies

