

BIOARCTIC AB (PUBL)
NASDAQ STOCKHOLM: BIOA B

BioArctic Company Presentation Nordea Innovation Seminar

November 26, 2019

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



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** generating **innovative projects**



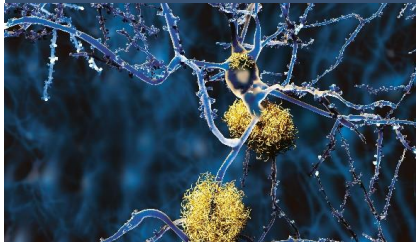
Attractive and well-balanced project portfolio with projects from discovery through Phase 3 and combination of both proprietary projects with substantial marketing and out-licensing potential and partnered projects generating income



Well-financed with BSEK >1 (MUSD >100) in cash, **positive financial results** during the last six years and **valuable collaboration agreements** totaling BSEK 9.3 (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
- Phase 3 confirmatory study started by



Discovery stage programs

- 3 preclinical stage disease modifying antibody programs with different mechanisms

Parkinson's disease



ABBV-0805

- Phase 1 study ongoing by partner

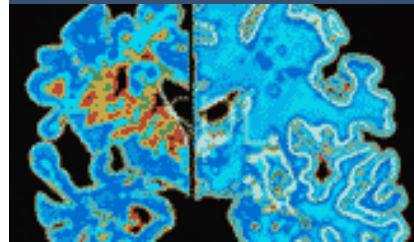


Discovery stage projects

- Preclinical stage projects in research collaboration partnered with



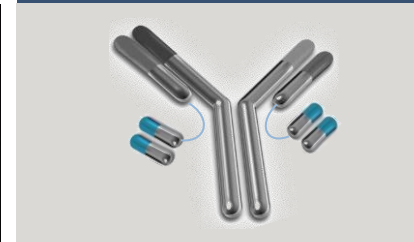
Other CNS diseases



Neurodegeneration research

- New indications and new targets

Blood-brain barrier technology platform



Blood-Brain Barrier Technology Platform

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

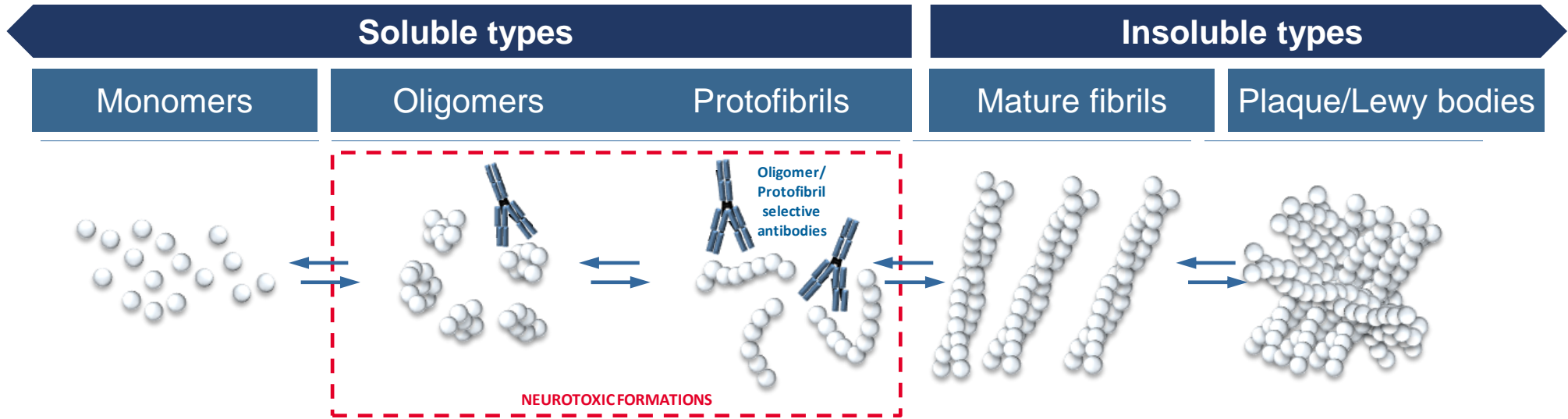
Diagnostic tools



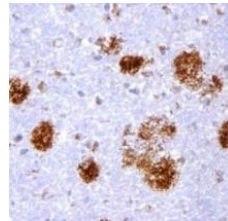
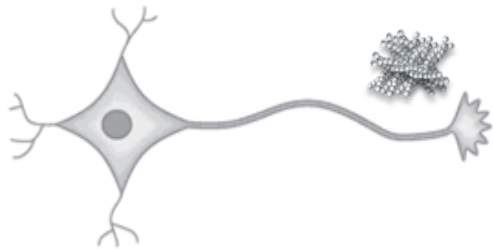
Diagnostic tools

- Imaging and biochemical biomarkers

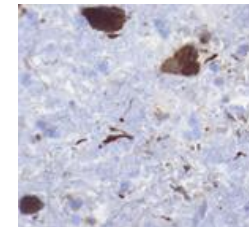
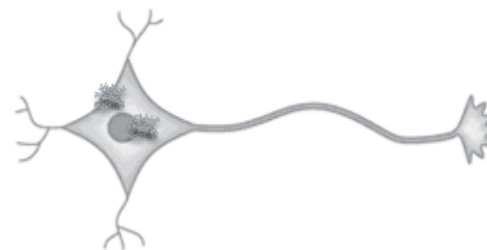
Targeting the toxic forms of misfolded proteins is important when designing therapies for neurodegenerative diseases



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

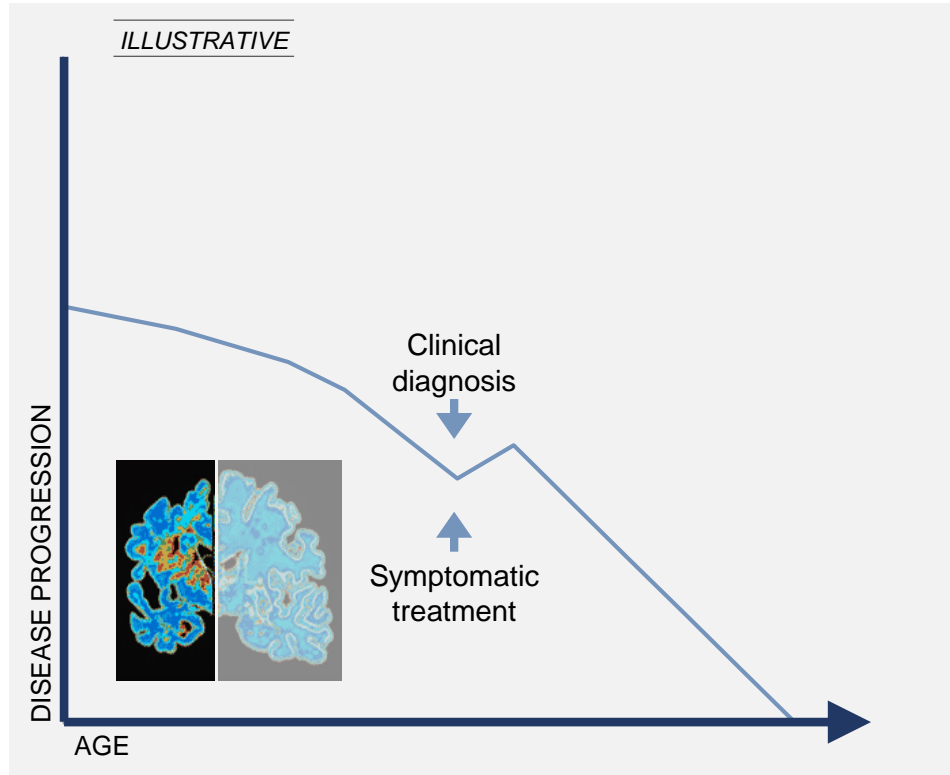


Parkinson's disease: misfolded alpha-synuclein results in Lewy Bodies

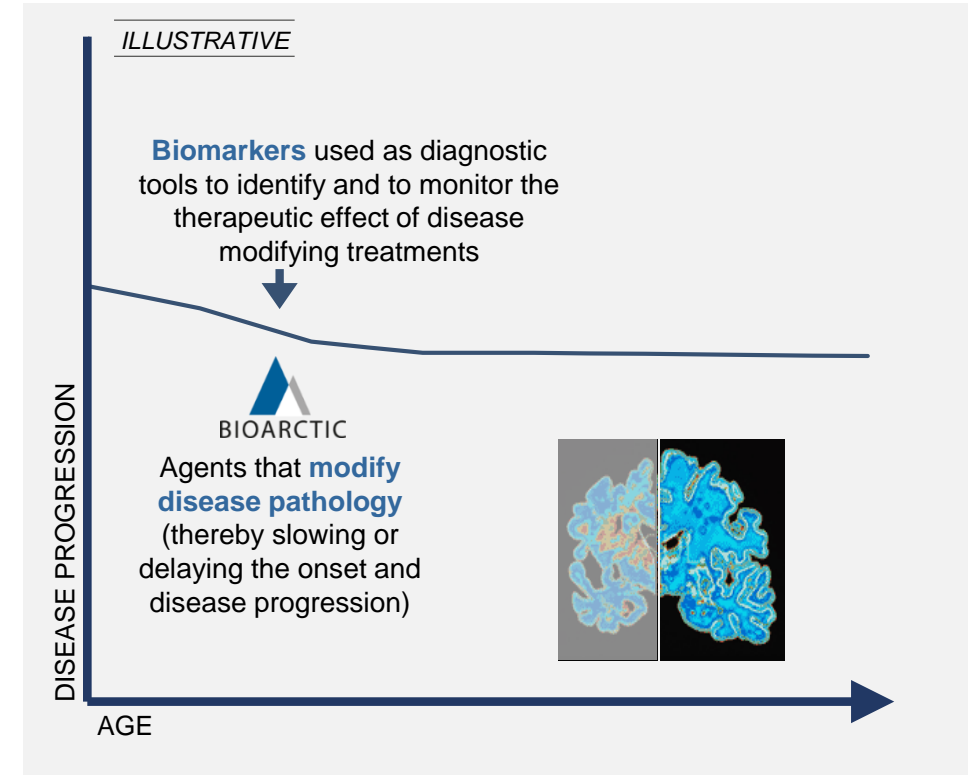


BioArctic develops disease modifying agents and diagnostics/biomarkers for neurodegenerative diseases

Neurodegenerative disease therapy TODAY





Neurodegenerative disease therapy TOMORROW



Significant unmet medical need to be addressed by disease modifying agents and reliable diagnostics/biomarkers

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

	Product candidate	Indication	Partner	Discovery	Preclinical	Phase 1	Phase 2	Phase 3
Neurodegenerative Diseases	BAN2401: anti-A β antibody	Alzheimer's Disease		→				
	BAN2401: anti-A β antibody	Down's Syndrome ² Traumatic Brain Injury ²	—	→				
	BAN2401 BACK-UP: anti-A β antibody	Alzheimer's Disease		→				
	AD1801: Undisclosed information	Alzheimer's Disease	—	→				
	AD1502: Undisclosed information	Alzheimer's Disease	—	→				
	AD1503: Undisclosed information	Alzheimer's Disease	—	→				
	ABBV-0805³: anti- α -synuclein antibody	Parkinson's Disease	abbvie	→				
	PD1601: anti- α -synuclein antibody	Parkinson's Disease	abbvie	→				
	PD1602: anti- α -synuclein antibody	Parkinson's Disease	abbvie	→				
Diagnostics & Technology	IMAGING AND BIOCHEMICAL BIOMARKERS: Aβ	Alzheimer's Disease	—	→				
	IMAGING AND BIOCHEMICAL BIOMARKERS: α-synuclein	Parkinson's Disease	abbvie	→				
	BBB-TECHNOLOGY: blood-brain barrier	Multiple application areas	—	→				
Spine	SC0806: ⁴ FGF1/medical device	Complete Spinal Cord Injury	—	→				

as of September 30, 2019

- 1) Eisai is BioArctic's partner for BAN2401 for treatment of Alzheimer's disease. Eisai partnered with Biogen for BAN2401 in 2014
- 2) Dementia and cognitive impairment associated with Down's syndrome and Traumatic Brain Injury
- 3) AbbVie in-licensed BAN0805 in late 2018 and will continue to develop BAN0805, now with the designation ABBV-0805
- 4) SC0806 project is being wound-down and will not be further developed

Long-standing and extensive partnerships

Alzheimer's disease

Partner Track Record

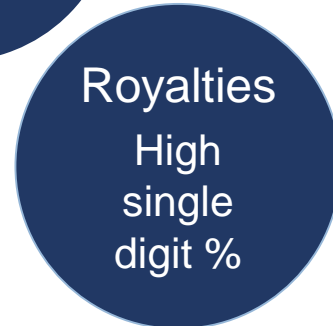
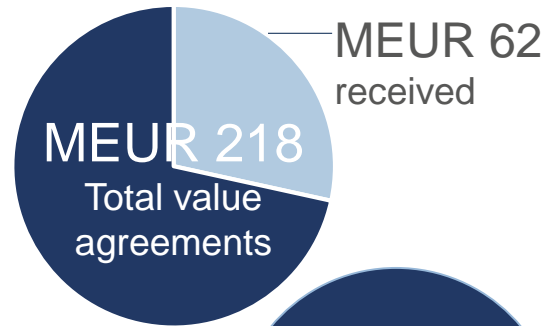


Discovered and developed world's best-selling medicine for symptoms in Alzheimer's



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)

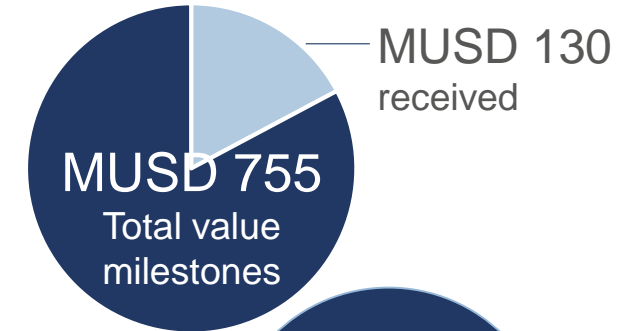


10 different indications in immunology

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 Management

GUNILLA OSSWALD, PhD

CEO

Former VP AstraZeneca (portfolio, projects, clinical, marketing)

30 years relevant experience



HANS BASUN, Professor, MD

VP CMO

Geriatrician at Memory Clin, Uppsala former AstraZeneca (clinical development)

35 years relevant experience



CHRISTER MÖLLER, PhD

VP CSO

Extensive experience from small biotech (research & development)

20 years relevant experience



JOHANNA FÄLTING, PhD

VP Translational Science & Pharmacology

Former AstraZeneca R&D (discovery & drug projects)

15 years relevant experience



MIKAEL MOGE, PhD

VP CMC and Protein Chemistry

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



LARS LANNFELT, Professor, MD

Co-founder, Senior VP University Collaborations

Senior Professor, Uppsala University
Discovered the Swedish and Arctic mutations in Alzheimer's Disease

35 years relevant experience



Innovative Scientists

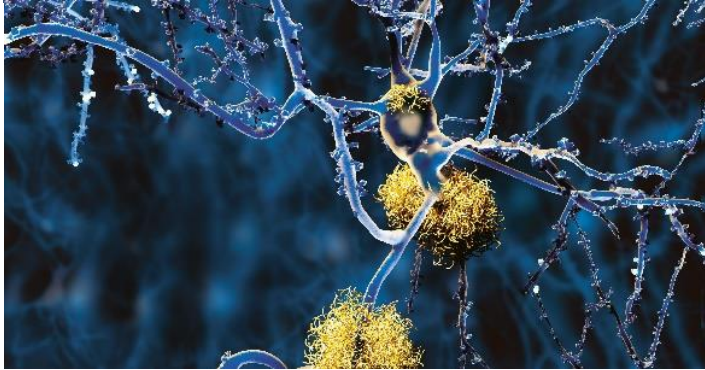


Collaboration with Universities



Significant progress 2019 year to date

Alzheimer's disease



BAN2401

- Phase 3 confirmatory study in early Alzheimer's disease started by Eisai (milestone received MEUR 15)
- Phase 2b open label extension study ongoing
- ACTC and Eisai prepare for two Phase 3 prevention studies to start 2020
- Data presented at AAIC July 2019

Discovery stage programs

- Progressed according to plan

Parkinson's disease



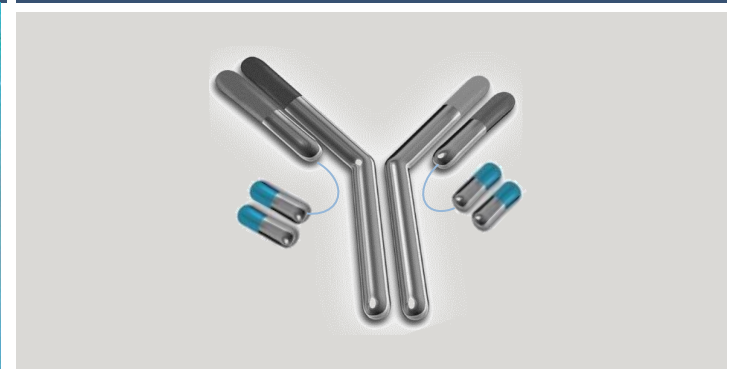
ABBV-0805 (BAN0805)

- IND produced by BioArctic approved by FDA
- Phase 1 study started by AbbVie

Discovery stage projects

- Progressed according to plan in AbbVie collaboration

Blood-brain barrier technology platform

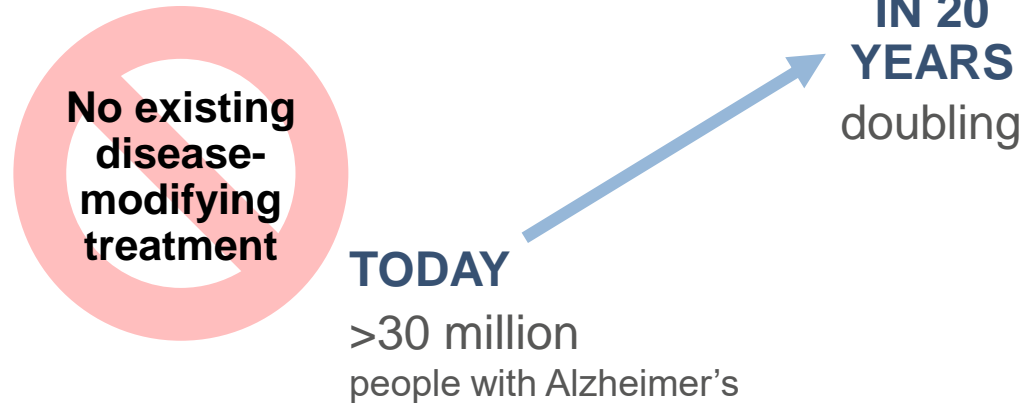


Blood Brain Barrier Technology Platform

- Vinnova grant of MSEK 10 received together with Uppsala University
- Internationally renowned scientist recruited

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**

Eisai announced four clinical trials underway

1. **Confirmatory Phase 3 study** ("Clarity AD") started
 - Primary endpoint final readout expected 2022
2. Phase 2b open label extension study ongoing
3. Phase 3 prevention studies ("A3 and A45 Studies") in preclinical stages of AD planning to start 2020

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

High unmet medical need



- 2nd most common neurodegenerative disease
- 6.2 million people with Parkinson's in 2015
- Younger patient group, still at working age

Unique profile

Unique and targeted binding profile

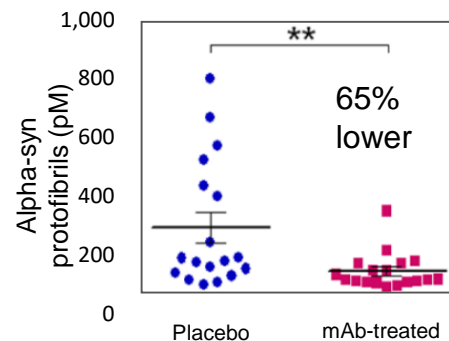
- Highly selective for toxic forms of misfolded alpha-synuclein (oligomers/protofibrils)

Built on genetic and pathology rationale

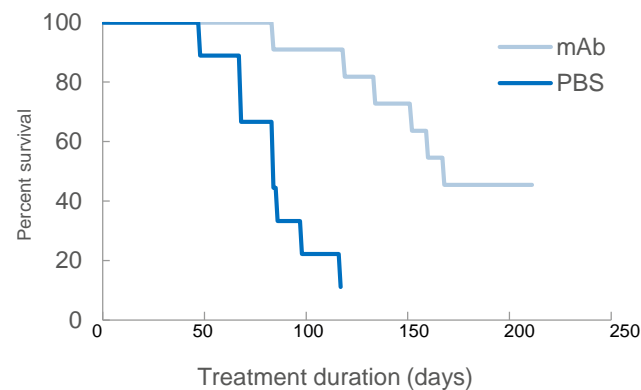
- Alpha-synuclein mutations lead to Parkinson's
- Alpha-synuclein oligomers/protofibrils are elevated in Parkinson's

Preclinical proof of concept

Reduction of neurotoxic alpha-synuclein oligomers/protofibrils



Delays disease progression and increases lifespan

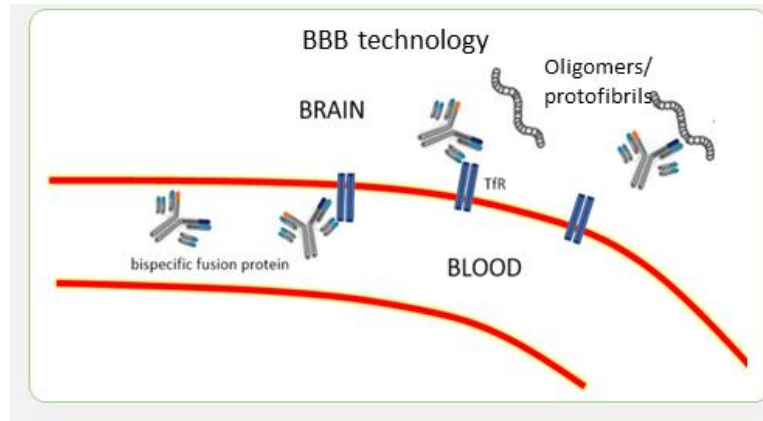
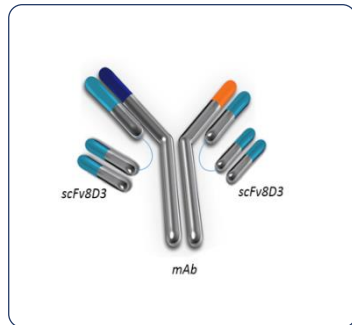


ABBV-0805 in clinical development

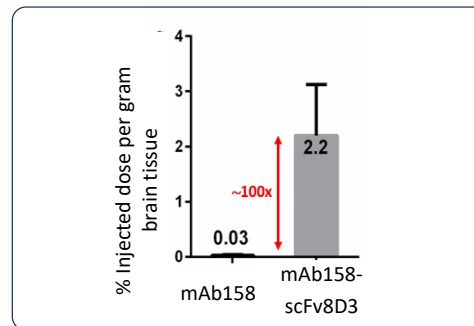
- Phase 1 with ABBV-0805 ongoing by AbbVie
- BioArctic will deliver follow-up antibodies in the continued collaboration with AbbVie

Advancing technology platforms and diagnostics to fuel pipeline

BLOOD-BRAIN BARRIER TECHNOLOGY PLATFORM

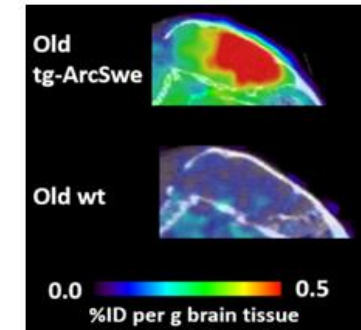


Substantially increased antibody brain uptake by BioArctic's brain shuttle technology



DIAGNOSTIC TOOLS

Antibody-based imaging (PET)



Source: Sehlin et al 2016 Nature Communications. Hultqvist et al 2017, Theranostics.

Biochemical biomarkers



BioArctic has a strong financial profile

- Listed on Nasdaq Stockholm Mid Cap, market capitalization of SEKbn 8 (~800 MUSD)*



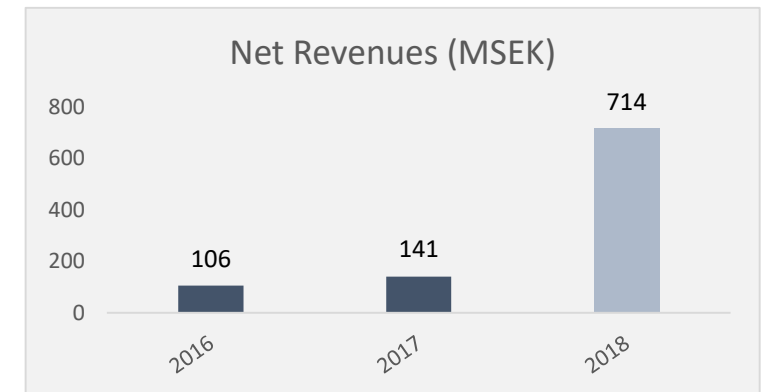
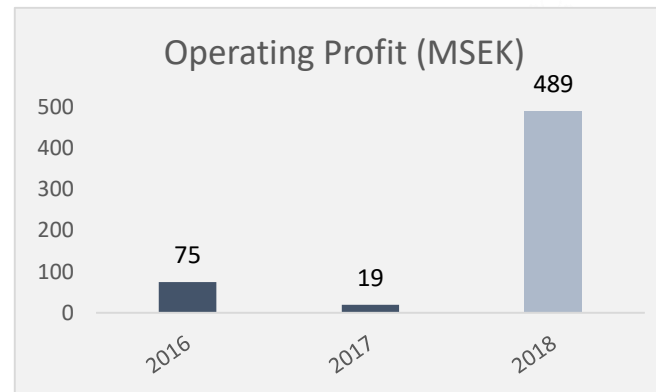
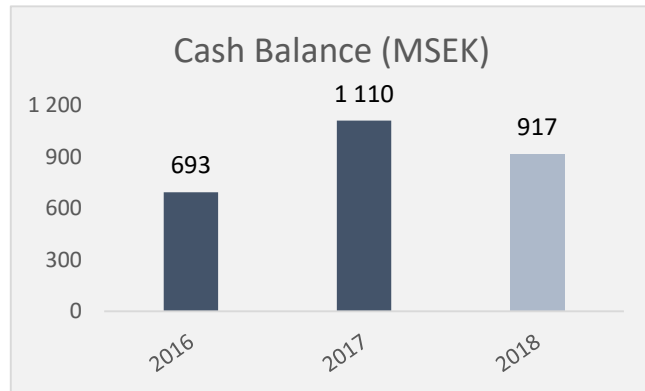
- More than 1 billion SEK (100 MUSD) in cash
- Equity ratio at 73 percent



- Positive financial results during the last 6 years
- Expected 2019 operating costs 190-210 MSEK



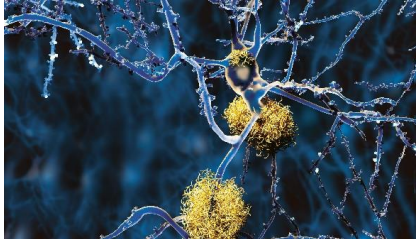
- Significant funding from partner research collaborations and license agreements, as well as grants
- Total potential collaboration deal value of ~SEKbn 9.7 (~1 BUSD) of which ~SEKbn 1.9 (~0.2 BUSD) received
- Additional future royalties potential
- Milestone payments one-time nature explain fluctuations in financial results



* Per date of the interim report Q3 on October 24, 2019

Upcoming news flow

Alzheimer's disease



BAN2401 (Eisai)

- To present data at international congresses incl. CTAD December 2019
- Phase 3 confirmatory study results 2022
- Phase 2b open label extension study results
- Phase 3 prevention studies to start 2020

Discovery stage programs

- Advance into preclinical development

Parkinson's disease



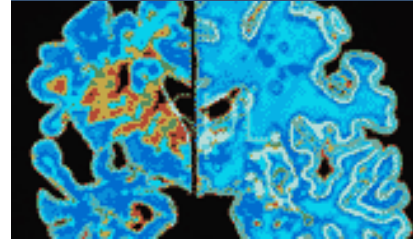
ABBV-0805 (AbbVie)

- Complete Phase 1 study

Discovery stage projects

- Continue development in AbbVie collaboration

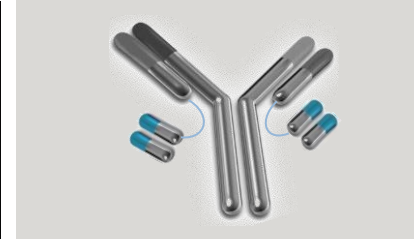
Other CNS diseases



Neurodegeneration research

- New indications and new targets

Blood-brain barrier technology platform



Blood-Brain Barrier Technology Platform

- Expansion and continued development

Diagnostic tools



Diagnostic tools

- Continue development of imaging and biochemical biomarkers