BIOARCTIC AB (PUBL)
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Interim Report January-March 2019

Stockholm, May 9, 2019

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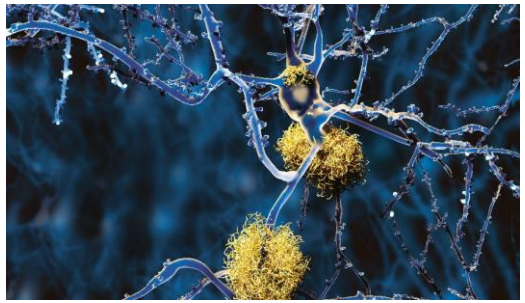
Great progress in the projects 2018 & 2019 year to date

ALZHEIMER'S DISEASE



BAN2401

- Phase 2b study demonstrated positive results in 856 patients with early Alzheimer's disease
- One Phase 3 confirmatory study in early Alzheimer's disease initiated by Eisai
- Presented at international congresses - AAIC, CTAD, AD/PD

Discovery stage programs

- Progressed according to plan

PARKINSON'S DISEASE

ABBV-0805 (BAN0805)

- AbbVie licensed the portfolio and 50 MUSD milestone received
- IND produced by BioArctic approved by FDA
- Phase 1 study started by AbbVie

Discovery stage projects

- Progressed according to plan

COMPLETE SPINAL CORD INJURY

SC0806

- Phase 1 safety evaluated and Phase 2 started

DIAGNOSTICS AND TECHNOLOGY

Blood Brain Barrier Technology

- Vinnova grant of 10 MSEK received together with Uppsala University (April)

BIOARCTIC

BioArctic – a unique Swedish biopharma company

A **scientific breakthrough by our founder** enables development of disease modifying treatments for disorders in the central nervous system

Successful strategic collaborations with global pharmaceutical companies with a total **value of the agreements of 9.3 BSEK (ca 1 BUSD) plus royalties**

A confirmatory Phase 3 trial initiated for BAN2401 – our most advanced drug candidate – a promising game changing treatment for early Alzheimer´s disease

Positive financial results during the last six years and **more than 1 BSEK in cash**

A broad project portfolio and a well-functioning research and development organization and fruitful collaborations with leading academic researchers generating **new projects with substantial marketing and out-licensing potential**

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Portfolio combines fully financed partner projects and cutting-edge proprietary projects

PROJECT PORTFOLIO AS OF MARCH 31, 2019

Attractive combination of fully financed partner projects and cutting-edge, proprietary R&D pipeline with substantial market and out-licensing potential

	Product candidate	Indication	Partner	Discovery	Preclinical	Phase 1	Phase 2	Phase 3
Neurodegenerative Diseases	**BAN2401:** anti-Aβ antibody	Alzheimer's Disease	Eisai / Biogen[1]					
	BAN2401: anti-Aβ antibody	Down's Syndrome[2] Traumatic Brain Injury[2]	—					
	BAN2401 BACK-UP: anti-Aβ antibody	Alzheimer's Disease	Eisai					
	AD1801: Undisclosed information	Alzheimer's Disease	—					
	AD1502: Undisclosed information	Alzheimer's Disease	—					
	AD1503: Undisclosed information	Alzheimer's Disease	—					
	ABBV-0805[3]: 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:** FGF1/medical device	Complete Spinal Cord Injury	—					

1) Partner with Eisai on BAN2401 for treatment of Alzheimer's disease. Eisai partnered with Biogen on 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

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Long-standing and extensive partnerships

Alzheimer's disease collaboration and license

Partner Track Record

Eisai

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

Aricept donepezil HCl tablet 5 mg, 10 mg and 23 mg

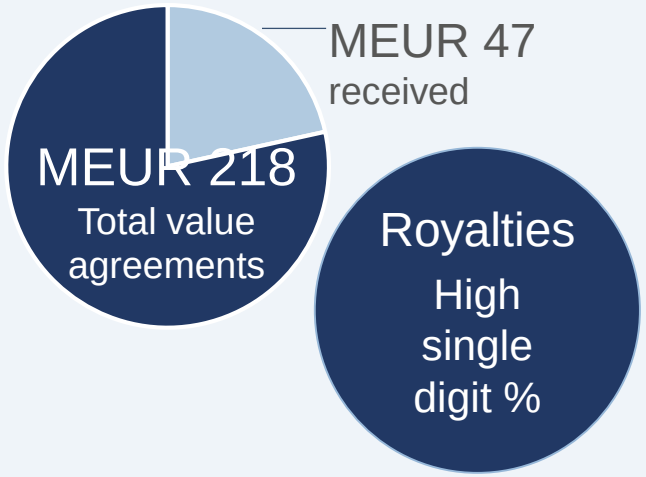
For confusion related to Alzheimer's

10+ projects in dementia
Currently in development

High level of commitment to BAN2401

Valuable Collaborations

- 3 research collaborations and 2 licenses
- Abeta oligomer/protofibril antibodies BAN2401 and BAN2401 back-up as disease modifying treatments for Alzheimer's disease



Parkinson's disease collaboration and license

Partner Track Record

abbvie

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

HUMIRA® adalimumab

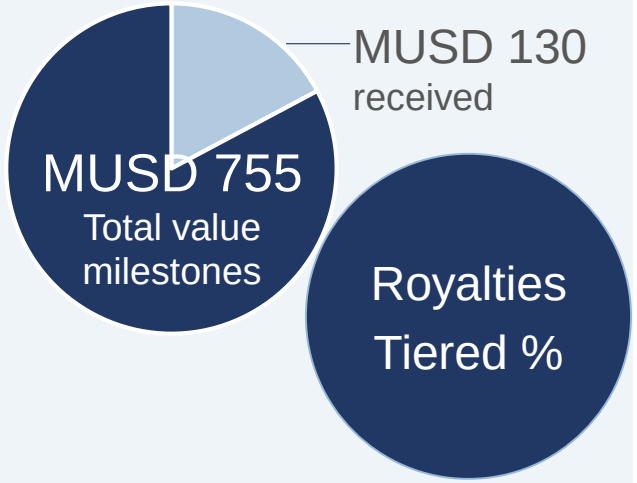
10 different indications in immunology

Approved product for symptoms associated with Parkinson's disease

Duopa carbidopa/levodopa enteral suspension 4.63 mg/20 mg per mL

Valuable Collaborations

- Research collaboration and license
- Alpha-synuclein antibodies as disease modifying therapies for Parkinson's (ABBV-0805, follow-up antibodies and diagnostics)



Sources: Eisai, AbbVie and BioArctic corporate information

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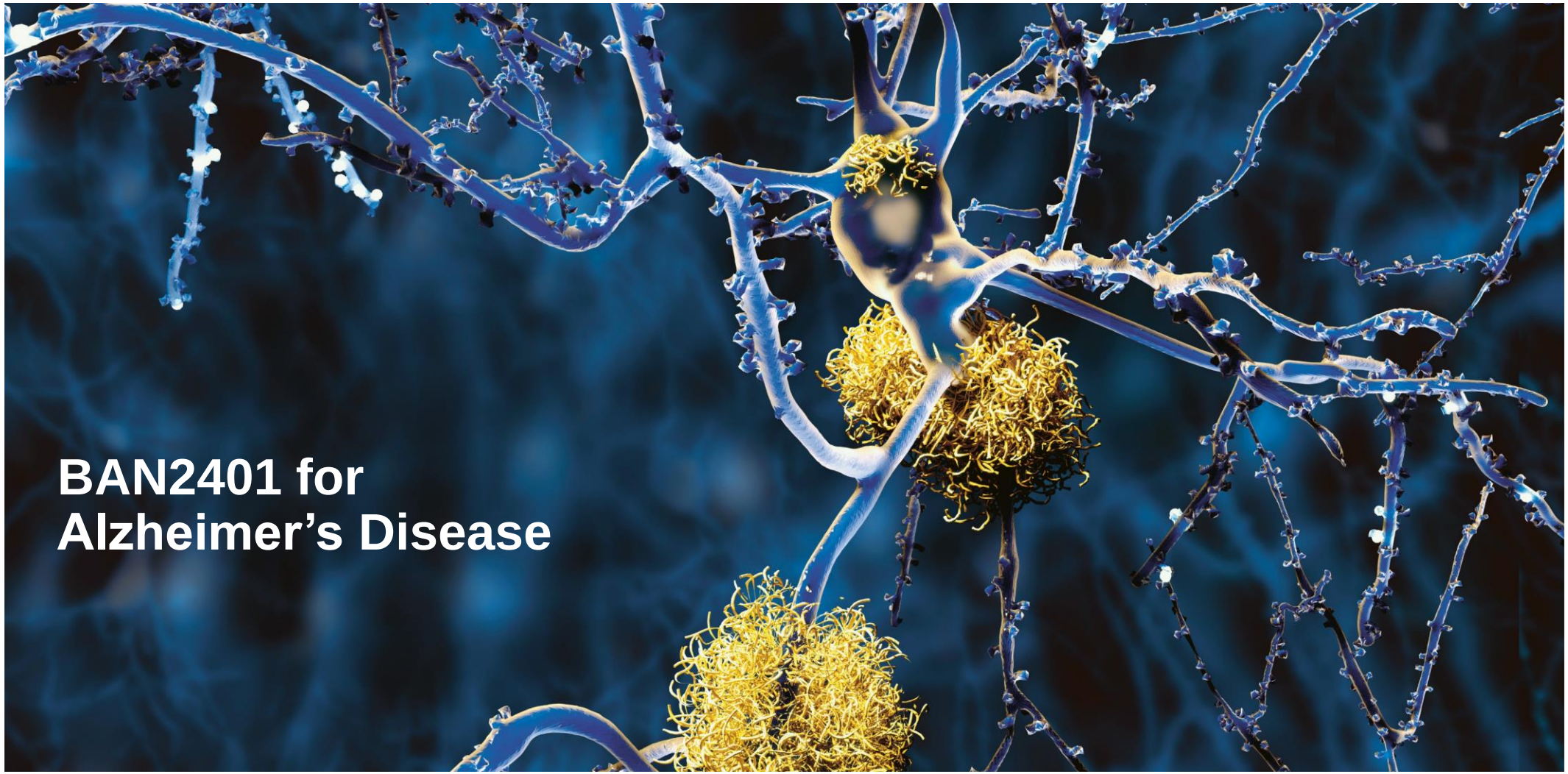

BAN2401 for Alzheimer's Disease

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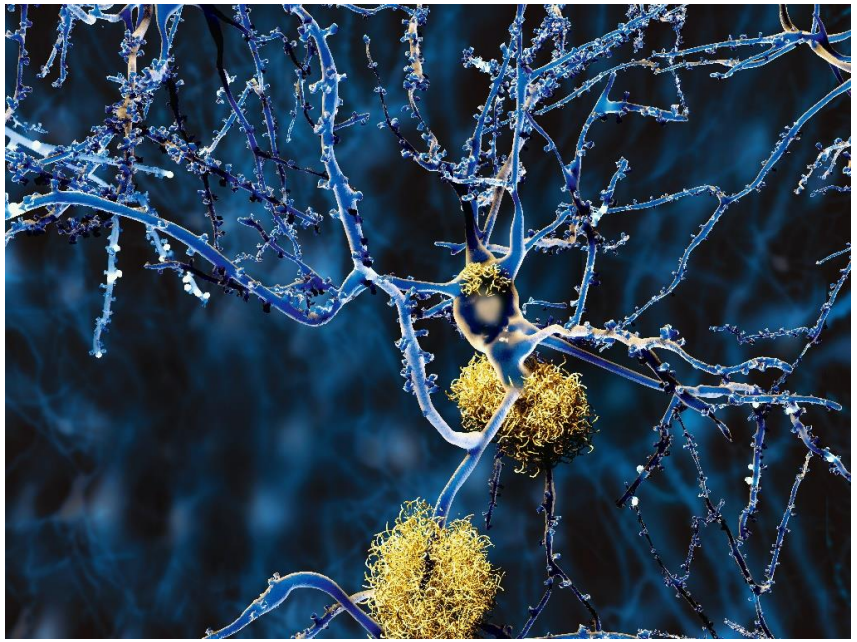
Significant opportunity in Alzheimer's disease

- 30 million people worldwide suffer from Alzheimer's disease today and the number is expected to double in 20 years
- High unmet medical need
- Patients treated at earlier stages of the disease
- Huge market with demand for several products and expected to be used in combination
- Alzheimer's field has lately suffered from drawback of several programs, BAN2401 is a unique antibody with the strongest clinical results now in Phase 3

NEURONS WITH AMYLOID PLAQUES IN ALZHEIMER'S DISEASE



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BAN2401 is a unique antibody with robust clinical results

UNIQUE ANTIBODY PROFILE

Unique and targeted binding profile

- Highly selective for protofibrils of Abeta vs monomers and fibrils
- Protofibrils are the most toxic form of Abeta

Unique clinical fingerprint

- Rapid onset of clinical effect
- Consistent effects on neurodegenerative biomarkers
- Low frequency of ARIA–E
- No titration required

ROBUST CLINICAL RESULTS DRIVING PHASE 3

Robust results in a large Phase 2b study

- 856 early Alzheimer's disease patients
- Consistent effects on clinical endpoints, amyloid clearance and neurodegenerative biomarkers
- Most patients randomized to two top doses due to early effect – top dose selected as best dose
- Effect increase over time

Single Phase 3 study ("Clarity AD") designed to confirm the positive effects in Phase 2b

- 1566 subjects with early Alzheimer's disease and confirmed amyloid pathology
- Primary and secondary endpoints including clinical outcomes, safety and imaging and other biomarkers
- Top dose from Phase 2b (10 mg/kg) or placebo twice a month

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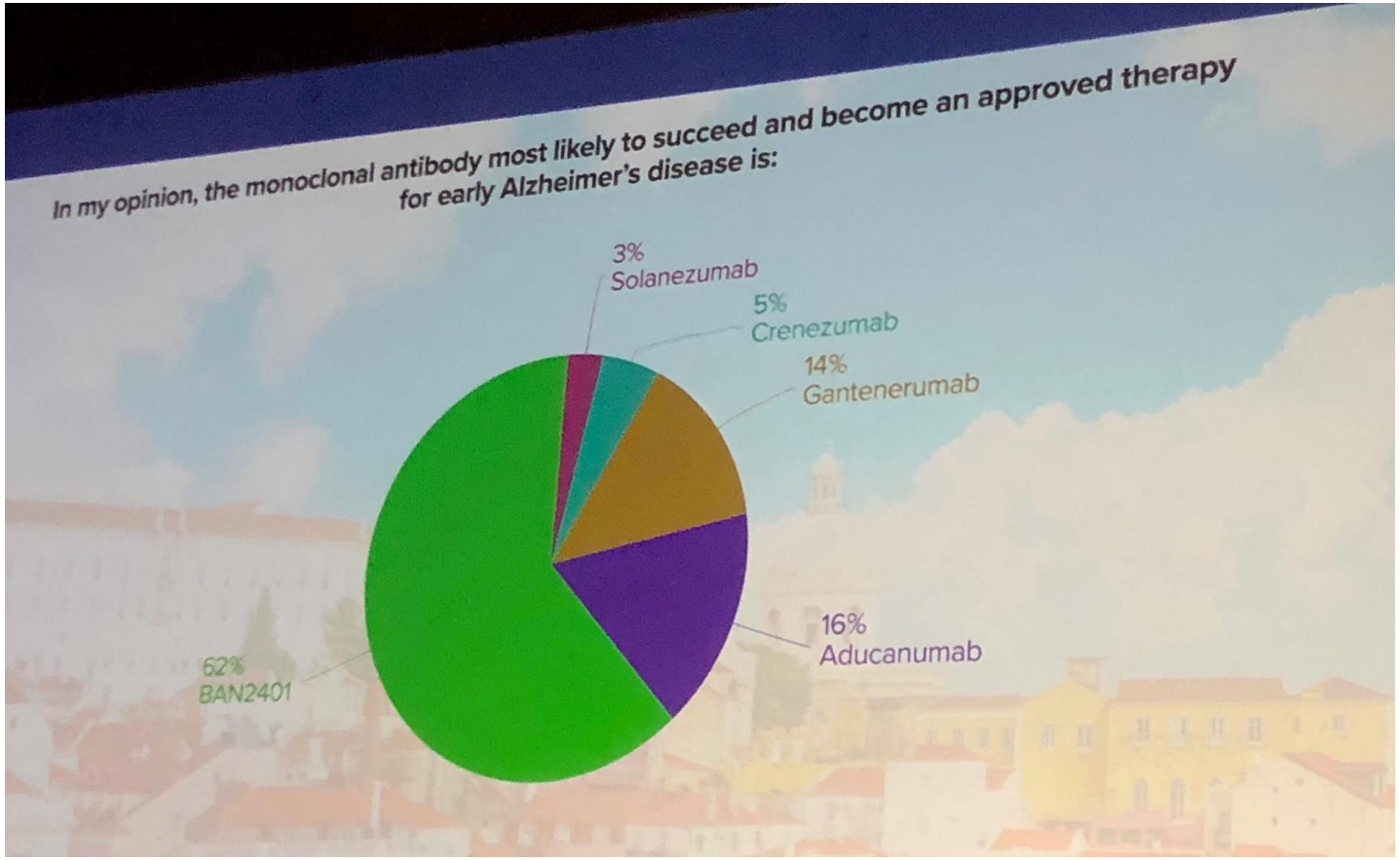
At AD/PD in March 2019 BAN2401 was seen as the most promising monoclonal drug candidate as disease modifying treatment in Alzheimer's disease



Votes by an audience of approx. 1500 Key Opinion Leaders, researchers and physicians at AD/PD March 30, 2019

BAN2401 – upcoming events

- Eisai has initiated the confirmatory Phase 3 study in early Alzheimer's disease patients
  - BioArctic to receive a milestone at start of Phase 3
  - Results expected as early as 2022
- Results from the open-label extension study with BAN2401, without placebo, for patients from the Phase 2b study
- Eisai is exploring the potential for a clinical study at even earlier (preclinical) stages of Alzheimer's disease

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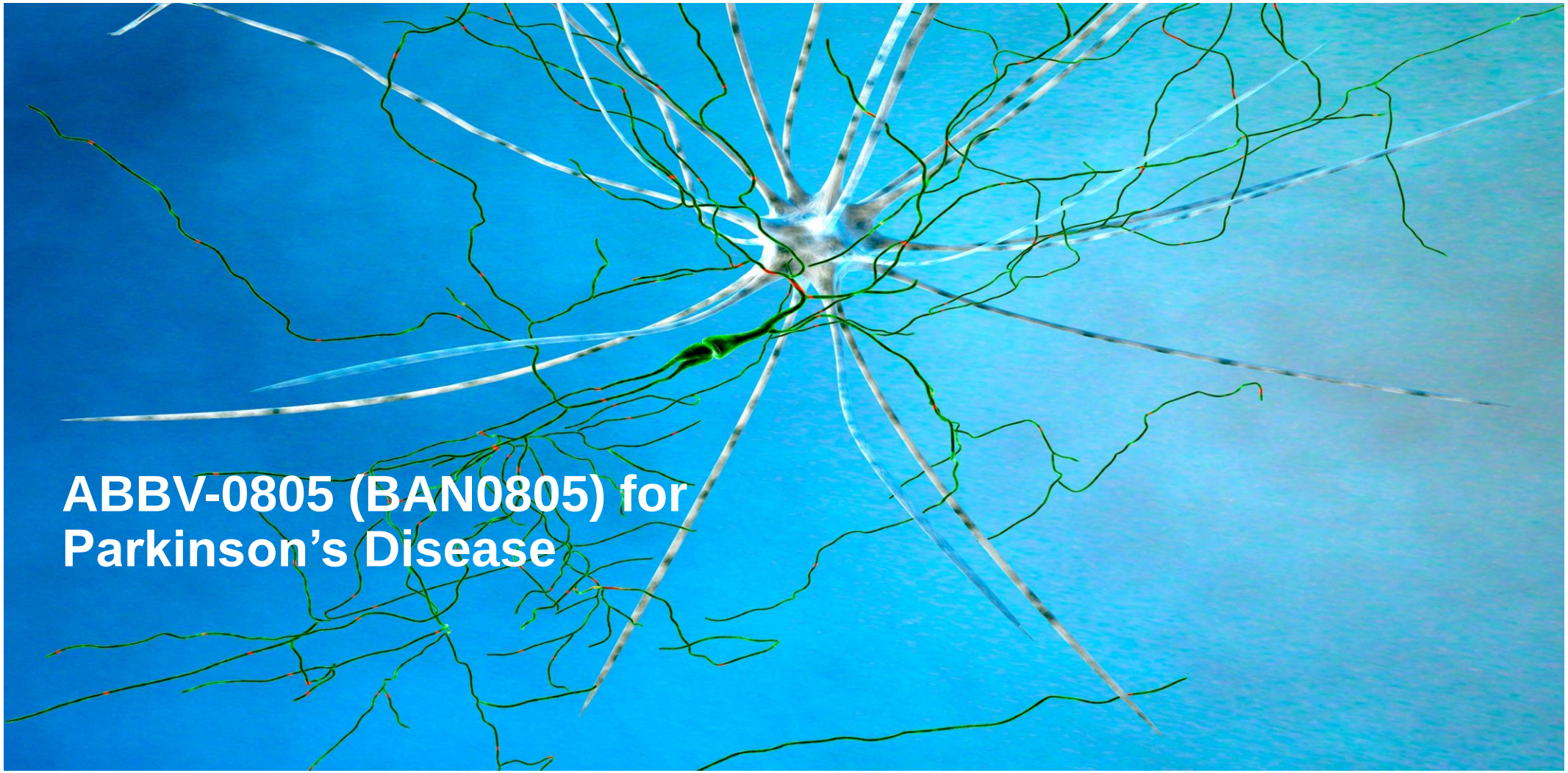

ABBV-0805 (BAN0805) for Parkinson's Disease

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Significant opportunity in Parkinson's disease

- Parkinson's disease is the second most common neurodegenerative disease
- In 2015, it was estimated that 6.2 million people suffered from Parkinson's disease worldwide
- Compared with Alzheimer's, Parkinson's disease affects a younger patient group, still at working age
- High unmet medical need
- There is currently no disease modifying treatment for Parkinson's

NETWORK OF NEURONS IN PARKINSON'S DISEASE

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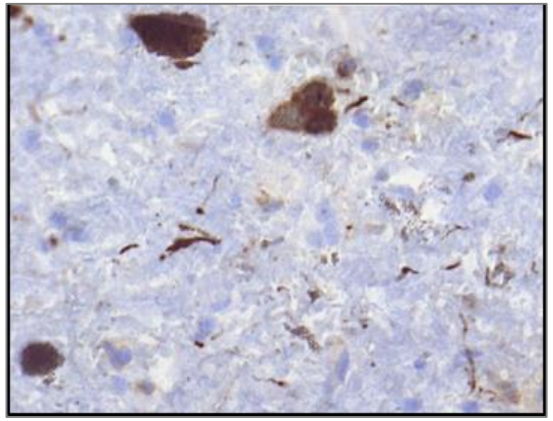
BAN0805 – Unique potential disease modifying antibody for Parkinson's disease with strong preclinical results

RATIONALE FOR TARGETING ALPHA-SYNUCLEIN

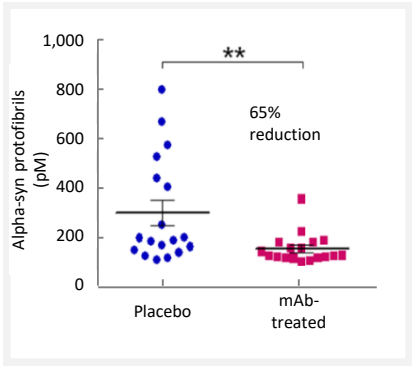
Human genetics → Pathology → Pre-clinical proof of concept

Alpha-synuclein mutations lead to Parkinson's disease or Dementia with Lewy Bodies and are associated with increased oligomer/ protofibril formation

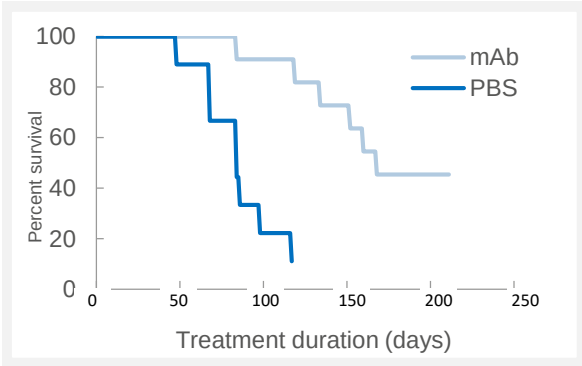


Alpha-synuclein deposition is a hallmark of Parkinson's disease pathophysiology and alpha-synuclein oligomers/protofibrils are elevated in Parkinson's disease

Reduction of neurotoxic alpha-synuclein oligomers/protofibrils



Increases lifespan



Oligomer/protofibril selective antibody reduces neurotoxic alpha-synuclein oligomer/protofibril levels, delays disease progression and increases lifespan in a mouse model of Parkinson's disease

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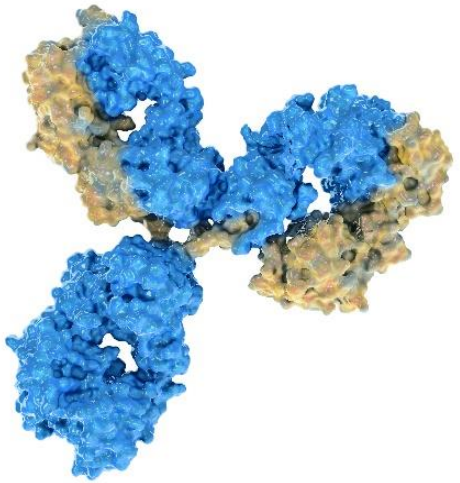
Updates on BAN0805/ABBV-0805 and follow-up antibodies

- Alpha-synuclein antibody portfolio licensed by AbbVie December 14, 2018
- Received a milestone payment of 50 MUSD for the license
- BAN0805/ABBV-0805 IND-application was approved by FDA in February 2019
- AbbVie started Phase 1 with ABBV-0805 in March 2019
- AbbVie is responsible for the clinical development in Parkinson´s disease
- BioArctic will deliver follow-up antibodies in the continued collaboration with AbbVie



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SC0806 for Complete Spinal Cord Injury

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High unmet patient need in Complete Spinal Cord Injury

- Patients suffer from other serious symptoms, incl. neuropathic pain, bowel and bladder incontinence, sensory loss, pressure sores, infertility and sexual dysfunction
- 2.5 million people live with paralysis, 40% complete spinal cord injury
- More common among younger men, injured in accidents
- No treatment available for these patients
- Orphan drug designation in the US and EU for SC0806

The patients require life-long treatment and care, which means high costs for healthcare systems and societies

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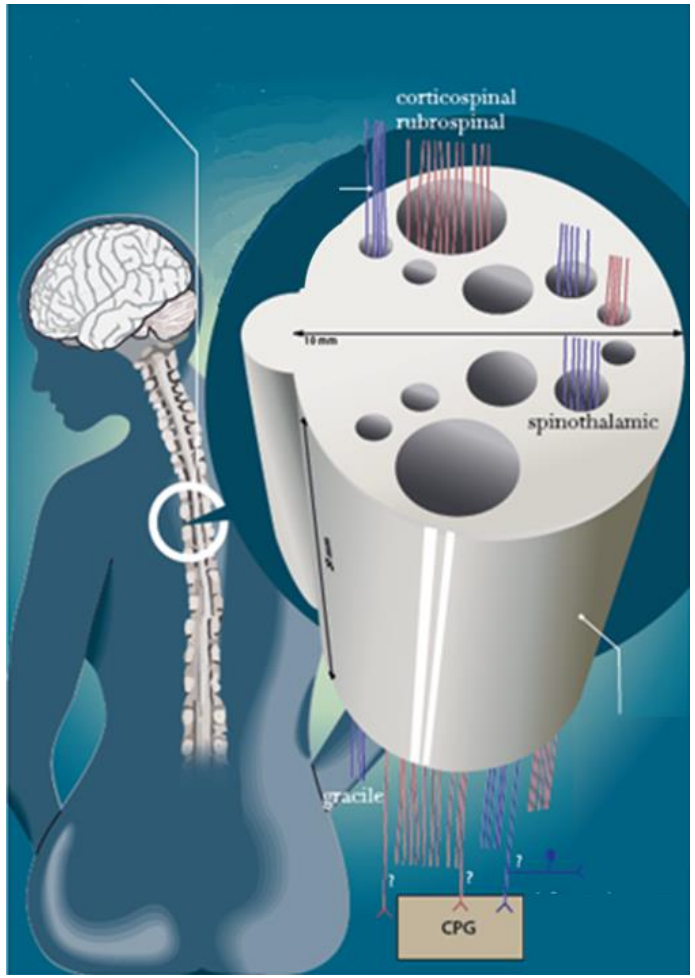
SC0806 – Unique regenerative treatment of Complete Spinal Cord Injury

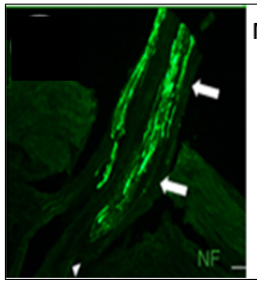
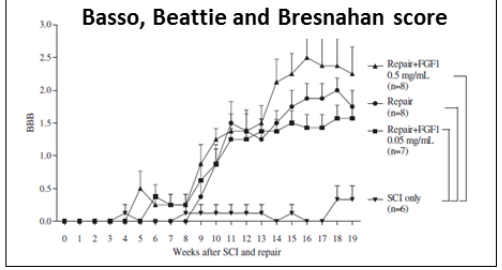
SC0806 – Regenerative Treatment of CSCI



Treatment Rationale

SC0806 makes nerve regeneration possible

FGF1 activated by heparin	• Stimulation of central axon outgrowth • Decreases gliosis
Peripheral nerve autografts	• Optimal regeneration environment
Biodegradable device	• Provides sustained release of FGF1 • Positioning of nerve grafts from white to gray matter

Nerve regeneration	Electrophysiology restored	Motor function improved
		

Preclinical Proof of Concept shown in rats with resected spinal cords

- Rat experiments demonstrate nerve regeneration, restored electrophysiology and motor function after SC0806 treatment

Source: Nordblom et al. Restorative Neurology and Neuroscience 30 (2012) 91–102

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SC0806 – Phase 2 ongoing with interim analysis expected 1H 2020

PROJECT STATUS

- Clinical Phase 1/2 trial ongoing in patients with Complete Spinal Cord Injury
  - Surgery at Karolinska University Hospital, Stockholm, Sweden
  - Rehabilitation 18 months with Lokomat™ in Sweden, Estonia, Finland and Norway
  - 9 patients included in Panel A (6 treated with SC0806 and 3 control patients)
  - Safety evaluation of patients in Panel A performed and support progression into Panel B i.e. Phase 2
  - First patient included in Phase 2 during Q1 2019
- Orphan Drug designation in US and EU – may grant 7 and 10 years exclusivity, respectively
- EU Horizon 2020 research and innovative program Grant Agreement No. 643853 of MEUR 6.4

THE LOKOMAT ™ USED IN THE REHABILITATION

Diagnostics and Technology Platforms

Advancing diagnostics and technology platforms to fuel pipeline

ANTIBODY BASED IMAGING (PET) IN ALZHEIMER'S PATIENTS	Research collaboration with Uppsala University to develop new technologies to image the brain
ALZHEIMER'S DISEASE DIAGNOSTICS	Research collaboration with Brain Biomarker Solutions in Gothenburg AB
PARKINSON'S DISEASE DIAGNOSTICS	Research for better diagnostic tools and biomarkers for Parkinson's disease (participation in a European research consortium with a grant from the EU's Horizon 2020)
BLOOD BRAIN BARRIER TECHNOLOGY	Development of multi-specific antibodies with a transporter to facilitate passage across the blood brain barrier (in collaboration with Uppsala University with a grant from Sweden's Innovation Agency, Vinnova)

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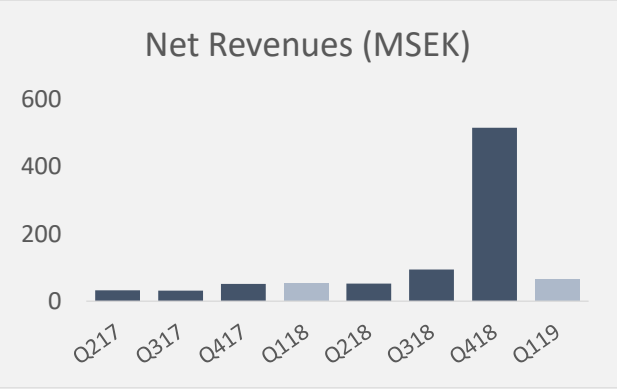
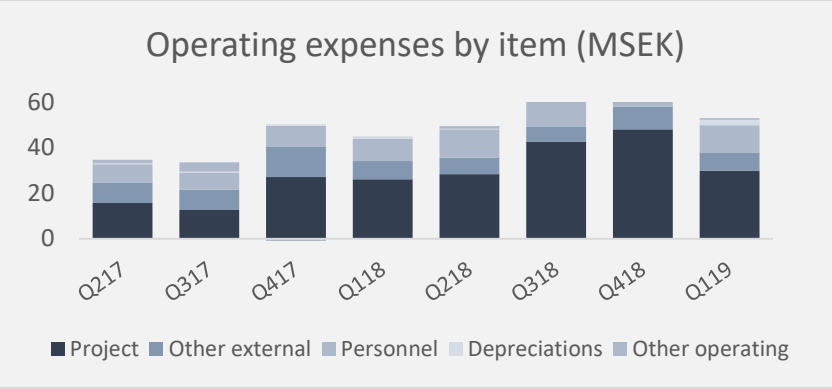
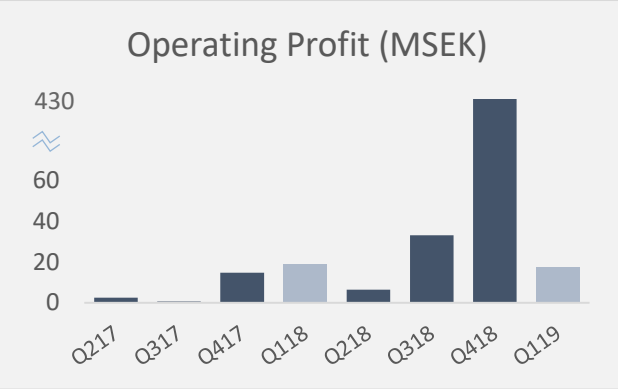
Financial summary

Revenues and operating profit Q1 2019







- Net revenues increased to 63.4 MSEK (52.3)
- Mainly related to the AbbVie research collaboration regarding the Parkinson's project

- About 85% of the costs are related to R&D
- Project expenses increased slightly to 29.9 MSEK (26.1)
- Other operating expenses were 22.4 MSEK (18.5), which increase is related to BioArctic being a larger organization

- Operating profit decreased to 17.3 MSEK (18.9)

Operating expenses are expected to be in the range of 190 - 250 MSEK for the fiscal year January - December 2019

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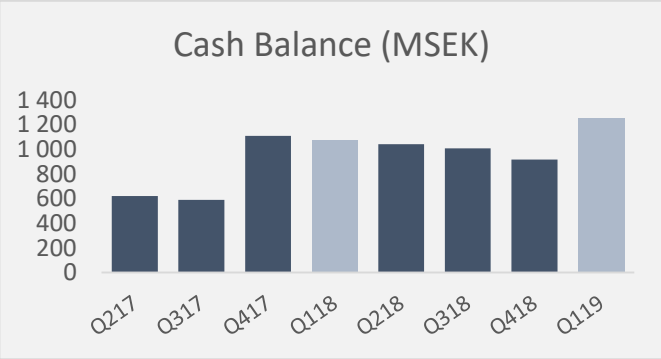
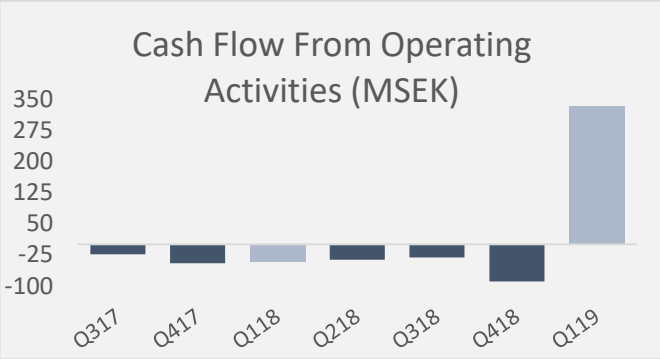
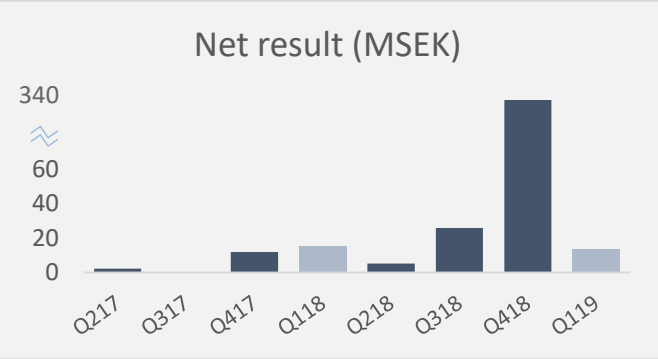
Cash related and net profit Q1 2019







- Cash balance amounted to 1,255.6 MSEK (1,078.7) at the end of the quarter

- Operating cash flow amounted to 333.6 MSEK (-42.0) during Q1
- The reason for the positive number in Q1 is related to the MUSD 50 payment from AbbVie for the in-licensing of ABBV-0805

- Profit for the period decreased to 13.6 MSEK (15.4) during Q1

To sum up, BioArctic showed another quarter with positive net results and a strong cash balance

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Upcoming news and closing remarks

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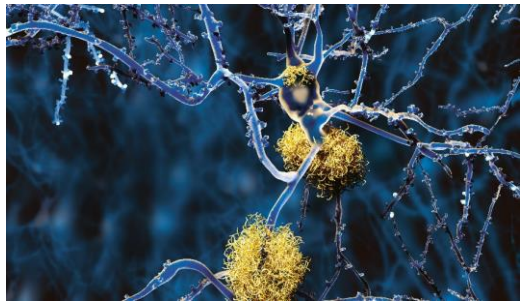
Upcoming news flow

ALZHEIMER'S DISEASE



BAN2401
- Phase 3 confirmatory study in early Alzheimer's disease start by Eisai and milestone payment
- International congresses incl. AAIC in July
- Phase 2b open label extension study results
- Clinical study in earlier stages of Alzheimer's disease decision

Discovery stage programs
- Advancement into preclinical stage

PARKINSON'S DISEASE

ABBV-0805 (BAN0805)
- Phase 1 study completion by AbbVie

Discovery stage projects
- Advancement into preclinical stage

COMPLETE SPINAL CORD INJURY

SC0806
- Interim analyses of safety and efficacy of the first part of the Phase1/2 study

DIAGNOSTICS AND TECHNOLOGY

Blood Brain Barrier Technology
- Expansion and continued development of the Blood Brain Barrier Technology platform in collaboration with Uppsala University

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GUNILLA OSSWALD, CEO

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NEXT REPORT & IR CONTACT

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