BioArctic AB

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Biotech & Money – Investival Showcase

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Helping Patients with Disorders in the Central Nervous System by Developing Innovative Treatments

Alzheimer's Disease

Parkinson's Disease

Complete Spinal Cord Injury

Three key areas with high unmet medical needs – all lacking effective treatments today

Disease modifying treatment in Alzheimer's and Parkinson's Disease – areas with huge and growing markets due to aging populations

BAN2401 Phase 2b study in early AD in collaboration with Eisai – first late stage study demonstrating potential disease modifying effect on both cognition and biomarkers

BAN0805 for PD in collaboration with AbbVie – preparing for clinical development and IND in the U.S.

SC0806 a unique regenerative treatment for patients with Complete Spinal Cord Injuries in Phase 1/2

Attractive combination of fully financed partner projects and innovative pipeline with substantial market and out-licensing potential

Strong science based research and highly educated engaged teams with vast experience in drug development and great track record of high quality deliverables

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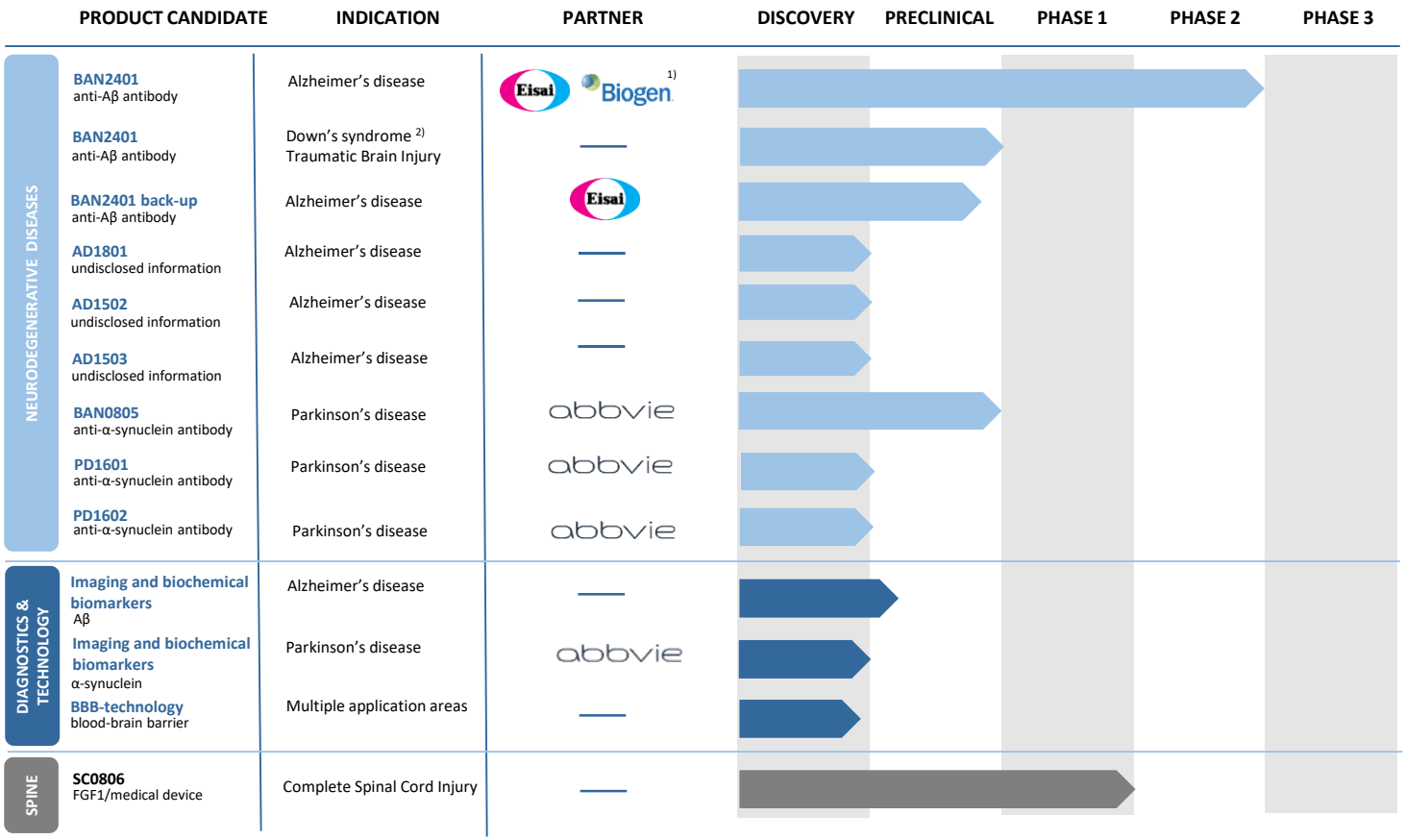
Strategic Partnerships and Cutting-Edge Proprietary R&D

per September 30, 2018



1) Partner with Eisai on BAN2401 for treatment of AD. Since 2014, Eisai partnered with Biogen in AD
2) Dementia and cognitive impairment associated with Down's syndrome and Traumatic Brain Injury

Source: company data

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Long-standing and Extensive Partnerships

Eisai collaboration and license agreements Alzheimer's Disease

Description of agreements

- Two research collaborations – disease modifying therapies for AD – resulted in two licenses for Aβ oligomer/protofibril antibodies: BAN2401 and BAN2401 Back-up
- Third research collaboration – new target as a disease modifying therapy for AD

Milestone / royalty potential

- Total aggregated value of the research collaborations and license agreements is approx. EUR 218m in signing fee and milestones, plus high single digit royalties
- BioArctic has received approx. EUR 47m for the research collaborations, signing fees and milestones

AbbVie collaboration agreement Parkinson's Disease

Description of agreements

- Research collaboration – alpha-synuclein antibodies as disease modifying therapies for PD incl. BAN0805 to IND, follow-up compounds and diagnostic
- Option for AbbVie for a license to develop and commercialize the antibodies

Milestone / royalty potential

- Total potential value of the agreement is up to USD 755m incl. an up-front fee, option exercise fee, and success-based milestones plus tiered royalties
- BioArctic has received an USD 80m up-front payment for the research collaboration
- Payment of USD 50m to be received when exercising option to license, pending US antitrust legislation clearance

Strategic collaborations with pharmaceutical industry validating potential value and commercialization potential for BioArctic with proven track record of delivering on research collaborations

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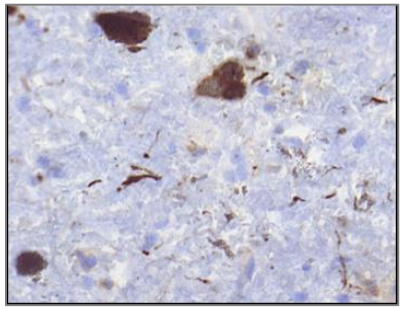
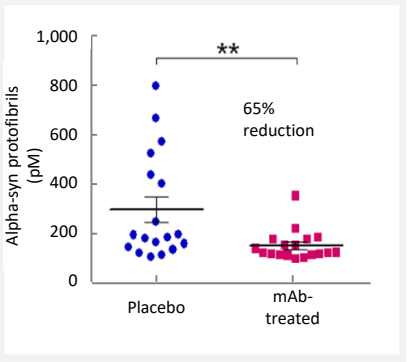
BAN0805 – Groundbreaking Disease Modifying Drug in PD with Rationale for Selective Targeting of Alpha-synuclein Oligomers/ Protofibrils

Rationale for targeting alpha-synuclein

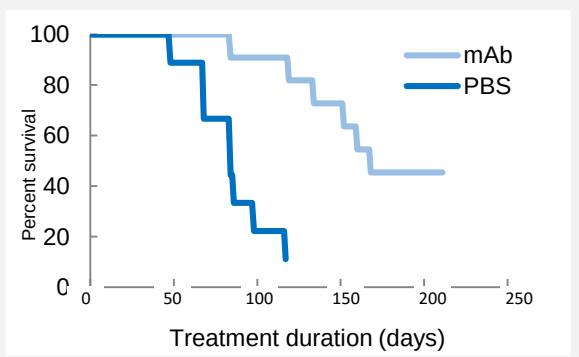
Human genetics → Pathology → Pre-clinical proof of concept



Reduction of neurotoxic alpha-synuclein oligomers/protofibrils



Increases lifespan



Alpha-synuclein mutations lead to PD or Dementia with Lewy Bodies and are associated with increased oligomer/protofibril formation

Alpha-synuclein deposition is a hallmark of PD pathophysiology and alpha-synuclein oligomers/protofibrils are elevated in PD

Oligomer/protofibril selective antibody reduces neurotoxic alpha-synuclein oligomer/protofibril levels, delays disease progression and increases life-span in a PD mice model

BAN0805 in preparation for IND to start clinical trials in the US 2019

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BAN2401 – Innovative Phase 2b Study Design
Positive 18 Month Results Reported

Important parameters

Right target
- Address the soluble protofibrils – a toxic form of amyloid

Right patient population
- Early AD – MCI due to AD & Mild AD
- Identify right patients – biomarkers

Right dose & exposure
- Selecting doses with exposures above preclinical IC50
- Adaptive design testing several doses and dose regimens

Right measurements
- More sensitive cognition scales
- Biomarkers for disease progression and disease modification

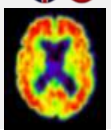
Right safety
- Well tolerated with a benign safety profile
- Low risk for amyloid related imaging abnormalities (ARIA) and no expected cardiovascular risk

Phase 2b study design

Patient inclusion

Multinational recruitment:
- 100 clinical centers included
- **Inclusion criteria:** MMSE >22-30
- Stable concomitant medication
- Positive amyloid PET/CSF

Inclusion completed with 856 → patients →



Treatment 12 months

Double-blind, placebo controlled, parallel-group study with Bayesian adaptive design

- Placebo
- 2.5 mg/kg twice a month
- 5 mg/kg once a month
- 5 mg/kg twice a month
- 10 mg/kg once a month
- 10 mg/kg twice a month

→

Primary analyses:
- Δ from baseline in ADCOMS at 12 months
- Safety and tolerability

→

Treatment 18 months

Key analyses:
- Δ from baseline in ADCOMS, CDR-SB, ADAS-cog at 18 months
- Δ from baseline in brain amyloid as measured by amyloid PET
- Δ from baseline in CSF biomarker and MRI (total hippocampal volume)
- Safety and tolerability

BAN2401 18 months treatment demonstrated an effect on both cognition and biomarkers with a good tolerability profile

Completion of study after 18 months treatment and 3 months follow-up - Q4 2018

Source: Company information
Note: ADCOMS = Alzheimer's Disease Composite Score, an evaluation tool developed by Eisai

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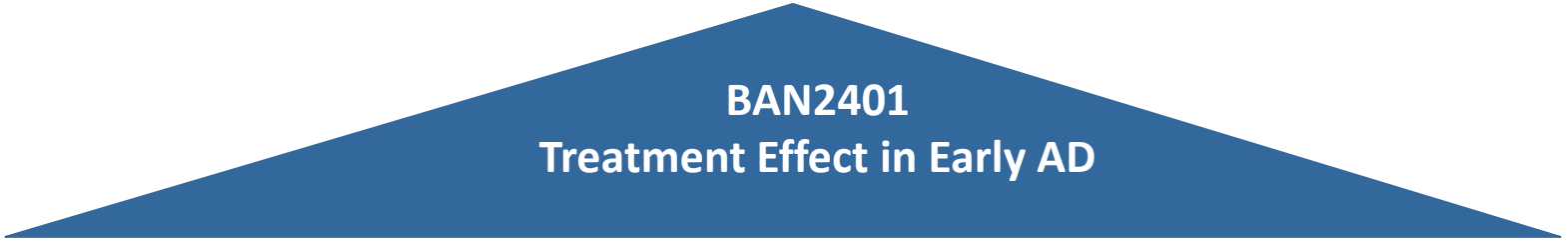
Positive Phase 2b Study Results Support BAN2401 as a Potential Treatment for a Broad Population of Early Alzheimer Patients



Clinical Outcome Measures	Brain Amyloid PET	CSF Biomarkers
• Slowing of disease progression observed across clinical outcome measures at the highest dose, including 30 % on ADCOMS • Slowing of disease progression observed across sub-groups	• Pronounced dose-dependent amyloid clearance across the dose range • 81% of subjects converted to amyloid negative state • Consistent and pronounced amyloid clearance across all sub-groups	• Elevated Abeta demonstrates target engagement • Impact on AD pathophysiology with benefits on neuro-degeneration markers: t-tau, p-tau, neurogranin and NfL

BAN2401 was well tolerated with < 10% ARIA-E at any dose

Selectively targeting Abeta protofibrils with low affinity to monomers confer an advantegous benefit risk profile

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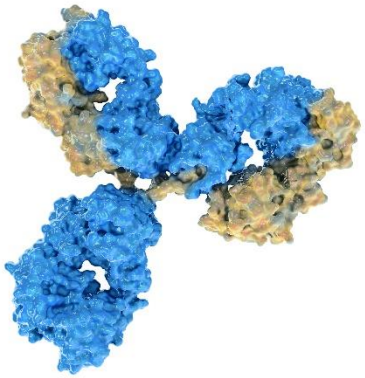
BAN2401 – Next Steps

- Eisai is currently conducting interactions with regulatory agencies regarding the future BAN2401 program
- The study will be completed in Q4 2018 and includes a further 3 months follow-up after completion of 18 months of treatment (at 21 months)
- Open-label extension study with BAN2401, without placebo, for patients from the Phase 2b study will be initiated Q4 2018



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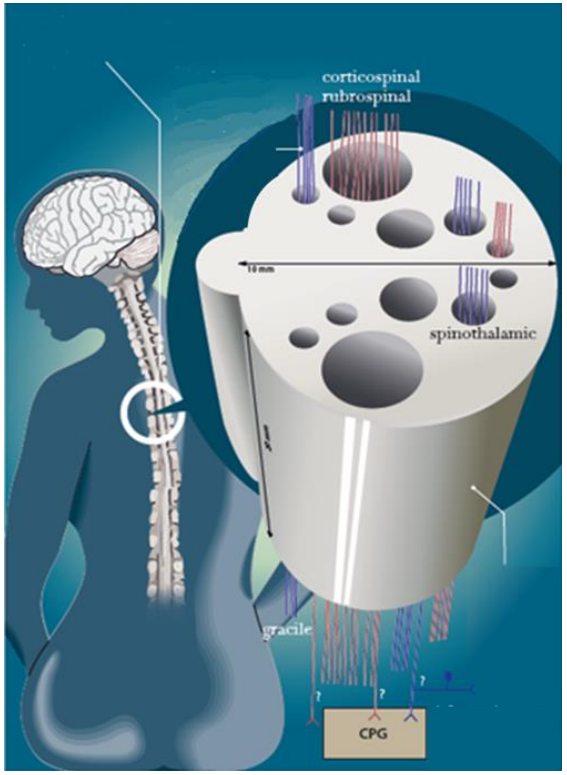
SC0806 – Unique Regenerative Treatment of Complete SCI

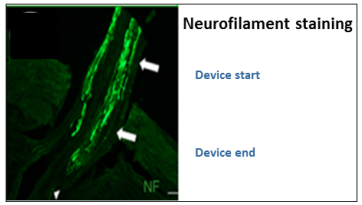
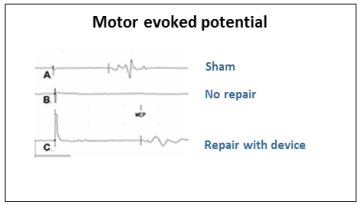
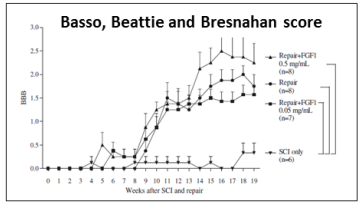
SC0806 – Regenerative Treatment of Complete SCI



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

- Rat experiments demonstrate nerve regeneration, restored electrophysiology and motor function
- The motor evoked potential (MEP) has been restored in rats with resected spinal cords

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

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SC0806 – Unique Regenerative Treatment of Complete SCI

The Lokomat™ used in the Rehabilitation

Project Status

- Clinical Phase 1/2 trial ongoing with SC0806 in patients with Complete Spinal Cord Injury
  - Surgery in Sweden
  - Rehabilitation 18 months with Lokomat™ in Sweden, Estonia, Finland and Norway
  - Patients receiving SC0806 treatment are given the option of 12 months additional participation in an extension study
  - 9 patients included in Panel A (6 treated with SC0806 and 3 control patients)
  - Screening of patients for Panel B on-going
  - Interim analysis planned Q4 2019/Q1 2020
- Orphan Drug designation in US and EU – granting 7 and 10 years exclusivity, respectively
- EU Horizon 2020 research and innovative program Grant Agreement No. 643853 of MEUR 6.4

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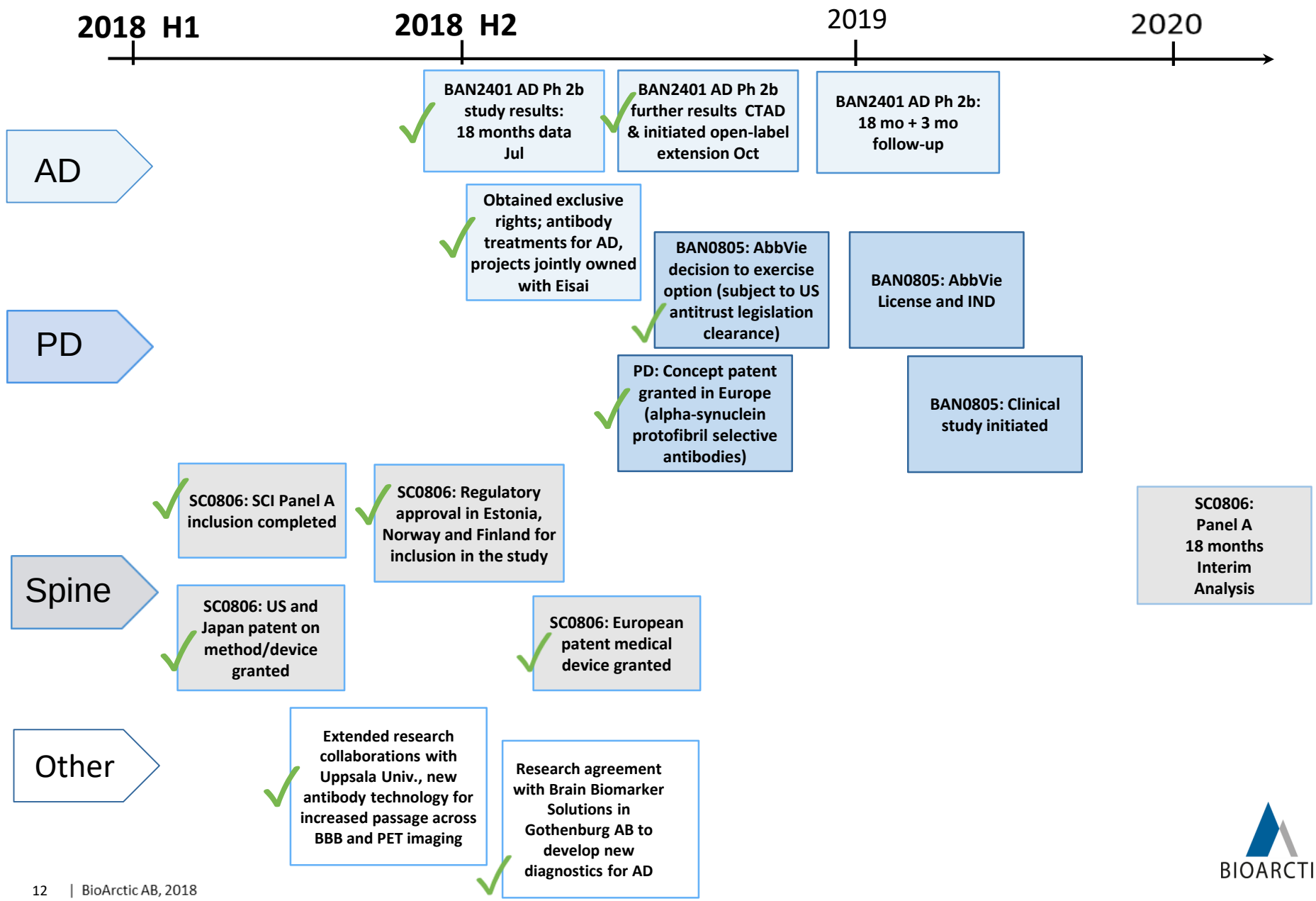
Recent & Anticipated News Flow



Thank you for your attention
Q&A

Gunilla Osswald, CEO, PhD

Next report & IR Contact

- **Next report:**
  Full Year Report 2018
  Feb 14, 2019
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