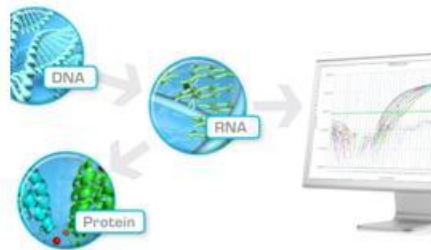


DiaGENIC

for early disease detection

DiaGenic ASA – Presentation Swedish American Life Science Summit, Stockholm, August 23nd, 2012

Henrik Lund, MD PhD, CEO



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DiaGenic – Company and product outline

Who **Stock listed (OSE:DIAG) life science** company based in **Oslo**.
Founded in 1998, 20 employees, and holds an extensive portfolio of patents linked to its technology and products.

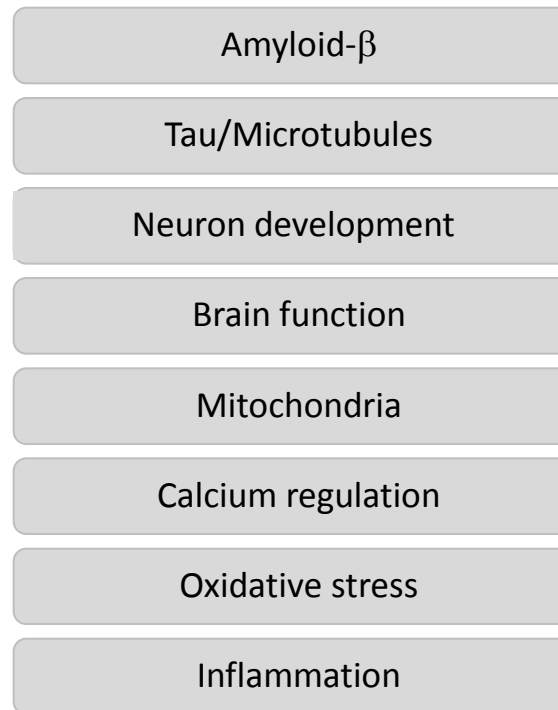
What **Early diagnosis and blood based biomarkers** for >20 bn USD markets. Core focus on Alzheimer's Disease (**ADtect®**) and early stages thereof (**MCItect®**). Additional product lines in Parkinson's (**PDtect®**) and Breast Cancer (**BCtect®**).

Why **Early diagnosis and intervention** is key to successful clinical outcome. Alzheimer's Disease (**ADtect®**) (**MCItect®**) address one of the most valuable unmet medical need lifescience markets next 5-10 y

How **Gene expression analysis** from easily available peripheral blood in Alzheimers market with competitive and unique diagnostic utilities

When **ADtect® and MCItect®** are currently promoted as biomarkers for pharma and as companion diagnostic opportunities. Strong collaborative portfolio of partners in diagnostics and pharma in ongoing collaborations. Target FDA submission of ADtect/MCItect in 2014-15 for clinical use in the US.

Original IP based on Method to identify diseases using blood samples and gene expression technology where the sample is collected distant to the area of the disease (for Alzheimers' Disease e.g. across the Blood Brain Barrier)



ADtect®

MCItect®

¹⁸Pettect®

- ◆ In addition to the multitude of genes involved in differentiation, cell cycle and cell metabolism, the ADtect® MCItect® assays also cover a wide range of known pathways associated with AD pathology, such as Amyloid-beta, pTau, presenilin and mitochondrial processing

Solid IP, backed by 12 years of R& D

> 100 granted patents

5 patent families granted or in process

Family 1	a. Method to identify diseases using blood samples and gene expression technology where the sample is collected distant to the area of the disease	a. Covers both sequence based and non - sequence based gene expression methods. Granted for Alzheimer in US, Europe, and Hong Kong. Broad patent, including Alzheimer's disease, in Japan and Norway
	b. Method to identify diseases using non-sequence based gene expression methods	B. No disease limitations, no sample limitation, Granted in Europe, Hong Kong and Norway
Family 2	Describes sets of gene sequences that can be used to develop disease specific expression signature	Granted in South Africa. Granted in Australia, New Zealand and Europe for Alzheimer's disease and Breast cancer, and for breast cancer in India
Family 3	Describes gene families and genes expressed in blood which can be used to detect cancer	Granted in South Africa, Australia, New Zealand , Europe and US
Family 4	Describes sets of oligonucleotide probes in Kit form that can be used to identify, diagnose and monitor breast cancer	Application filed in 2010. National phase not yet entered.
Family 5	Describes different set of oligonucleotide probes in kit form that can be used to identify, diagnose Alzheimer's disease and stages thereof and monitor its progression	Priority application filed in 2011. National phase entered in US, Australia and Canada in 2012.

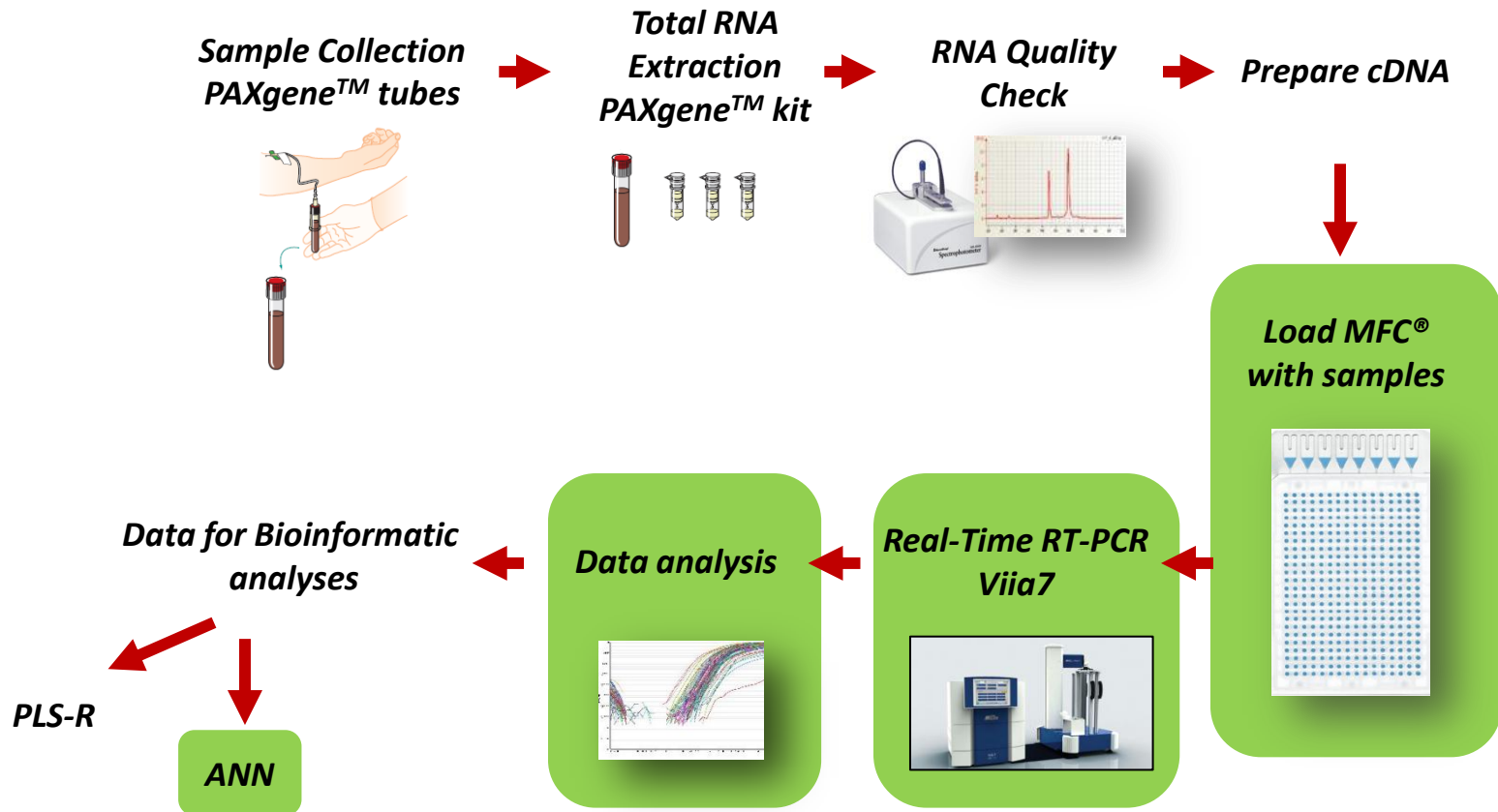
Solid IP, backed by 12 years of R& D

> 100 granted patents (reviews by Merz, Pfizer, GE Healthcare)

Diseases	Technology related granted patents	Granted patents covering important gene sets including our products
Alzheimer's Disease (and stages thereof)	US 6720138 EP1323728 HK 03109502 NO 327084 JP 4163758	EP 1565574 HK 1057217 AU 2003286262 NZ 540750 ZA 2005/03797 AP/P/2005/003317, Family 5 application (on file)
Diseases where blood samples taken distant to the disease sites, includes other CNS diseases	NO 327084 JP 4163758	
Breast cancer (including its very early stage)	NO 327084 JP 4163758 US (pending)	US 8105773 (includes polypeptides for corresponding gene sets) EP 1766056 AU 2003286262, AU 2005250219 NZ 540750 NZ 551797 ZA 2005/03797 ZA 2006/10644 IN 248463 AP/P/2005/003317 Family 4 application (PCT on file)

A simple blood sample in a specialized tube - PAXgeneTM

ADtect[®] mCitect[®] PDtect[®] BCtect[™] ¹⁸Pettect[®]

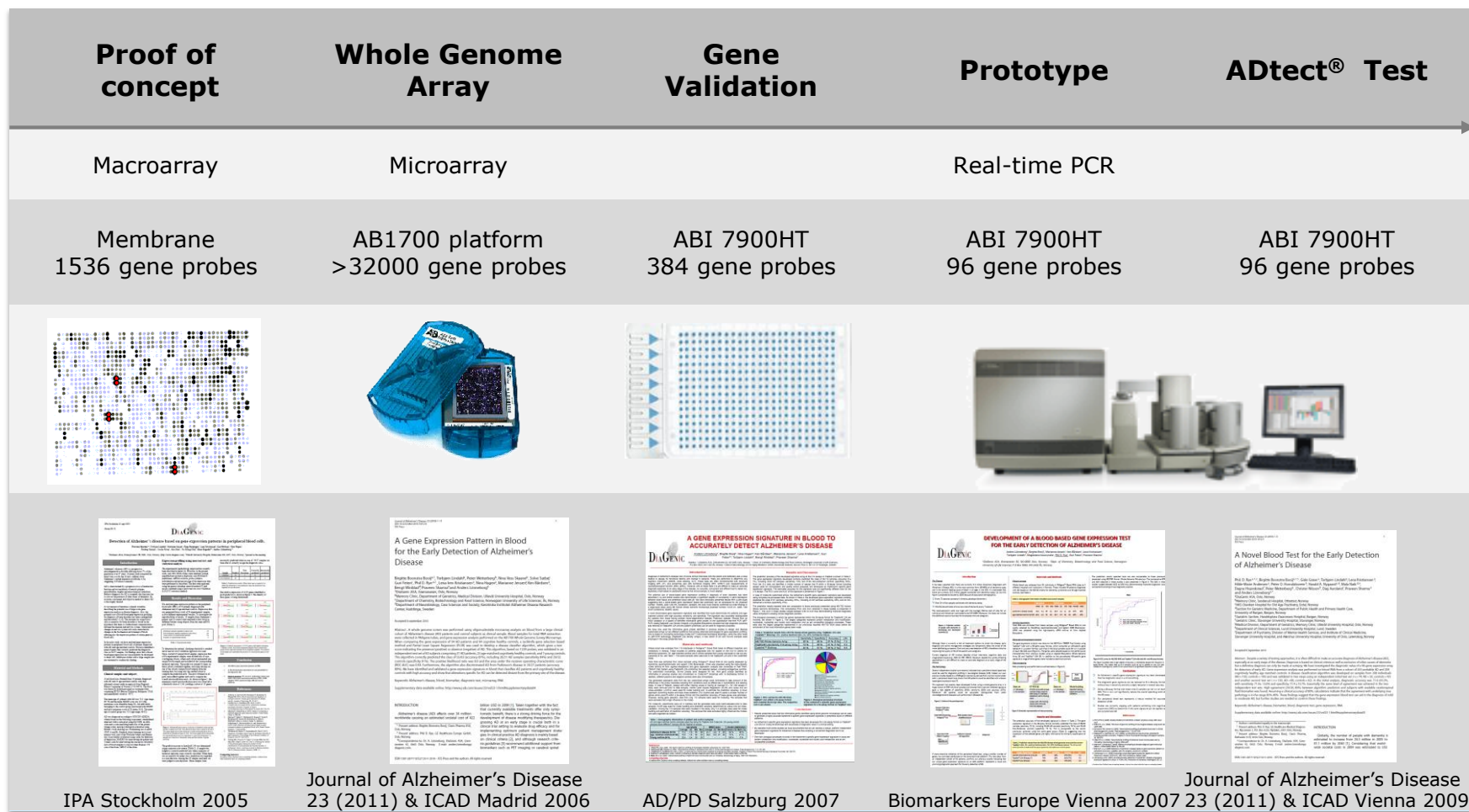


Symbol indicates new developments in DiaGenic methodology

for early disease detection

DiAGENIC

Development of ADtect® - Applied Biosystems 7900/ViiA7 – process for selection of disease specific gene probes.



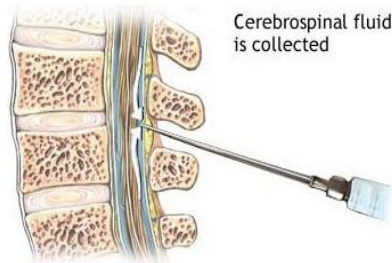
The competitive edge of the technology: ADtect® is patient and payer friendly compared to other technologies

PET imaging



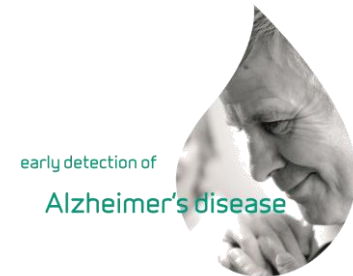
- ✗ Expensive
 - Tracer costs \$6000
 - Equipment
- ✗ Include one AD related biological processes ($A\beta$)
- ✗ 20-30% false positives
- ✗ Limited access

CSF biomarker



- ✗ Invasive procedure
 - Medical complications
 - Average procedural charge USD 5,700
- ✗ Include two AD related biological processes ($A\beta$, Tau)
- ✗ 36% false positives
- ✗ Assay standardization

ADtect®



- ✓ Patient friendly
- ✓ Less invasive
- ✓ Include all known AD related biological processes*
- ✓ Less expensive
- ✓ Fast turnaround time

DiaGenics product portfolio with core focus on Alzheimer's Disease

Rx

Integrated
biomarkers

Companion
Diagnostics

¹⁸Pettect^{*}

Tailor made biomarker with
Alzheimer's PET tracer

mcitect[®]

Mild Cognitive Impairment to
AD progression biomarker

PDtect[®]

Early detection of Parkinson's



ADtect[®]

Early detection of Alzheimer's

BCtect[™]

Early detection of
breast cancer



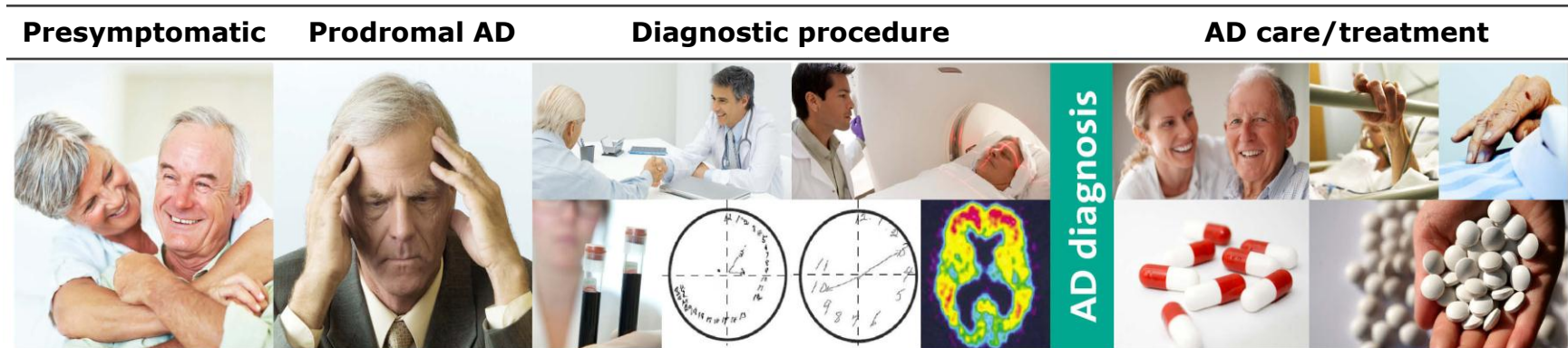
Core focus areas

* PETtect not a registered trademark – development of amyloid IVD illustrative purpose

for early disease detection **DiAGENiC**

DiaGenic delivers blood based biomarkers for early diagnosis in Alzheimer's disease - significant unmet medical and diagnostic need

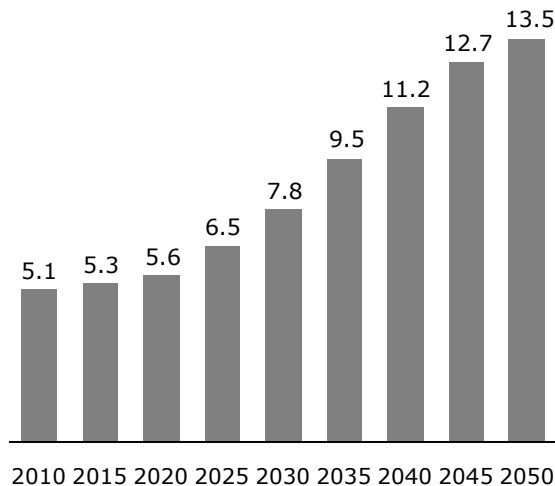
ADtect® maitect® ¹⁸Pettect®



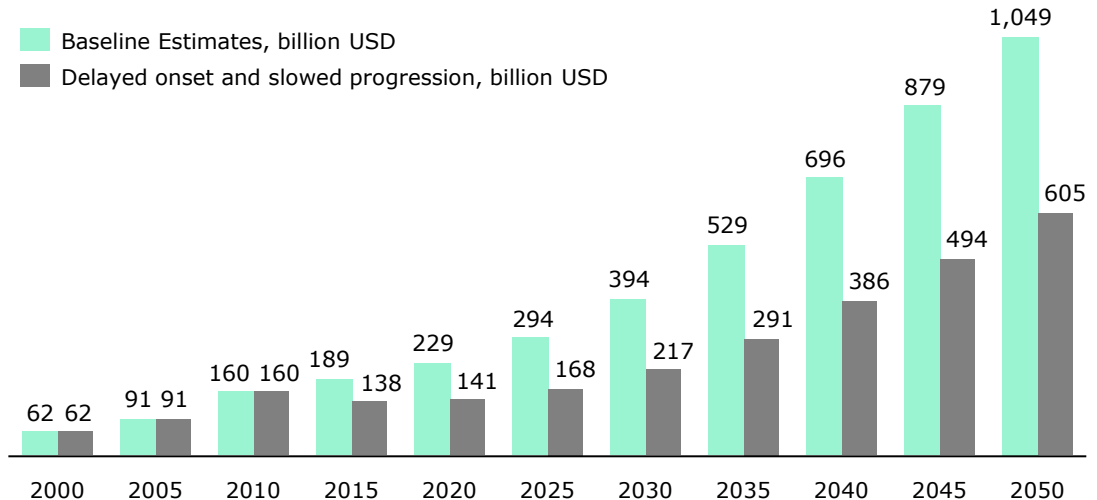
- ◆ Alzheimer's disease ("AD") is a progressive neurodegenerative disease
 - Multifactorial, and not completely understood disease mechanism
 - Amyloid hypothesis prevailing
 - Currently 5.4 million¹ patients suffers from AD in the US
- ◆ A substantial unmet medical need
 - No effective medications that delays disease development today, only symptomatic treatment
 - Disease management today is a combination of drugs, change of lifestyle and diet Amyloid hypothesis prevailing
- ◆ A difficult diagnostic challenge – disease first detected at dementia stage
 - Current diagnostics is time consuming, costly and has low diagnostic accuracy
 - Large unmet need for diagnostic tools in pre-dementia stage

The market for blood based test for Alzheimer's is large due to high disease prevalence and the serious public health challenge

Number of Americans aged 65 and over with Alzheimer's

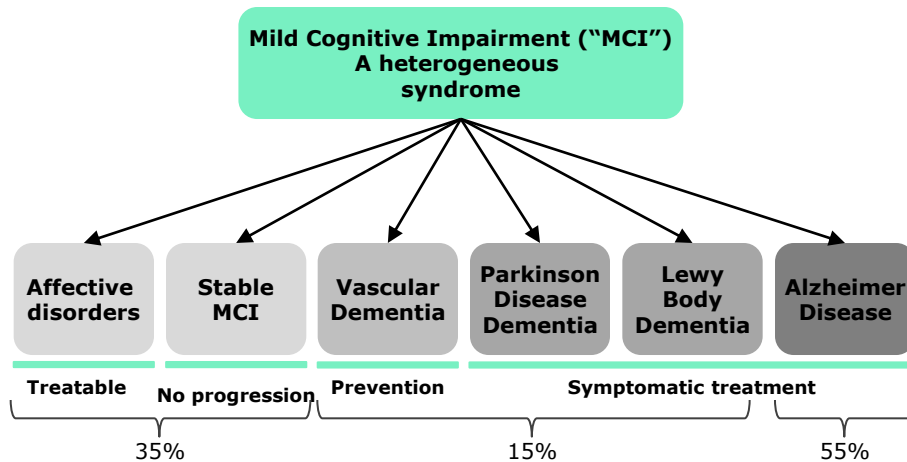


Medicare spending for people with Alzheimer's disease using current projections vs. projections with delayed onset and slowed progression



- The number of AD patients and associated medical expense is expected to grow exponentially between 2010 and 2050
- Medicare alone expected to spend \$20 trillion on AD between 2010 to 2050 if no advances are made (~40% of total Medicare spending).
- A treatment that delays disease onset by only 5 years will reduce the overall cost of AD by \$3.97 trillion over 30 years, a 40% reduction!

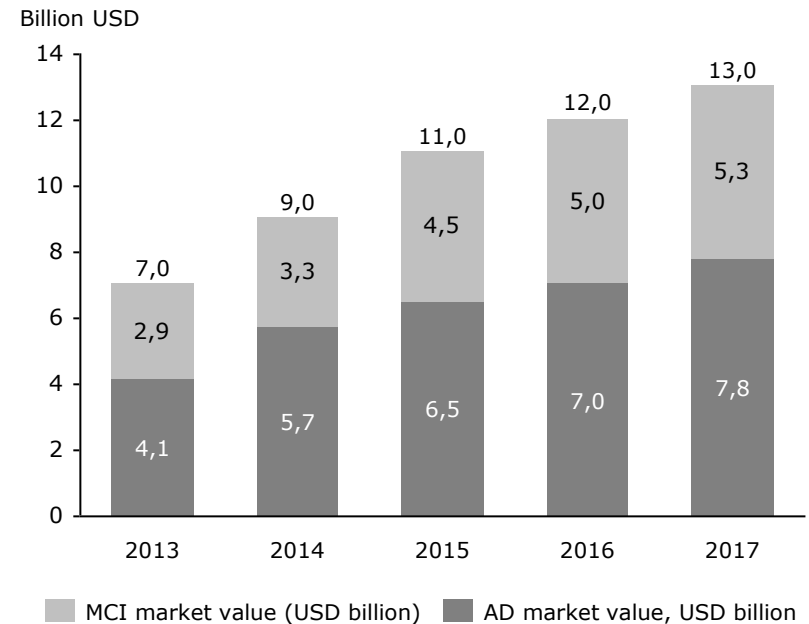
An early diagnosis of Alzheimers is difficult and prodromal AD diagnosis is key to any disease modification. Mild Cognitive Impairment (MCI) is where future focus is.....



"The earlier in the disease process that people at risk for developing Alzheimer's are identified, the sooner we can intervene. Earlier detection will be our best opportunity to prevent continuing damage to the brain, once more effective therapies are developed."

William Thies, PhD,
Chief Medical and Scientific Officer at the Alzheimer's Association

US Alzheimer's disease and MCI market

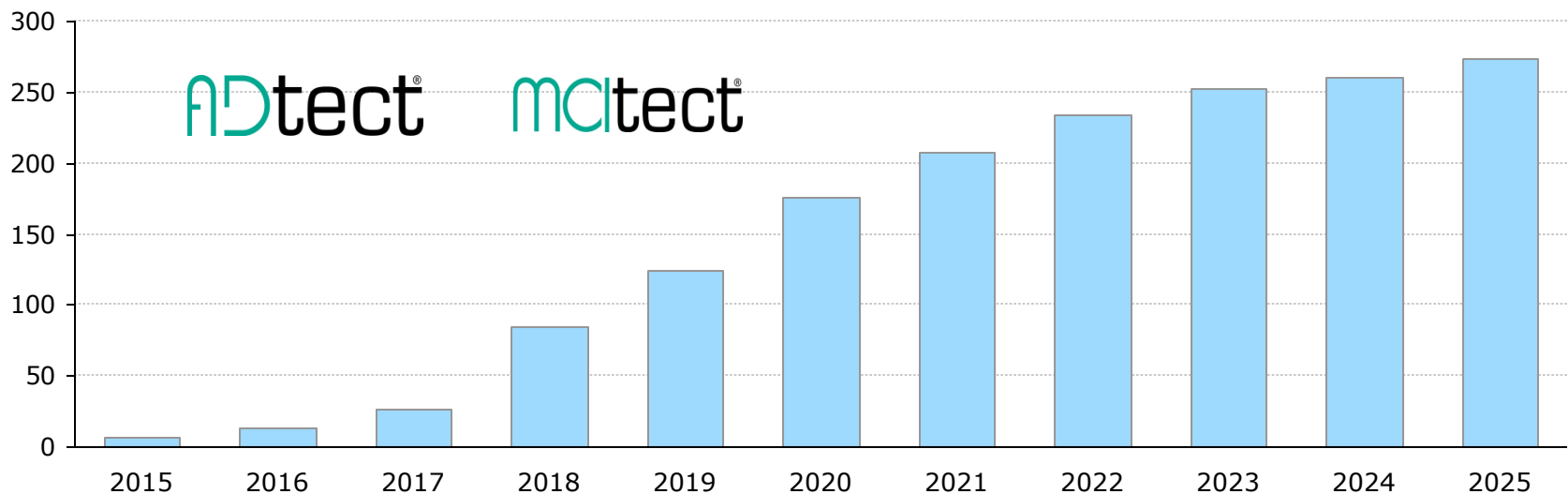


- Current diagnostics and therapeutic intervention applied at dementia stage
- Successful drug development is expected to significantly boost the AD therapeutic market – increase need and value of diagnostics
- Ability to diagnose and intervene in Prodromal AD may further increase the market significantly

ADtect® - promising opportunities in the current US market

- ◆ Promising opportunities in the Alzheimer diagnostic market, despite the limitations of existing treatment options
- ◆ ADtect® US sales projection 5 years from launch \$150M – 200M, assuming reimbursement and 80% test accuracy

US market estimate blood based Alzheimer biomarkers – (USD million)¹



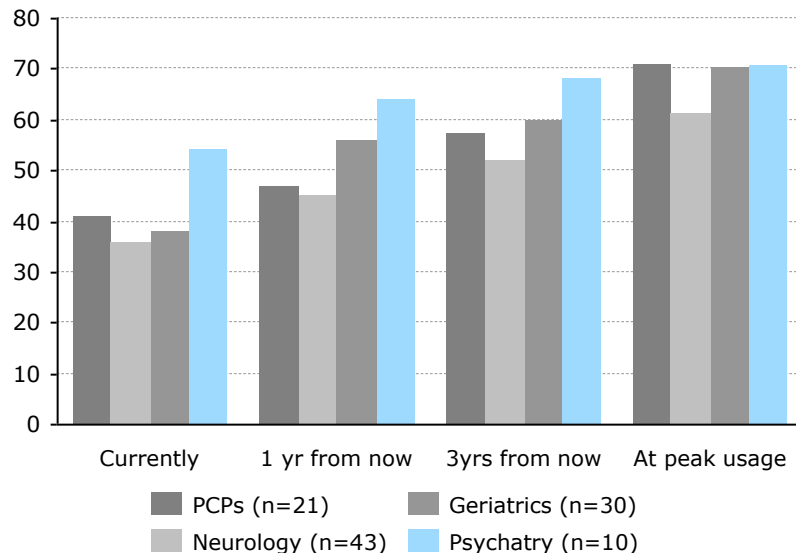
¹ End user sales based on price per test of USD 650

DiaGenics CE approved **ADtect®** meets an unmet need and will be adapted by physicians

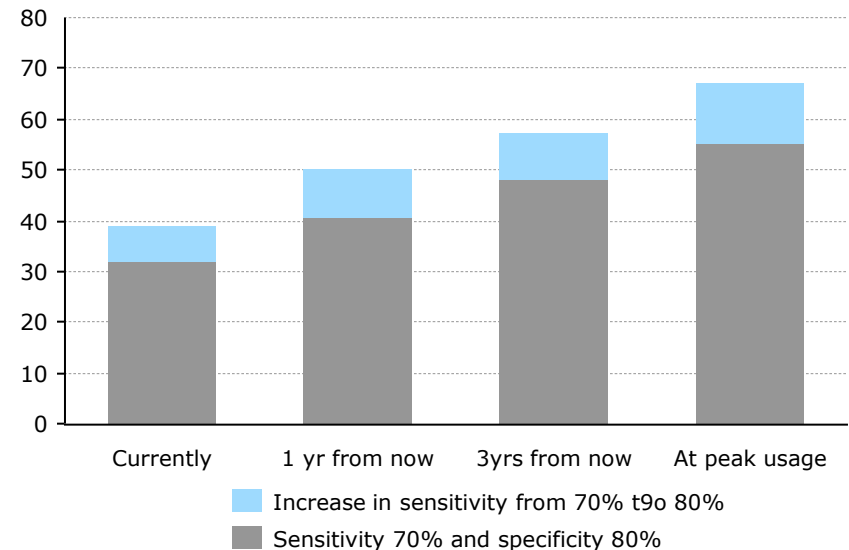
Assuming existing treatment options, reimbursement and 80% test accuracy:

- ♦ Physicians would use ADtect® on 67% of ALL the patients with symptoms of dementia at peak usage if accuracy of 80% for the blood test.
- ♦ 45 % of the physicians asked anticipate hitting peak usage within 2 years
- ♦ If ADtect sensitivity or specificity drops from 80% to 70%, then peak usage will drop from 67% to 56%

Preference share



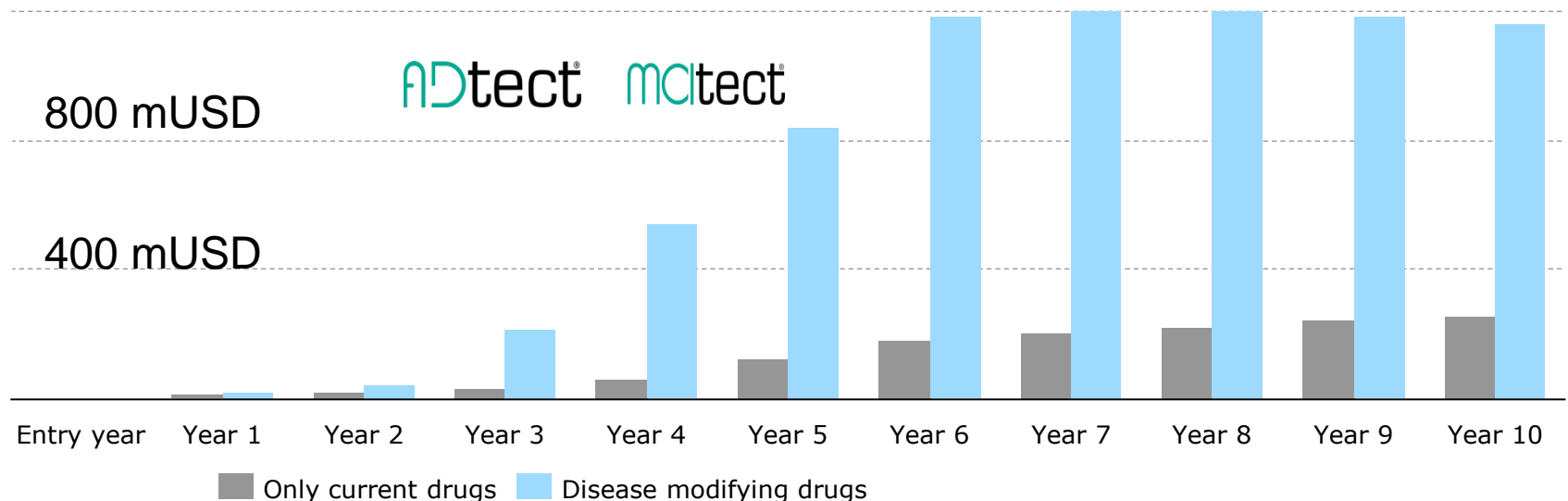
Preference share at different efficacy scenarios



Development of disease modifying therapy in Alzheimer's is challenging. Therapeutic intervention must be at early disease (MCI) stage – will drive blood based test market beyond 1 bn USD

- ♦ The market for DiaGenic's Alzheimer's diagnostic tests has blockbuster potential, and peak US sales projected to increase by a multiple of 7 if disease modifying drugs are successfully launched.
- ♦ Key driver for accelerated growth will be ability of new drugs 2012-onwards to modifying disease progression
- ♦ DiaGenic blood based RNA signature technology unique – few competitors

Illustration of US Market estimate blood based Alzheimer biomarkers with and without new effective drugs





DiaGenic test accuracy in dementia and pre-dementia stages of Alzheimer's Disease

Pending board meeting

ADtect® multi-center studies – high accuracy achieved

Validation studies indicates a true detection of AD pathology of 85%

- ♦ ADtect agreement with clinical diagnosis is 72% (n=412)
 - Clinical diagnosis as set by a review board was used as standard of truth, assumed to be 80% accurate
 - 72% observed agreement with 80% accurate clinical diagnosis indicates a true detection of AD pathology of 85%
- ♦ 30 Clinical samples contained CSF biomarker data (A β 1-42, t-tau, p-tau)
 - 24 of 28 positive CSF samples were correctly predicted with ADtect® (85% agreement)

Agreement with clinical diagnosis	Calibration (%) N=208	Validation (%)		Total (%) N=412
		Initial N=74	Extended N=130	
Overall agreement	71.6	71.6	71.5	71.6
Agreement with positive outcome	71.8	71.9	70.6	71.8
Agreement with negative outcome	71.4	71.4	72.6	71.6

DiaGenic reaches 82% accuracy milestones for ADtect improvement – results from IAAC July 18th increases deal potential

DIAGENIC

Press Room

Releases

Multimedia

About

DiaGenic show 82% accuracy of new ADtect blood test in Alzheimer's disease.

18 Jul, 2012 08:30 CET

alzheimer's association
AAIC >12

Alzheimer's Association International Conference*
Vancouver, British Columbia, Canada
July 14 - 19, 2012

*Q2 2012 highlight (post Q):
IAAC Vancouver July 18th*

*R&D excellence and
continous product
improvement
to reach accuracy > 80% for
early Alzheimer detection*

DIAGENIC

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Findings from DiaGenic, Pfizer R&D Collaboration Show Promising Early Results for Blood-based Test for Early Alzheimer Disease

14 Oct, 2011 09:00 CET

Ottaw – October 14 2011: DiaGenic ASA (DIAGENIC) today reports preliminary positive findings from the collaborative R&D project with Pfizer Inc. where the objective is to identify blood-based biomarkers that may be used to detect early stages of Alzheimer's disease (AD). The project is a collaboration between DiaGenic and Pfizer Inc. (Pfizer).

Stepwise
AD/MCI test
improvement

DIAGENIC

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Highly ranked Journal of Alzheimer's Disease to publish two DiaGenic ADtect® articles

22 Sep, 2010 09:00 CET

Abstracts of two articles to be published in the highly ranked Journal of Alzheimer's Disease have been posted today on the journal's web site. This will build confidence in ADtect® among clinicians and pharmaceutical companies and confirm DiaGenic's leading position as a provider of biomarkers in the CNS field.

DIAGENIC

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DiaGenic presents promising findings in pilot study

3 Nov, 2011 10:00 CET

DiaGenic's blood sample based Alzheimer's disease test has proven successful in a clinical study released today. DiaGenic is the first to diagnose Alzheimer's disease from a blood sample at such an early stage of the disease.

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CE MARKING OF THE FIRST BLOOD TEST FOR EARLY ALZHEIMER'S DIAGNOSIS

12 Jun, 2009 08:30 CET

DiaGenic ASA today announces the European release of its ADtect® (Alzheimer's) blood-based gene-expression assay for clinical diagnostic use. The Alzheimer's assay is released as a CE IV D Mark product under the European Directive on In Vitro Diagnostic Medical Devices 98/79/EC.

GENIC

Reaching >80% limit – summary of findings

- AD vs matched controls - 20 signature on new AD samples: 82%, (n=50)
- MCI conversion to AD 20 signature MCI 70-74%
- MCI conversion to AD with “new” 25 signature: 81%, (n = 75)
- A lower number of probes (20 -25, not locked)
- Instrumentation/technology (ViiA 7)
- Expansion of validation cohorts (additional patients)



DIAGENIC

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DiaGenic show 82% accuracy of new ADtect blood test in Alzheimer's disease.

18 Jul, 2012 08:30 CET

Oakville, Ontario, Canada, July 17th 2012: DiaGenic, a leading provider of diagnostic services, today presented a significant improvement in the accuracy of its ADtect blood test. The new test, which uses a proprietary 20-probe signature, achieved 82% accuracy in detecting Alzheimer's disease (AD) in a study of 50 new AD samples. This is a significant improvement over the current standard of care, which typically achieves 70-74% accuracy. The new test is also significantly more accurate than the current standard of care in detecting MCI conversion to AD, achieving 81% accuracy in a study of 75 new AD samples. The new test is also significantly more accurate than the current standard of care in detecting MCI conversion to AD, achieving 81% accuracy in a study of 75 new AD samples.

alzheimer's association® Alzheimer's Association International Conference®
Vancouver, British Columbia, Canada
July 14 - 19, 2012

AAIC>12

Summary of findings: Fewer genes improves ADtect and sets standard for MCItect

ADtect improvement	ADtect
Number of genes	20
Sample size (25 AD 25 controls)	50
Performance characteristics	
Accuracy	82 %
Sensitivity	80 %
Specificity	84 %
AUC	0.85

Results I: 20 Gene signature from ADtect increased accuracy in detecting Alzheimer's disease in the dementia stage



Results II: 25 Gene signature with increased accuracy in detecting Prodromal AD 2 years before dementia onset

MCI due to AD improvement		mciTECT	
Number of genes	20	25	25
Sample size (MCI-c 35, MCI-s 40 whereof newly included 7 MCI-C and 13 MCI-s)	20	20	75
Performance characteristics			
Prediction accuracy	70 %	75%	81%
Sensitivity	69 %	71%	77%
Specificity	71 %	77%	85%
AUC	0.73	0.73	0.83





Licencing opportunities & Pharma collaborations

R&D collaboration 2011 with Pfizer 20 gene signature prodromal (pre-dementia) AD biomarker

Development of blood based biomarkers for early stages of Alzheimer's disease

Biomarkers for prodromal AD and progression rate in AD identified

In collaboration with



Biomarker for prediction of **prodromal AD** in blood

- ◆ DiaGenic has identified a 20 gene signature in blood predicting MCI conversion to AD (prodromal AD) within 2 years, n =129. DiaGenic's prodromal AD signature significantly reduces sample size in clinical trials
 - Cost reduction by 35%-45%.
 - Homogenous cohorts secures successful completion of clinical trials



Biomarker in blood defining **AD progression**

- ◆ DiaGenic has identified a 113 gene signature in blood for rate of progression in AD
 - Correct staging in >80% of fast progression cases
 - Provides an independent marker of progression in AD
 - Prediction of AD progression rate was demonstrated
 - >90% overall agreement for subjects with mild AD
 - Potential to reduce sample size in mild AD trials



R&D collaboration 2012 Diagenic GE Healthcare to develop amyloid PET In Vitro Diagnostic

- *R&D agreement for first in class study comparing gene signature and brain PET imaging*
- *GE Healthcare completes successful phase III with autopsy studies and restates FDA filing end of 2012*
- *Alzheimer market see important step change with FDA approval of first 18 F-PET ligand (AMYVID®; Eli Lilly) for detecting amyloid in the brain April 4th . Market expected to hit 1.5 bn USD*
- *Amyloid PET launch in selected US sites from June 1st onwards*



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First patient included in DiaGenic and GE Healthcare project to develop a blood test for Mild Cognitive Impairment, associated with Alzheimer's

7 Jun, 2012 17:28 CET

Oslo – June 7th 2012: DiaGenic ASA [OSL:DIAG] today announced that the first patient with MCI (Mild Cognitive Impairment) was examined with [18F] Flutemetamol PET imaging at University of Lund Sweden in the DiaGenic and GE Healthcare Research Collaboration announced March 27th 2012. First patient examined with PET imaging means that the clinical phase of the collaboration has been initiated.

The study aims to develop a blood-based gene expression profile in patients with mild cognitive impairment (MCI) to be used in conjunction with PET imaging of the brain. The PET imaging agent, [18F] Flutemetamol, is currently in phase 3 development and is not yet approved by any regulatory authority.

DiAGENiC

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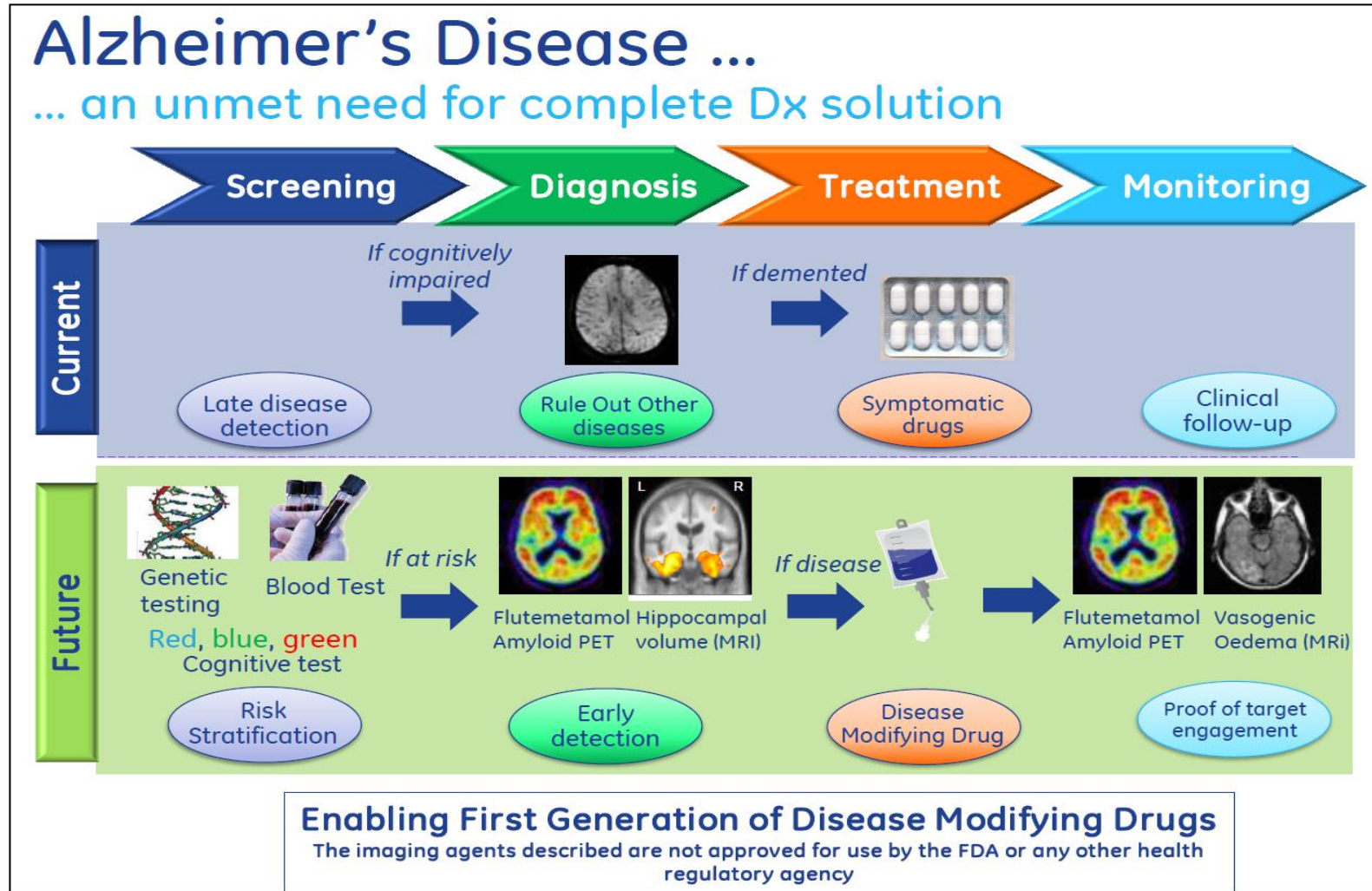
DiaGenic and GE Healthcare to develop blood-based test for mild cognitive impairment, a disorder associated with risk for Alzheimer's Disease

26 Mar, 2012 16:05 CET

Oslo – March 26th 2012: DiaGenic ASA [OSL:DIAG] today announced a research agreement to collaborate with GE Healthcare to develop a blood-based test using DiaGenic's peripheral gene expression profiling in patients with mild cognitive impairment, a disorder associated with risk for Alzheimer's Disease. The study would be used in conjunction with PET imaging to identify a blood based gene expression signature in these patients. The PET imaging agent, [18F] Flutemetamol, is currently in phase 3 development and is not yet approved by any regulatory authority.

This research effort will combine expertise in data integration, informatics, genomics and imaging. Its goal will be to find a signature that may identify subjects at risk of Alzheimer's at a very early disease stage. The collaboration is part of a broad portfolio of diagnostic solutions that GE Healthcare is developing in the Alzheimer's field.

The future of Alzheimer diagnostics as viewed by GE Healthcare





Market access & US regulatory 510k/PMA process

Pending board meeting

US out-licensing and Pharma partnering

- ◆ Progress in licencing activities in the US (with Ferghana Partners)
- ◆ Additional large pharma collaboration requests for DiaGenic's Alzheimer platform/products
 - ◆ *Ferghana extension of contract with 6 months from May 31st*
 - ◆ *DiaGenics AD and PD technology in focus.*
 - ◆ *Counterparties represent service providers (typically laboratory chains) or technology providers (platform providers).*
 - ◆ *Scope for license is funding of US PMA/510k approval, milestone based upfronts and royalty on commercialization. A limited number of counterparties are at different stages of DiaGenic interaction.*
 - ◆ *DiaGenic continue discussions to add pharma R&D collaboration with partner having phase II-III clinical programs with NCEs in the quarter.*



DiaGenic Alzheimer's/Mild Cognitive Impairment biobank

Pushing the boundaries to the pre-dementia stage – gene expression in prodromal AD (MCI_{lect}®) – collecting sufficient number of MCI patients a rate limiting factor in AD drug/diagnostic development

- ♦ DiaGenic has conducted a 4 year prospective clinical study in mild cognitive impairment patients
 - Monitored disease progression with annual clinical exam and blood sampling
 - Full DiaGenic ownership for commercial product development
- ♦ DiaGenic has of the world's largest RNA blood based biobank in neurodegeneration
 - >3500 unique samples from MCI, AD, PD patients, age matched healthy controls and technical samples from all relevant clinical groups
- ♦ DiaGenic key collaborators on MCI
 - UC Davis, USA, Professor Charles DeCarli
 - 200 MCI patients, 50 controls and other dementias
 - University of Lund, Sweden, Dr Oscar Hansson
 - 300 MCI patients and controls – GE Healthcare project
 - Other sites as part of DiaGenic and EU funded studies (SPIDIA, EDAR)
 - 300 MCI cases and controls
 - Baltazar (France) – pending signature : > 50 MCI converters
 - DiaGenic –“Pfizer” cohort : 130 MCI- controls – AD (60 MCI converters)
 - DiaGenic US regulatory 510k/PMA process (DOCRO): 24 US specialist MCI sites





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Parkinsons Disease and Breast Cancer

PDtect®

BCtect™

- ◆ *PDtect – early detection of Parkinsons Disease*
- ◆ *BCtect – gene signatures for pre-menopausal women with dense breasts*

Pending board meeting

Back-up slides

4-6 million PD patients world wide

High Unmet medical need for PD biomarkers



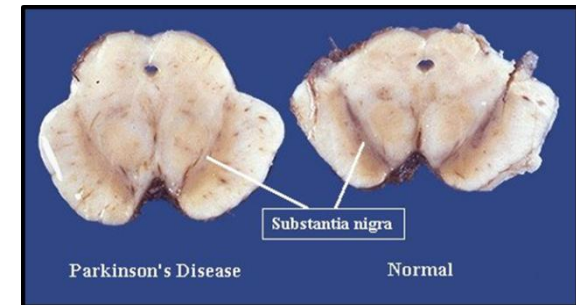
🔴 **Degeneration of dopaminergic neurons starts years before symptoms become apparent**

🔴 **No disease modifying drug available, only symptomatic**

- 28 ongoing clinical trials including new drugs

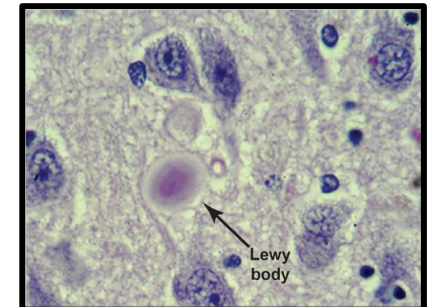
🔴 **Current diagnostic work up:**

- PD commonly misdiagnosed by non-specialists (<60%*)
- First investigated by GPs and then by Neurologists
 - Clinical examination
 - DaTSCAN imaging detects loss of functional dopaminergic neurons
- Post-mortem seldom done but is gold standard - Lewy bodies



🔴 **Need for blood based biomarkers**

- Pharma use
 - Aid in early diagnosis, patient stratification into clinical trials
 - Measure disease progression
- Clinical use
 - Clinical diagnosis in early disease stages
 - Triage with DaTSCAN imaging (Proposal submitted to GE Healthcare July 2012 for post patent project in PD)



*) C E Clarke (2007). Parkinson's disease. BMJ 2007;335;441-445.

PDtect® identifies Parkinson patients with high 88% accuracy

- Completed DiaGenic European multi-centre study (Reported high level Q1 2012)
 - 900 samples from PD patients, controls and patients with related neurologic disorders.
 - 160 denovo patients (early PD without pharmaceutical treatment).
 - Monitored over 2 years for disease progression.
- Overall accuracy across all PD stages using 700 genes was 88%
 - In the diagnostic challenging group of early PD (denovo PD) sensitivity was 85%.
 - Whole genome screen on a subset - 79 PD patients, including 27 denovo PD, and 109 controls
 - >2000 genes impacted by the disease in blood.
- Has generated a substantial interest among several pharmaceutical companies

Predicting Parkinson's disease by integrating clinical and microarray data with Canonical Partial Least Squares

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Introduction

Parkinson's disease is a neurodegenerative disease affecting the motor system. Current diagnosis is based on the observation of motor symptoms and the use of levodopa. The clinical diagnosis of Parkinson's disease is challenging due to the lack of specific biomarkers and the need for long-term monitoring. The aim of this study was to explore the potential of a blood-based gene expression signature for predicting Parkinson's disease.

Results

The classifier became more stable when clinical information was included in the model building, higher accuracy is achieved already for models with low complexity. The present results for 79 PD and 109 controls compared to regular 79 PD and 109 controls. The aim was to use clinical information.

Materials and methods

Sample Preparation

Whole blood was collected from individuals at Norwegian and Swedish hospitals. Blood samples were collected from individuals with Parkinson's disease and age-matched controls. Blood samples were collected using EDTA tubes and processed using the DiaGenic protocol.

Clinical diagnosis

Clinical diagnosis was determined at each site by experienced neurologists.

Expression data and clinical information

The gene expression was measured using the Illumina whole-genome expression array. The clinical information was determined by the clinical diagnosis.

Statistical analysis

Four different partial least squares regression methods for predicting Parkinson's disease were compared.

- Regular PLS (Partial Least Squares)
- PLS with clinical information
- PLS with clinical information and gene expression
- PLS with clinical information and gene expression and clinical information

A repeated random 10-fold cross-validation routine was used to evaluate the model and the number of correctly predicted samples across the 1000 repeats.

Sample	Number	%
PD patients	79	
Control group	109	

Table 1. Summary of sample used.

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DiaGenic reports high 85% accuracy for blood based diagnosis in early, naive Parkinson patients in European multicenter study

Oslo – February 8th 2012 (DiaGenic ASA [OSL:DIAG]): The initial findings from DiaGenic sponsored prospective European multicenter Parkinson study is reported. The initial read out of the first subcohort of 79 PD patients and 75 matched healthy controls with no neurodegenerative disease, shows a diagnostic accuracy of 85% in early disease patients while overall accuracy was 88% across all stages.

The preliminary results of the biomarker development program in Parkinson's Disease (PD) were presented at the 19th World Congress on Parkinson's Disease and Related Disorders in Shanghai in November last year. DiaGenic reported that their gene expression data contained information that can be used to classify PD with high average accuracy in peripheral blood.

DiaGenic press release February 8th 2012

Magdalena Kauczynska Karlsson et al.
32nd Annual Conference of the International Society for Clinical Biostatistics 21-25 August 2011 Ottawa, Canada

Update on Parkinson Disease (PD)

Completion of clinical phase of Familial PD study – results expected post Q2 - partnering discussions initiated

- ◆ *DiaGenic presented high accuracy (88%) in diagnosing early disease in European multicenter trial (Q1)*
- ◆ *Dialogues with partners providing imaging diagnostics have been initiated (Q1) – Licence dialogues identify strong interest for PD*
- ◆ *To date, there are few alternatives and DiaGenic may quickly provide an innovative improvement to the diagnosis of PD.*

DIA GENIC

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DiaGenic reports high 85% accuracy for blood based diagnosis in early Parkinson patients in European multicenter study

8 Feb, 2012 17:28 CET

The initial findings from DiaGenic sponsored prospective European multicenter Parkinson study is reported. The initial read out of the first subcohort of 79 PD patients and 75 matched healthy controls with no neurodegenerative disease, shows a diagnostic accuracy of 85% in early disease patients while overall accuracy was 88% across all stages.

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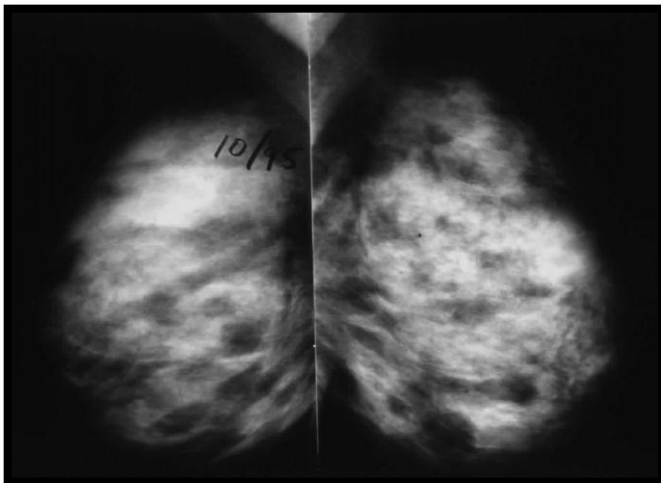
DiaGenic reports completion of data collection and genetic analyses in a unique study on familial Parkinson's disease

8 May, 2012 09:40 CET

Oslo – May 8th 2012 (DiaGenic ASA [OSL:DIAG]): DiaGenic today reports on the finalization of data collection and database lock of a blinded study in a Norwegian cohort of 80 patients with familial Parkinson's disease (PD). The majority of these patients are carrying a mutation in the parkin 8 gene (also called LRRK2) that significantly increases the risk of developing PD. Patients recruited from St Olavs University Hospital under the lead of Principal Investigator Professor Jan Aasly are all LRRK2 mutation carriers with or without the disease or healthy relatives. Unblinding of the study is set to the May 16th and analysis and reporting is expected to be completed during summer 2012.

BCtect® Superior to Mammography in Young Females

- ♦ The intended use for BCtect® is in the detection of early stage breast cancer
 - First line test for asymptomatic females with worries due to family history, resistance to mammography or who is not part of a screening program
 - Problem solver: Mammography in younger females has low sensitivity
- ♦ No current competition within blood based testing
 - Mammography is a lower cost tool, best suited for postmenopausal females. Sensitivity in younger females as low as 40%-50%
 - Higher cost Magnetic Resonance Imaging (MRI) is sensitive, but lacks specificity



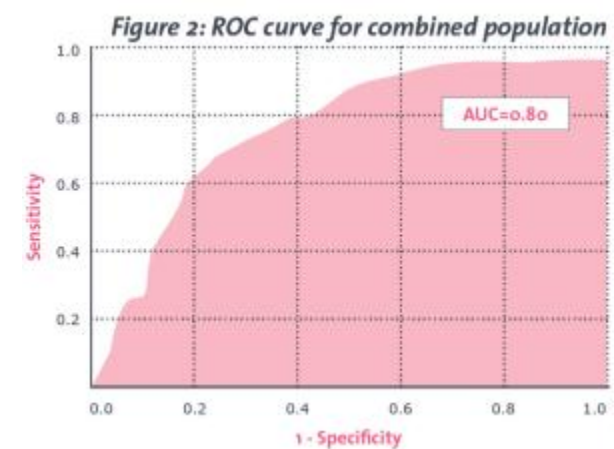
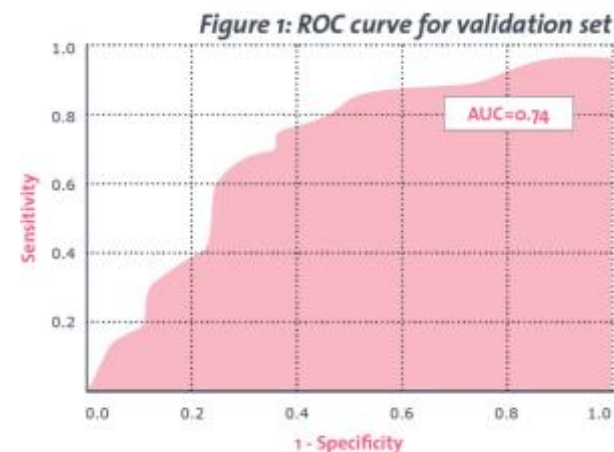
Tumours are not always detected by mammograms

Mammogram with a 5 cm invisible tumour in the right breast (upper right quadrant).
The left breast finding is a benign change.

Multi-centre study for BCtect® CE-marking

Performance data	Independent cohort	Total Study Intended use population
Number	N=109	N=332
Accuracy	72%	72%
Sensitivity	69%	72%
Specificity	74%	73%

- Overall 72% accuracy of BCtect®, using only 1 blood sample
- No significant effect observed for the most common co-morbidities included in study,
 - e.g. cardiac conditions, hypocholesterolaemia, diabetes, hypothyroidism, depression, asthma
- No relationship to receptor status
 - the most aggressive tumour type -triple negative- are detected with equal efficacy as entire population
- All tumour types detected
 - Including Lobular carcinomas that often is invisible on mammograms

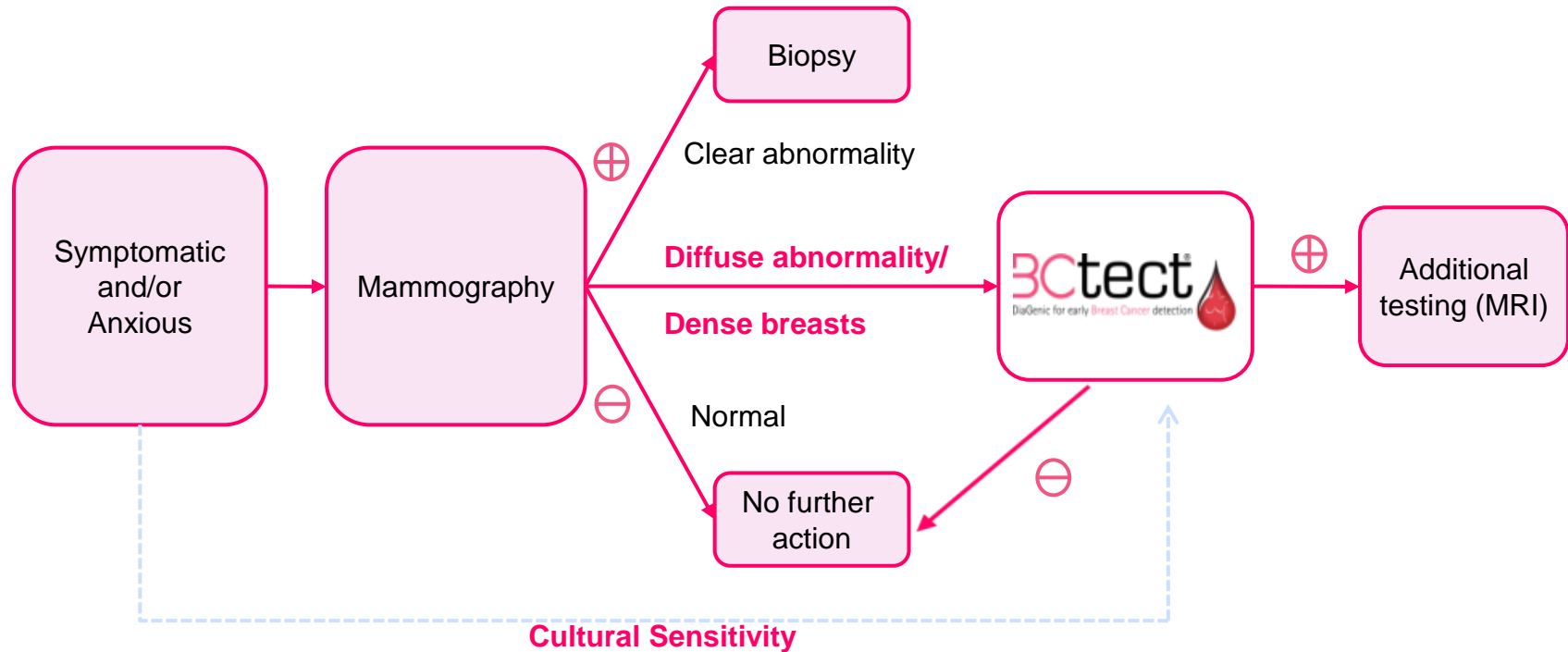


BCtect® has high performance across tumour types, stages and age

- BCtect® shows similar good performance with
 - All breast cancer types
 - Lobular tumours are often difficult to detect on mammogram
 - Early and late stage breast cancer
 - Detected tumours as small as 4mm!
 - Pre- and post-menopausal women
 - In comparison, mammography sensitivity as low as 40-50% in pre-menopausal females

Performance by tumour type			
	Validation	Calibration	Combined
Ductal	74%	75%	75%
Lobular	73%	83%	76%
Early stage (0-I)	74%	70%	71%
Late stage (II+)	66%	76%	72%
Pre-menopausal	73%	70%	71%
Post-menopausal	70%	74%	73%

BCtect® is a Problem Solver for Clinicians in Multiple Contexts



Population estimates

Negative: 75% of those referred for diagnostic mammography

Positive: 16% of those referred for diagnostic mammography, 3 to 4 biopsies taken for 1 cancer

Inconclusive: 10% of those referred for diagnostic mammography

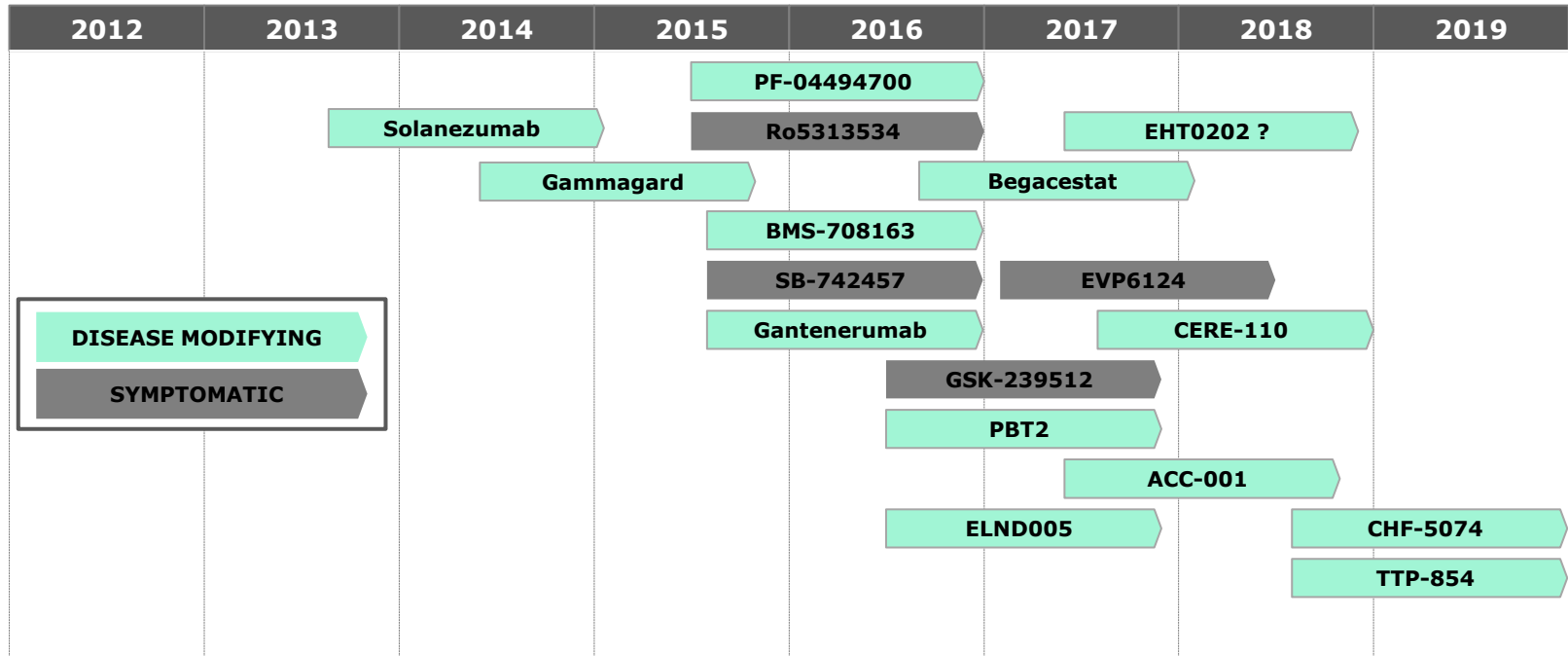
Q2 update: Market update - Pfizer, Elan, Johnson & Johnson Bapineuzumab did not reach phase III endpoints. All program i.v. bapi programs closing

- ◆ *DiaGenic partners and potential licence partners not affected*
- ◆ *Target patient population in phase III too advanced (mild-moderate AD)? – Alternative drug targets increased focus*
- ◆ *Early intervention key - MCI and early diagnosis even more important*
- ◆ *No immediate fall-out on Companies targeting MCI or have non-amyloid approaches in phase II-III*
- ◆ *Soleneuzumab phase III read-out october 2012*



New and expensive therapies expected to increase need and value of early diagnostics

Estimated launch of Alzheimer's drugs



- The first disease-modifying therapies expected to launch in 2013, and carry a significant price premium:
 - Current pricing of Aricept («gold-standard» symptomatic treatment, but off patent) is \$ 1.000 per year
 - Solanezumab (Eli Lilly) - expected pricing of \$6.000 per year , with sales of \$ 2.6 billion in 2019
 - Gammagard (Baxter) – expected pricing of \$30.000 per year, with sales of \$ 1.2 billion in 2019
- Datamonitor (Dec 2011) estimates that the Alzheimer's disease drug market is worth \$5.8bn in 2011, forecasted to grow to \$14.5bn - > 20 bn by 2020 (Deutsche Bank, May 2012)



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