



OPPORTUNITY ASSESSMENT OVERVIEW
Diagnostic solutions for unmet needs

In vitro diagnosis

Diagnosis is a **crucial** tool to
maintain population's **health**

70% of clinical decisions today directly depend on
in vitro diagnostic tests

The **overall market value** of in vitro diagnosis
was **\$ 52 billion** in 2017

Good diagnostic

Cost
savings

Treatment
efficacy

Quality
of life

PIPELINE

MULTIPLE
SCLEROSIS
(MS)

ALA DIAGNOSTICS
EM KIT

DIAGNOSTIC
ALGORITHM

TREATMENT
SELECTION

RESPONSE
BIOMARKER

RAPID MARKET ACCESS. LOW REGULATORY RISK
GREAT ACCEPTANCE BY CLINICIANS AND PATIENTS

INCREASE DIAGNOSTIC SUCCESS RATE
INCLUDES ALL AVAILABLE DIAGNOSTIC TOOLS

ALLOWS SELECTION OF THE BEST TREATMENT FOR EACH PATIENT
USING ARTIFICIAL INTELLIGENCE TO PREDICT THE PROGNOSIS

GREAT VALUE FOR BIG PHARMA THAT DEVELOPS AND
MARKETS ALTERNATIVES TO INTERFERON BETA

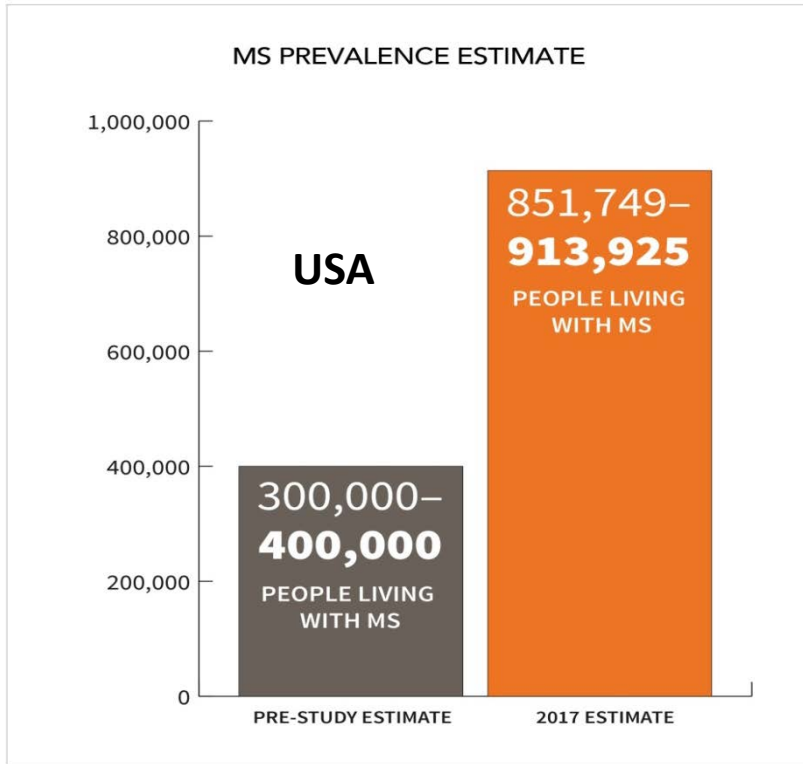
OTHER LINES
UNDER EVALUATION

DIAGNOSIS OF ANTIBIOTIC
ALLERGY

CANCER
DIAGNOSIS

EXPERIMENTAL DEVELOPMENT IN RESEARCH CENTERS

MULTIPLE SCLEROSIS METRICS



Source: Wallin, Mitchell T. "The prevalence of MS in the United States: A population-based estimate using health claims data." *Neurology*. February 2019. *Neurology Journal Web*. <http://n.neurology.org/lookup/doi/10.1212/WNL.00000000000007035>

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By applying a validated algorithm to multiple sets of surveillance health data, **researchers have shown a steady rise in MS prevalence in the US over the past 5 years**

Updated Atlas of MS shows over **2.8 million people worldwide have Multiple Sclerosis**

Every 5 minutes, someone, somewhere in the world is diagnosed with MS

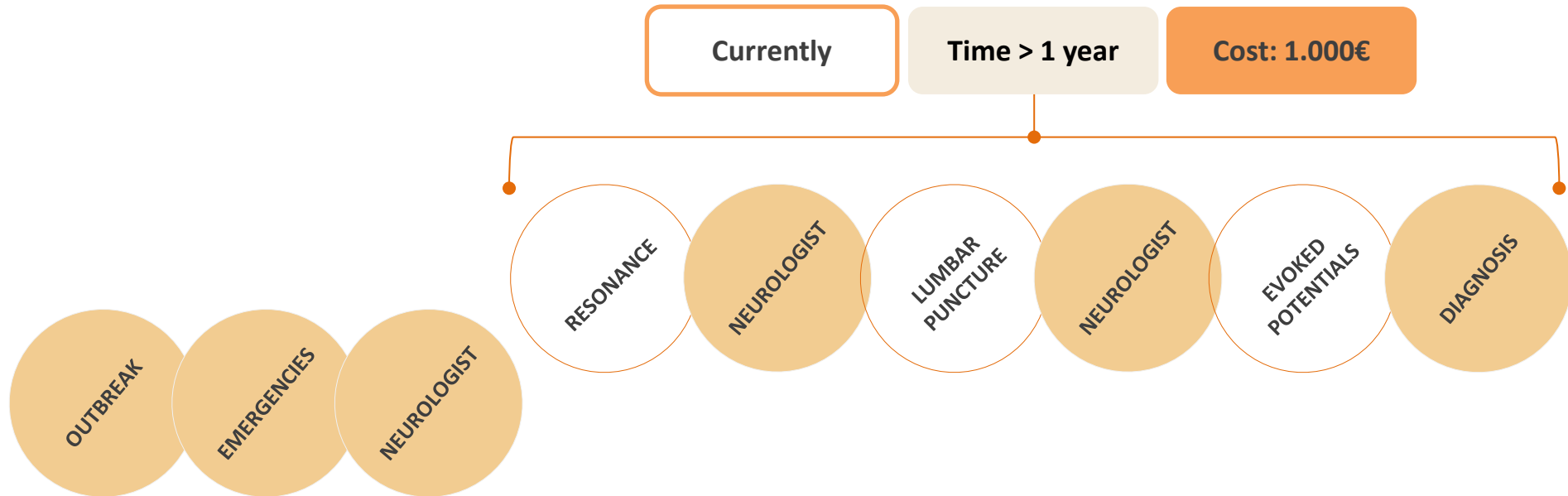
Multiple Sclerosis is the **major cause of nontraumatic disability in young adults**

The estimated **cost** of MS is 22,800€ in mild, 37,100€ in moderate and **57,500€ in severe disease**

MS misdiagnosis is common, near 20% of wrongly diagnosed cases in the USA. In the absence of a highly specific biomarker for MS, misdiagnosis may not always be avoidable

MS has a significant impact on patients' lives. The QoL is diminished by the physical, emotional, and cognitive effects of MS, which interfere with the ability to work, pursue leisure activities, and carry on with normal life

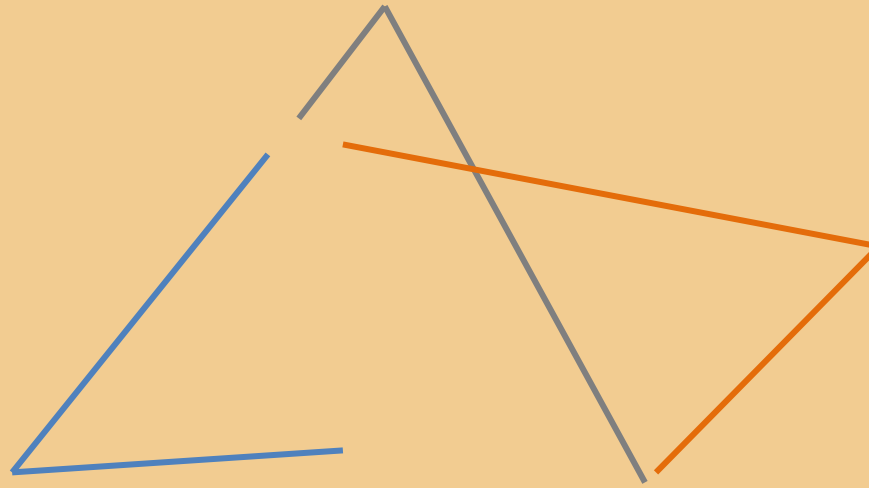
CURRENT DIAGNOSIS



No specific tests for the diagnosis of Multiple Sclerosis exists

Current diagnosis of Multiple Sclerosis is complex. It is based on clinical signs and symptoms, which leads to high variability and, therefore, misdiagnosis

It requires a battery of tests, none of them specific to MS which causes a result delay – which can be fatal – and a high cost



ALA DIAGNOSTICS EM KIT

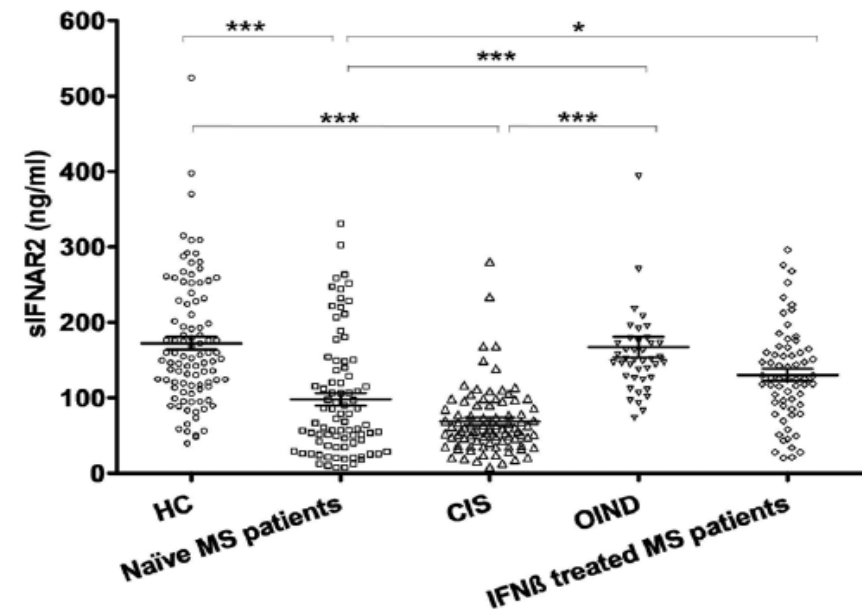
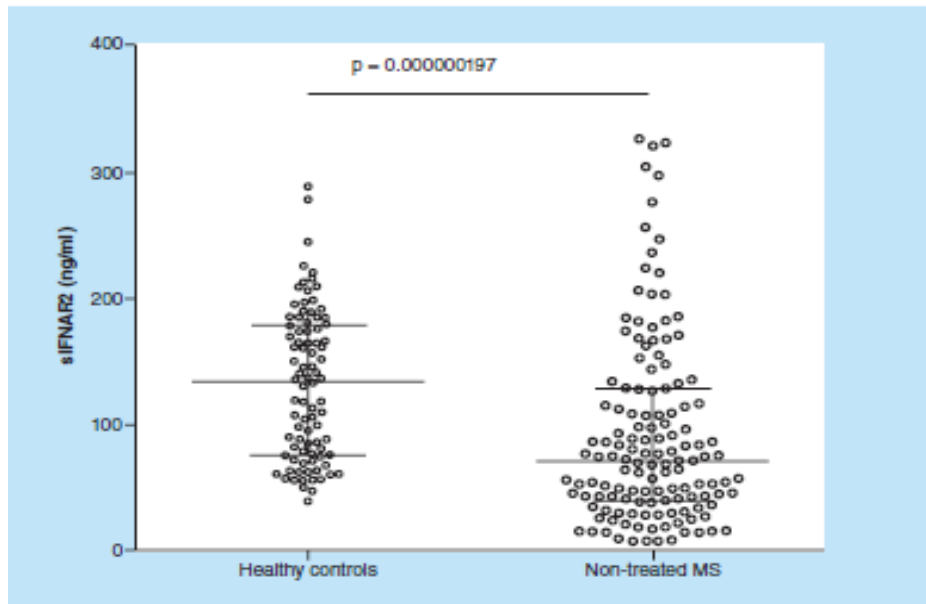
A BIOMARKER FOR THE DIAGNOSIS OF MULTIPLE SCLEROSIS IN BLOOD

Patented recombinant protein validated in
a cohort of n = over 500 human samples

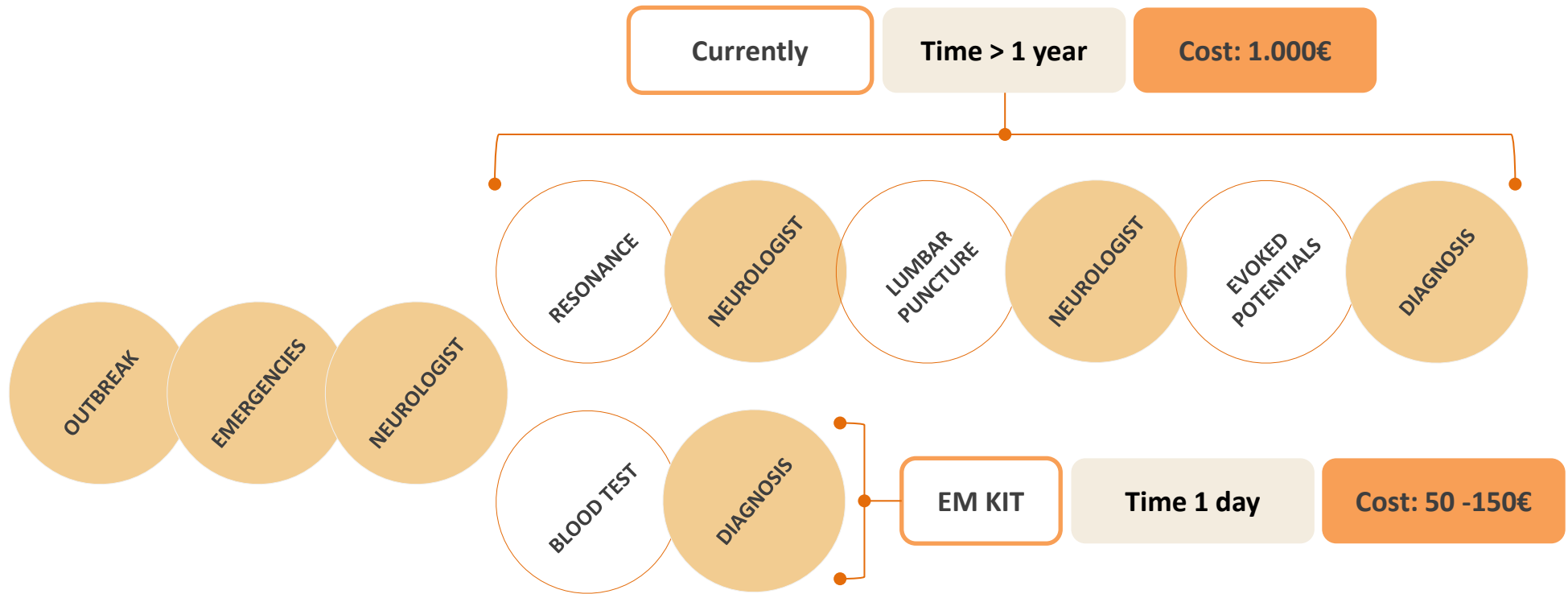
OUR BIOMARKER

OUR MOLECULE IS A HIGH VALUE CANDIDATE
THAT HAS SHOWN A CLEAR **DIAGNOSIS POTENTIAL**

- **88% positive predictive value** in a single blood test
- Applicable to **early diagnosis** of MS



EMKIT vs CURRENT DIAGNOSIS

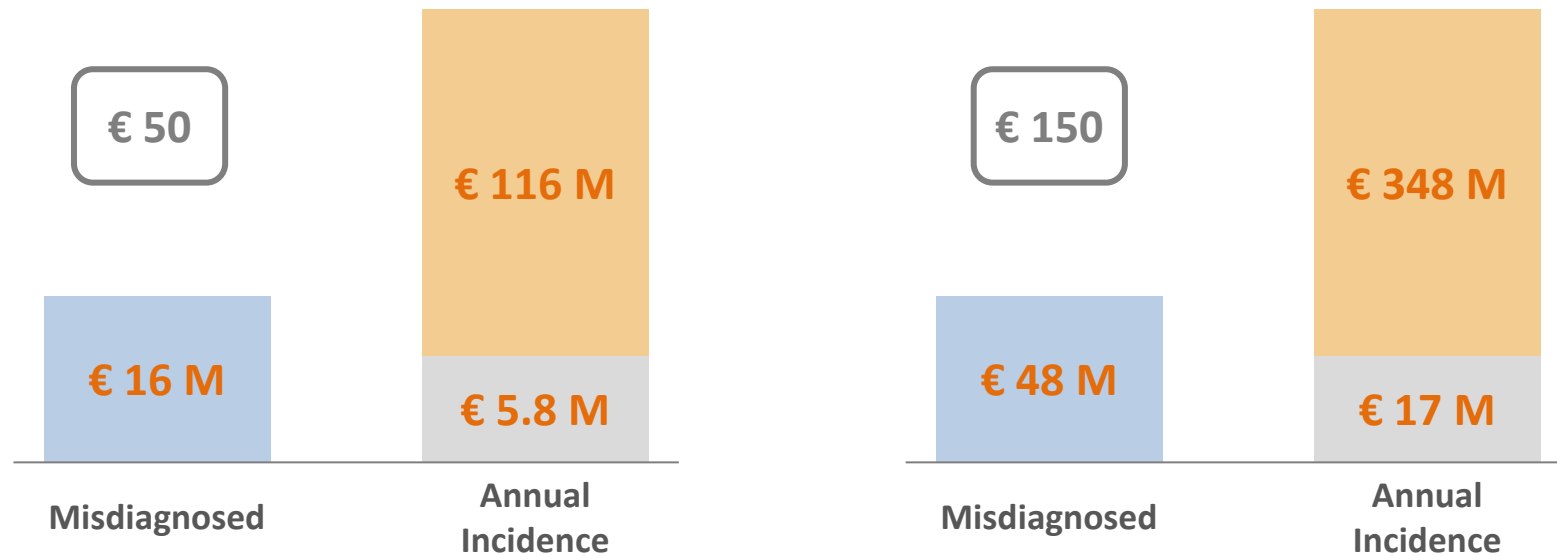


Misdiagnosis represents an annual cost of more than €20.000M

Patients: 2.8M worldwide

Misdiagnosis rate: 20%

Average cost/patient/year: €39.000



Potential market – Europe & USA – is based on

Annual incidence of Multiple Sclerosis: patients referred to the specialist to confirm their diagnostic

Annual incidence of **most common diseases** related to **misdiagnosis**: there is a high incidence in other diseases with similar symptoms to MS that can lead to misdiagnosis

Moreover, there is a patient pool of **misdiagnosed patients**

THE TEAM BEHIND

José Ramón Montero (CEO). Pharmacist. He has **14 years** of experience in the biotechnology market, performing functions related to the management of R+D+I projects, project feasibility analysis, business plan development, **business strategy and advising biotechnological start-ups.**

Dr. Óscar Fernández (Clinical CSO). Clinical neurologist. More than **40 years** experience. **Reference in the clinical diagnosis of Multiple Sclerosis.** He has participated in more than **100 clinical trials** related to Multiple Sclerosis. He is the inventor of the patents. He has published more than 200 articles in indexed journals.

Dr. José Pavía (R&D CSO). Medicine Doctor, professor and scientist at the Faculty of Medicine of the University of Malaga, in the area of **Pharmacology.** He has more than **30 years of research experience.** He is the inventor of patents. He has published more than 70 publications.

María Moreno (Marketing). Pharmacist. She has **15 years** of experience **in multinationals in the pharmaceutical sector.** She has led the **launch of products** in the pharmacy, parapharmacy and mass consumption channels.

Dra. Itziar Ochotorena (R&D Teams). She has **16 years** of experience in managing positions leading and **managing** private and public **biomedical research organizations.**

Dra. Laura Obiols (Regulatory Affairs). She has worked as a **research director at the European Commission,** has collaborated with the **WHO** and as a specialist at the Royal Pharmaceutical Society.

Innovative Bioconsulting (R&D Projects). Strategic consultancy focused on biotechnological market.

With the support of Gustavo Fuster. European Patent Attorney with CEIPI diploma of European Patent Litigation. Advisor.

THE TEAM BEHIND



Dr. Óscar Fernández

Clinical neurologist with more than **40 years** of experience **in the diagnosis and treatment of Multiple Sclerosis**

A reference in the clinical diagnosis of Multiple Sclerosis

He has participated in **more than 100 clinical trials** related to Multiple Sclerosis, collaborating with **Bigpharma**

He has published **more than 200 articles** in MS related journals

Close to the industry

Dr. Óscar Fernández has advised and/or collaborated with:

Almirall **Actelion** **Allergan**
Bayer
Biogen Idec **Novartis** **MSD**
Roche **Teva**
Bristol Myers Squibb **GSK** **Genzyme**
Sanofi **Janssen**
Wyeth **Lundbeck** **Pfizer...**

Close to doctors and patients

Board Member of the **European Charcot Foundation**

Former President of the Board of Directors of the **Spanish Society of Neurology**

Former **Head of the Neurology Service** and former Director of the Institute of Clinical Neurosciences of the Carlos Haya University Hospital

Former President of the Medical Advisory Committee of the Spanish **Multiple Sclerosis Association** and of **Multiple Sclerosis Spain**

Ethics Commission and Advisory Committees for the treatment of MS, etc.

A CONSCIOUS SOCIETY

There is a large presence of associations dedicated to help people affected by Multiple Sclerosis, both locally nationally and internationally.

Some examples

