

Access to a powerful epidemiological tool dedicated to Multiple Sclerosis















Summary

What is OFSEP?

- The French MS registry
- OFSEP History
- Our supports
- Our objectives

How we collect data?

- OFSEP Centers
- Centers Management
- From care to EDMUS
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- Focus on safety data collection
- OFSEP in figures

What kind of use?

- Make this database available to researchers...
- Our experts dedicated to industrial projects



The French MS registry

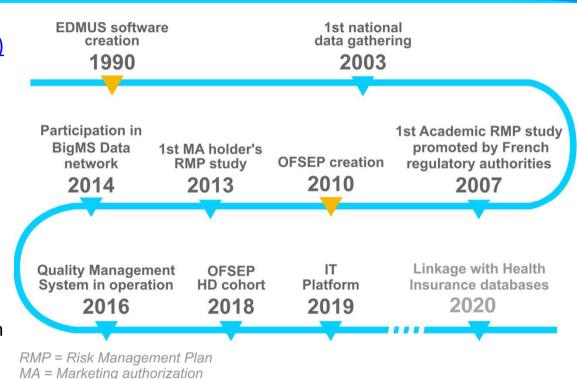
A huge database which aims to being a key epidemiological tool to serve the scientific community, encouraging research on MS and allowing to improve patient care

- A powerful tool built by the medical and scientific community since 1990
- The **biggest national MS registry** in the world with more than 65 000 patients to date, representing **half of French MS patients**
- A standardized data collection over years
- More than 400 committed experts in neurology, neuroradiology and biology working together, involved in patients care



OFSEP History

- 1990: EDMUS (European Database for MUltiple Sclerosis) software is created by Pr. Confavreux. It is **based on a standardized language** elaborated through the continuous concerted action of international experts.
- 2003: A registry of more than 30,000 patients is formed and several articles are published. This data collection is then possible thanks to centers resources.
- 2010: The registry built thanks to the commitment of the network of neurologists is reinforced by the financial support of ANR (French National Research Agency) within the scope of "Investments for the Future" program.



- Since 2016: A sharp increase in the database use for carrying out research projects from academic or industrial holders
- 2017: In order to better know Pharma Partners needs, a Partnership Pilot Phase is signed for 3 years. Its regular assessment highlight Partners interest on the deliverables provided within the Partnership



Our supports



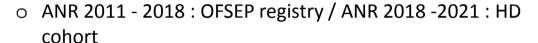






 Lyon 1 University, EDMUS Foundation and Lyon University Hospital are partners of OFSEP consortium from 2010







ARSEP (French MS patients association): from 2015 a dedicated support to the biological collection and the **EDMUS Platform**

Pharma industrial partners

Pharmaceutical Partnership from 2017









European Medicines Agency: Encourages collaborations between pharmaceutical companies and registries to follow-up patients in the context of PASS.



Our objectives: from care to research and from research to patient care

Shared convictions

- Benefits for MS patients
- Benefits for MS research (scientific and medical community)
- Interests for Health
 Authorities

OFSEP objectives

- Input the database :
 - Collect clinical data, MRIs and biological samples from all patients with MS or related diseases, followed by participating neurologists.
- Use this updated database for research projects to :
 - ✓ increase knowledge of MS and treatment possibilities
 - ✓ improve the care
 - ✓ evaluate the effectiveness and safety of drugs

How to achieve our goal?

- A long-term vision
- Centers recognized for their expertise
- Maintain the commitment and the motivation of MS experts neurologists to improve the data collection quality
- A competent and invested coordination team who helps centers to participate



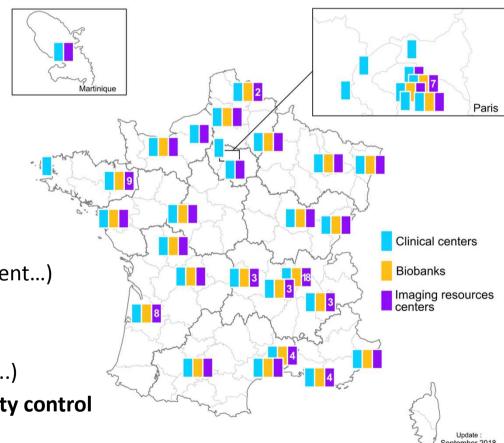
OFSEP Centers

We work to ensure that all OFSEP centers feel supported in their efforts!

- → Data is mainly collected by French MS reference clinical centers (CRC SEP), nominated by the regional health authorities
- → Expert MS neurologists and dedicated CRAs work together in each OFSEP center to collect care data for secondary use

Their expertise:

- MS expertise (diagnosis, follow-up, treatment management...)
- Certifications (Good clinical practice, Neurostatus)
- Knowledge of important outcomes
- Multi-disciplinary approach (MRI, biology, quality of life...)
- Fully conversant with regulatory requirements and quality control
- Research, teaching and training





Centers management

OFSEP coordination team have regular contacts to give them support

- Baseline **instructions** for the routine data collection
- New EDMUS instructions after each software development and technical support for its use
- Training sessions: twice a year, when the medical staff changes, new training sessions can be planned
- Updated forms and guidelines for the data collection

- Once a year, a training day is organized with all the centers: the NCC provides information about every project needing a detailed presentation or a particular attention
- A quarterly newsletter is sent to OFSEP centers
- OFSEP centers assessment and financial support distribution are based on center-based quality reports using OFSEP indicators

✓ Support to centers



- Center-based quality reportsRegular instruction reminders
- Internal newsletter



From care to EDMUS: data collection in OFSEP centers

Process of routine data collection

> OFSEP minimal dataset

- implemented on 2013, based on the common minimal data which are required for MS patient medical follow-up
- regularly updated, regarding new diagnosis criteria or MS experts recommendations
- collection of care data is done on a voluntary basis by MS experts. To reduce the workload of physicians, each center has a CRA for data entry

> EDMUS Data verification tool

- · Control of aberrant data at entry, alert messages
- Integrated data verification tool generating queries on missing or incoherent minimal data
 - Additional queries sent by our coordination team twice a year for more specific or complex tests
- since 2017, CRA can use it to confirm or modify data before data export to the Coordination center

From local EDMUS to the web access Platform

- EDMUS software has been regularly updated until end of 2018
- In 2017 EDMUS Foundation, in partnership with ARSEP association, decide to develop a new national platform: a web access application easier for collecting, using and sharing data between clinicians with a unique file for each patient
- The EDMUS Platform will be interfaced with the hospitals' information system allowing the interoperability of different sources of patients'



From EDMUS to secondary use: Data management and control

Generation of the centralized database

- receiving encrypted exports from centers
- evaluate the quality of data collection regarding OFSEP quality indicators based on Data verification tool
- additional queries are sent by the Coordination team twice a year for more specific and complex tests

Continuous improvement of the data collection process

- internal audit visits, to ensure optimal organization of data in accordance with instructions
- to improve quality, all OFSEP centers will be visited at least once per year

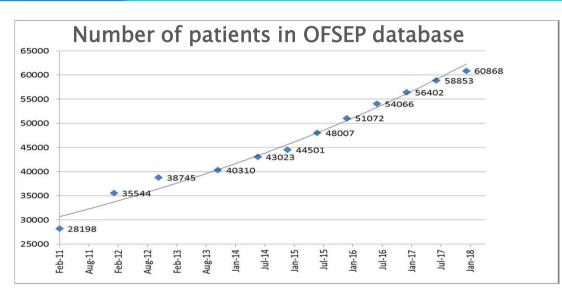


· Audit of data collection's organization

- Data quality control
- Action plan defined and follow-up of the actions
- · Audit of all MS reference clinical centers

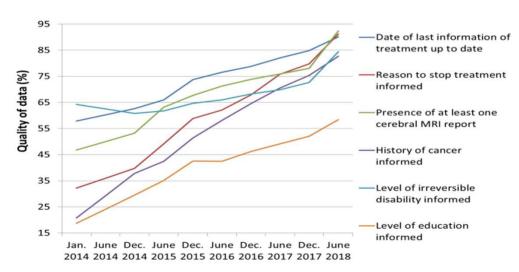


OFSEP in figures



Clinical data collection

- started in 1990
- June 2019 : **65 409 patients**
- about 20 000 patient seen / year
- about 5000 new patients each year
- 61% of patients have been followed since June 2013

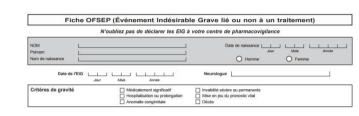




Focus on safety data collection

Implemented in the routine data collection in 2017

- A specific safety form to collect SAE, based on major classifications
- Accompanied to special training sessions to the OFSEP centers







New tool for SAE data entry

- MedDra coding will be integrated in the new EDMUS Platform to improve and standardize SAE data collection
- EDMUS Platform progressively available from 2020 in the OFSEP centers who will be trained to its use

Centralized quality control



- A centralized monitoring will be done from 2020-21 on safety data in order to control their quality and to have a high level of confidence in the data collected
- Quality Management System, including a continuous improvement approach



Make this database available to researchers...

...to allow them answering their scientific questions!



- major scientific papers published in peer-review journals
- these publications increase the knowledge on MS, useful for all people invested in MS

> Extract from our publication list:

- Vukusic S, Rollot F, Casey R et al; OFSEP investigators. **The impact of risk stratification on the incidence of PML with natalizumab treated patients in France**. JAMA Neurol. 2019. [Accepted].
- Laplaud DA, Casey R, Barbin L et al; OFSEP investigators. **Comparative effectiveness of teriflunomide versus dimethyl-fumarate in multiple sclerosis**. Neurology. 2019. [Accepted].
- Kingwell E, Leray E, Zhu Fet al. **Multiple sclerosis: effect of beta interferon treatment on survival**. Brain. 2019 May 1;142(5):1324-1333.
- Barbin L, Rousseau C, Jousset N et al; CFSEP and OFSEP groups. **Comparative efficacy of fingolimod vs natalizumab: A French multicenter observational study**. Neurology. 2016 Feb 23;86(8):771-8.
- Durozard P, Maarouf A, Boutiere C et al. **Efficacy of rituximab in refractory RRMS**. Mult Scler. 2019 May;25(6):828-836.



Our experts dedicated to industrial projects

Direction



Pr Sandra VUKUSIC

Professor of Neurology at University Lyon 1 – Faculté de Médecine Lyon Est Head of Department of Neurology A – Hôpital Neurologique – Lyon University Hospital Scientific coordinator of the Observatoire Français de la Sclérose en Plaques (French MS registry) President of EDMUS Foundation. Internationally recognized expert on MS.



Experts



Romain Casey, PhD Epidemiologist and registry manager

• Doctor in epidemiology, he has several experiences in France and abroad in the study and organization of data as an epidemiologist and biostatistician. He joined OFSEP in 2011.



Wladys Cranz Industry relation manager

- After studying biology, she taught for a year before devoting herself to research. She joins OFSEP in 2013.
- In 2016, she completed her initial training with a degree in Operational Unit Manager (PGM EMLyon Business School)



Fabien Rollot Biostatistician Manager

• After studying bio statistics, he worked severals years on various disease registers before joining OFSEP in 2014.



What about OFSEP future?

Our commitment:

- ✓ maintain the customized Platform tool to collect data from care
- ✓ preserve the commitment of motivated OFSEP centers
- ✓ continue our quality improvement approach
- ✓ safeguard the expertise of the OFSEP coordination team
- ✓ remain faithful to our origin and values

Let's work on a win-win Partnership to meet these challenges!

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