Appendix I Participant information sheet / Consent form

Participant information sheet

Neuropsychological Assessment and Aging

Project sponsor: Assistance Publique Hôpitaux de MARSEILLE (AP-HM) 80 Rue BROCHIER, 13354 MARSEILLE Cedex 5.

Principal Investigator: Bernard François MICHEL (MD), Department of Behavioral Neurology, 270 Boulevard de SAINTE-MARGUERITE, BP 29, 13274 MARSEILLE cedex 9.

Protocol Number: AGING – 2017-A00946-47

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1- Introduction

You are invited by [insert Neurologist name] to participate in a study on "Neuropsychological Assessment and Aging", which aims to improve the conditions of memory disorders assessment. Before your decision, it is important that you read this information sheet carefully: it will help you understand the rationale for this research, its progress, your role and the expected benefits. Your participation is completely voluntary. You are free to accept or refuse to participate. If you agree, you are free to change your mind at any time without having to provide any justification and your decision will not affect your routine treatment, your relationship with those treating you or your relationship with [insert Institution].

2- Rationale of the study

This study, which is sponsored by AP-HM, is led by Bernard François MICHEL (MD) of the Department of Behavioral Neurology (Hospital SAINTE-MARGUERITE, AP-HM) in collaboration with researchers from the CNRS, INSERM, and physicians from several hospitals in FRANCE, obtained funding from the National Research Agency (ANR). Its goal is to improve the conditions of neuropsychological assessment.

3- Overview of the procedure

This research plans to include 260 participants (at least 50 years old who come to the memory clinic for an initial assessment). It is conducted in 5 Hospitals in France. Your participation in this study will last about 10 months. Without counting the visit of today, you will have to return 2 or 3 times to the hospital, with a delay of 9 to 10 months between the first and the last visit. Participation in this research does not imply any additional financial cost for you. Any costs of transportation, meals, and accommodation will be covered by the center where you will take the tests (especially if they generate too many constraints compared to the routine care). The inclusion period in this study will run for 4 years.

4- Who can participate?

- **Visit 1**

Anyone who is at least 50 years old, coming to the hospital in memory consultation for a first evaluation (for example recommended by primary care physician) because of memory complaint. Cannot participate people with the following characteristics: Chronic ethylic addiction, psychiatric disorders (schizophrenia, bipolar disorder, major depression), traumatic brain injury, developmental pathologies, abuse of psychotropic drugs (if modified dosage in the last 3 months).

5- What does participation involve?

- **Visit 2**

If you agree to participate, the next visit (approximate duration: 2 hours) will be a consultation with the neuropsychologist, with whom you will take the memory tests usually proposed, and you will complete a questionnaire about your opinions and your perceptions about yourself and aging in general. Aging itself only leads to a slowing down in neuropsychological test responses, but these effects are well known and limited. The neuropsychological tests will be accompanied by physiological measurements that will be obtained thanks to a belt, a wristwatch, and a salivary gum (which looks like a chewing gum). You will need to wear the belt and wristwatch during the neuropsychological tests. The salivary gum should be chewed for a few seconds. Two salivary gums will be proposed to you: one before the beginning of the neuropsychological tests, the other after the tests.

- **Visit 3**

Depending on the diagnosis, after Visit 2, only certain participants will be invited to take two additional neuroimaging tests (MRI and PET described below) to complete the assessment during a third visit (length of visit: about 4h). The medical team responsible for monitoring the study, specific to each center, will meet to decide on the usefulness, for each participant, to carry out these neuroimaging examinations in order to reach the scientific objectives of the study (the decision criteria are indeed exclusively scientific). Magnetic Resonance Imaging (MRI) of the brain is a painless biological examination that allows to visualize the brain. At the time of the visit, the absence of contraindication to the MRI will be checked by the physician (claustrophobia, metallic material in the body). The only inconveniences related to this examination come from the constraint of remaining stay lying down, without moving and the noise caused by the operation of the MRI. No adverse biological effects are known to date. The duration of this examination is approximately one hour. Positron Emission Tomography (PET), which is associated with radiotracers such as ^{18}Fflorbetaben, is an imaging technique that can be used to visualize the presence of amyloid plaques in patients' brains. The duration of this examination is about 2 hours. You will lie on your back and an infusion will be placed. The dose of radiation delivered is controlled by the hospital: it is limited by legislation. The maximum dose absorbed by the whole body during a PET scan is about 7 milliSieverts, which is usual for an imaging and risk-free examination as reported by different clinical studies. To ensure the validity of the study, the results of the neuroimaging examinations performed during visit 3 will be communicated to you at the end of visit 4. The results of the neuropsychology done on visit 2 will be communicated to you after visit 2.

- **Visit 4**

Finally, a last follow-up visit (approximately 2 hours) with the neuropsychologist will be offered 9 to 10 months later, during which you will take similar tests to those of visit 2 to evaluate your memory. At the end of this visit, patients who have had a lumbar puncture as part of routine care, will be asked for their agreement to use their results for the present study. Lumbar puncture is a relatively invasive examination that is performed in routine medical practice as part of the diagnosis and follow-up of patients with mild cognitive impairment.

6- What are the costs?

As a patient, you are in a situation of usual care and there will be no additional financial cost to you to be in this study: the neuroimaging examinations and the physiological measurements are funded by the ANR (whose management is provided by the sponsor), and neuropsychological examinations and Lumbar Puncture are part of a routine care consultation. Similarly, travel expenses for visits 1 (first cognitive assessment), 2 (neuropsychological assessment) and 4 (9-month follow-up: neuropsychological assessment) will be covered by a regular consultation. Depending on the centers (including CAEN), the visit 3 (neuroimaging) may lead to travel or accommodation expenses that will be funded by the sponsor up to compensation (travel, accommodation, meals).

7- What are the expected benefits?

Societal benefits: improved test conditions for neuropsychological assessments at hospital.

8- What are the possible risks and disadvantages of taking part?

Participation in the study requires some availability to go several times to the hospital (but most of visits will be scheduled as part of your usual care).

9- What are your rights as a participant in this research?

You can refuse to participate in this research without having to provide any justification and without any consequence on the continuation of your treatment. Likewise, you can withdraw at any time from the trial without justification, and without consequence on the continuation of your treatment or on the quality of the care which will be provided to you. To participate in this study you must be affiliated to a social security scheme. This research falls under the application of the Public Health Code. It is subject to the new regulatory system that applies to research "involving the human person", namely Law No. 2012-300 of 5 March 2012 on research involving the human person (called law JARDE) as amended by the order n° 2016-800 of June 16, 2016, and its decrees of application. This information is available on the Legifrance website (www.legifrance.gouv.fr). The coordinating investigator of this study is the Dr [insert Neurologist name]. The promoter of this test is the AP-HM, 80 rue BROCHIER 13005 MARSEILLE, with a SHAM insurance contract (Contract No. 145.166). This study has been originally approved by the Committee for the Protection of South-East Persons I (date 19/07/2017) and the authorization of the National Agency for the Safety of Drugs and Health Products (date 12/06/2017).

10- Confidentiality of the data

Your medical and socio-demographic data that are necessary for this research, will be the subject of a computerized processing in accordance with the law n° 2004-801 of August 6th, 2004 relative to the protection of persons and the processing of personal data, and modifying the law n° 78-17 of January 6th, 1978 on data processing, computers files and freedoms. These data will be anonymized and identified by a number and your initials. In no case will these data be identifiable. They will remain strictly confidential and can only be consulted by the medical team, the persons duly mandated by the promoter and possibly by the representatives of the Competent Authorities. In accordance with the provisions of the law on data processing, computers files and freedoms (Law No. 78-17 of January 6, 1978 amended by Law No. 2004-801 of August 6, 2004), you have the right to access and rectification of your personal data and the right of objection to the transmission of such data, protected by professional secrecy, likely to be used and processed in the context of this research. You can also access directly or through a doctor of your choice to all of your medical data (Article L 1111-7 of the Public Health Code). In case of any injuries or complications resulting from your participation in the study, you can have access to compensation according to the terms of Articles L. 1121-10 and L.1142-3 of the Public Health Code.

11- If you decide to participate

This document belongs to you and we invite you to discuss it with your doctor and / or your relatives. Participation in this study requires the signature of the form below named "Consent Form". You will need to have read and understood this information sheet and you will need to sign the document called "Free and Informed Consent". Your consent does not relieve the sponsor and the doctors of their responsibilities, you also retain all rights guaranteed by law. The Physician who takes care of you may at any time decide to interrupt your participation if he has new elements calling into question the conduct of this study. You can also decide to interrupt your participation at any time during the study, without any justification. You have the right to get information held by investigators about your health. To make your decision concerning your participation or not in this project, you have a reflection period of at least 1 week (minimum delay between the first visit this day, and the second visit corresponding to the neuropsychological assessment).

12- If you decide to not participate

You can refuse to participate without having to justify your decision. This will not affect your care or your relationship with the healthcare team.

To get more information
To request access to your data
To obtain the overall results of the study
You can contact Bernard François MICHEL (MD), Department of Behavioral Neurology, 270 Boulevard of SAINTE-MARGUERITE, BP 29, 13274 MARSEILLE cedex 9
Tel: 04 91 74 46 75

Free and Informed Consent

Neuropsychological Assessment and Aging

Project sponsor: Assistance Publique des Hôpitaux de MARSEILLE (AP-HM) 80 Rue BROCHIER, 13354 MARSEILLE Cedex 5.

Principal Investigator: Bernard François MICHEL (MD), Department of Behavioral Neurology, 270 Boulevard de SAINTE-MARGUERITE, BP 29, 13274 MARSEILLE cedex 9.

I, the undersigned, ... (first and last name), born on .... / .... / .... declares:

1- I freely agree to participate in the research involving the interventional category 1 human person entitled "Neuropsychological Assessment and Aging", without this relieving the research organizers from their responsibilities;
2- I understand that I have a period of reflection between the moment the information was given to me and the moment of the signature of this document;
3- I have been informed that I have the right to withdraw my consent to participate in the study at any time, without any justification and without changing my relationship with the nursing staff or my care;
4- I have been informed that I retain all my rights guaranteed by the law (The law n ° 2012-300 of March 5th, 2012 relating to the research involving the human person (known as law JARDE) / Public Health Code, title II of the book first relative research involving the human person);
5- I have been informed that this research was approved by the Committee of Protection of the People SOUTHEAST I on 19/07/2017 and the National Agency for the Safety of Drugs and health products on 12/06/2017;
6- I have been informed of the purpose, process, advantages and disadvantages of this research, and have been informed that it will be conducted in accordance with the Good Clinical Practices defined in the Official Bulletin published by the Ministry of Social Affairs and Social Affairs. 'Employment;
7- I was able to ask all the questions I wanted and received adapted answers that I clearly understood, and I have noted that I could complete this information throughout the study with the Pr / Dr [insert Neurologist name];
8- I have been informed that the Sponsor of this study is represented by the AP-HM (DRCI 80, rue BROCHIER, 13354 Marseille Cedex 05), and has subscribed a contract of insurance "Civil Liability" in accordance with the law in force with SHAM (contract No. 145.166);
9- I have been informed of the anonymous use of the data concerning me, collected as part of this research by computerized treatment. The presentation of the results of the study will not allow my direct or indirect identification;
10- I have been informed that these data can only be consulted by the investigators of the study and the promoter or by persons mandated by the sponsor and bound by professional secrecy, or by persons mandated by the administrative, health and judicial authorities;

11- I have been informed that I could if I wish to access these data, to check them and to request modifications if necessary, according to the law in force (guaranteed by the articles 39 and 40 of the law n ° 78-17 of January 6th, 1978 on data processing, computers files and freedoms, and subsequent laws including Law No. 2004-801 of August 6, 2004);
12- I have noted that any new information occurring during the study, likely to call into question my participation, will be communicated to me as soon as possible;
13- I have understood that the sponsor or the investigator can decide at any moment to interrupt the study;
14- I am affiliated to a social security scheme;
15- I have been informed that the overall results of the study may be communicated to me in accordance with article L1122-1 of the Public Health Code;
16- I have understood that it is possible for me to join the Pr / Dr .... for any further information with the following phone number .....
17- I have understood that if I agree to participate in this research, I must sign this document;
18- Do not allow my identification.

Having had enough time for reflection before making my decision:

☐ **I freely and voluntarily agree to participate in the research AGING under the conditions specified above.**

☐ **I accept two additional neuroimaging examinations (MRI and PET) to complete my assessment during a third visit, in case I am selected for this phase of the study.**

Date……. **Date…….**

Name and Signature of the patient **Name and Signature of the Investigator**

Done in duplicate (one for the investigating physician and one for the patient)