

**Supplementary Material for “Impact of Natalizumab on Productivity and Ability to Work in Patients with Multiple Sclerosis in France: The TITAN Study”**

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**Supplementary Table S1** Timeline of data collection

| Information collected                                                                  | Data collected from investigator (visit to doctor) |          |           |           | Data collected from patient (telephone interviews) |          |           |           |
|----------------------------------------------------------------------------------------|----------------------------------------------------|----------|-----------|-----------|----------------------------------------------------|----------|-----------|-----------|
|                                                                                        | BL                                                 | 6 months | 12 months | 18 months | BL                                                 | 6 months | 12 months | 18 months |
| Check eligibility criteria                                                             | X                                                  |          |           |           |                                                    |          |           |           |
| <b>Data collected from the investigating physicians (investigator's CRF)</b>           |                                                    |          |           |           |                                                    |          |           |           |
| Sociodemographic data (initials, sex, date of birth, etc.)                             | X                                                  |          |           |           |                                                    |          |           |           |
| Clinical characteristics at baseline (date of MS diagnosis, form of MS, etc.)          | X                                                  |          |           |           |                                                    |          |           |           |
| MS treatment                                                                           | X                                                  | X        | X         | X         |                                                    |          |           |           |
| Number of flares                                                                       | X                                                  | X        | X         | X         |                                                    |          |           |           |
| EDSS score                                                                             | X                                                  | X        | X         | X         |                                                    |          |           |           |
| Information on the primary caregiver                                                   | X                                                  |          |           |           |                                                    |          |           |           |
| <b>Data collected from the patients (patient telephone interviews)</b>                 |                                                    |          |           |           |                                                    |          |           |           |
| Time/sick leave                                                                        |                                                    |          |           |           | X                                                  | X        | X         | X         |
| Questionnaire "Professional situation and consequences of MS on professional activity" |                                                    |          |           |           | X                                                  | X        | X         | X         |
| WPAI-MS                                                                                |                                                    |          |           |           | X                                                  | X        | X         | X         |
| EQ-5D-3L                                                                               |                                                    |          |           |           | X                                                  | X        | X         | X         |
| MSIS-29                                                                                |                                                    |          |           |           | X                                                  | X        | X         | X         |

*BL* baseline, *CRF* case report form, *EDSS* Expanded Disability Status Scale, *EQ-5D-3L* 3-Level EuroQol–5 Dimensions, *MS* multiple sclerosis, *MSIS-29* Multiple Sclerosis Impact Scale, *WPAI-MS* Work Productivity and Activity Impairment–Multiple Sclerosis

**Supplementary Table S2** Baseline characteristics of enrolled patients

| Characteristic                                                           |            | Total<br>( <i>N</i> = 185) |
|--------------------------------------------------------------------------|------------|----------------------------|
| Female sex, <i>n</i> (%)                                                 |            | 140 (75.7)                 |
| Age at baseline, years, mean (SD)                                        |            | 36.4 (9.5)                 |
| Presence of $\geq 1$ comorbidity, <i>n</i> (%)                           |            | 39 (21.1)                  |
| Duration of MS at baseline, years, mean (SD)                             |            | 4.7 (5.5)                  |
| EDSS score at diagnosis, <sup>a</sup> mean (SD)                          |            | 1.4 (1.3)                  |
| EDSS score at baseline, <sup>b</sup> mean (SD)                           |            | 1.9 (1.4)                  |
| Number of relapses in the 12 months prior to inclusion, <i>n</i> (%)     | 0          | 33 (18.0)                  |
|                                                                          | 1          | 92 (50.3)                  |
|                                                                          | 2          | 45 (24.6)                  |
|                                                                          | 3 and more | 13 (7.1)                   |
| At least one treatment in the 12 months prior to inclusion, <i>n</i> (%) |            | 125 (67.9)                 |

<sup>a</sup>Mean value calculated per the number of patients with data (*n* = 127)

<sup>b</sup>Mean value calculated per the number of patients with data (*n* = 180)

EDSS Expanded Disability Status Scale, MS multiple sclerosis

**Supplementary Table S3** Baseline employment of enrolled patients

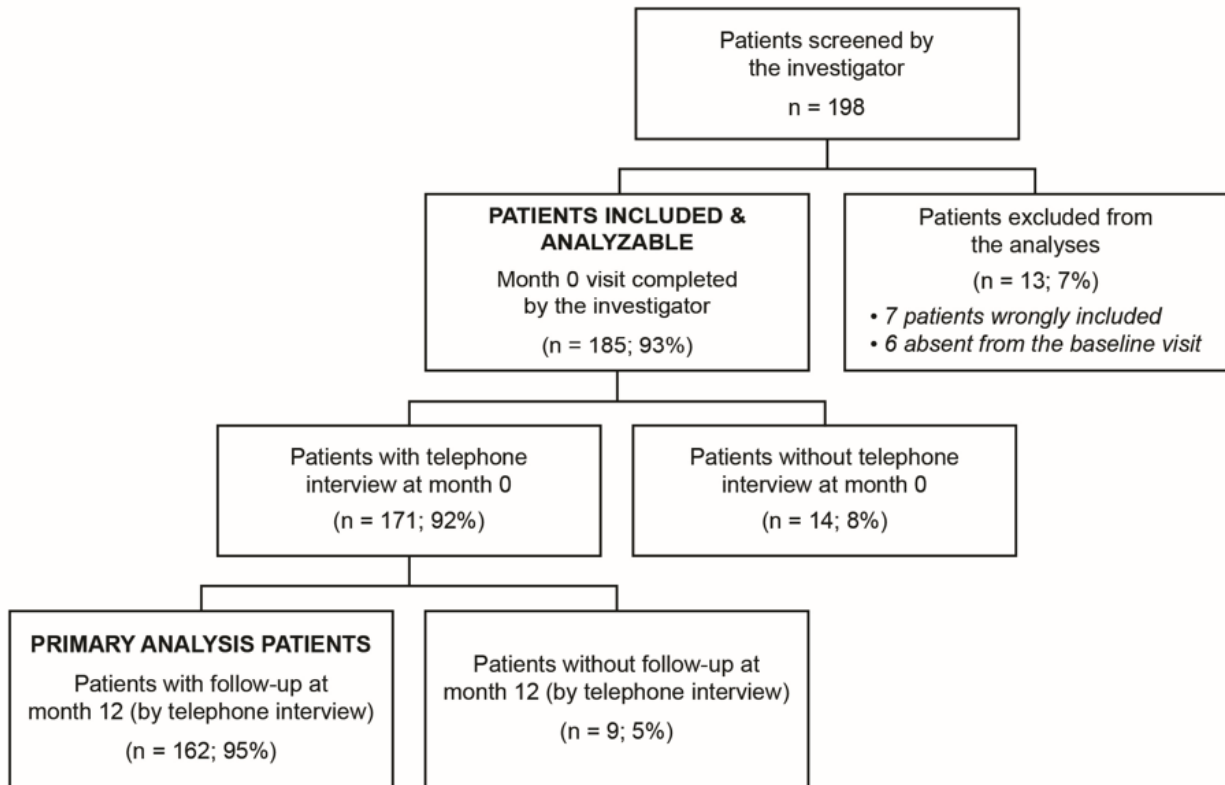
|                                                           | Type of employment                      | Total<br>( <i>N</i> = 185) |
|-----------------------------------------------------------|-----------------------------------------|----------------------------|
| Paid job, <i>n</i> (%) <sup>a</sup>                       |                                         | 167 (98.8)                 |
|                                                           | Craftsman, shopkeeper, entrepreneur     | 9 (5.4)                    |
|                                                           | Intermediate occupation                 | 3 (1.8)                    |
| Professional category, <i>n</i> (%) <sup>b</sup>          | Executive, engineer, liberal profession | 38 (22.9)                  |
|                                                           | Employee                                | 114 (68.7)                 |
|                                                           | Worker                                  | 2 (1.2)                    |
|                                                           | Private sector employee                 | 97 (58.4)                  |
|                                                           | Public sector employee                  | 56 (33.7)                  |
| Employee type, <i>n</i> (%) <sup>b</sup>                  | Self-employed                           | 10 (6.0)                   |
|                                                           | Other                                   | 3 (1.8)                    |
|                                                           | Open-ended contract                     | 125 (82.2)                 |
| Type of contract, <i>n</i> (%) <sup>c</sup>               | Fixed-term contract                     | 19 (12.5)                  |
|                                                           | Other (temporary worker, intermittent)  | 8 (5.3)                    |
| Number of worked hours (per week), mean (SD) <sup>b</sup> |                                         | 33.8 (8.3)                 |

<sup>a</sup>Percentages calculated per the number of patients with data at baseline interview (*n* = 169)

<sup>b</sup>Percentage calculated per the number of employed patients with data (*n* = 166)

<sup>c</sup>Percentage calculated per the number of employed patients with data on type of contract (*n* = 152)

**Supplementary Fig. S1.** TITAN study disposition



## Supplementary Methods

Phone interviews were conducted as soon as possible after the investigator informed Kappa Santé, a contract research organization, of inclusion of the patient in the study. All interview questions were discussed with the patient only. The interviewer adapted questions as necessary to allow for an exhaustive collection of information.

Interviews were conducted with introductory scripts A and B, followed by information collection in the questionnaires detailed below.

Primary and follow-up phone interviews, detailed in parts 1 and 2 below, were conducted at inclusion and 6, 12, and 18 months after initiation of natalizumab.

During the coronavirus disease 2019 (COVID-19) lockdown period, an additional phone interview, detailed in part 3, was conducted.

### Part 1: Primary Phone Interview

#### A. Getting in touch

Hello, I am [Surname / First name Investigator] from Kappa Santé. I would like to speak to Mrs. / Mr. [Patient Name / First Name] about the TITAN study, which was proposed to him/her by his/her doctor, Dr. [Name / First Name Doctor]. This study concerns his treatment with TYSABRI® for his/her multiple sclerosis (MS), and his/her work.

👉 If the patient is not available, schedule a Callback or an Appointment.

👉 If the patient is available, continue the interview.

#### B. Introduction and general discussion

A few days ago, your doctor, Dr. [Last name / First name Doctor], asked you to take part in an observational study on MS, called the TITAN study. The objective of this study is to assess the impact of treatment with TYSABRI on the ability to work in patients with MS and their caregivers in France.

⇒ **If the patient asks about the caregiver:** A caregiver is a person who accompanies you and helps you in everyday life. If you have a caregiver, he (or she) also has the opportunity to participate in this study.

This study has been proposed to you because you are between 18 and 65 years old, you have a paid professional activity, and you have recently started or will soon start treatment with TYSABRI for the treatment of your MS.

I am part of the research team working in collaboration with your doctor. I will call you four times (today, then in 6 months, 12 months and 18 months) to collect information on your professional activity and your quality of life with regard to your MS. I specify that the data concerning you collected during the study will be kept in a secure computer system, without your names and contact details appearing. *(We use a secure directory with your contact details, to which only our team has access. This directory will be destroyed at the end of the study, so that your participation remains anonymous.)*

**Before starting this interview, could you confirm your:**

**Gender:** ☐Male ☐Female

**Age at inclusion:**   years

**Do you have the Patient Guide that your doctor gave you at the start of the study?**

☐Yes ☐No

⇒ **If No: Can you pick it up?** ☐Yes ☐No

⇒ This notebook serves as a support for the collection of information during our interviews. You will find the questions you will be asked during our calls and help to find the information required before the interview. You can also write notes to remember things to tell us on our next call.

Your doctor has recently initiated a new treatment for your MS.

**Have you ever received the treatment, called TYSABRI?**

☐Yes, Date of first intake:   /     (DD/MM/YYYY)

☐No, Date of the first scheduled intake:   /     (DD/MM/YYYY)

### **C. Professional situation and consequences of MS on professional activity**

I will begin this interview with a questionnaire on your professional situation and the consequences of MS on your professional activity.

**What is your level of education?** ☐ Level below the baccalaureate  
☐ Bachelor's degree or higher

**C.1. Module 1: professional situation at the start of treatment with TYSABRI**

The following questions are about your work situation today.

**Do you currently have a paid job** (patient under contract, or considered active for liberals)?  
☐ Yes ☐ No

👉 If No: Attention, patient not eligible.

👉 If yes:

**Box 1:**

**What is your occupation?** .....

**What is your professional category?**

- ☐ Farmer (example: breeder)
- ☐ Craftsman, merchant, entrepreneur (examples: self-employed electrician, manager)
- ☐ Intermediate occupation (examples: teacher, nursery nurse, technician, nurse)
- ☐ Executive, engineer, liberal profession (examples: business executive, doctor, journalist)
- ☐ Employee (examples: administrative agent, secretary, salesman, waiter, childminder)
- ☐ Worker (examples: operator, driver, mason, storekeeper)
- ☐ No occupation → Attention, patient not eligible.

**In which sector of activity?**

- ☐ Agriculture, forestry and fishing
- ☐ Manufacturing, mining and other industries
- ☐ Construction
- ☐ Wholesale and retail trade, transport, accommodation and catering
- ☐ Information and communication
- ☐ Financial and insurance activities
- ☐ Real estate activities
- ☐ Specialized, scientific and technical activities
- ☐ Administrative and support service activities
- ☐ Public administration, education, human health and social action



☐ Other service activities

**Are you currently:**

- ☐ Private sector employee
- ☐ Public sector employee
- ☐ Non-salaried (liberal profession, agricultural or not)
- ☐ Other, give details .....

 **If employee:** As an employee, what type of contract do you currently have:

- ☐ CDI
- ☐ CDD, specify the duration:    (months)
- ☐ Other (temporary, intermittent, etc), specify: .....

**What is the duration of this professional activity:**

**Start date:**   /   /    (DD/MM/YYYY)

**End date:**   /   /    (DD/MM/YYYY)

☐ Not applicable (CDI, liberal activity, ...)

**Do you carry out your professional activity** (apart from therapeutic half-time, which should not be considered here as part time):

- ☐ Full-time
- ☐ Part-time (excluding therapeutic half-time)
  - \* What percentage of time?   %

**How many hours do you work per week\*?** (according to contract 100%)   h/ wk

*\* hourly rate to be smoothed for people in liberal activity.*

**Does your job allow you some flexibility to adapt to your MS (possibility of teleworking, flexible hours, etc)?**

- ☐ Yes, quite flexible
- ☐ Yes, not very flexible
- ☐ No, not at all flexible

**Do you have a disability pension related to your MS?** ☐ Yes ☐ No

**C.2. Module 2: changes in the professional situation in the 12 months preceding the start of treatment with TYSABRI**

We are now going to focus on the evolution of your professional situation over the period before treatment with TYSABRI; we are going to trace all the changes over the period from [calculated date corresponding to 12 months before the 1<sup>st</sup> dose of treatment] to today.

*Interviewer Prompt: Free conversation, clarifying the time period: 'Is it easy for you to identify this period of X months?' 'Do you remember events that happened in your life during this period to help you situate yourself in time?'*

For these questions, we are interested in the evolution of your work (excluding work stoppages or therapeutic half-time)

**1) Over this period, have you always had the same job as the one described today (without interruption of contract)?**

- ☐ Yes, I have always had the same job without change or interruption of contract  
☐ No, I haven't always had the same job

**2) Over this period, did you always have the same weekly working time (according to your contract)?**

- ☐ Yes, I have always had the same weekly working time  
☐ No, I haven't always had the same weekly working time

➡ If Yes to (1) AND (2): It is noted, you confirm that you have therefore always had [profession] as a profession, on a [full/part] time basis with a working time of [duration] hours/week over the entire period from [calculated date corresponding to 12 months before the first dose of treatment] to today?

☐ Yes ☐ No

➡ If Yes, *continue directly to Module 3*

➡ If No, *go to the next question and describe the professional changes*

➡ If No to (1) OR (2): Can we describe your professional development over the whole of this period:

**On what date(s) did you experience changes in your professional situation?**

**Box 2: to be repeated 'n' times depending on the number of change(s)**

**Change 'n':**

**Date of change** \_\_/\_\_/\_\_\_\_ (DD/MM/YYYY)

**After this date, did you have a paid professional activity?**

☐ Yes ☐ No

➡ If No: **were you unemployed?** ☐ Yes ☐ No

👉 If Yes: Go back to Box 1

- At the end of the changes of professional activity go to module 3

### C.3. Module 3: work stoppages in the 12 months preceding the start of TYSABRI

- For the employees, the investigator will collect medical prescriptions for work stoppage. For the self-employed, any work stoppage will be noted by the investigator (including whether work stoppage has or has not been the subject of a formal prescription/declaration).

**During the 12 months preceding the start of TYSABRI, did you have any work stoppages?**

☐Yes ☐No

👉 If yes:

**How many work stoppages?**    work stoppages

**Do you have your health insurance statement with you? (available on the AMELI account):**

☐Yes ☐No

- Guide and advise the patient on the use of the AMELI account, with reference to the support document (patient guide) given to him or her on inclusion in the study.

👉 If Yes: can we note, using this document, the dates on which you had work stoppages?

👉 If No: can you postpone the dates of these stops? In addition, I suggest that I call you back soon so that we can check them using the statement.

Dates of work stoppages:

| #   | Start date (DD/MM/YYYY)                                                                                  | End date (DD/MM/YYYY)                                                                                    | MS-related                                               |
|-----|----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| 1   | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 2   | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| ... | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| not | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="checkbox"/> Yes <input type="checkbox"/> No |

In the 12 months prior to starting TYSABRI, did you have any therapeutic “half-time” periods? ☐Yes ☐No

↳ If yes:

Dates of therapeutic half-time periods:

| #   | Start date<br>(DD/MM/YYYY) | End date<br>(DD/MM/YYYY) | % of time worked | MS-related                                               |
|-----|----------------------------|--------------------------|------------------|----------------------------------------------------------|
| 1   | __/__/____                 | __/__/____               | __%              | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 2   | __/__/____                 | __/__/____               | __%              | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| ... | __/__/____                 | __/__/____               | __%              | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| not | __/__/____                 | __/__/____               | __%              | <input type="checkbox"/> Yes <input type="checkbox"/> No |

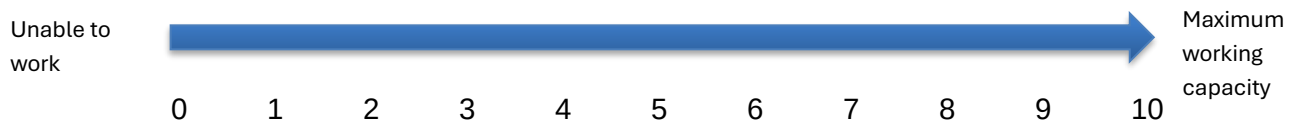
#### C.4. Module 4: demands of professional activity and ability to meet them

Is your work demanding:

- Especially mentally? ☐Yes ☐No
- Especially physically? ☐Yes ☐No
- Mentally and physically? ☐Yes ☐No

Current ability to work:

On a scale of 0 to 10, let's assume that your ability to work at its highest level is worth 10 points. How many points would you give your current ability? (0 means that you are currently unable to work, and 10 means that you are at maximum working capacity)



Current ability to work in relation to the job requirements:

|                                                                                                   | Very good                | Pretty good              | Mean                     | Poor                     | Bad                      |
|---------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| How do you rate your current ability to work compared to the <b>physical demands</b> of your job? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| How do you rate your current ability to work compared to the <b>mental demands</b> of your job?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Management of TYSABRI monthly treatment intake:

To receive the infusion of TYSABRI each month, what organization is planned?

- ☐ The doctor prescribes a work stoppage; specify the duration of the work stoppage: \_\_\_\_ days
- ☐ You adapt your working hours; specify (*type of working time arrangement, shift in working days, etc*): \_\_\_\_\_
- ☐ Appointments are scheduled on non-working days
- ☐ You take an RTT or another compensation day
- ☐ Other; specify: \_\_\_\_\_

**D. Work Productivity and Activity Impairment Questionnaire–Multiple Sclerosis v2.2  
(WPAI-MS)<sup>1</sup>**

**E. 3-Level EuroQol–5 Dimensions (EQ-5D-3L)<sup>2</sup>**

**F. Multiple Sclerosis Impact Scale (MSIS-29)<sup>3</sup>**

**G. Presence of a caregiver**

As I presented to you, the objective of this study is to assess the impact of treatment with TYSABRI on the ability to work of patients with MS and their caregivers in France.

A caregiver is a person close to you, who accompanies you and helps you in everyday life on a non-professional basis. *When several people share this role, the so-called “main” carer is the one who provides the link and coordinates the actions of the other carers – including professional carers.*

**As part of your MS, do you have a caregiver that you consider to be the main person to accompany and assist you on a daily basis?**

- ☐ Yes, I have a primary caregiver (*natural/family – non-professional*)
- ☐ Yes, but my caregiver is officially paid to assist me (*professional*)
- ☐ No, several people can help me according to my needs
- ☐ No, I don't have any helper

👉 **If Caregiver/Family, What is your relationship to your primary caregiver?**

- ☐ Joint
- ☐ Relative

☐ Brother, sister

☐ Other (explain, list: .....)

👉 If Caregiver/family, Do you live together? ☐ Yes ☐ No

👉 If Caregiver/family, Over the period from [calculated date corresponding to 12 months before the first dose of treatment] to today, how much time is devoted to you on average per week by your caregiver to help you with regard to your MS?  
\_ \_ hours/weeks

#### H. End of call/appointment

*At the end of the call, thank the patient for the time devoted to the interview and offer him/her/them to make an appointment for the next call in 6 months (otherwise, inform him/her/them of the theoretical date of the call).*

## Part 2: Follow-up Phone Interviews (Month 6 [M6], M12, M18)

### A. Getting in touch

Hello, I am [Surname / First Name Investigator] from Kappa Santé. I would like to speak to Mrs. / Mr. [Patient Name / First Name] about the TITAN study in which they are participating with Dr. [Name / First Name Doctor]. This study concerns his/her MS and his/her work.

↳ If the patient is not available, schedule a Callback or an Appointment.

↳ If the patient is available, continue the interview.

### B. Introduction and general discussion

I am calling you today as part of your participation in the TITAN study on MS, carried out with your doctor, Dr. [Last name / First name Doctor]. I remind you that this study aims to assess the impact of treatment with TYSABRI on the ability to work in patients with MS and their caregivers in France.

It is planned that we will call you 6, 12, and 18 months after the beginning of your participation in the study to take stock of your professional situation and the impact of your MS on your professional activity. This call corresponds to the follow-up at [6 / 12 / 18] months.

**Before starting this interview, do you have the Patient Guide that was given to you at the start of the study?** ☐Yes ☐No

↳ If No: Can you pick it up? ☐Yes ☐No

⇒ This notebook serves as a support for the collection of information during our interviews. You will find the questions you will be asked during our calls and help to find the necessary information before the interview. You can also write notes to remember things to tell us on our next call.

### C. Professional situation and consequences of MS on professional activity

I suggest that you begin this interview with a questionnaire on your professional situation and the effects of MS on your professional activity.

During our last call on [date of last call], you told us that your profession was [profession], on a [full/part] time basis with a working time of [duration] hours/week.

**Has this situation changed from [date of last call] to today?**

☐ Yes ☐ No

↳ If Yes, continue to Module 1

➤ If No, go directly to Module 3

### C.1. Module 1: professional situation today

The following questions are about your work situation today.

**Do you currently have a paid job** (patient under contract or considered active for liberals)?

☐ Yes ☐ No

➤ If yes :

#### Box 1:

**What is your occupation?** .....

**What is your professional category?**

- ☐ Farmer (example: breeder)
- ☐ Craftsman, merchant, entrepreneur (examples: self-employed electrician, manager)
- ☐ Intermediate occupation (examples: teacher, nursery nurse, technician, nurse)
- ☐ Executive, engineer, liberal profession (examples: business executive, doctor, journalist)
- ☐ Employee (examples: administrative agent, secretary, salesman, waiter, childminder)
- ☐ Worker (examples: operator, driver, mason, storekeeper)
- ☐ No occupation

**In which sector of activity?**

- ☐ Agriculture, forestry and fishing
- ☐ Manufacturing, mining and other industries
- ☐ Construction
- ☐ Wholesale and retail trade, transport, accommodation and catering
- ☐ Information and communication
- ☐ Financial and insurance activities
- ☐ Real estate activities
- ☐ Specialized, scientific and technical activities
- ☐ Administrative and support service activities
- ☐ Public administration, education, human health and social action
- ☐ Other service activities

**Are you currently:**

- ☐ Private sector employee



- ☐ Public sector employee
- ☐ Non-salaried (liberal profession, agricultural or not)
- ☐ Other, give details .....

🔗 **If employee:** As an employee, what type of contract do you currently have:

- ☐ CDI
- ☐ CDD, specify the duration: / /  (months)
- ☐ Other (temporary, intermittent, etc), specify: .....

**What is the duration of this professional activity:**

**Start date:** / /  (DD/MM/YYYY)

**End date:** / /  (DD/MM/YYYY)

☐ Not applicable (CDI, liberal activity, ...)

**Do you carry out your professional activity** (apart from therapeutic half-time, which should not be considered here as part time):

- ☐ Full time
- ☐ Part time (excluding therapeutic half-time)
  - \* What percentage of time? %

**How many hours do you work per week\*?** (according to contract 100%)  h/ wk

*\* hourly rate to be smoothed for people in liberal activity.*

**Does your job allow you some flexibility to adapt to your MS (possibility of teleworking, flexible hours, etc)?**

- ☐ Yes, quite flexible
- ☐ Yes, not very flexible
- ☐ No, not at all flexible

**Do you have a disability pension related to your MS?** ☐ Yes ☐ No

## C.2. Module 2: changes in the professional situation since the last call

We are now going to look at changes in your professional situation since the last call; we will trace all changes over the period going from [\[date of the previous call\]](#) to today.

*Free conversation, clarifying the time period: 'Is it easy for you to identify this period of X months?'  
'Do you remember events that happened in your life during this period to help you situate yourself in time?'*

For these questions, we are interested in the evolution of your work (excluding work stoppages or therapeutic half-time).

**3) Over this period, have you always had the same job as the one described today (without interruption of contract)?**

- ☐ Yes, I have always had the same job without change or interruption of contract  
☐ No, I haven't always had the same job

**4) Over this period, did you always have the same weekly working time (according to your contract)?**

- ☐ Yes, I have always had the same weekly working time  
☐ No, I haven't always had the same weekly working time

➡ If Yes to (1) AND (2): It is noted you confirm that you have, therefore, always had [profession] as a profession, on a [full/part] time basis with a working time of [duration] hours/week over the entire period from [date of last call] to today?

- ☐ Yes ☐ No

➡ If Yes, *continue directly to Module 3*

➡ If No, *go to the next question and describe the professional changes*

➡ If No to (1) OR (2): Can we describe your professional development over the whole of this period?

**On what date(s) did you experience changes in your professional situation?**

**Box 2: to be repeated 'n' times depending on the number of change(s)**

**Change 'n':**

**Date of change** \_ \_ / \_ \_ / \_ \_ \_ \_ (DD/MM/YYYY)

**After this date, did you have a paid professional activity?**

- ☐ Yes ☐ No

➡ If No: **were you unemployed?**

☐ Yes

☐ No

➡ If Yes: **Go back to Box 1**

➡ **At the end of the changes of professional activity, go to Module 3**

**C.3. Module 3: work stoppages since the last call**

➡ *For the employees, the investigator will collect the judgments having been the subject of a prescription by their doctor. For the self-employed, the investigator will collect any work stoppage (including if it has yet to be the subject of a formal prescription/declaration).*

Since [date of last call], approximately 6 months ago, have you had any work stoppages?

☐Yes

☐No

↳ If yes:

How many work stoppages? \_ \_ \_ work stoppages

Do you have your health insurance statement with you? (available on the AMELI account):

☐Yes

☐No

☛ Guide and advise the patient on using the AMELI account, with reference to the support document (patient guide) given to him on inclusion in the study.

↳ If Yes: can we note, using this document, the dates on which you had work stoppages?

↳ If No: can you postpone the dates of these stops? In addition, I suggest I call you back soon so we can check them using the statement.

Dates of work stoppages:

| #   | Start date (DD/MM/YYYY) | End date (DD/MM/YYYY) | MS-related                                               |
|-----|-------------------------|-----------------------|----------------------------------------------------------|
| 1   | _ _ / _ _ / _ _ _ _     | _ _ / _ _ / _ _ _ _   | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 2   | _ _ / _ _ / _ _ _ _     | _ _ / _ _ / _ _ _ _   | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| ... | _ _ / _ _ / _ _ _ _     | _ _ / _ _ / _ _ _ _   | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| not | _ _ / _ _ / _ _ _ _     | _ _ / _ _ / _ _ _ _   | <input type="checkbox"/> Yes <input type="checkbox"/> No |

Since [date of last call], approximately 6 months ago, have you had any therapeutic “half-time” periods? ☐Yes ☐No

↳ If yes :

Dates of therapeutic half-time periods:

| #   | Start date<br>(DD/MM/YYYY) | End date<br>(DD/MM/YYYY) | % of time<br>worked | MS-related                                               |
|-----|----------------------------|--------------------------|---------------------|----------------------------------------------------------|
| 1   | _ _ / _ _ / _ _ _ _        | _ _ / _ _ / _ _ _ _      | _ _ %               | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 2   | _ _ / _ _ / _ _ _ _        | _ _ / _ _ / _ _ _ _      | _ _ %               | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| ... | _ _ / _ _ / _ _ _ _        | _ _ / _ _ / _ _ _ _      | _ _ %               | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| not | _ _ / _ _ / _ _ _ _        | _ _ / _ _ / _ _ _ _      | _ _ %               | <input type="checkbox"/> Yes <input type="checkbox"/> No |

#### C.4. Module 4: demands of professional activity and ability to meet them

##### Is your current job demanding:

- Especially mentally? ☐Yes ☐No
- Especially physically? ☐Yes ☐No
- Mentally and physically? ☐Yes ☐No

##### Current ability to work:

On a scale of 0 to 10, let's assume that your ability to work at its highest level is worth 10 points. How many points would you give your current ability? (*0 means that you are currently unable to work, and 10 means that you are at maximum working capacity*)



##### Current ability to work in relation to the job requirements:

|                                                                                                   | Very good                | Pretty good              | Mean                     | Poor                     | Bad                      |
|---------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| How do you rate your current ability to work compared to the <b>physical demands</b> of your job? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| How do you rate your current ability to work compared to the <b>mental demands</b> of your job?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

##### Management of TYSABRI monthly treatment intake:

To receive the infusion of TYSABRI each month, what organization is planned?

- ☐ The doctor prescribes a work stoppage; specify the duration of the work stoppage: \_\_\_\_ day
- ☐ You adapt your working hours; specify (*type of working time arrangement, shift in working days, etc*): \_\_\_\_\_
- ☐ Appointments are scheduled on non-working days
- ☐ You take an RTT or another compensation day
- ☐ Other; specify: \_\_\_\_\_

#### D. WPAI-MS<sup>1</sup>

E. EQ-5D-3L<sup>2</sup>

F. MSIS-29<sup>3</sup>

G. Presence of a caregiver

A caregiver is someone close to you who accompanies you and helps you in everyday life on a non-professional basis. *When several people share this role, the so-called “main” carer is the one who provides the link and coordinates the actions of the other carers – including professional carers.*

Since our last call on **[date of the previous call]**, has your caregiver changed?

☐Yes ☐No

↳ **If yes, do you have a caregiver that you consider to be the main person to accompany and assist you on a daily basis?**

☐Yes, I have a new primary caregiver (*natural/family – non-professional*)

☐Yes, but my caregiver is officially paid to assist me (*professional*)

☐No, several people can help me according to my needs

☐No, I don't have any helper

↳ **If Caregiver/family: What is your relationship with your primary caregiver?**

☐Joint

☐Relative

☐Brother, sister

☐Other (explain) list: .....

↳ **If Caregiver/family: Do you live together?** ☐Yes ☐No

↳ **If Caregiver/family on the previous call, or New Caregiver declared today:**  
**In the period from **[date of last call]** to today, how much time does your carer devote to you on average per week to help you with your MS?**  hours/weeks

H. End of call/appointment

*[Call to M6 and M12] At the end of the call, thank the patient for the time devoted to the interview and offer him/her/them to make an appointment for the next call in 6 months (otherwise, inform him/her/them of the theoretical date of call).*

*[Call to M18] At the end of the call, thank the patient for the time devoted to the interview. Inform him/her/them that this was the last call and thank him for his/her/their participation in the TITAN study. Tell him/her/them that if he/she/they wishes, he/she/they can ask his/her/their doctor for the study results once they are available.*

### Part 3: Additional Patient Questionnaire Specific to the Lockdown Period (COVID-19)

**During confinement, did you continue your usual face-to-face work?**

☐Yes ☐No ☐Not applicable

**If yes, period(s) of face-to-face work** (possibility of adding several periods):

Start date of face-to-face work: / /  (DD/MM/YYYY)

End date of face-to-face work: / /  (DD/MM/YYYY)

**During confinement, did you continue your usual work by telecommuting?**

☐Yes ☐No ☐Not applicable

**If yes, period(s) of telecommuting** (possibility of adding several periods):

Start date of face-to-face work: / /  (DD/MM/YYYY)

End date of face-to-face work: / /  (DD/MM/YYYY)

**During confinement, did you experience periods of unemployment?**

☐Yes ☐No ☐Not applicable

**If yes, period(s) of unemployment** (possibility of adding several periods):

Unemployment start date: / /  (DD/MM/YYYY)

Unemployment end date: / /  (DD/MM/YYYY)

Type of unemployment:

☐No job (unemployment before confinement, end of fixed-term contract, etc)

☐Partial unemployment (company closure, position not possible in teleworking): %  
of working time unemployed: %

☐MS-related

☐Other, give details: \_\_\_\_\_

**During confinement, did you experience periods of sick leave?**

☐Yes ☐No ☐Not applicable

**If yes, period(s) of work stoppage** (possibility of adding several periods):

Start date of the work stoppage: / /  (DD/MM/YYYY)

End date of the work stoppage: / /  (DD/MM/YYYY)

Type of work stoppage:

☐For childcare

☐COVID-19

☐MS-related

☐Other health reason

☐ Other, give details: \_\_\_\_\_

**On what date did you resume working conditions the same as before confinement?**

\_\_/\_\_/\_\_\_\_ (DD/MM/YYYY)

☐ Not included to date

☐ Not concerned

**Clarification/comment on the employment situation during the confinement period:**

|  |
|--|
|  |
|--|



## **Supplementary references**

1. Reilly MC, Zbrozek AS, Dukes EM. The validity and reproducibility of a work productivity and activity impairment instrument. *Pharmacoeconomics*. 1993;4(5):353–65.
2. Rabin R, de Charro F. EQ-5D: a measure of health status from the EuroQol Group. *Ann Med*. 2001;33(5):337–43.
3. Hobart J, Lamping D, Fitzpatrick R, Riazi A, Thompson A. The Multiple Sclerosis Impact Scale (MSIS-29): a new patient-based outcome measure. *Brain*. 2001;124(5):962–73.