Patient/carer group or patient expert statement

Thank you for agreeing to give us your views on the technology and the way it should be used in the NHS.

Patients and patient advocates can provide a unique perspective on the technology, which is not typically available from the published literature.

To help you give your views, we have provided a template. The questions are there as prompts to guide you. You do not have to answer every question. Please do not exceed the 8-page limit.

About you

Your name: Head of Research and Information

Name of your organisation (if applicable): Multiple Sclerosis Society

I am an employee of a patient organisation that represents patients with the condition for which NICE is considering the technology? If so, give your position in the organisation where appropriate (e.g. policy officer, trustee, member, etc) √

The information contained in this document represents the views of the Multiple Sclerosis (MS) Society. The MS Society is the UK's largest membership organisation for people affected by MS (current membership of approximately 44,000). Multiple Sclerosis is the most common disabling neurological disorder affecting young adults and it is estimated that around 85,000 people in the UK have MS. The MS Society is dedicated to supporting everyone whose life is touched by MS and provides: respite care, a freephone MS Helpline, grants for home adaptations and mobility aids, education and training, specialist MS nurses and a wide range of award wining information. The MS Society also funds around 50 vital MS research projects in the UK into the cause, cure and care of MS.

In completing this document, the MS Society has drawn on the opinions of a number of consultant neurologists with a special interest in MS, and importantly on the opinions of people with MS.

What do patients and/or carers consider to be the advantages and disadvantages of the technology for the condition?

1. **Advantages**
(a) Please list the specific aspect(s) of the condition that you expect the technology to help with. For each aspect you list please describe, if possible, what difference you expect the technology to make.

Tysabri is an important and welcome new therapy for the treatment of highly relapsing remitting multiple sclerosis (MS), specifically treatment naive patients with rapidly evolving severe disease and patients that are failing to respond adequately to existing disease modifying therapies.

Tysabri is currently licensed by the EMEA (and the US FDA) for the treatment of aggressive relapsing forms of MS under the following prescribing guidelines:

- **patients with high disease activity despite treatment with a beta-interferon**
- **patients with rapidly evolving severe relapsing-remitting multiple sclerosis**

For the above indications, there are no licensed and effective alternative therapies currently available; hence Tysabri offers an important breakthrough in the modification of the course of MS.

Advantages:
As opposed to current disease modifying drugs used for the treatment of relapsing MS that are given as injection either daily, or on multiple occasions each week, Tysabri offers the following advantages:

- **clinically significant incremental reduction in annual relapse rates**
- **clinically significant incremental reduction in the risk of disability progression**
- **clinically significant impact on MRI outcomes**
- **a significant effect on health-related quality of life**
- **the potential to reduce the number of hospital visits as a result of MS**
- **monthly infusion in a healthcare setting**
- **active monitoring of disease activity as part of proposed protocols for use**
- **well tolerated with limited side effects**

(b) Please list any short-term and/or long-term benefits that patients expect to gain from using the technology. These might include the effect of the technology on:

- the course and/or outcome of the condition
- physical symptoms
- pain
- level of disability
- mental health
- quality of life (lifestyle, work, social functioning etc.)
- other quality of life issues not listed above
- other people (for example family, friends, employers)
- other issues not listed above.

It should be noted that Tysabri will not be an appropriate treatment for all people affected by MS. The number of patients likely to derive maximum benefit from it is small (Biogen estimate approximately 2500 people in the UK under the current prescribing criteria)

Short-term benefits:
Tysabri use, based on the current available data from clinical trials, could offer the following short-term benefits

- **reduction in the accumulation of lesions in the CNS**
- **reduction in the number of annual relapses**
- **reduction in the risk of disability progression**
- **likely reduction in hospital admissions**
- **likely reduction in MS-related GP visits**
- **improved well-being and independence**

In addition, Tysabri could also impact positively on the lives of people affected by MS and consequently on their families and carers. A reduction in the frequency of relapses would be highly valued by people affected by MS, as would any delay in the progression of disability. Consequently the positive effect on medical symptoms and disability progression would certainly positively impact on quality of life, maintenance of employment, psychological health, social relationships and family roles.

Long-term benefits:
This is difficult to determine as cumulative data is limited at present (three years of data is available from phase III trials and extension studies). However, if the large reduction in disability progression observed in the clinical trials was maintained in the long term, one would expect the following benefits:

- **improvements in the maintenance of quality of life**
- **enhanced chances of remaining in employment for longer**
- **maintenance of relationships and social interaction**
- **reduced impact/usage on NHS use in the long term**
- **reduced need for social care**

Several of these benefits would have a positive impact on the costs of caring for people with MS, both to the health and social care systems. This saving is difficult to quantity (it is hard to assess what costs would have been incurred had an unpredictable disease like MS continued unchecked), but should be borne in mind.

It should be added that people with MS would stand to benefit from the earliest possible intervention with treatments that might reduce disability progression. At present, Tysabri is only licensed as a front line therapy because of safety concerns. Longer-term safety data should be used to reconsider its use once this is available.

What do patients and/or carers consider to be the advantages and disadvantages of the technology for the condition? (continued)

2. **Disadvantages**
Please list any problems with or concerns you have about the technology. Disadvantages might include:

- aspects of the condition that the technology cannot help with or might make it worse.
- difficulties in taking or using the technology
- side effects (please describe which side effects patients might be willing to accept or tolerate and which would be difficult to accept or tolerate)
- impact on others (for example family, friends, employers)
- financial impact on the patient and/or their family (for example cost of travel needed to access the technology, or the cost of paying a carer).

Disadvantages:
Some potential down-sides to Tysabri use would possibly include:

- **estimated risk of severe, life-threatening infection (progressive multifocal leucoencephalopathy (PML) as a result of Tysabri use of 1:1000 according to currently available data**
- **travel costs to attend a specialised infusion centre once a month**
- **possible time implications: travel to and from the infusion centre, one hour infusion, plus one hour observation period post-infusion**
- **potential for infusion-related complications (anaphylaxis / anaphylactoid responses)**

3. Are there differences in opinion between patients about the usefulness or otherwise of this technology? If so, please describe them.

Tysabri appears to be broadly welcomed by people affected by MS and MS patient advocacy groups and we are unaware of any significant differences of opinion. A significant number of people with relapsing forms of MS (data from the US National MS Society who presented findings to the US FDA Tysabri investigation) would be willing to forgo the risk of developing PML and receive Tysabri based on the significant data about its possible benefits (reduction in CNS lesion load, reduction in annual relapse rates and reduction in the risk of disability progression). This situation is the result of the lack of effective alternative therapies for modifying the course of MS. In view of this there is a consensus amongst many patients with highly active MS that they should have access to this therapy.

This situation would no doubt evolve should Tysabri become more widely available. Patients' experiences of the treatment would be shared, increasing the spectrum of views over its efficacy.

4. Are there any groups of patients who might benefit **more** from the technology than others? Are there any groups of patients who might benefit **less** from the technology than others?
People with highly active relapsing remitting forms of MS (including early aggressive relapsing MS and those patients with an inadequate response to

the other licensed disease modifying therapies) will benefit the most from Tysabri given the lack of alternative treatments available.

Current data suggests that people with progressive, non-relapsing forms of MS would be unlikely to benefit from Tysabri. This is based on evidence that pathologic mechanisms underlying secondary and primary progressive forms of MS are independent of inflammation (Tysabri is an immunomodulatory therapy aimed at reducing immune traffic into the CNS and establishing inflammatory-mediated damage of myelin).

Comparing the technology with alternative available treatments or technologies

NICE is interested in your views on how the technology compares with existing treatments for this condition in the UK

(i) Please list any current standard practice (alternatives if any) used in the UK.

There are numerous pharmaceutical interventions specific for the treatment of MS-related symptoms, from fatigue to bladder control, but only limited options for treating the disease mechanism itself.

Disease modifying therapies have been available since 1996, namely the beta-interferons and glatiramer acetate for relapsing remitting MS (and limited use in some secondary progressive MS patients). These drugs have been shown to reduce the frequency of relapses by approximately 30% and to reduce the severity of relapses. The impact on reducing disability progression is modest with beta interferon and has not been proven with glatiramer acetate The Department of Health is gathering data on a large cohort of patients taking disease modifying drugs through its Risk Sharing Scheme.

There are currently no effective and licensed therapies for treating highly active aggressive relapsing forms of MS (see prescribing criteria in section 1a). Some experimental procedures that target the Tysabri prescribing group have been described (mitoxantrone/glatiramer acetate combination therapy), but these observations need to be confirmed in phase III clinical trials (see http://www.mxga-mstrial.co.uk).

Mitoxantrone has been used 'off license' in some centres to treat aggressive forms of relapsing MS, but its use is limited (two years maximum) given problems with drug-related cardiotoxicity and a 1:300 risk of developing leukaemia.

(ii) If you think that the new technology has any **advantages** for patients over other current standard practice, please describe them. Advantages might include:

- improvement in the condition overall
- improvement in certain aspects of the condition

- ease of use (for example tablets rather than injection)
- where the technology has to be used (for example at home rather than in hospital)
- side effects (please describe nature and number of problems, frequency, duration, severity etc.)

Given the lack of effective alternative therapies, Tysabri offers a significant and welcome breakthrough in the treatment of highly active, aggressive relapsing forms of MS. Clinical results demonstrate the significant potential of Tysabri to impact positively on the lives of people affected by MS who meet the criteria, and consequently on their families and carers. A reduction in the frequency of relapses would be highly valued by people affected by MS, as would any delay in the progression of disability. Consequently Tysabri's affect on medical symptoms and disability progression would have a positive impact on quality of life, maintenance of employment, psychological health, social relationships and family roles.

(iii) If you think that the new technology has any **disadvantages** for patients compared with current standard practice, please describe them. Disadvantages might include:

- worsening of the condition overall
- worsening of specific aspects of the condition
- difficulty in use (for example injection rather than tablets)
- where the technology has to be used (for example in hospital rather than at home)
- side effects (for example nature or number of problems, how often, for how long, how severe).

None, as standard practice has limited options for intervention in highly active, aggressive relapsing forms of MS (supportive care, short-term steroid use or possibly short-term mitoxantrone).

Research evidence on patient or carer views of the technology

If you are familiar with the evidence base for the technology, please comment on whether patients' experience of using the technology as part of their routine NHS care reflects that observed under clinical trial conditions.

To the knowledge of the MS Society, there are a number of UK-based prescriptions of Tysabri, made by neurologists, for individuals that meet the prescribing criteria. The prescriptions are now subject to financial approval by individual PCTs. The MS Society will be closely following the situation and sincerely hopes that permission to provide Tysabri through individual PCT funding streams will be granted.

Are there any adverse effects that were not apparent in the clinical trials but have come to light since, during routine NHS care?

To the knowledge of the MS Society, there are no UK-based prescriptions of Tysabri outside of clinical trials to date, although the MS Society is aware of prescriptions awaiting funding approval by individual PCTs (see above).

Are you aware of any research carried out on patient or carer views of the condition or existing treatments that is relevant to an appraisal of this technology? If yes, please provide references to the relevant studies.

As part of the comprehensive US FDA safety investigations into the use of Tysabri, the United States National MS Society conducted a key survey of the opinions of people with MS to Tysabri. The survey findings formed a key part of the US FDA hearings. The full survey outcomes can be found at:

http://www.nationalmssociety.org/pdf/research/tysabri_survey.pdf

Availability of this technology to patients in the NHS
What key differences, if any, would it make to patients and/or carers if this technology was made available on the NHS?

Tysabri would offer a major breakthrough in the treatment of highly active, rapidly worsening relapsing MS for which there are no effective licensed alternatives at present.

Tysabri offers the best chance of reducing further relapses and reducing the risk of disability progression for the target groups.

What implications would it have for patients and/or carers if the technology was not made available to patients on the NHS?

Without Tysabri, potentially eligible people with MS would have to rely on symptomatic treatment of MS related problems and an unchecked, chronic progression of the condition, which usually leads to significant disability. As the condition progresses, this has a huge impact on the health and well being of people with MS, on their family, friends and carers and also on the health and social care systems.

Are there groups of patients that have difficulties using the technology?

This may be limited to those who are unwilling / uncomfortable with infusions and / or the location of infusion centres, and the requirement for travel and time for infusions and post-infusion monitoring.

Other Issues

Please include here any other issues you would like the Appraisal Committee to

consider when appraising this technology.

People with MS are broadly aware of the benefits and risks associated with Tysabri. It is critical that clear and comprehensive guidance must be provided to people with MS and to healthcare providers alike to assist in making informed decisions about whether Tysabri should be offered. The MS Society and other MS charities would, in the event of a positive decision, have a role to play in disseminating information about its use.

A positive STA decision would be welcomed by people with MS and by the MS Society. We would reiterate that this treatment offers great scope to a patient group that currently has few or no alternatives.

Assuming a positive decision, people with MS would be keen to see robust monitoring systems in place for the introduction of Tysabri because of uncertainties about the risks (and benefits) to individuals of the prescribed drug. Strong guidance to Primary Care Trusts would also be essential to ensure there were no cost obstacles to the prescription of the drug, where a prescribing specialist saw a clear case for its use.