

NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Proposed Health Technology Appraisal

Masitinib for treating the amyotrophic lateral sclerosis form of motor neurone disease [ID967]

Draft scope (pre-referral)

Draft remit/appraisal objective

To appraise the clinical and cost effectiveness of masitinib within its marketing authorisation for treating the amyotrophic lateral sclerosis form of motor neurone disease.

Background

Amyotrophic lateral sclerosis (ALS) is the most common type of motor neurone disease, affecting 80% of patients^{1,2}. Motor neurone disease is a neurodegenerative condition that affects the brain and spinal cord. It is characterised by the degeneration of motor neurones, leading to muscle weakness. Initial symptoms vary and may include muscle weakness, wasting, cramps and stiffness of arms and/or legs, problems with speech and/or swallowing or, more rarely, breathing problems³.

About 4000 people in England have motor neurone disease, of whom approximately 3200 will have ALS⁴. Motor neurone disease can affect adults at any age, but most people are diagnosed over the age of 50. About 90% of people do not have a family history of motor neurone disease (known as sporadic disease). About 5-10% of people do have a family history of motor neurone disease (known as familial). The sporadic and familial forms of the disease are treated in the same way. ALS is more common in men than in women⁵.

There is currently no cure for ALS. NICE technology appraisal 21 recommends riluzole for treating ALS. NICE guideline 42 on the [assessment and management of motor neurone disease](#) recommends care by a multidisciplinary team including, where appropriate:

- Psychological and social care support.
- Interventions to manage symptoms, for example pharmacological treatment for muscle problems.
- Equipment to aid activities of daily living and mobility.
- Support for nutrition, communication, and respiratory function including surgical interventions if necessary (for example, to enable feeding).

The technology

Masitinib (brand name unknown, AB Science) is a tyrosine kinase inhibitor that targets mast cells and macrophages. It is proposed to inhibit inflammatory processes involved in some central nervous system diseases. It is administered orally.

Masitinib does not currently have a marketing authorisation in the UK for treating ALS. It has been studied in clinical trials that compared masitinib plus riluzole with placebo plus riluzole in adults with familial or sporadic ALS.

Intervention(s)	Masitinib in combination with riluzole
Population(s)	People with amyotrophic lateral sclerosis
Comparators	<ul style="list-style-type: none"> • Riluzole monotherapy • Best supportive care
Outcomes	<p>The outcome measures to be considered include:</p> <ul style="list-style-type: none"> • overall survival • disease progression • forced vital capacity (FVC) • time to first tracheotomy • adverse effects of treatment • health-related quality of life.
Economic analysis	<p>The reference case stipulates that the cost effectiveness of treatments should be expressed in terms of incremental cost per quality-adjusted life year.</p> <p>The reference case stipulates that the time horizon for estimating clinical and cost effectiveness should be sufficiently long to reflect any differences in costs or outcomes between the technologies being compared.</p> <p>Costs will be considered from an NHS and Personal Social Services perspective.</p>
Other considerations	<p>Guidance will only be issued in accordance with the marketing authorisation. Where the wording of the therapeutic indication does not include specific treatment combinations, guidance will be issued only in the context of the evidence that has underpinned the marketing authorisation granted by the regulator.</p>
Related NICE recommendations	Related Technology Appraisals:

<p>and NICE Pathways</p>	<p>Technology Appraisal No. 20, January 2001, 'Motor neurone disease – riluzole.' Moved to static list, April 2006.</p> <p>Related Guidelines:</p> <p>NICE guideline 42, February 2016, 'Motor neurone disease: assessment and management'.</p> <p>Related Quality Standards:</p> <p>'Motor Neurone Disease' 2015 NICE Quality Standard. Publication expected August 2016</p> <p>Related Interventional Procedure guidance:</p> <p>'Intramuscular diaphragm stimulation for ventilator-dependent chronic respiratory failure due to neurological disease' July 2009 NICE Interventional Procedures Guidance 307.</p> <p>Related NICE Pathways:</p> <p>'Motor Neurone Disease' (2010) NICE pathway http://pathways.nice.org.uk/pathways/motor-neurone-disease</p>
<p>Related National Policy</p>	<p>NHS England (2014) Manual for prescribed specialised services, section 11. Adult specialist neuroscience services and section 134. Specialist services to support patients with complex physical disabilities (all ages) http://www.england.nhs.uk/wp-content/uploads/2014/01/pss-manual.pdf</p> <p>NHS England (2013) NHS standard contract for neurosciences specialised neurology (adult). https://www.england.nhs.uk/wp-content/uploads/2013/06/d04-neurosci-spec-neuro.pdf</p> <p>Department of Health, NHS Outcomes Framework 2015-2016, Dec 2014. Domains 1, 2, 4 and 5. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/385749/NHS_Outcomes_Framework.pdf</p>

Questions for consultation

Have all relevant comparators for masitinib been included in the scope?
 Which treatments are considered to be established clinical practice in the NHS for treating amyotrophic lateral sclerosis (ALS)?

How should best supportive care be defined? Are there any people who cannot have riluzole and therefore have best supportive care only (if so, what are the reasons for not having riluzole)?

Are the outcomes listed appropriate? Is 'disease progression' an appropriate term for referring to measures such as the ALS functional rating scale?

Will masitinib always be used in combination with riluzole? Or is masitinib monotherapy likely to be a treatment option?

Are there any subgroups of people in whom masitinib is expected to be more clinically effective and cost effective or other groups that should be examined separately?

Where do you consider masitinib will fit into the existing NICE pathway, '[Motor Neurone Disease](#)' (2016)?

NICE is committed to promoting equality of opportunity, eliminating unlawful discrimination and fostering good relations between people with particular protected characteristics and others. Please let us know if you think that the proposed remit and scope may need changing in order to meet these aims. In particular, please tell us if the proposed remit and scope:

- could exclude from full consideration any people protected by the equality legislation who fall within the patient population for which masitinib will be licensed;
- could lead to recommendations that have a different impact on people protected by the equality legislation than on the wider population, e.g. by making it more difficult in practice for a specific group to access the technology;
- could have any adverse impact on people with a particular disability or disabilities.

Please tell us what evidence should be obtained to enable the Committee to identify and consider such impacts.

Do you consider masitinib to be innovative in its potential to make a significant and substantial impact on health-related benefits and how it might improve the way that current need is met (is this a 'step-change' in the management of the condition)?

Do you consider that the use of masitinib can result in any potential significant and substantial health-related benefits that are unlikely to be included in the QALY calculation?

Please identify the nature of the data which you understand to be available to enable the Appraisal Committee to take account of these benefits.

NICE intends to appraise this technology through its Single Technology Appraisal (STA) Process. We welcome comments on the appropriateness of appraising this topic through this process. (Information on the Institute's

Technology Appraisal processes is available at
<http://www.nice.org.uk/article/pmg19/chapter/1-Introduction>)

References

1. Motor Neurone Disease Association (2015) Motor neurone disease: a guide for GP's and primary care teams. Accessed March 2016
2. NICE (2016) Motor neurone disease: assessment and management for NICE clinical guideline 42. Accessed March 2016
3. Motor Neurone Disease Association (2015) Motor neurone disease: a guide for GP's and primary care teams. Accessed March 2016
4. NICE (2016) Motor neurone disease: assessment and management for NICE clinical guideline 42. Accessed March 2016
5. Motor Neurone Disease Association (2015) Motor neurone disease: a guide for GP's and primary care teams. Accessed March 2016