

Dr James Palmer
Medical Director for Specialised Services
NHS England
Via email

19 October 2017

Re. NHS reply to the medical experts' letter on nusinersen in spinal muscular atrophy

Dear Dr Palmer,

We at TreatSMA have received the NHS letter, dated 25/9/2017 and signed by Mr Edmund Jessops, to the letter of the UK medical community regarding the criteria of the Expanded Access Programme (EAP) of nusinersen in spinal muscular atrophy.

We must say the response is not what we reasonably expected as a patient community. The letter basically denied the request of the UK medical experts without touching upon the valid considerations raised therein.

We urge you to review the NHS opinion once again in consideration of the following points:

1. The Expanded Access Programme makes nusinersen treatment available to the most severely affected patients **on a compassionate use basis**, in view of high likelihood that this new drug, which is not yet available through normal routes, will provide clinical benefit in those patients. NHS demand of "proof of efficacy in all patients" prior to authorising its use under EAP implies a total failure of understanding of what compassionate use essentially is.
2. Clinical trial design in rare disorders, especially in such a phenotypically varied disorder as spinal muscular atrophy, does not normally foresee including all the possible patient categories and combinations where the treatment will ultimately have clinical benefit and drug approval will be sought. The reasons for this are related to the issues of statistical power, group homogeneity, budget and logistics considerations, and avoidance of confounding factors linked to concurrent medical interventions, for example to mechanical ventilation which is commonly introduced in the most severely affected SMA patients. Therefore, NHS's demand of clinical trial data across the entire spectrum betrays **lack of understanding of clinical trial design** in SMA.

3. That said, nusinersen has been reviewed by the European Medicines Agency and found **effective in the entire spectrum of spinal muscular atrophy**. In reaching its decision, EMA experts carefully considered a range of factors, including the key one that SMA, a single-gene disorder, presents with a continuous spectrum and nusinersen targets the genetic cause of the disorder. NHS's demand for new "published evidence" can only be perceived as **disregard of experts' analyses** prepared for the European Medicines Agency as well as for the various European national regulators who have supported nusinersen use in accordance with its label.
4. Further, recent weeks brought to light **new evidence** of nusinersen efficacy across the spectrum of SMA, including in particular in patients with SMA type 1 older than 7 months. The medical team at Hôpital Trousseau, Paris, who has treated more than 50 SMA patients with nusinersen, has reported a mean increase of 5.46 (!) points in CHOP-INTEND score over a period of barely 6 months in 15 patients with SMA type 1 older than 7 months who were treated with nusinersen ("Safety, tolerability and clinical efficacy of nusinersen in SMA type 1 older than 7 months: a prospective study". *Neuromuscular Disorders* 27 (2017), p. S211; and accompanying poster, attached herewith). It is particularly remarkable that out of 15 babies in that group, five learned to sit independently after barely 6 months of nusinersen therapy!
5. Saving lives through EAP requires **no additional budget or funds** for the NHS, given that the high drug cost is fully covered by its manufacturer while its administration can be done as a standard outpatient procedure, under basic healthcare provision, as it is done elsewhere in the world. What is more, allowing the manufacturer to finance the most expensive first year of treatment will, in the future, result in significant savings for the NHS, once NICE recommends the wide provision of nusinersen in SMA type 1, as it is widely expected.
6. Out of almost 20 countries where EAP is in operation, **in no other country in the world** have health authorities imposed such draconian restrictions on compassionate access to the first-ever effective SMA therapy as NHS did in ours. It is daunting to all those who work in the neuromuscular field to hear the United Kingdom cited internationally as a country that has ignored the science, failed the SMA patients and disrespected the national medical community.

We know of many SMA 1 children treated with nusinersen who gained an ability to swallow, breathe independently, sit unsupported. Since last March, approximately 60 children with SMA type 1 have been included in the EAP in our country and **all** are making significant gains. But now your published policy has prompted a number of hospitals to continue refusing this life-saving treatment to many others.

Furthermore, your letter stipulated that any further amendment to the policy would take significant amount of time. Please understand that those with SMA type 1 simply do not have this time! Every week of delay causes permanent and irreversible loss of function in their bodies and to-date has resulted in several deaths.

We know that your office is preoccupied with developing policies and procedures. They may be needed but we ask you to look beyond those. We ask you to see the patients, the children and the families. We ask you to see the human side of this tragedy which should not be occurring in a developed country like ours.

We trust that you would advocate for the right changes and will amend the nusinersen EAP criteria as requested by the UK neuromuscular medical experts. Because when people study medicine, it is in order to help people and not to hide behind red tape.

Yours sincerely,

Lucy Frost
Dr Gennadiy Ilyashenko
Joseph Irwin
Kacper Rucinski

on behalf of TreatSMA Co-ordination Team

Copy to:

- Professor Dr Kate Bushby, Chair of Neuromuscular Genetics, Institute of Genetic Medicine, Newcastle University
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- Dr Mariacristina Scoto, Senior Clinical Research Associate, Dubowitz Neuromuscular Centre, UCL Institute of Child Health, Great Ormond Street Hospital for Children
- Dr Edmund Jessop, Public Health Advisor, Highly Specialised Services, NHS England
- Doug Henderson, Managing Director, SMA Support UK
- Joanna Mitchell, Executive Director, SMA Trust
- Jonathan Kingsley, Muscular Dystrophy UK