

Spinraza[®] and Zolgensma[®] for Spinal Muscular Atrophy: Effectiveness and Value

Questions for Deliberation and Voting: March 7, 2019 Public Meeting

These questions are intended for the deliberation of the New England CEPAC voting body at the public meeting.

Clinical Evidence

Patient Population for questions 1-3: Patients with infantile-onset (Type I) spinal muscular atrophy (SMA).

1. Is the evidence adequate to demonstrate that the net health benefit of nusinersen (**Spinraza[®]**, Biogen Inc.) added to supportive care is superior to that provided by supportive care alone?
Yes No
2. Is the evidence adequate to demonstrate that the net health benefit of onasemnogene abeparvovec (**Zolgensma[®]**, AveXis/Novartis AG) added to supportive care is superior to that provided by supportive care alone?
Yes No
3. Is the evidence adequate to distinguish the net health benefit between **Spinraza** and **Zolgensma**?
Yes No

Patient Population for question 4: Patients with later-onset (Type II/III) SMA.

4. Is the evidence adequate to demonstrate the net health benefit of **Spinraza plus supportive care** is superior to that provided by **supportive care alone**?
Yes No

Patient Population for questions 5-6: Patients with presymptomatic SMA.

5. Is the evidence adequate to demonstrate the net health benefit of administering **Spinraza prior to development of symptoms** is superior to that of **supportive care alone**?

Yes No

6. Is the evidence adequate to demonstrate the net health benefit of administering **Zolgensma prior to development of symptoms** is superior to that of **supportive care alone**?

Yes No

Potential Other Benefits and Contextual Considerations

Spinraza

7. Is it likely that treatment with Spinraza offers one or more of the following potential “other benefits” that are not adequately captured in the base case cost-effectiveness model? (select all that apply)
- a. **Spinraza** offers reduced complexity compared to other treatment options that will improve patient outcomes in the real world.
 - b. **Spinraza** has a different mechanism of action or approach that will allow successful treatment of many patients for whom other available treatments have failed.
 - c. **Spinraza** will significantly reduce caregiver or broader family burden.
 - d. **Spinraza** will have a significant impact on improving patients’/caregivers’ ability to return to work and/or their overall productivity.
 - e. **Spinraza** will have a significant impact on the entire “infrastructure” of care, including effects on screening for affected patients, on the sensitization of clinicians, and on the dissemination of understanding about the condition, that may revolutionize how patients are cared for in many ways that extend beyond the treatment itself.
 - f. There are other important benefits -- or disadvantages -- that should have an important role in judgments of the value of **Spinraza**: _____.
8. Are any of the following contextual considerations important in assessing **Spinraza’s** long-term value for money? (select all that apply)
- a. **Spinraza** is intended for the care of individuals with a condition of particularly high severity in terms of impact on length of life and/or quality of life.
 - b. **Spinraza** is intended for the care of individuals with a condition that represents a particularly high lifetime burden of illness.
 - c. **Spinraza** was the first to offer any improvement for patients with this condition.

- d. **Compared to best supportive care**, there is significant uncertainty about the long-term risk of serious side effects of **Spinraza**.
- e. **Compared to best supportive care**, there is significant uncertainty about the magnitude or durability of the long-term benefits of **Spinraza**.
- f. There are additional contextual considerations that should have an important role in judgments of the value of **Spinraza**: _____.

Zolgensma

- 9. Is it likely that treatment with **Zolgensma** offers one or more of the following potential “other benefits” that are not adequately captured in the base case cost-effectiveness model? (select all that apply)
 - a. **Zolgensma** offers reduced complexity compared to other treatment options that will improve patient outcomes in the real world.
 - b. **Zolgensma** will significantly reduce caregiver or broader family burden.
 - c. **Zolgensma** has a different mechanism of action or approach that will allow successful treatment of many patients for whom other available treatments have failed.
 - d. **Zolgensma** will have a significant impact on improving patients’/caregivers’ ability to return to work and/or their overall productivity.
 - e. **Zolgensma** will have a significant impact on the entire “infrastructure” of care, including effects on screening for affected patients, on the sensitization of clinicians, and on the dissemination of understanding about the condition, that may revolutionize how patients are cared for in many ways that extend beyond the treatment itself.
 - f. There are other important benefits -- or disadvantages -- that should have an important role in judgments of the value of **Zolgensma**: _____.

- 10. Are any of the following contextual considerations important in assessing **Zolgensma’s** long-term value for money? (select all that apply)
 - a. **Zolgensma** is intended for the care of individuals with a condition of particularly high severity in terms of impact on length of life and/or quality of life.
 - b. **Zolgensma** is intended for the care of individuals with a condition that represents a particularly high lifetime burden of illness.
 - c. **Compared to best supportive care**, there is significant uncertainty about the long-term risk of serious side effects of **Zolgensma**.
 - d. **Compared to best supportive care**, there is significant uncertainty about the magnitude or durability of the long-term benefits of **Zolgensma**.
 - e. There are additional contextual considerations that should have an important role in judgments of the value of **Zolgensma**: _____.

Long-Term Value for Money

11. Given the available evidence on comparative effectiveness and incremental cost-effectiveness, and considering other benefits, disadvantages, and contextual considerations, what is the long-term value for money of treatment with **Spinraza** versus **supportive care alone** in patients with infantile-onset (Type I) SMA?
 - a. Low long-term value for money
 - b. Intermediate long-term value for money
 - c. High long-term value for money

12. Given the available evidence on comparative effectiveness and incremental cost-effectiveness, and considering other benefits, disadvantages, and contextual considerations, what is the long-term value for money of treatment with **Zolgensma** versus **supportive care alone** in patients with infantile-onset (Type I) SMA?¹
 - a. Low long-term value for money
 - b. Intermediate long-term value for money
 - c. High long-term value for money

13. Given the available evidence on comparative effectiveness and incremental cost-effectiveness, and considering other benefits, disadvantages, and contextual considerations, what is the long-term value for money of treatment with **Zolgensma** versus **Spinraza** in patients with infantile-onset (Type I) SMA?¹
 - a. Low long-term value for money
 - b. Intermediate long-term value for money
 - c. High long-term value for money

14. Given the available evidence on comparative effectiveness and incremental cost-effectiveness, and considering other benefits, disadvantages, and contextual considerations, what is the long-term value for money of treatment with **Spinraza** versus **supportive care** in patients with later-onset (Type II/III) SMA?
 - a. Low long-term value for money
 - b. Intermediate long-term value for money
 - c. High long-term value for money

15. Given the available evidence on comparative effectiveness and incremental cost-effectiveness, and considering other benefits, disadvantages, and contextual considerations, what is the long-term value for money of treating patients with **Spinraza before symptoms develop** versus **best supportive care**?
 - a. Low long-term value for money
 - b. Intermediate long-term value for money
 - c. High long-term value for money

¹ Note: Zolgensma value votes will be taken only if the therapy's price has been announced by the time of the March 7 public meeting.