

Intrathecal administration with SPINRAZA® (nusinersen)

INDICATION

SPINRAZA® (nusinersen) is a prescription medicine used to treat spinal muscular atrophy (SMA) in pediatric and adult patients.

IMPORTANT SAFETY INFORMATION

Increased risk of bleeding complications has been observed after administration of similar medicines. Your healthcare provider should perform blood tests before you start treatment with SPINRAZA and before each dose to monitor for signs of these risks. Seek medical attention if unexpected bleeding occurs.

Please see additional Important Safety Information on page 8 and click for full [Prescribing Information](#).

SPINRAZA®
(nusinersen) injection
12 mg/5 mL

Intrathecal administration with SPINRAZA® (nusinersen)

What is an intrathecal injection?

An intrathecal injection or lumbar puncture is a method to deliver medication into the fluid of the spine, also known as cerebrospinal fluid (CSF). The procedure is always administered by a specially trained healthcare provider (HCP). See diagram on page 3.

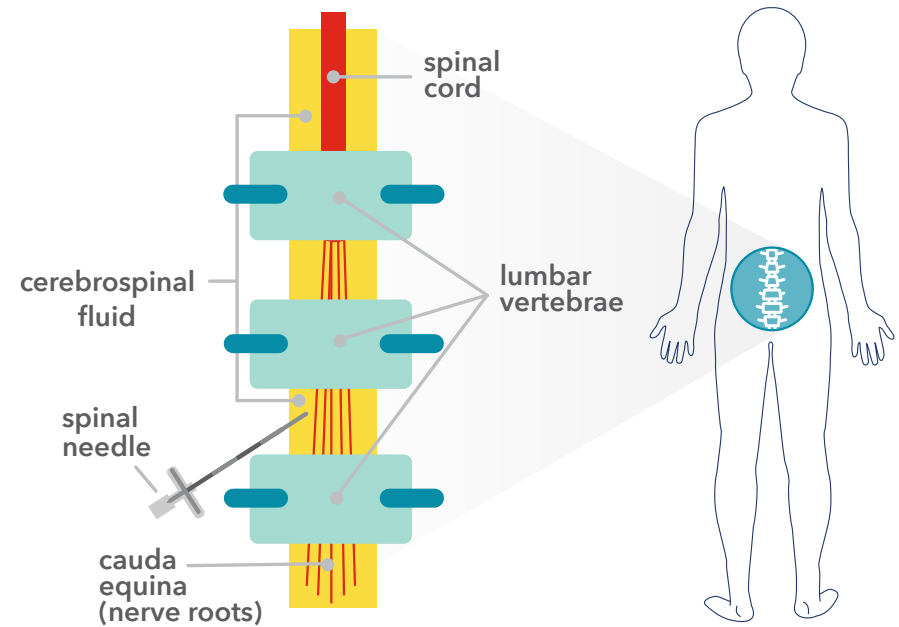
Why is SPINRAZA administered intrathecally?

SPINRAZA is injected into the CSF, which circulates around the spine and the brain. SPINRAZA is delivered directly to the central nervous system (CNS), which allows it to be distributed to the spinal motor neurons located in the spinal cord.

Where do I go to receive my injection?

You may receive your treatment at a hospital or outpatient site with expertise in intrathecal administration. To help you find a treatment center, visit the Treatment Locator at SPINRAZA.com

Intrathecal injection



“My first treatment was an emotional day for everyone involved.”

NICOLE // AGE 45
LATER-ONSET SMA
TREATED WITH SPINRAZA

Individual results may vary based on several factors, including severity of disease, initiation of treatment, and duration of therapy.

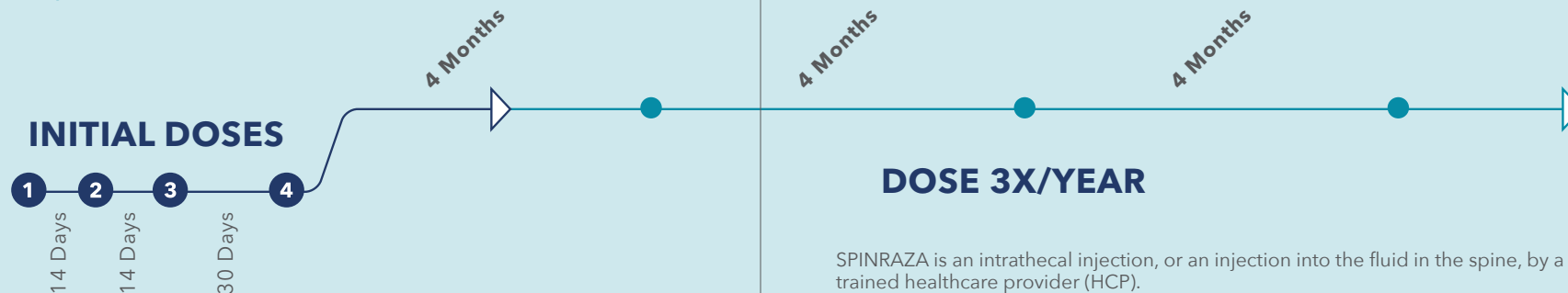
IMPORTANT SAFETY INFORMATION

Increased risk of kidney damage, including potentially fatal acute inflammation of the kidney, has been observed after administration of similar medicines. Your healthcare provider should perform urine testing before you start treatment with SPINRAZA and before each dose to monitor for signs of this risk.

Please see additional Important Safety Information on page 8 and click for full [Prescribing Information](#).

SPINRAZA® (nusinersen) dosing schedule

Dosing designed to get your body the medicine it needs, when it needs it.



The recommended dosage of SPINRAZA is 12 mg (5 mL) per administration

SPINRAZA is an intrathecal injection, or an injection into the fluid in the spine, by a specially trained healthcare provider (HCP).

The dosing schedule begins with 4 initial loading doses; the first 3 occur in 14-day intervals and the fourth dose occurs 30 days after the third dose. After these initial doses, SPINRAZA is administered in maintenance doses 3 times a year. Ask your HCP for additional information about the dosing schedule and treatment procedure.



Blood and urine testing

Because an increased risk of bleeding and kidney damage has been seen with similar medications, individuals taking SPINRAZA may be at similar risk. It is recommended that your HCP perform blood and urine testing once before starting treatment and again before each dose to monitor for signs of these risks.

IMPORTANT SAFETY INFORMATION

The most common side effects of SPINRAZA include lower respiratory infection, fever, constipation, headache, vomiting, back pain, and post-lumbar puncture syndrome.

These are not all of the possible side effects of SPINRAZA. Call your healthcare provider for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.

Please see additional Important Safety Information on page 8 and click for full [Prescribing Information](#).

SPINRAZA administration

What to expect during SPINRAZA intrathecal administration*

- // SPINRAZA is administered as an intrathecal injection using a specialized spinal needle and is injected over 1 to 3 minutes
- // Prior to administration of SPINRAZA, your HCP will remove 5 mL of cerebrospinal fluid (CSF)
- // The injection can be done while you are either seated or lying down on your front or your side. You and your HCP will decide what position is right for you
- // Ultrasound or other imaging techniques may be used to guide placement of the spinal needle, particularly in younger patients
- // Your HCP should be careful not to administer SPINRAZA where there might be signs of infection or inflammation
- // Speak to your HCP about any additional injection day considerations or questions you may have

*Individual results may vary based on several factors, including severity of disease, initiation of treatment, and duration of therapy.

Frequently asked questions

Q. Is intrathecal delivery unique to SPINRAZA® (nusinersen)?

- A. No. While SPINRAZA is the only spinal muscular atrophy (SMA) treatment delivered by intrathecal injection, this method is used to administer other medications, such as anesthetic agents and pain medications.

Q. Who will administer SPINRAZA?

- A. Administration will be performed by, or under direction of, healthcare professionals experienced in performing lumbar punctures for SPINRAZA. The procedure is performed in a designated treatment center with expertise in delivering intrathecal injections.

Q. Is the injection painful?

- A. It is possible that an individual may feel pain during or after injection. Local anesthetics and sedation may be used to make an individual more comfortable, depending upon his/her clinical condition. Discuss this with your healthcare provider (HCP) to determine the best plan.

Q. Is anesthesia required for treatment?

- A. Your HCP will advise on whether sedation should be administered depending on you/your child's clinical needs.

Q. Are any tests required before SPINRAZA treatment?

- A. Certain laboratory tests are required before starting treatment and before each dose of SPINRAZA as determined by your/your child's HCP. Because of an increased risk of bleeding, blood tests are required. Because of a risk of renal (kidney) toxicity, urine testing is required.

IMPORTANT SAFETY INFORMATION

Before taking SPINRAZA, tell your healthcare provider if you are pregnant or plan to become pregnant.

Please see additional Important Safety Information on page 8 and click for full [Prescribing Information](#).

Q. Can a parent or caregiver be present during the injection?

- A. Each treatment center will have its own policies regarding the presence of caregivers during the injection. Discuss this concern with your HCP prior to the injection.

Q. Can patients with scoliosis, spinal rods, or spinal fusions receive SPINRAZA?

- A. SPINRAZA is administered into the lower back as an intrathecal injection. It is important to discuss any concerns you may have with your HCP regarding your individual condition.

Q. What happens if a dose is missed?

- A. It's important to speak with your/your child's HCP in the event of a missed dose. He or she can determine the next course of action per the SPINRAZA Prescribing Information.

“She actually has a specific blanket and a specific panda bear that’s sitting on a shelf in her room that she takes with her. His name is Pongo. And Pongo has had all the injections as well.”

—KELLI, CARLEE’S MOM

CARLEE // AGE 11
LATER-ONSET SMA
TREATED WITH SPINRAZA

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STILL HAVE QUESTIONS?

Your doctor should be your primary resource for any medical questions. For more information about SPINRAZA, you can visit [SPINRAZA.com](https://www.spinraza.com). You can also contact Biogen Patient Services at 1-844-4SPINRAZA (1-844-477-4672), Monday through Friday, from 8:30 AM to 8:00 PM ET.

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[Please click for full Prescribing Information.](#)

This information is not intended to replace discussions with your healthcare provider.

