ZYNLONTA® (loncastuximab tesirine-lpyl) – Calculating Dose Based on Adjusted Body Weight

Overview

- ZYNLONTA should be administered as an intravenous (IV) infusion administered for over 30 minutes on Day 1 of each cycle (every 3 weeks). The recommended dosage is as follows:
  - 0.15 mg/kg every 3 weeks for 2 cycles, followed by 0.075 mg/kg every 3 weeks for subsequent cycles.[1]
- For patients who have a body mass index (BMI) ≥ 35 kg/m^2, calculate the dose based on adjusted body weight (ABW).[1]
- ADC Therapeutics does not make recommendations outside the Prescribing Information. Please defer to your clinical judgment.
- See the **Relevant Prescribing Information** section for additional information regarding dosing of ZYNLONTA.
- Review of the ZYNLONTA Prescribing Information is recommended for additional information regarding dosage and administration and reconstitution of ZYNLONTA.

Calculating ZYNLONTA Dose

- Calculate the total ZYNLONTA dose (mg) required based on the patient's weight and prescribed dose.[1] Please find an example of this calculation below. Please note this is for a theoretical patient. Please round all calculations to the one decimal unit or follow dosing calculation guidelines within your own institutional protocol.

Example

- A 230 lb patient who is prescribed 0.15 mg/kg of ZYNLONTA (Cycle 1, Day 1) will receive a total dose of 15.8 mg of ZYNLONTA.

Divide a patient's weight in pounds (lbs) by 2.2 to determine the patient's weight in kilograms (kg).[2]

$$230 \div 2.2 = 105 \text{ kg}$$

Because the patient above is prescribed ZYNLONTA 0.15 mg/kg (Cycle 1, Day 1), the patient's dose of ZYNLONTA can be determined by multiplying the patient's weight in kg by 0.15.

$$105 \times 0.15 = 15.8 \text{ mg of ZYNLONTA}$$

Adjusted Body Weight

- For patients with a body mass index (BMI) ≥35 kg/m^2, calculate the dose based on an ABW formula as follows:[1]

$$\text{ABW in kg} = 35 \text{ kg/m}^2 \times (\text{height in meters})^2$$

- Below, please find two examples of how to calculate adjusted body weight. Please note these are examples for theoretical patients. The first example (Patient 1) uses the ZYNLONTA dose of 0.15 mg/kg, while the second example (Patient 2) uses the ZYNLONTA dose of 0.075 mg/kg.
- Please round all calculations to the one decimal unit or follow dosing calculation guidelines within your own institutional protocol.

Examples

Patient 1

- A patient who is 230 lbs and 60 inches in height (5 feet or 1.5 meters) has a BMI of 44.9 kg/m^2 according to the Centers for Disease Control and Prevention (CDC) adult BMI calculator.[3]

Divide 60 inches by 12 to convert inches to feet.

60 ÷ 12 = 5 feet

Multiply 5 feet by 0.3048 to convert feet to meters.

5 x 0.3048 = 1.5 meters

OR

Multiply 60 inches by 0.0254 to convert inches to meters.

60 x 0.0254 = 1.5 meters

- Because the patient's BMI is > 35 kg/m^2, per the Prescribing Information, the following ABW formula should be used to calculate the dose of ZYNLONTA:

ABW in kg = 35 kg/m^2 × (height in meters)^2

ABW in kg = 35 kg/m^2 x (1.5 meters)^2

ABW in kg = 35 kg/m^2 x (2.3 m^2) = 80.5 kg

- If the patient is prescribed a ZYNLONTA dose of 0.15 mg/kg (Cycle 1, Day 1), the patient will receive a total of 12.1 mg of ZYNLONTA as an IV infusion administered over 30 minutes. See below.

0.15 mg/kg x 80.5 kg = 12.1 mg of ZYNLONTA

- Convert the calculated dose (mg) to volume using 5 mg/mL, which is the concentration of ZYNLONTA after reconstitution. More than one vial may be needed to achieve the calculated dose.[1]

12.1 mg ÷ 5 mg/mL = 2.4 mL of ZYNLONTA

Patient 2

- A patient who is 397 lbs and 72 inches in height (6 feet or 1.8 meters) has a BMI of 53.8 kg/m^2 according to the CDC adult BMI calculator.[3]

Divide 72 inches by 12 to convert inches to feet.

72 ÷ 12 = 6 feet

Multiply 6 feet by 0.3048 to convert feet to meters.

6 x 0.3048 = 1.8 meters

OR

Multiply 72 inches by 0.0254 to convert inches to meters.

72 x 0.0254 = 1.8 meters

- Because the patient's BMI is > 35 kg/m^2, per the Prescribing Information, the ABW formula below should be used when calculating the dose of ZYNLONTA.

ABW in kg = 35 kg/m^2× (height in meters)^2

ABW in kg = 35 kg/m^2 x (1.8 meters)^2

ABW in kg = 35 kg/m^2 x (3.2 m^2) = 112 kg

- If the patient is prescribed a ZYNLONTA dose of 0.075 mg/kg (Cycle 3, Day 1), the patient will receive a total dose of 8.4 mg of ZYNLONTA.

0.075 mg/kg x 112 kg = 8.4 mg of ZYNLONTA

- Convert the calculated dose (mg) to volume using 5 mg/mL, which is the concentration of ZYNLONTA after reconstitution. More than one vial may be needed to achieve the calculated dose.[1]

8.4 mg ÷ 5 mg/mL = 1.7 mL of ZYNLONTA

Literature Search

- A PubMed biomedical literature search conducted on April 4, 2025, yielded no relevant data regarding calculating ZYNLONTA dose based on adjusted body weight.

Relevant Prescribing Information

Section 2: Dosage and Administration[1]
Section 2.1: Recommended Dosage[1]

- ZYNLONTA as an intravenous infusion administered over 30 minutes on Day 1 of each cycle (every 3 weeks). Administer intravenous infusion as follows:
    - 0.15 mg/kg every 3 weeks for 2 cycles.
    - 0.075 mg/kg every 3 weeks for subsequent cycles.

Section 2.4: Reconstitution and Administration Instructions[1]

- Reconstitute and further dilute ZYNLONTA prior to intravenous infusion. Use appropriate aseptic technique.

Dose calculation[1]

- Calculate the total dose (mg) required based on the patient's weight and prescribed dose [see *Dosage and Administration (2.1*)].
    - For patients with a body mass index (BMI) ≥35 kg/m^2, calculate the dose based on an adjusted body weight (ABW) as follows:

$$\text{ABW in kg} = 35\ \text{kg/m}^2 \times (\text{height in meters})^2$$

    - More than one vial may be needed to achieve the calculated dose.
    - Convert the calculated dose (mg) to volume using 5 mg/mL, which is the concentration of ZYNLONTA after reconstitution.

References

[1] ZYNLONTA® (loncastuximab tesirine-lpyl) for injection Prescribing Information, October 2022.
[2] Ojo A, Huynh AP. Conversion Weights. [Updated 2021 Mar 8]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2021 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK557608/.
[3] Centers for Disease Control and Prevention. Adult BMI Calculator. https://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/english_bmi_calculator/bmi_calculator.html. Accessed April 10, 2024.

ADC Therapeutics encourages all health care professionals to report any adverse events and product quality complaints to medical information at 855-690-0340. Please consult the ZYNLONTA Prescribing Information.