AMGEN® Revision Number: 6

Parsabiv® Safety Data Sheet

ision Number: 6 Date Issued 12-Oct-2022

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERSTANDING

1.1 Product identifier

Product Name: Parsabiv®
Common Name: Etelcalcetide HCl

Chemical Name: N-Acetyl-D-cysteinyl-S-(L-cysteine

disulfide)-D-alanyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-argininamide, hydrochloride salt

Synonyms: AMG 416, KAI-4169

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use: Pharmaceutical

Uses advised against: No information available

Manufacturer: Emergency Telephone Number:

Amgen Inc. Chemtrec

One Amgen Center Drive NORTH AMERICA 1-800-424-9300, Thousand Oaks, California 91320-1799 INTERNATIONAL 1-703-527-3887

1-805-447-7233 1-805-447-1000

2. HAZARDS IDENTIFICATION

Emergency Overview

Pharmaceutical product intended for clinical and commercial manufacturing purposes only. Product contains etelcalcetide HCl, an active pharmaceutical ingredient, for treatment of secondary hyperparathyroidism (sHPT) in patients with chronic kidney disease (KD) on hemodialysis. Dosage contents may pose a health hazard only if significant absorption occurs (e.g. inhalation after a major spill). Avoid inhalation, skin contact, eye contact and accidental ingestion. Based on available data, the GHS classification criteria are not met.

2.1 - Classification of the drug substance or mixture (drug product in final form, not applicable) REGULATION (EC) No 1272/2008

Not classified

2.2 Label elements

Not classified

2.3 Other Hazards No information available



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3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Ingredients: See below

Chemical Name: N-Acetyl-D-cysteinyl-S-(L-cysteine

disulfide)-D-alanyl-D-argi

CAS-No: 1262780-97-1 (free base); 1334237-71-6 (hydrochloride salt)

Supplied for intravenous administration as a sterile, single-use, preservative-free liquid solution in 3 strengths: 2.5 mg etelcalcetide in 0.5 mL (5 mg/mL) solution, 5 mg etelcalcetide in 1 mL (5 mg/mL) solution, and 10 mg etelcalcetide in 2 mL (5 mg/mL) solution. All strengths are formulated with sodium hydroxide and succinic acid.

4. FIRST AID MEASURES

4.1 Description of first-aid measures

Eye Contact: In the case of contact with eyes, rinse immediately with plenty of water and seek medical

advice.

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and

shoes. Consult a physician if necessary.

Inhalation: Move to fresh air. If symptoms persist, call a physician.

Ingestion: If symptoms persist, call a physician. Do not induce vomiting without medical advice. Never

give anything by mouth to an unconscious person.

Notes to Physician: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Flammable Properties: No information available.

Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

5.2 Special hazards arising from the substance or mixture

Hazardous Combustion Products: No information available.

5.3 Advice for firefighters

Protective Equipment and As in any fire, wear self-contained breathing apparatus pressure-demand, NIOSH

Precautions for Firefighters: (approved) and full protective gear.



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6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Spill Procedures:

If material is released or spilled, cordon off spill area. Take proper precautions to minimize exposure by using appropriate personal protective equipment in cleaning up a spill. If in powder form, wet down spilled material to minimize airborne dispersion. Soak up material with absorbent e.g., paper towels, and wash spill area thoroughly with appropriate cleaning materials. Dispose of collected material in accordance with applicable waste disposal regulations. Avoid release to the environment.

7. HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Handling and Storage:

Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke in work areas. Use adequate ventilation to minimize exposure. Wash hands, face and other potentially exposed areas immediately after handling this material. Remove contaminated clothing prior to entering eating areas. Clean protective equipment thoroughly after each use. Store in a well ventilated area.



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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limit: No exposure guidelines established by ACGIH, NIOSH or OSHA. Amgen recommends an

occupational exposure limit (OEL) of 6 µg/m³ as an 8-hour time weighted average over a 40-hour work week. The OEL is designed as an acceptable airborne concentration of a substance for which it is believed that workers may be repeatedly exposed day after day without adverse health effects. Etelcalcetide HCl has been classified per Amgen's Hazard Classification System as an Occupational Exposure Band 4 compound (5 µg/m³ - 20

 μ g/m³).

Engineering Controls: When practicable, handle material in enclosed processes or in processes with effective

local exhaust ventilation or within a chemical hood.

8.2 Exposure controls

Personal Protective Equipment

Eye/face Protection: Wear safety glasses with side shields, chemical splash goggles, or safety glasses with side

shields and a full-face shield to prevent contact with eyes. The choice of protection should

be based on the job activity and potential for exposure to the eyes and face.

Skin Protection: Use gloves or other appropriate personal protective equipment if skin contact with

formulation is possible. Wear lab coat or other protective over garment if splashing is possible. The choice of protection should be based on the job activity and potential for skin

contact.

Respiratory Protection: When possible, handle material in enclosed processes or containers. If it is properly

handled with effective local exhaust ventilation or containment, respiratory protection may not be needed. For procedures involving larger quantities or dust/aerosol generating procedures such as weighing or a large transfer of liquids, an air-purifying respirator with NIOSH approval for dusts and mists may be needed. The choice of protection should be

based on the job activity and the potential for exposure.

Other: Wash hands, face and other potentially exposed areas after handling material (especially

before eating, drinking or smoking). Clean protective equipment thoroughly after each use.

8.3 Environmental exposure controls

Environmental Exposure Controls Avoid release to the environment.



Odor:

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White to off-white lyophilized powder (HCl Salt and drug product)

Clear, colorless liquid (liquid drug product)

1 kDa **Molecular Weight:** No information available

Odor Threshold: No information available No information available pH: Melting point (°C) VALUE No information available Flash Point: No information available **Evaporation Rate:** No information available Lower explosive limit: No information available Upper explosive limit: No information available

Vapor Pressure: No information available Vapor Density (air = 1): No information available No information available Relative density:

Water Solubility: At least 100 mg/mL (HCI salt and drug product),

Fully miscible with water (liquid drug product)

Partition Coefficient (log Kow):

Viscosity: No information available

10. STABILITY AND REACTIVITY

No information available 10.1 Reactivity

No information available 10.2 Chemical stability

10.3 Possibility of hazardous No information available

reactions

No information available

No Information available 10.4 Conditions to avoid

No information available 10.5 Incompatible materials

10.6 Hazardous

decomposition products

No information available

10.7 Other information Dust Explosion Hazard Properties tested on etelcalcetide HCl API:

MIE >1000mJ

MIT (dust cloud) >600° C

MEC 180< MEC<225; MEC estimate 225 g/m ³

Kst 42 bar-m/sec ± 30% Pmax 6.1 bar ± 10%

Electrostatic Properties tested on etelcalcetide HCI API:

Volume resistivity: 9.33 x 10 ¹⁵ Ω-cm Calculated Dielectric Constant: 1.97 Measured Decay Time: 3 sec



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11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity:

Skin corrosion/irritation:

Serious eye damage/eye irritation:

Respiratory or skin sensitization:

No information available
No information available
No information available

Germ cell mutagenicity: GHS classification criteria not met. Not genotoxic based on a battery of in vitro and in vivo

studies

Carcinogenicity: GHS classification criteria not met. Did not show carcinogenic effects in animal experiments

Reproductive toxicity: GHS classification criteria not met. Etelcalcetide HCl did not effect developmental toxicity

following intravenous exposure in rats and rabbits. Also, no reproductive/fertility toxicity

has been observed in male and female rats intravenously administered etelcalcetide HCl.

STOT - single exposure:Does not meet GHS Classification Criteria and therefore is not classified. **STOT - repeated exposure:**Does not meet GHS Classification Criteria and therefore is not classified.

Aspiration Hazard: No information available

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Ecotoxicity effects: No information available

12.2 Persistence and degradability

Persistence/Degradability: No information available

12.3 Bioaccumulative potential

Bioaccumulation/ Accumulation: No information available

12.4 Mobility in soil

Mobility in Environmental Media: No information available

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment: No information available

12.6 Other adverse effects

Other Adverse Effects: No information available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste Disposal Method: Dispose of waste according to prescribed federal, state, local and competent authority

guidelines.



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14. TRANSPORT INFORMATION

DOT: Not regulated by U.S. DOT, IATA, or IMDG.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

International Inventories

TSCA: EINECS/ELINCS DSL/NDSL PICCS: ENCS: CHINA: AICS: KECL: -

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

State Regulations

California Proposition 65: This product does not contain any Proposition 65 chemicals.

15.2 Chemical safety assessment

No CSA has been conducted.

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16. OTHER INFORMATION

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To the best of our knowledge, the information provided here is accurate as of the date of the Safety Data Sheet (SDS). The information is specific to the material that is the subject of this SDS and may not be valid when this material is used in combination with any other materials or in any process. Each user should review the information provided here in the context of the user's intended manner of handling, using, processing, storing, transporting, and disposing of the material.

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