# VELETRI® (epoprostenol)
# VELETRI - Preparation and Stability of ≥3000 to <15,000 ng/mL Epoprostenol Solutions Derived From Vials Containing 1.5 mg Epoprostenol for Infusion

## SUMMARY


- Epoprostenol solutions diluted to final concentrations of ≥3000 to <15,000 ng/mL must be prepared using VELETRI for infusion vials containing 0.5 mg epoprostenol.[1]
- In the event that epoprostenol solutions diluted to final concentrations of >3000 to <15,000 ng/mL need to be prepared using VELETRI for infusion vials containing 1.5 mg epoprostenol (Table: Preparation of ≥3000 to <15,000 ng/mL Epoprostenol Solutions From Vials Containing 1.5 mg Epoprostenol for Infusion), these solutions will have a shorter duration of use compared with corresponding solutions made using 0.5 mg vials. This is because the increased dilution factor with the 1.5 mg vial results in a lower pH, which in turn reduces the stability of VELETRI.[2, 3]
- Epoprostenol solutions diluted to final concentrations of ≥3000 to <15,000 ng/mL that have been prepared using 1.5 mg epoprostenol for infusion vials can be stored at 2°-8°C for 24 hours, following which they can be stored at 25°C for 24 hours.[3]


## CLINICAL DATA

An in-house study has been performed to test the stability of ≥3000 ng/mL to <15,000 ng/mL epoprostenol solutions when prepared from vials containing 1.5 mg epoprostenol for infusion. Relevant information from this study and the conclusions that can be drawn from it are summarized below.[3]

### Preparation of Epoprostenol Solutions Diluted to Final Concentrations of ≥3000 and <15,000 ng/mL Using Vials Containing 1.5 mg Epoprostenol for Infusion

Examples of reconstitution and dilution procedures for preparing epoprostenol solutions diluted to final concentrations of ≥3000 to <15,000 ng/mL prepared using vials containing 1.5 mg epoprostenol for infusion are outlined in Table: Preparation of ≥3000 to <15,000 ng/mL Epoprostenol Solutions From Vials Containing 1.5 mg Epoprostenol for Infusion.[2, 3]

**Preparation of ≥3000 to <15,000 ng/mL Epoprostenol Solutions From Vials Containing 1.5 mg Epoprostenol for Infusion**[2, 3]

| Final Epoprostenol Concentration | Directions |
|---|---|
| 3000 ng/mL | • Reconstitute 1 vial containing 1.5 mg of epoprostenol for infusion with 5 mL of WFI or 0.9% NaCl.<br>• Withdraw 1 mL of the obtained solution.<br>• Fill the withdrawn solution in 100 mL infusion cassette and bring to final volume with WFI or 0.9% NaCl. |
| 5000 ng/mL | • Reconstitute 1 vial containing 1.5 mg of epoprostenol for infusion with 5 mL of WFI or 0.9% NaCl.<br>• Withdraw 1.7 mL of the obtained solution.<br>• Fill the withdrawn solution in 100 mL infusion cassette and bring to final volume with WFI or 0.9% NaCl. |
| 10,000 ng/mL | • Reconstitute 1 vial containing 1.5 mg of epoprostenol for infusion with 5 mL of WFI or 0.9% NaCl.<br>• Withdraw 3.4 mL of the obtained solution.<br>• Fill the withdrawn solution in 100 mL infusion cassette and bring to final volume with WFI or 0.9% NaCl. |
| Abbreviations: NaCl, sodium chloride; WFI, water for injection. | |

In the event that epoprostenol solutions diluted to final concentrations of ≥3000 to <15,000 ng/mL are prepared using vials containing 1.5 mg epoprostenol for infusion, these solutions will have a shorter maximum duration of use than corresponding solutions made using 0.5 mg vials. This is because the increased dilution factor with the 1.5 mg vial results in a lower pH, which in turn reduces the stability of VELETRI.[2]

The results of the in-house stability study indicate the following:

- Epoprostenol solutions diluted to final concentrations of ≥3000 to <15,000 ng/mL that have been prepared using 1.5 mg epoprostenol for infusion vials can be stored at 2°-8°C for 24 hours, following which they can be stored at 25°C for 24 hours.[3]

## LITERATURE SEARCH

A literature search of MEDLINE®, EMBASE®, BIOSIS Previews®, Derwent® (and/or other resources, including internal/external databases) was conducted on 28 June 2023.

## REFERENCES


1. Data on File. Epoprostenol for infusion 2 CCDS, version 6. Actelion Pharmaceuticals Ltd. EDMS-ERI-205912254. September 22, 2020.
2. Data on File. Techincal memo: VELETRI - preparation of solution for infusion with concentration between 3,000 ng/mL and 15,000 ng/mL. Actelion Pharmaceuticals Ltd. October 13, 2020.
3. Data on File. Stability report. In-use stability testing including mixed storage conditions of 3 µg/mL solutions prepared from 1.5 mg/vial epoprostenol for injection EFI2. Actelion Pharmaceuticals Ltd. SR23-02A. 2012.