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Dear Healthcare Professional

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FLOLAN (epoprostenol sodium) and leakage of administration sets containing PETG

Summary:

- GSK has recently received reports of leakage of administration materials used with FLOLAN prepared with Sterile Diluent (pH12) due to cracking or damage.
- The leakage occurred in components containing polyethylene terephthalate glycol (PETG) that were being used in renal dialysis.
- Polyethylene terephthalate (PET) is not considered to be compatible with highly alkaline solutions, based on reports of administration set damage when used with highly alkaline medications. PETG is thought to be similarly susceptible to alkaline solutions.
- GSK would like to advise that such administration materials may develop damage resulting in cracking or leakage of fluids when used for administration of FLOLAN solution prepared with Sterile Diluent (pH12).
- This information has been endorsed by the Medicines and Healthcare products Regulatory Agency

Key Messages:

- **FLOLAN solution prepared with Sterile Diluent (pH12) should not be used with any preparation or administration materials containing polyethylene terephthalate (PET) or polyethylene terephthalate glycol (PETG).**

Action required by Health Care Providers:

- **Check** if your patients who are receiving FLOLAN solution prepared with Sterile Diluent (pH12) use any preparation or administration materials that contain PET or PETG.

- If you are unsure of the materials that are used by your patients for preparation or administration of FLOLAN solution, you should consult the manufacturer of the sets to confirm if they are considered compatible with highly alkaline solutions, such as FLOLAN solution prepared with Sterile Diluent (pH12).

Please share the information in this letter with relevant health care personnel under your supervision.

Action Being Taken by GlaxoSmithKline:

GSK is reviewing the prescribing information for FLOLAN and Sterile Diluent (pH12) to establish whether an update is warranted to highlight the incompatibility of FLOLAN solution prepared with Sterile Diluent (pH12) and preparation and administration materials containing PET or PETG.

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Supporting Information:

During development of Sterile Diluent (pH12) for FLOLAN, GSK performed physical compatibility tests with preparation and administration materials that were reported to be used during preparation or administration of FLOLAN. These tests assessed the potential for an interaction between epoprostenol reconstituted with Sterile Diluent (pH12) and contact materials used during reconstitution and administration of epoprostenol solutions.

In addition, for some materials, compatibility testing with sodium hydroxide solutions is reported in published literature. These test conditions are frequently at higher pH, higher temperature and longer duration than administration components would be exposed during preparation or administration of FLOLAN solution prepared with Sterile Diluent (pH12). It is therefore likely that a material compatible with these extreme conditions will be generally compatible with FLOLAN solution prepared with Sterile Diluent (pH12).

Based on GSK testing with Sterile Diluent (pH12) or published literature with sodium hydroxide solutions, the following materials are likely to be compatible with FLOLAN solution prepared with Sterile Diluent (pH12):

- Modified Acrylic
- Acrylonitrile butadiene styrene (ABS)
- Cyclic olefin polymer
- Polyamide
- Polyethersulfone
- Polyethylene
- Polyisoprene
- Polyolefin
- Polypropylene
- Polytetrafluoroethylene (PTFE)
- Polyurethane
- Polyvinyl chloride (PVC) (plasticised with bis(2-ethylhexyl) phthalate [DEHP])
- Polyvinylidene fluoride (PVDF)
- Silicone

GSK did not test all administration sets that contain the above materials. The use of components of similar composition to those that were tested constitutes a lower risk of incompatibility. Manufacturers of administration sets may sometimes change the components or materials. You should consult the manufacturer of the sets to confirm if they are considered compatible with highly alkaline solutions, such as FLOLAN solution prepared with Sterile Diluent (pH12), if you are unsure of the materials that are used by your patients for preparation or administration of FLOLAN.

Call for reporting:

Adverse events should be reported. For the UK, reporting forms and information can be found at www.mhra.gov.uk/yellowcard. Adverse events should also be reported to GlaxoSmithKline on 0800 221 441.

Communication information:

If you have any questions, contact the Customer Contact Centre, GlaxoSmithKline, Stockley Park West, Uxbridge, Middlesex UB11 1BT; customercontactuk@gsk.com; Freephone: 0800 221 441. For medical information enquiries please email ukmedinfo@gsk.com or call 0800 221 441 (option 4).

Yours sincerely

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