

PERITONE

Package Insert Rev. 23

SOFT FLOW SC Low Calcium Peritoneal Dialysis Solution

For intraperitoneal administration only

PRODUCT NAME SOFT FLOW SC Low Calcium Peritoneal Dialysis Solution

DESCRIPTION SOFT FLOW SC Low Calcium Peritoneal Dialysis Solutions are sterile, nonpyrogenic, low calcium solutions in polypropylene (PP) bags for intraperitoneal administration only. The solution is clear and not more intensely coloured than a tinge of yellow.

COMPOSITION Sodium Chloride BP, Calcium Chloride BP, Magnesium BP, Dextrose Anhydrous BP, Sodium Lactate BP and Water for Injection BP.

DOSE FORMS AND STRENGTHS SOFT FLOW is used in Continuous Ambulatory Peritoneal Dialysis (CAPD) and Automated Peritoneal Dialysis (APD).

SOFT FLOW is available in concentrations and fill volumes as shown in the table below:

Table with 3 columns: No, Products, Fill Volume (ml). Rows 1-3 showing different dextrose concentrations (1.5%, 2.5%, 4.25%) and their respective fill volumes (2000, 2500, 5000 ml).

SOFT FLOW composition, calculated osmolality, pH and ionic concentrations are shown in the table below:

Table with 10 columns: Strength, g/L, mmol/L, Osmolality (mOsmol/L) (calc), pH, and ionic concentrations (Sodium, Calcium, Magnesium, Chloride, Lactate). Rows 1-3 corresponding to the product strengths.

PHARMACODYNAMICS

SOFT FLOW SC Low Calcium Peritoneal Dialysis Solution is a hypertonic peritoneal dialysis solution containing dextrose, a monosaccharide, as the primary osmotic agent. An osmotic gradient must be created between the peritoneal membrane and the dialysis solution in order for ultrafiltration to occur.

PHARMACOKINETICS

Glucose content in SOFT FLOW is expressed as dextrose anhydrous and is available in concentrations of 1.5%, 2.5% and 4.25%. Glucose is rapidly absorbed from the peritoneal cavity by diffusion and appears quickly in the circulation due to the high glucose concentration gradient between SOFT FLOW compared to blood capillary glucose level.

The rate of glucose absorption will be dependent upon the transport characteristics of the patient's peritoneal membrane as determined by a peritoneal equilibration test (PET). Glucose absorption will also depend upon the concentration of glucose used for the exchange and the length of the dwell. Glucose is metabolized by normal cellular pathways (e.g. glycolysis) and provides a source of calories and may elevate blood glucose levels.

Transport of other molecules across the peritoneal membrane, such as lactate, will occur by diffusion. Metabolism of lactate occurs in the liver and results in the generation of the bicarbonate.

Transport of other molecules will be dependent upon the molecular size of the solute, the concentration gradient, and the effective peritoneal surface area as determined by the PET.

INDICATION

SOFT FLOW SC in polypropylene (PP) bags for CAPD (1 bag of Peritoneal Dialysis Solution & 1 Drain Bag) is indicated for use in chronic renal failure patients being maintained on continuous ambulatory peritoneal dialysis when nondialytic medical therapy is judged to be inadequate.

SOFT FLOW SC in polypropylene (PP) bags for APD (1 bag of Peritoneal Dialysis Solution) is indicated for use in chronic renal failure patients being maintained on peritoneal dialysis.

RECOMMENDED DOSAGE AND ADMINISTRATION

The solution is used for dialysis therapy by instilling into the peritoneal cavity. Patients on continuous ambulatory peritoneal dialysis (CAPD) typically perform 4 cycles per day (24 hours). Patients on automated peritoneal dialysis (APD) typically perform 4-5 cycles at night and up to 2 cycles during the day. The fill volume depends on body size, usually from 2.0 to 2.5 liters per 1.73m².

Infusion volume, duration dwell, and frequency of treatment should be appropriately selected based on the condition, blood chemistry, body fluid imbalance, age and body weight of the individual patient to be treated.

Directions for Use

Always use SOFT FLOW exactly as instructed by the medical team specialised in Peritoneal dialysis. Check with them if you are not sure. Aseptic technique must be employed throughout the peritoneal dialysis procedure.

Warning

For patient comfort, SOFT FLOW may be warmed to 37°C (98°F). Only dry heat should be used. It is best to warm solutions within the overwrap using a heating pad. Do not immerse SOFT FLOW in water for warming. Do not use a microwave oven to warm SOFT FLOW.

To Open

To open, tear the overwrap down at the slit and remove the solution container. Some opacity of the plastic, due to moisture absorption during the sterilization process, may be observed. This does not affect the solution quality or safety and may often leave a slight amount of moisture within the overwrap. The opacity should diminish gradually.

Inspect for Container Integrity

Inspect the bag connector to ensure the tip protector (pull ring) is attached. Do not use if the tip protector is not attached to the connector. Inspect the SOFT FLOW container for signs of leakage and check for minute leaks by squeezing the container firmly. Inspect the frangible that it is positioned correctly and is not broken. Do not use SOFT FLOW if the frangible is broken or leaks are suspected as sterility may be impaired. Inspect the tubing and drain container for presence of solution. Small droplets are acceptable, but if solution flows past the frangible prior to use, do not use and discard the units.

To Add Medication

Additives may be incompatible. If the resealable rubber plug on the medication port is missing or partially removed, do not use product if medication is to be added.

- 1. Put on mask. Clean and/or disinfect hands.
2. Prepare medication port site using aseptic technique.
3. Using a syringe with a 1 inch long 25-19-gauge needle, puncture resealable medication port and inject additive.
4. Reposition container with ports up and evacuate the medication port by squeezing and tapping it.
5. Mix solution and medication thoroughly.

Addition of Potassium

Potassium is omitted from solutions because dialysis may be performed to correct hyperkalaemia. In situations where there is a normal serum potassium level or hypokalaemia, the addition of potassium chloride (up to a concentration of 4 mEq/L) may be indicated to prevent severe hypokalaemia. The decision to add potassium chloride should be made by the physician after careful evaluation of serum potassium.

Addition of Insulin

Addition of insulin was evaluated in 6 insulin-dependent diabetic patients undergoing CAPD for ESRD. No interference with insulin absorption from the peritoneal cavity or with insulin's ability to control blood glucose was observed. Appropriate monitoring of blood glucose should be performed when initiating SOFT FLOW in diabetic patients and insulin dosage adjusted if needed.

Addition of Heparin

No human drug interaction studies with heparin were conducted. In vivo studies demonstrated no evidence of incompatibility of heparin (Vogels et al. 2004).

Addition of Antibiotics

No formal clinical drug interaction studies have been performed. It has been reported in the literature that, in vitro studies of the following anti-infectives have demonstrated stability with several different peritoneal dialysis formulations: amphotericin B, ampicillin, azlocillin, cefepime, cefazolin, cefepime, cefotaxime, ceftazidime, ceftriaxone, ciprofloxacin, clindamycin, cotrimoxazole, deferolamine, erythromycin, gentamicin, linezolid, mezlocillin, miconazole, moxifloxacin, nalidixic acid, nalidixic acid, penicillin G, piperacillin, teicoplanin, ticarcillin, tobramycin, and vancomycin. However, aminoglycosides should not be mixed with penicillins due to chemical incompatibility (de Vin et al. 2009; Henderson et al. 1981; Navarro et al. 1986).

Administration instructions for CAPD therapy

- Put on mask. Clean and/or disinfect hands. Using aseptic technique;
1) Uncoil tubing and drain bag, ensuring that the transfer set is closed.
2) Remove the tip protector from the connector of solution container.
3) Immediately attach the solution container to patient connector (transfer set).
4) Clamp solution line and then break frangible near solution bag. Hang solution container and place the drainage container below the level of the abdomen.
5) Open transfer set to drain the solution from abdomen. If drainage cannot be established, contact your clinician. When drainage complete, close transfer set.
6) Remove clamp from solution line and flush new solution to flow into the drainage container for 5 seconds to prime the line. Clamp drain line after flush complete.
7) Open transfer set to fill. When fill complete, close transfer set.
8) Disconnect SOFT FLOW from transfer set and apply cap.
9) Upon completion of therapy, discard any unused portion.

Administration instructions for APD therapy

- Put on mask. Clean and/or disinfect hands. Using aseptic technique;
1) Remove the tip protector from connector of solution container. Do not reuse the solution or container once the tip protector is removed.
2) Immediately attach the solution container to automated peritoneal dialysis set.
3) Continue therapy as instructed in user manual or accompanying tubing sets for automated peritoneal dialysis. Upon completion of therapy, discard any unused portion.

CONTRAINDICATIONS

SOFT FLOW is contraindicated in patients with pre-existing severe lactic acidosis.

WARNINGS

Encapsulating Peritoneal Sclerosis (EPS) is considered to be a known, rare complication of peritoneal dialysis therapy.

Because SOFT FLOW is a dextrose-based solution, patients with allergy to corn or corn products are at increased risk for allergic reaction, which may include anaphylactic/anaphylactoid reactions. Stop the infusion immediately, drain the solution from the peritoneal cavity and treat appropriately if any signs or symptoms of a suspected hypersensitivity reaction develop.

Patients with severe lactic acidosis should not be treated with lactate-based peritoneal dialysis solutions (See Contraindications). Patients with conditions known to increase the risk of lactic acidosis (e.g., severe hypotension or sepsis that can be associated with acute renal failure, hepatic failure, inborn errors of metabolism, and treatment with drugs such as nucleoside/nucleotide reverse transcriptase inhibitors (NRTIs)) must be monitored for the occurrence of lactic acidosis before the start of treatment and during treatment with lactate-based peritoneal dialysis solutions.

When prescribing the solution to be used for an individual patient, consideration should be given to the potential interaction between the dialysis treatment and therapy directed at other existing illnesses. Serum potassium levels should be monitored carefully in patients treated with cardiac glycosides. For example, rapid potassium removal may create arrhythmias in cardiac patients using digitalis or similar drugs; digitalis toxicity may be masked by hyperkalaemia, hypermagnesaemia, or hypocalcaemia.

Correction of electrolytes by dialysis may precipitate signs and symptoms of digitalis excess. Conversely, toxicity may occur at suboptimal dosages of digitalis if potassium is low or calcium is high.

Diabetics require careful monitoring of insulin requirements and other treatments for hyperglycaemia during and following dialysis with dextrose containing solutions.

PERITONE

Package Insert Rev. 23

PRECAUTIONS

General

Peritoneal-Dialysis Related

SOFT FLOW SC Low Calcium Peritoneal Dialysis Solution is intended for intra peritoneal administration only. Not for intravenous administration.

The following conditions may predispose to adverse reactions to peritoneal dialysis procedures:

Abdominal conditions, including uncorrectable mechanical defects that prevent effective peritoneal dialysis or increase the risk of infection, disruption of the peritoneal membrane and diaphragm by surgery, congenital anomalies or trauma prior to complete healing, abdominal tumours, abdominal wall infections, hernias, faecal fistula, colostomies or ileostomies, frequent episodes of diverticulitis, inflammatory or ischemic bowel disease, large polycystic kidneys, or other conditions that compromise the integrity of the abdominal wall, abdominal surface, or intra-abdominal cavity, such as documented loss of peritoneal function or extensive adhesions that compromise peritoneal function. Conditions that preclude normal nutrition, impaired respiratory function, recent aortic graft placement, and potassium deficiency may also predispose to complications of peritoneal dialysis.

Aseptic technique must be employed throughout the peritoneal dialysis procedure to reduce the possibility of infection.

Following use, the drained fluid should be inspected for the presence of fibrin or cloudiness, which may indicate the presence of peritonitis.

If peritonitis occurs, the choice and dosage of antibiotics should be based upon the results of identification and sensitivity studies of the isolated organism(s) when possible. Prior to identification of the involved organism(s), broad-spectrum antibiotics may be indicated.

Over infusion of peritoneal dialysis solution volume into the peritoneal cavity may be characterized by abdominal distention, feeling of fullness and/or shortness of breath. Treatment of over infusion is to drain the peritoneal dialysis solution from the peritoneal cavity.

Need for Trained Physician

Treatment should be initiated and monitored under the supervision of a physician knowledgeable in the management of patients with renal failure.

A patient's volume status should be carefully monitored to avoid hyper- or hypovolemia and potentially severe consequences including congestive heart failure, volume depletion and hypovolemic shock.

An accurate fluid balance record must be kept and the patient's body weight monitored. Significant losses of protein, amino acids, water-soluble vitamins and other medicines may occur during peritoneal dialysis. The patient's nutritional status should be monitored and replacement therapy should be provided as necessary.

Information for Patients

Patients should be instructed not to use solutions if they are cloudy, discoloured, contain visible particulate matter, or if they show evidence of leaking containers (see Dosage and Administration).

Aseptic technique must be employed throughout the procedure.

An improper clamping sequence may result in infusion of air into the peritoneum (see Dosage and Administration, Directions for Use).

Laboratory Tests

Serum Electrolytes

SOFT FLOW does not contain potassium. Evaluate serum potassium prior to administering potassium chloride to the patient. In situations where there is a normal serum potassium level or hypokalaemia, addition of potassium chloride (up to a concentration of 4 mEq/L) to the solution may be necessary to prevent severe hypokalaemia. This should be made under careful evaluation of serum and total body potassium, and only under the direction of a physician.

Fluid, haematology, blood chemistry, electrolyte concentrations, and bicarbonate should be monitored periodically. If serum magnesium levels are low, magnesium supplements may be used.

Patients receiving SOFT FLOW solutions should have their calcium levels monitored for the development of hypocalcaemia or hypercalcaemia. In these circumstances, adjustments to the dosage of the phosphate binders, vitamin D analogs, and/or calcimimetics should be considered by the physician.

SOFT FLOW should be considered for use in patients with hypercalcaemia.

Carcinogenesis, Mutagenesis, Impairment of Fertility

Studies to evaluate the carcinogenic or mutagenic potential of this product, or its potential to affect fertility adversely, have not been performed.

Effects on the ability to drive and use machines

End stage renal disease (ESRD) patients undergoing peritoneal dialysis may experience undesirable effects, which could affect the ability to drive or use machines (e.g. malaise, hypovolemia).

Drug Interactions

No clinical drug interaction studies were performed. As with other dialysis solutions, blood concentrations of dialyzable drugs may be reduced by dialysis. Dosage adjustment of concomitant medications may be necessary. In patients using cardiac glycosides (digoxin and others), plasma levels of calcium, potassium and magnesium must be carefully monitored (see Warnings).

USE IN SPECIFIC POPULATION

Pregnancy

Pregnancy Category C. SOFT FLOW is a peritoneal dialysis solution of electrolytes, lactate and dextrose and is pharmacologically inactive. Animal reproduction studies have not been conducted with SOFT FLOW. While there are no adequate and well controlled studies in pregnant women, appropriate administration of SOFT FLOW with monitoring of fluid, electrolyte, acid-base and glucose balance, is not expected to cause fetal harm, or affect reproductive capacity. Maintenance of normal acid-base balance is important for fetal well being. Physicians should carefully consider the potential risks and benefits for each specific patient before prescribing SOFT FLOW.

Nursing Mothers

SOFT FLOW is a dialysis solution of electrolytes, lactate and dextrose and is pharmacologically inactive. The components of SOFT FLOW are excreted in human milk. Appropriate administration of SOFT FLOW with monitoring of fluid, electrolyte, acid-base and glucose balance, is not expected to harm a nursing infant. Physicians should carefully consider the potential risks and benefits for each specific patient before prescribing SOFT FLOW Solutions.

Geriatric Use

Safety and effectiveness have been established based on published clinical data.

Pediatric Use

Safety and effectiveness have been established based on published clinical data. No adequate and well-controlled studies have been conducted.

ADVERSE REACTIONS

The following adverse reactions have been identified during post approval use. Because these reactions are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a causal relationship during drug exposure. Adverse reactions are listed by MedDRA System Organ Class (SOC), then by Preferred Term in order of severity.

INFECTIONS AND INFESTATIONS: Fungal peritonitis, Peritonitis bacterial, Catheter related infection.

METABOLISM AND NUTRITION DISORDERS: Hypovolemia, Hypervolemia, Fluid retention, Hypokalaemia, Hyponatremia, Dehydration, Hypochloremia

VASCULAR DISORDERS: Hypotension, Hypertension

RESPIRATORY, THORACIC, AND MEDIASTINAL DISORDERS: Dyspnea

GASTROINTESTINAL DISORDERS: Sclerosing encapsulating peritonitis, Peritonitis, Peritoneal cloudy effluent, Vomiting, Diarrhea, Nausea, Constipation, Abdominal pain, Abdominal distension, Abdominal discomfort

SKIN AND SUBCUTANEOUS DISORDERS: Stevens-Johnson syndrome, Urticaria, Rash (including pruritic, erythematous and generalized), Pruritus

MUSCULOSKELETAL, CONNECTIVE TISSUE DISORDERS: Myalgia, Muscle spasms, musculoskeletal pain

GENERAL DISORDERS AND ADMINISTRATION SITE CONDITIONS: Generalized edema, Pyrexia, Malaise, Infusion site pain, Catheter related complication

DRUG ABUSE AND DEPENDENCE

There has been no observed potential of drug abuse or dependence.

OVERDOSAGE AND TREATMENT

Symptoms

There is a potential for overdose resulting in hypervolemia, hypovolemia, electrolyte disturbances or hyperglycaemia.

Treatment

Hypervolemia may be managed by using hypertonic peritoneal dialysis solutions and fluid restriction. Hypovolemia may be managed by fluid replacement either orally or intravenously, depending on the degree of dehydration.

Electrolyte disturbances may be managed according to the specific electrolyte disturbance verified by blood testing. The most probable disturbance, hypokalaemia, may be managed by the oral ingestion of potassium or by the addition of potassium chloride in the peritoneal dialysis solution prescribed by the treating physician.

Hyperglycaemia in diabetic patients may be managed by adjusting the insulin dose or adjusting other treatments for hyperglycaemia.

INCOMPATIBILITIES

Consult with physician. If, in the informed judgment of the physician, it is deemed advisable to introduce additives, use aseptic technique. Mix thoroughly when additives have been introduced. Do not store solutions containing additives.

Refer to directions for use accompanying drugs to obtain full information on additives.

If the resealable rubber plug on the medication port is missing or partially removed, do not use product if medication is to be added.

Some drug additives may be incompatible with SOFT FLOW.

Addition of Potassium

Potassium is omitted from solutions because dialysis may be performed to correct hyperkalaemia. In situations where there is a normal serum potassium level or hypokalaemia, the addition of potassium chloride (up to a concentration of 4 mEq/L) may be indicated to prevent severe hypokalaemia. The decision to add potassium chloride should be made by the physician after careful evaluation of serum potassium.

STORAGE CONDITIONS

STORE BELOW 30°C

DO NOT REFRIGERATE OR FREEZE

SOFT FLOW SC Low Calcium Peritoneal Dialysis Solution should be stored out of the reach of children.

HOW SUPPLIED

SOFT FLOW dialysis solutions are available in 2L and 5L polypropylene bags with an overwrap/pouch. SOFT FLOW dialysis solutions for CAPD: 1 bag of Peritoneal Dialysis Solution & 1 Drainage Bag. SOFT FLOW dialysis solutions for APD: 1 bag of Peritoneal Dialysis Solution.

NAME AND ADDRESS OF MANUFACTURER & PRODUCT REGISTRATION HOLDER

Peritone Health Sdn Bhd (1079413-W) Lot 12, Industrial Zone 4, Kulim Hi-Tech Park 09000, Kedah, Malaysia.

PRODUCT REGISTRATION NO:

SOFT FLOW SC Low Calcium (2.5mEq/L) Peritoneal Dialysis Solution with Dextrose 1.5% w/v: MAL18116041A2

SOFT FLOW SC Low Calcium (2.5mEq/L) Peritoneal Dialysis Solution with Dextrose 2.5% w/v: MAL18116040A2

SOFT FLOW SC Low Calcium (2.5mEq/L) Peritoneal Dialysis Solution with Dextrose 4.25% w/v: MAL18116042A2

Date of Revision of Package Insert

13 Aug 2020



Handwritten signature 'Normal' and date '05 NOV 2020'.

ADMINISTRATION INSTRUCTION FOR CAPD THERAPY (PACK SIZE : 2L & 2.5L)

A. PREPARATION



1. Clean table surface: Wipe table and drip stand.
2. Gather the required items for your treatment: PD solution set, minicap (check expired date), hand rub, mask.
3. Check solution bag: strength, volume expiry date.



4. Remove transfer set from pouch.
5. Put on mask. Do proper hand wash and dry well.



6. Remove outer wrap of PD solution set.



7. Squeeze PD solution bag to check for any leak. Check clarity of bag and breakable seal is intact.

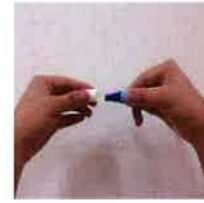
B. CONNECTION



8. Clamp both the inflow and outflow tubings of PD solution set.



9. Perform a proper hand rub.



10. Remove minicap from transfer set without touching anywhere.



11. Connect to PD solution set.

C. CAPD EXCHANGE: DRAIN, FLUSH, FILL



12. Break the seal. Hang the solution Bag.
13. Place drainage bag at a position lower than patient.



14. **DRAIN:** Open both clamps on transfer set and drainage bag to allow drainage to flow out. - check effluent for cloudiness.
15. Close clamp on transfer set when drain is completed.



16. **FLUSH:** Open clamp of the PD solution bag, count 1-10 and check the solution flow into the drainage bag.
17. Close clamp at drainage bag.



18. **FILL:** Open clamp on transfer set to allow the solution to flow into the peritoneum.
19. Close clamp on solution bag when infusion is completed.
20. Close clamp on transfer set.

D. DISCONNECTION



21. Open a new mini cap pack.



22. Perform a proper hand rub.



23. Disconnect PD solution set from the transfer set.



24. Cover transfer set with the mini cap carefully.
25. Weigh the effluent and record the amount.
26. Check effluent for any cloudiness. Dispose the effluent used bag.

ADMINISTRATION INSTRUCTION FOR APD THERAPY (PACK SIZE : 5L)



1. Prepare the items for the Automated Peritoneal Dialysis (APD) therapy. Start the APD machine.
2. Scan the QR code of each Peritoneal Dialysis bag to ensure that the correct solution is used according to the prescription ordered.
3. Follow the audio/visual instructions on the screen to connect the PD bags to the machine without touching any other area.
4. When APD therapy is completed, disconnect lines carefully. For safe therapy, please follow all instructions in manual before using the APD machine.

***Do not skip Hand Rub! This procedure is MANDATORY to prevent infection.
*For safe therapy, please follow all instructions in manual before using the APD machine**



Nawal
05 NOV 2020