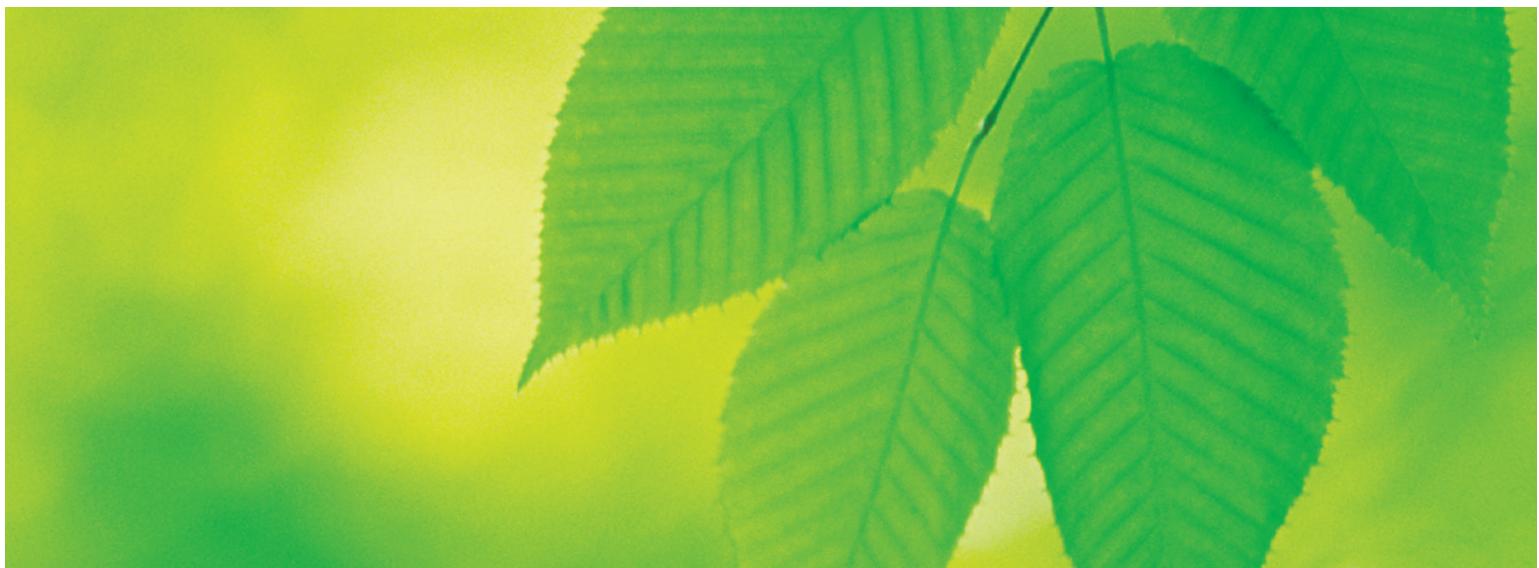


# PleurX® drainage guide



## Patient Name

## General Practitioner

Name: .....

Tel: .....

## Catheter Implant

Date: .....

Hospital: .....

Consultant: .....

Ward: .....

Name: .....

Tel: .....

Other: .....

Name: .....

Tel: .....



**CareFusion**

## Additional physician notes:

Your doctor may want to use this space to provide additional comments regarding your drainage regime:

*Note: Sutures around the catheter should be removed once there is tissue in-growth around the cuff.*

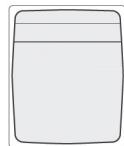


# Drainage Kit Contents

## Procedure Pack

Self-Adhesive Dressing

(A)



(B) Blue Wrapping around the following:

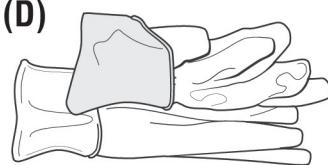
Alcohol Pads

(C)



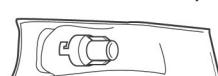
(D) Gloves

(D)



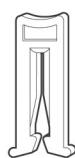
Catheter Valve Cap

(E)



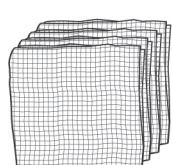
Blue **Emergency** Slide Clamp

(F)



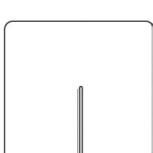
Gauze Pads

(G)

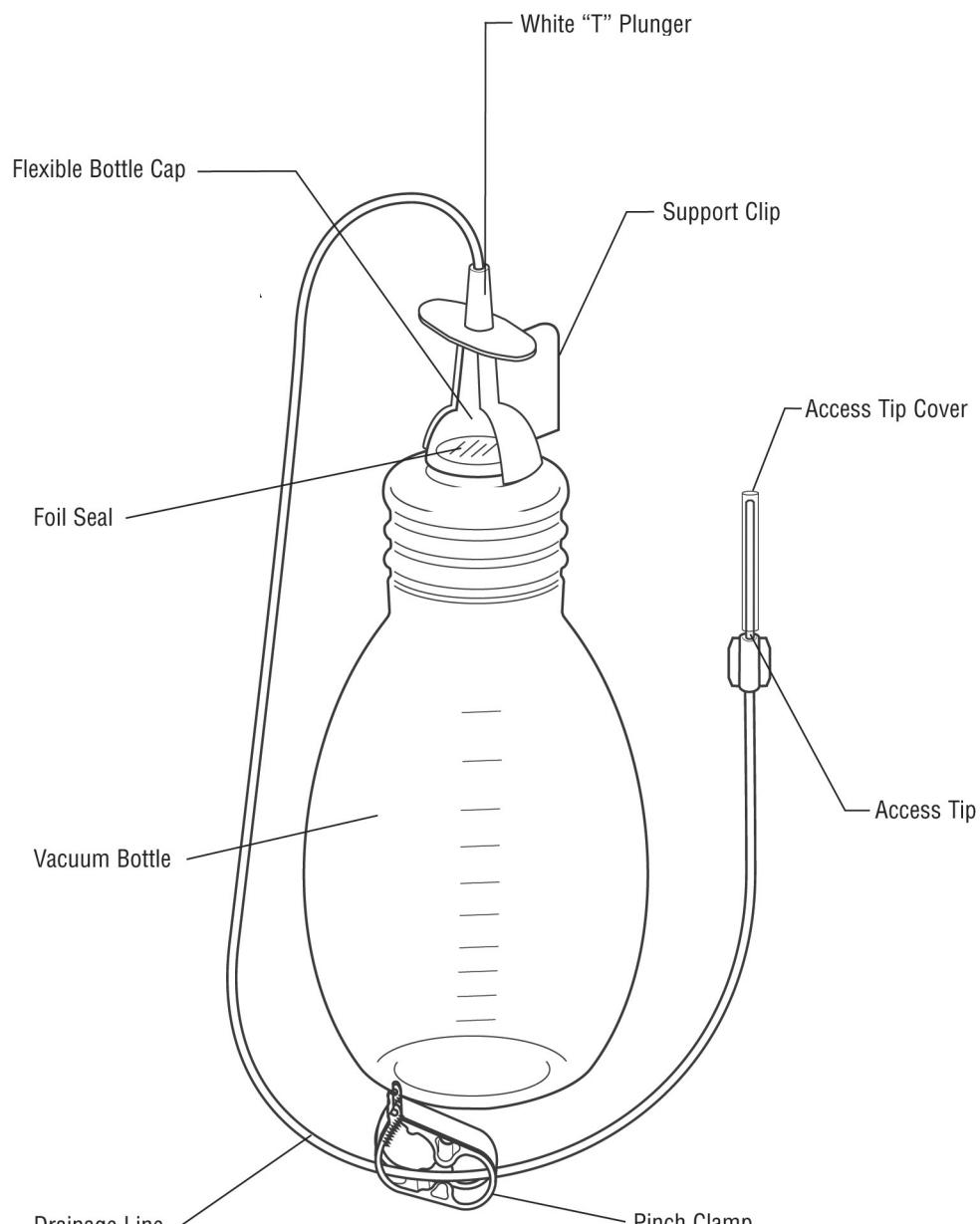


Foam Catheter Pad

(H)



## Plastic Vacuum Bottle



## PleurX Drainage Procedure

You should have been trained by a doctor or nurse in the correct way to use the items in this kit. If you have any problems or questions about draining the fluid, contact your doctor or nurse.

Read this entire pamphlet carefully before draining fluid.

## Warnings

Do not drain more than 1000 ml of fluid from your chest or 2000 ml of fluid from your abdomen at any one time.

It is normal to feel some discomfort or pain when draining fluid. If discomfort or pain is experienced when draining, clamp the drainage line to slow or stop the flow of fluid for a few minutes. If you do not feel better after doing this or the pain is severe, contact your doctor or nurse. Pain may be an indication of infection.

Keep the valve on the PleurX Catheter and the access tip on the drainage line clean. Keep them away from other objects to help avoid contamination.

Do not use scissors or other sharp objects near the PleurX Catheter.

Do not put anything except the access tip of the drainage line into the PleurX Catheter valve since this could damage the valve. A damaged valve may allow air into your body or let fluid leak out through the valve when you are not draining.

### If you accidentally cut the catheter or damage the valve, follow these steps:

- a. Pinch the catheter closed between your fingers.
- b. Slip the blue **emergency** slide clamp over the catheter and push the catheter completely into the small end of the clamp. This will close the catheter. (**Figure 1**)
- c. Notify your doctor immediately.

## Cautions

For single use only. Re-use may result in a non-functional product or contribute to cross contamination.

Fluid collected in the drainage bottle is not sterile. To ensure that fluid collected in the bottle does not flow back into the catheter, close the pinch clamp on the drainage line when you are finished draining. Do not invert the bottle and hold it above your catheter site.

The pinch clamp on the drainage line must be completely closed when not draining or the vacuum in the bottle may be lost.

Make sure that the valve and the access tip are securely connected when draining. If they are accidentally separated, they may become contaminated and the vacuum in the bottle may be lost. If this occurs, clean the valve with an alcohol pad and use a new drainage bottle to avoid potential contamination.

The alcohol pads are flammable. Do not expose the pads to an open flame.

Precautions should be taken to ensure the drainage line is not tugged or pulled.

Contains Phthalates. The benefit of treatment outweighs the remote possibility of exposure to phthalates.

**Chest:** Potential complications of draining the pleural space include, but may not be limited to, pneumothorax, reexpansion pulmonary edema, hypotension, circulatory collapse and infection.

**Abdomen:** Potential complications of draining fluid from the abdomen include, but may not be limited to, hypotension, circulatory collapse, electrolyte imbalance, protein depletion, ascites leakage, peritonitis, wound infection, and loculations of the peritoneal space.

## Sterility

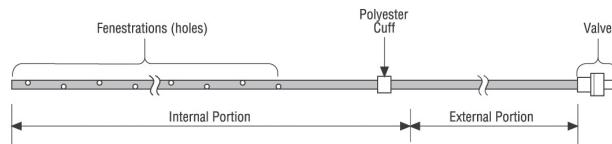
The Procedure Pack and Vacuum Bottle (with drainage line) have been sterilized. The inside of the bottle and bottle connections are not exposed to sterilant. Samples should not be taken from the bottles. These products are for single use only. Do not re-sterilize.

Do not use if package is damaged.

CareFusion will not be responsible for any product that is resterilized, nor accept for credit or exchange any product that has been opened but not used.

## The PleurX Catheter

The PleurX Catheter may be placed in your chest to drain fluid from around your lungs or it may be placed in your abdomen to drain fluid that builds up in that area. Your doctor has placed the PleurX Catheter to allow you to drain fluid from your chest or abdomen while you are at home. Part of the catheter is inside your body and has several holes that allow fluid to enter the catheter. The fluid is drained through the outer end of the catheter. There is a valve at the outer end of the catheter that prevents air from entering and fluid from leaking out when you are not draining.



The PleurX Drainage Kit and Vacuum Bottles may be used to drain fluid through the PleurX Catheter whether it is placed in your chest or abdomen. To provide the best performance and to avoid damage to the catheter, always use the PleurX Drainage Supplies for draining fluid through the PleurX Catheter.

## PleurX Drainage Supplies

The following supplies are required to complete a drainage procedure: **(Figure 2)**

- 1 Plastic Vacuum Bottle with attached Drainage Line
- 1 Procedure Pack containing the following sterile items:
  - 1 Self-Adhesive Dressing **(A)**
  - Blue Wrapping (Wrapped around the following Items) **(B)**
    - 3 Alcohol Pads **(C)**
    - 1 Pair of Gloves **(D)**
    - 1 Valve Cap **(E)**
    - 1 Blue Emergency Slide Clamp **(F)**
    - 4 Gauze Pads 4" x 4" (10 cm x 10 cm) **(G)**
    - 1 Foam Catheter Pad **(H)**

## How to Drain Using the PleurX Drainage Kit

Now that your doctor or nurse has trained you on the drainage procedure, you should find it easy to follow these step-by-step instructions. You should drain as directed by your doctor, usually every one to two days. Do not change frequency or drain more fluid than your doctor has recommended without first consulting your doctor.

### Prepare to Drain

1. Set up a clean, clear workspace on a table or counter.
2. Place the number of bottles that you plan on using near your workspace.
3. Thoroughly wash your hands with soap and water for at least 1 minute.
4. Remove the dressing from over your catheter. If you see any redness, swelling or fluid around the catheter, finish this drainage procedure and contact your doctor or nurse.
5. Thoroughly wash your hands again with soap and water for at least 1 minute.
6. Open the Drainage Kit bag and remove the Procedure Pack pouch.
7. Open the Procedure Pack pouch. Set the adhesive dressing aside.
8. Set bundle with blue wrapping on your workspace with the flap side up. Carefully unfold the blue wrapping by pulling on the outside of the wrapping. Leave the enclosed items on the wrapping. The items and the inside of the wrapping are sterile. Do not touch them with your ungloved hands or other non-sterile items. **(Figure 4)**
9. Remove the bottle with the drainage line from the bag. The items in the drainage kit bag are sterile. It is especially important that the access tip remain sterile. If the cover has fallen off of the access tip, make sure you do not touch the tip with your hands or anything non-sterile. The access tip can only touch the blue wrapping.

10. Set bottle near blue wrapping, remove the paper tape from the drainage line and uncoil the drainage line. Place the access tip on the blue wrapping.
11. Both gloves fit either hand. Be careful not to let the outside of the gloves touch anything non-sterile, such as your skin or clothing. Put on gloves as shown. **(Figure 5)**
12. Peel open the pouch containing the valve cap and let the cap fall onto the blue wrapping. **(Figure 6)**
13. Tear open the three alcohol pads, but do not remove the pads from their pouches. Place them on the blue wrapping.

### Connect the Drainage Bottle

**Warning:** Keep the valve on your PleurX Catheter and the access tip on the drainage line clean. Keep them away from other objects to help avoid contamination.

**Warning:** Do not put anything except the access tip of the drainage line into the PleurX Catheter valve, since this could damage the valve. A damaged valve may allow air into your body or let fluid leak out through the valve when you are not draining.

1. Squeeze the pinch clamp on the drainage line completely closed. **(Figure 7)**
2. Hold the drainage line near the access tip and remove the cover from the access tip with your other hand by twisting it and pulling gently. **(Figure 8)** Set the access tip back on the sterile blue wrapping.
3. Hold the base of the catheter valve and remove the cap by twisting it counterclockwise and pulling gently. **(Figure 9)** Discard the cap.
4. While holding the base of the catheter valve in one hand, clean around the valve opening with an alcohol pad. **(Figure 10)**
5. Continue holding the catheter near the valve. Pick up the drainage line with your other hand and insert the access tip securely into the catheter valve. You will feel and hear a click when the access tip and valve are locked together. **(Figure 11)**

### Drain Fluid

**Warnings:** It is normal to feel some discomfort or pain when draining fluid. If discomfort or pain is experienced when draining, clamp the drainage line to slow or stop the flow of fluid for a few minutes. If you don't feel better after doing this, or the pain is severe, contact your doctor or nurse. Pain may be an indication of infection.

**Warnings:** Do not drain more than 1000 ml of fluid from your chest or 2000 ml of fluid from your abdomen at any one time.

**Warnings:** Do not use scissors or other sharp objects near the PleurX Catheter.

**Note:** The blue **emergency** slide clamp should be used if you accidentally cut the catheter. See **Warnings** and **Cautions**.

1. The support clip on the vacuum bottle insures that the vacuum seal on the bottle is not broken before you are ready. Remove the support clip by grasping the upper part of the flange and pulling outward. **(Figure 12)**
2. Hold the bottle steady with one hand and push the white "T" plunger down with the other hand to puncture the foil seal. The vacuum in the bottle will pull the flexible bottle cap down. **(Figure 13)**
3. Release the pinch clamp on the drainage line to begin drainage. Fluid will flow into the vacuum bottle. You can slow the flow by squeezing the pinch clamp until partially closed. **(Figure 14)**
4. The flow into the bottle may slow down when the fluid is almost completely drained. When the flow stops or the bottle is filled, squeeze the pinch clamp on the drainage line completely closed. Drainage will usually take 5 –15 minutes.

## Changing the Drainage Bottle

If you need to change to a new bottle for any reason, the procedure follows the same steps.

1. Remove the new bottle with the drainage line from the bag. The items in the drainage kit bag are sterile. It is especially important that the access tip remain sterile. If the cover has fallen off of the access tip, make sure you do not touch the tip with your hands or anything non-sterile. The access tip can only touch the blue wrapping.
2. Set bottle near blue wrapping, remove the paper tape from the drainage line and uncoil the drainage line. Place the access tip on the blue wrapping.
3. Squeeze the pinch clamp on the drainage line completely closed. **(Figure 7)**
4. Hold the drainage line near the access tip and remove the cover from the access tip with your other hand by twisting it and pulling gently. **(Figure 8)** Set the access tip back on the sterile blue wrapping.
5. To remove the used bottle, hold the drainage line in one gloved hand and the catheter valve in the other gloved hand, pull the access tip of the used bottle out of the valve in a firm, smooth motion. Set the used drainage line down.
6. Continue holding the catheter near the valve. Pick up the new drainage line with your other hand and insert the access tip securely into the catheter valve. You will feel and hear a click when the access tip and valves are locked together.
7. Resume following these instructions for use beginning with **Draining Fluid**. You do not need to clean the valve between bottles.

## Final Steps

1. With the used drainage line in one gloved hand and the catheter valve in the other hand, pull the access tip out of the valve in a firm, smooth motion. **(Figure 15)** Set the used drainage line down.
2. Clean the catheter valve with a new alcohol pad.

3. Place the new cap over the catheter valve and twist it clockwise until it snaps into its locked position. **(Figure 16)**

## Place a New Dressing

1. Clean around the catheter site with a new alcohol pad. **(Figure 17)**
2. Place the foam catheter pad around the catheter. **(Figure 18)**
3. Wind the catheter into loops and place it over the foam pad. **(Figure 19)**
4. Cover the catheter with the gauze pads. **(Figure 20)**
5. Remove gloves from both hands.
6. The self-adhesive dressing has three (3) layers:
  - a. Clear shiny plastic covering
  - b. Clear wound dressing
  - c. Two piece white paper backing
7. Take the self-adhesive dressing and peel away the larger of the two white pieces of paper backing from the dressing. **(Figure 21)**
8. Center the dressing over the gauze pads and press it down. **(Figure 22)**
9. There is a clear shiny plastic covering that needs to be removed from the dressing. Starting at one of the corners where the white paper backing remains, bend the shiny plastic covering back slightly and pinch the corner of the white paper and the clear wound dressing to separate the shiny plastic covering from the clear wound dressing.

**Note:** You may find it easier to separate a corner of the white paper from the clear wound dressing and use the tip of your finger or fingernail to start separating the shiny plastic covering from the dressing. (This is similar to the way you would remove a piece of tape or an adhesive tag.) Peel the shiny plastic covering from the dressing. **(Figure 23)**

10. Remove the remaining white paper backing from the clear wound dressing and press it down.

## Empty the PleurX Drainage Bottle(s)

1. Record the volume of drained fluid on drainage chart.
2. Hold the bottle steady with one hand and push down on the "T" plunger, then move it in a circular motion to make a larger opening in the foil seal. **(Figure 24)**
3. Release the pinch clamp on the drainage line to release any vacuum that may be left in the bottle then re-clamp the drainage line completely closed.
4. The drainage line is attached with a flexible cap. Place your thumb on the edge of the cap and push the cap sideways and down into the bottle opening to loosen the cap from the bottle rim. Grasp the cap and pull it away from the bottle to remove the drainage line. **(Figure 25)**
5. Empty the bottle into the toilet or sink.
6. Place the drainage line and bottle in a plastic bag, seal tightly, and discard.

## Frequently Asked Questions

### Q: How often should I drain the fluid from my chest or abdomen?

A: You should drain fluid as directed by your doctor, usually every one to two days. Consult your doctor before changing the frequency of your drainage.

### Q: What if I still feel short of breath or experience discomfort after I have finished draining?

A: Notify your doctor if you continue to feel short of breath or experience discomfort. Do not drain more than 1000 ml of fluid from your chest or 2000 ml of fluid from your abdomen at any one time.

### Q: When will I know that the catheter can be removed?

A: When you try to drain fluid 3 times in a row, and each time less than 50 ml drains into the bottle, you should see your doctor to find out if the catheter can be removed or if it needs to be replaced. (See next question.)

### Q: What does it mean if the volume of fluid I drain decreases or if I do not drain any fluid?

A: If the fluid goes away suddenly or if the amount of drainage gradually declines, it is possible that the catheter or drainage line may be clogged. Squeeze the catheter and the drainage line gently. If drainage does not begin, follow the instructions for changing to another bottle. If the drainage does not start when you use a second bottle, call your doctor. If the amount of drainage gradually declines, the fluid may be drying up and it may be time for the catheter to be removed. Refer to question "When will I know that the catheter can be removed?"

### Q: How long will the catheter be in my chest or abdomen?

A: The catheter will be in until fluid stops draining. The amount of time will vary from patient to patient. Fluid build-up is not likely to stop in the abdomen but may stop in the chest. The catheter may remain in place as long as you need it.

### Q: What should I do if the color of the fluid changes from the usual color?

A: Any change in the appearance of the fluid should be reported to your doctor.

### Q: Can I take a shower or bath with the catheter in place?

A: **Shower:** You can take a shower or sponge bath if a selfadhesive dressing like the one in the Procedure Pack is securely attached to your skin. The self-adhesive dressing is designed to keep fluid out. Be sure the dressing is completely and securely attached and that the catheter and gauze pads are all contained underneath it. If the gauze becomes

wet when showering, remove the dressing immediately, clean and dry the area, and apply a new dressing as instructed under section "Place a New Dressing".

A: **Bath:** Do not allow the catheter to soak underwater in a tub, bath, pool, etc.

### Q: What happens if the PleurX Catheter is accidentally pulled out?

A: In the unlikely event that the catheter is pulled out or the cuff becomes exposed, cover the exit site with a sterile dressing and seek immediate medical attention. The PleurX Catheter has a polyester cuff that is normally under the skin where the catheter is inserted. The cuff and the sutures help keep the catheter in place.

### Q: How will I know if my catheter is infected?

A: You should contact your doctor immediately if you believe your catheter is infected. Pain, redness (erythema), warmth to touch, swelling (edema), fever or fluid from around the catheter site may indicate your catheter is infected. Some discomfort and redness after insertion is expected but should not persist or worsen.

## PleurX Accessories Additional Drainage Supplies

Product Description	REF
<input type="checkbox"/> PleurX Drainage Kit (1000 ml bottle)	50-7510
<input type="checkbox"/> PleurX Drainage Kit (500 ml bottle)	50-7500B
<input type="checkbox"/> Vacuum Bottle (1000 ml) with Drainage Line	50-7210
<input type="checkbox"/> Vacuum Bottle (500 ml) with Drainage Line	50-7205B
<input type="checkbox"/> Drainage Line Set	50-7245
<input type="checkbox"/> Replacement Valve Cap	50-7235

Contact your doctor or nurse for information on how to obtain additional supplies. Further product information and resources are available online at [www.carefusion.co.uk/pleurx](http://www.carefusion.co.uk/pleurx)

## Warranty

CareFusion warrants that this medical device is free from defects in both materials and workmanship.

The above warranties are in lieu of all other warranties, either expressed or implied, including any warranty of merchantability or fitness for a particular purpose. Suitability for use of the medical device for any surgical procedure shall be determined by a qualified medical professional. CareFusion shall not be liable for incidental or consequential damages of any kind.

## Glossary of Terms

**Ascites:** liquid that builds up in the abdomen

**Pneumothorax:** air in the space between the lungs and the chest wall

**Circulatory collapse:** sudden drop in blood pressure: shock

**Erythema:** redness of the skin

**Edema:** swelling due to excessive fluid

**Electrolyte imbalance:** change in the normal level of certain chemicals in the body; such as sodium or potassium

**Hypotension:** low blood pressure

**Peritoneum:** membranes that line the inside of the abdomen and surround the abdominal organs

**Peritoneal space:** space in the abdomen formed by the inner and outer membranes of the peritoneum

**Peritonitis:** infection of the peritoneum

**Protein depletion:** reduction in the amount of protein in the blood

**Re-expansion pulmonary edema:** accumulation of fluid in the lung associated with very rapid drainage of pleural effusion

# Drainage Record

## Drainage Record, continued

## Drainage Record, continued

For further information or to learn more about how CareFusion can assist in your efforts to bring this valuable treatment option to more patients, please **email IS-Pleurx@carefusion.com**, or visit **carefusion.co.uk/pleurx**



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