

**Latest draft Perfadex guideline (March 2016):**

**PERFADEX**

- Shelf life of 3 years at pH 5.5.
- Store at < 30° C
- DO NOT add any drugs or buffering agents to the Perfadex bags until it is finally confirmed that lungs are being retrieved.
- Once the Perfadex container is opened and additives have been added the solution must be kept cold and used within 24 hours.

**Donor size and required volume of Perfadex**

Donor Wt (Kg)	AntegradeVol (L)	Retrograde Vol (L)	Total Vol (L)	Number of 1L bags required
21-40	1.0	1.0	2.0 (50-95 ml/kg)	2
41-60	2.0	1.0	3.0 (50-73 ml/kg)	3
61-80	3.0	1.0	4.0 (50-67 ml/kg)	4
81-100	4.0	1.0	5.0 (50-62 ml/kg)	5
101-120	5.0	1.0	6.0 (50-59 ml/kg)	6
121-140	6.0	1.0	7.0 (50-58 ml/kg)	7

- Will need up to 7 of 1L bags per retrieval
- Keep enough at 4° C for 3 retrieval, i.e. 3 x 6 of 1.0L bags

**Additives**(see table below)

- Prior to administration, the pH needs to be buffered upwards to 7.4 by the addition of THAM/TRIS (Tromethamine) for all bags
- Calcium chloride is also required
  - Calcium chloride 0.5 ml for each 1.0 L bag
  - THAM 1.6 ml for each 1.0 L bag
- The first 1.0L Perfadex bags should also contain Prostacyclin and GTN - 500 mcg Prostacyclin and 25 mg of GTN diluted in 50 mL of supplied diluent.

- The Perfadex bags must be labeled either
  - a) **“WithALL drugs”**or
  - b) **“With Ca<sup>++</sup>& THAM only”**
- Drugs should be added to the bags individually. Give the bag a good shake
- ReturnPerfadex bags 2-7 in the ice-box after adding drugsuntil required

	Bag 1	Bag 2	Bag 3	Bag 4	Bag 5	Bag 6	Bag 7
Temperature	Room	Cold	Cold	Cold	Cold	Cold	Cold
Prostacyclin	Yes	-	-	-	-	-	-
GTN	Yes	-	-	-	-	-	-
Calcium Chloride	Yes	Yes	Yes	Yes	Yes	Yes	Yes
THAM	Yes	Yes	Yes	Yes	Yes	Yes	Yes

### PERFADEX DELIVERY

- It is delivered from a height of about 25 cm above donor
- **If delivery pressure is monitored by infusion line previously used for prostacyclin bolus, aim for a pressure of 25 mmHg**
- Preservation solution is delivered in two phases, antegrade followed by retrograde.
- The same antegradecannula(e) is removed from the PA and placed into each pulmonary vein in turn.
- The retrograde phase consists of delivering 250 mls of Perfadex into each pulmonary vein. This is done by pinching the cannula between the fingers so as to prevent the pneumoplegia from leaking back into the left atrium.
- Prior to the retrograde flush, the heart is excised and thepulmonary trunktransected just before its bifurcation