

## Geuder Pre-Loaded Glass Cannula for DMEK

### Instructions for Use

In addition to the pre-loaded cannula, you will need to have a sterile shallow petri dish filled with Balanced Salt Solution (BSS) and one (1) 5cc syringe filled with Balanced Salt Solution (BSS) available for use during the technique.

1. Have the technician remove the cap from the vial containing the cannula and hold the vial in an upright position at the edge of the sterile field.
2. Using sterile hemostats, remove the preloaded cannula system from the vial.
3. Place the preloaded cannula system on the sterile field with the cannula facing up.
4. Carefully remove the glass cannula from the clear plastic transportation holder.

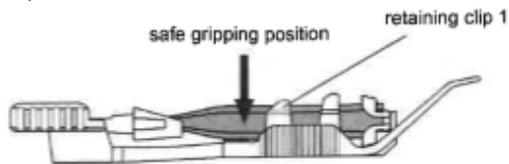


Fig. 1a

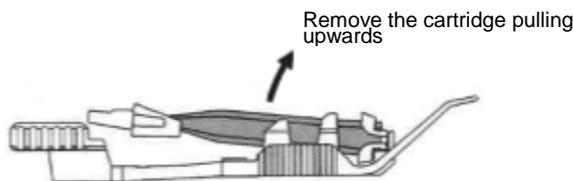


Fig. 1b

Important: To avoid unwanted leakage of the corneal storage medium from the cartridge, the cartridge must always be held if possible in a horizontal position.

5. Hold the cannula in a horizontal position over a petri dish filled with BSS.
6. While maintaining the cannula in a horizontal position, carefully remove the end cap from the large end of the cannula. Be sure the graft does not fall out of the open end.
7. Using a drop of BSS on the end of the syringe to mitigate introduction of an air bubble into the cannula, connect a 5cc syringe filled with BSS to the large end of the cannula.

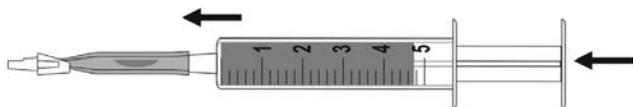


Fig. 2

8. Carefully flush cornea storage media from the cannula by using gentle bursts of BSS from the syringe. To prevent the graft from prematurely entering the slender end of the cannula do not introduce BSS too quickly or forcefully.
9. If the graft starts to enter the slender end of the cannula, aspirate BSS from the petri dish to reposition the graft while continuing to flush the cornea storage media from the cannula. Do not allow the graft to enter the slender end of the cannula during this process.
10. Once cornea storage media is flushed from the cannula, while maintaining a horizontal hold over the petri dish, carefully remove the front plug by gently pulling it **lengthwise** (fig. 4). **Tilting or rotation of the plug must be absolutely avoided.** There is a risk of destruction of the cartridge and thus also of the graft. The user could be injured.



Fig. 4

11. Using gentle bursts of BSS from the syringe carefully guide the graft into the slender end of the cannula making sure the graft does not prematurely deploy out of the open end of the cannula.
12. Once the graft is positioned in the slender end of the cannula, the graft is ready to insert into the anterior chamber of the eye.
13. Insert the tip of the cannula through a tight 2.5-millimeter incision.
14. Rotate the cannula so the bevel is up.
15. Deploy the graft by gently depressing the syringe plunger in short bursts versus a steady push. Visualize the graft as it moves into the anterior chamber.
16. Do not remove the cannula from the anterior chamber.
17. Use bursts of fluid from the syringe to position the graft in such a way it will not follow the cannula as it is being removed from the wound.
18. Remove the cannula from the anterior chamber.
19. Discard the cannula after use.
20. Proceed with un-scrolling and positioning the DMEK graft in the patient's eye.