



## *Instructions for Use*

### *Injector Prep and Loading*

#### *80000-DMEK - Straiko DMEK Injector*

#### *Manufactured by:*

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#### **Injector Prep**

- The Straiko DMEK injector (80000-DMEK) should be sterilized per instructions found at [www.guntherweiss.com](http://www.guntherweiss.com).
- A video of the assembly process can be found by using this link: [Straiko DMEK injector assembly](#)
- For attaching the Straiko DMEK injector to the syringe use a section of a #14 French nasogastric suction catheter or equivalent sterile silicone tubing.
- Using scissors cut a section of 40mm to 50mm from a #14 French nasogastric suction catheter.
- Place the 40 to 50 mm section of tubing over the tip of a 3cc syringe.
- Fill the syringe with BSS.
- The flexible tubing, previously cut, will now be cut to fit the flanged end of the Straiko DMEK injector by placing the open end of the cut tubing next to the flanged end of Straiko DMEK injector Using the Straiko DMEK injector as a guide for length cut the flexible tubing to length so that the flanged end of the Straiko DMEK injector can be inserted into the tubing and the tubing will reach the reservoir section of the Straiko DMEK injector.
- Slide the Straiko DMEK injector snugly into the tubing sleeve which when accomplished will complete a secure and leak proof seal. The flanged end of the glass tube should sit very near the plastic hub of the syringe.
- Expel BSS through the assembled device and eliminate all of the air bubbles. Flush the syringe thoroughly several times if needed to ensure all the bubbles are eliminated. Leave 1.5 to 2 ccs of BSS in the syringe for tissue loading.



## Tissue Prep

- Prepare the DMEK graft by stripping the tissue and leaving a small attachment so it will not float off of the stromal carrier. Alternatively, obtain pre-stripped tissue from an eye bank with DMEK experience.
- Stain the graft for several seconds with Trypan blue to make the edge visible and to inspect for damage. This clarifies the edge and assists when picking up the graft.
- Place the pre-stripped donor tissue on the Vacuum Punch base.
- Applying suction is not necessary and may be damaging to the tissue if the tissue has a corneal window that was used for placing an orientation mark. Suction may pull the DMEK graft into the corneal window.
- Punch the graft to the desired size. A partial thickness punch is best so that the Descemet's membrane is punched through but the carrier stroma is not.
- Remove the peripheral rim of Descemet's membrane carefully to ensure that the graft punch is complete. The removed rim tissue may be used to practice loading and unloading the injector.
- Place enough fluid into the well that the graft is covered.
- Grasp the very edge of the graft and lift gently to complete separation of the graft from the carrier tissue. Use forceps with a very delicate tip to grab one spot and lift the graft straight up toward the attached hinge area.
- Place the graft back into the corneoscleral cap and stain it with trypan blue to aid in visualization. Staining time is up to the surgeon preference but generally ranges from 1 to 4 minutes.
- Remove excess Trypan with care and then refloat the graft in BSS.

## Loading the Straiko DMEK injector (80000-DMEK)

- The tissue can be loaded into the injector straight from the corneoscleral cap.
- Very carefully orient the scrolled graft with the tip of the Straiko DMEK injector and so that it is parallel to the tip of the tube.
- With a gentle sucking motion of the syringe, pull back on the plunger and the graft will slide easily into the Straiko DMEK injector.
- Only delicate motions are needed and the graft can be left positioned at the very tip of the device.
- The Straiko DMEK injector (80000-DMEK) is now ready for use