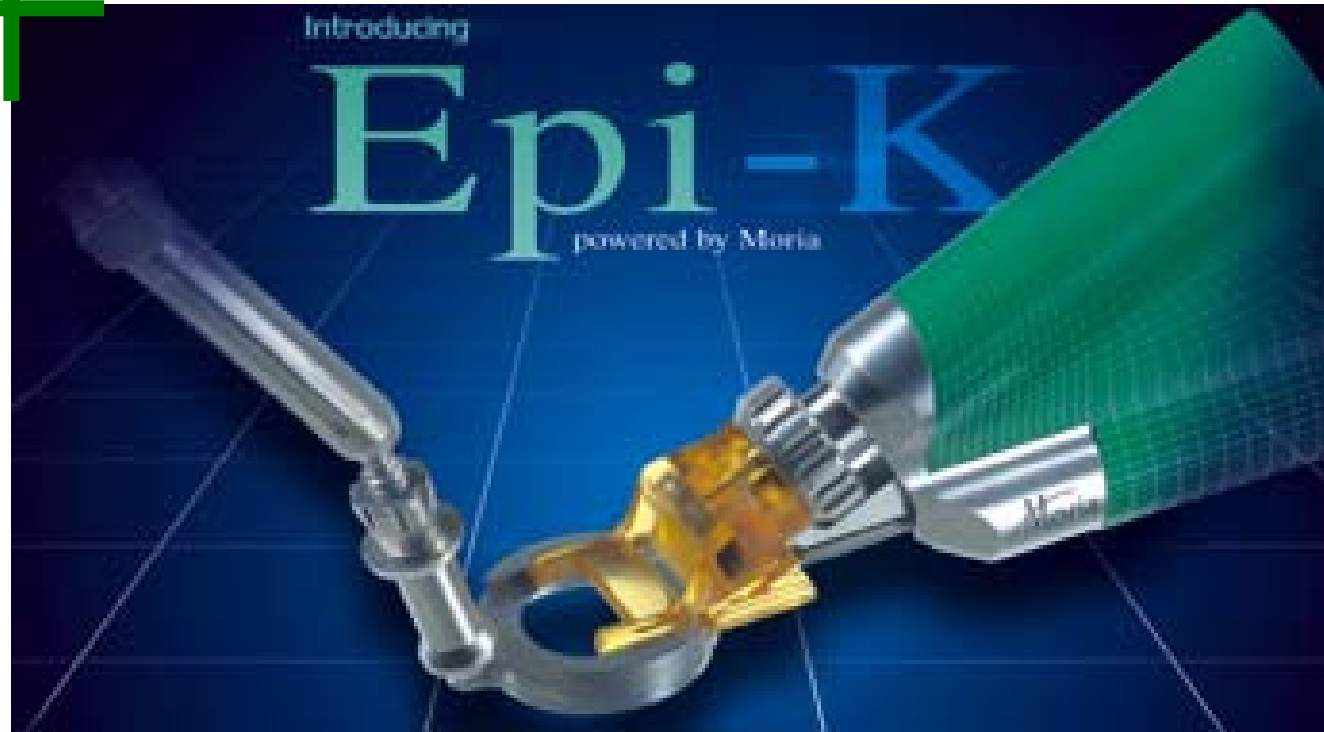


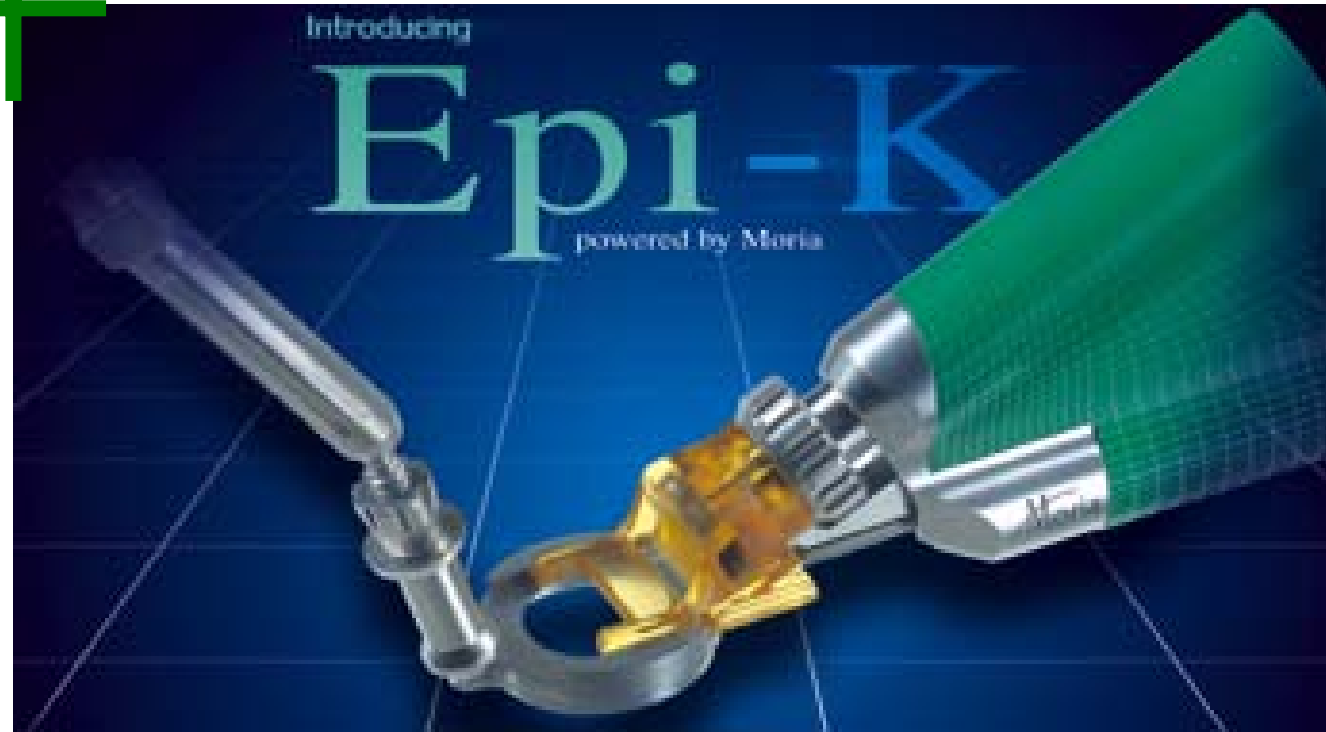
Moria



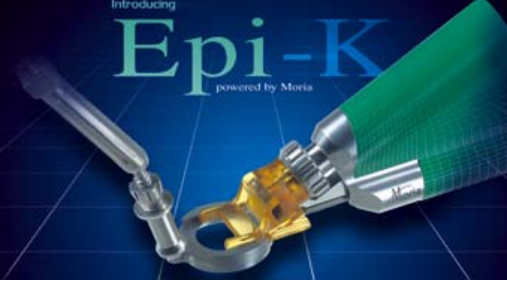
My Epi-K Evolution
AST with Epi- K



Surgical Technique and Visual Outcomes Using Advanced Surface Treatment

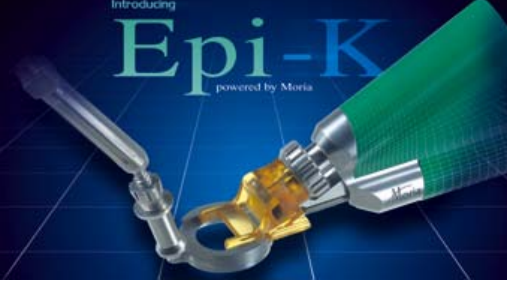


Rick Milne Md.
The Eye Center
Columbia, SC



**I have Returned
“ Back to the Future”
I have gone from 95% Lasik
To 95% AST with Epi-K**

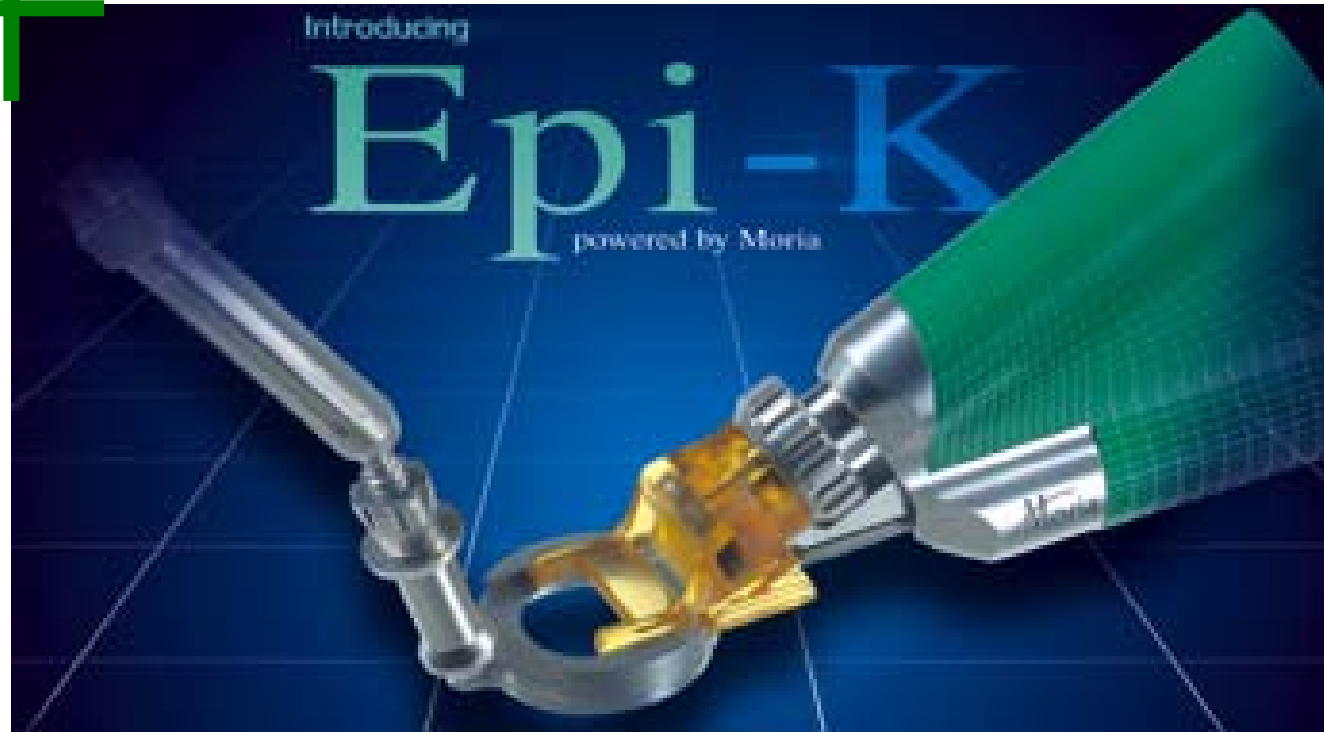




Surface Ablation, an appealing location

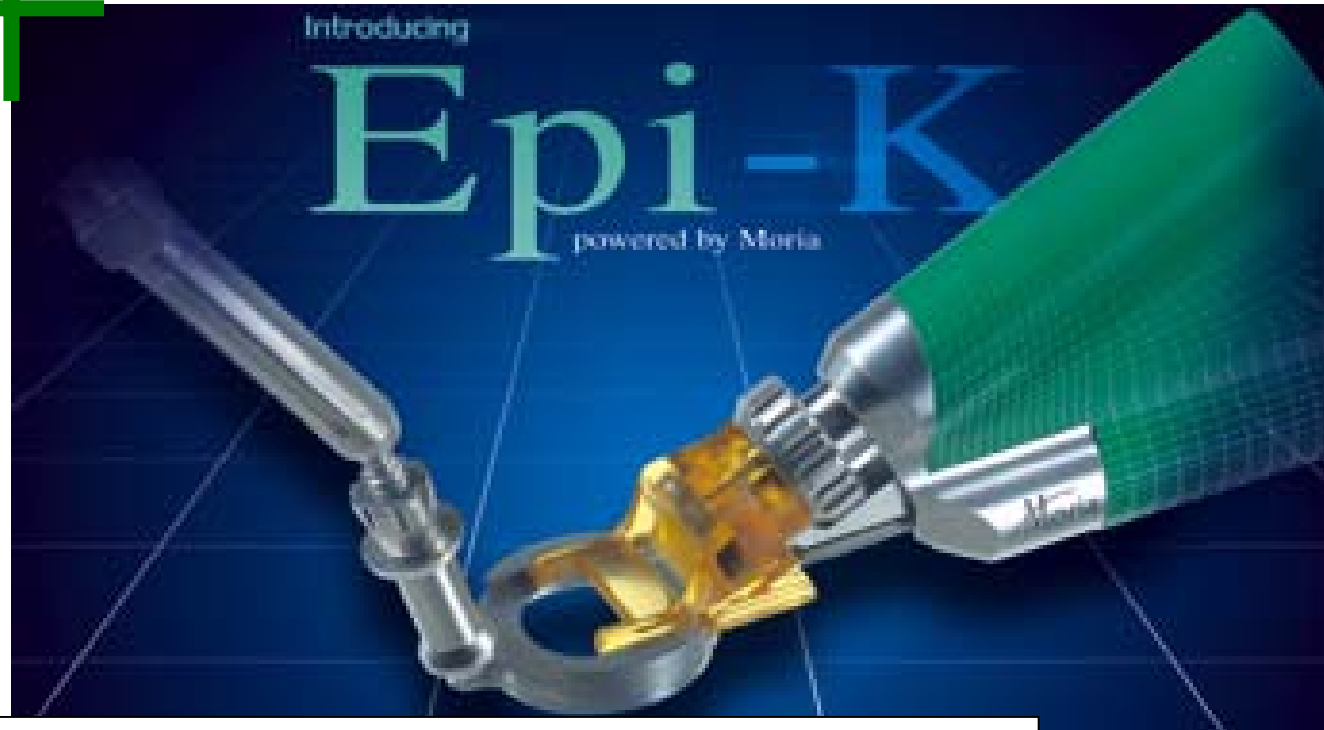
- Thin Corneas
- Tear Dysfunction
- Safety first mindset
- Wave front guided ablations

Moria



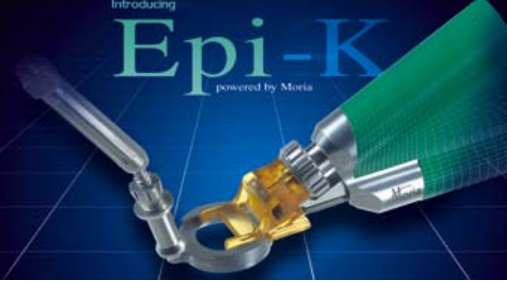
Epi-K with Flap not removed.

Moria



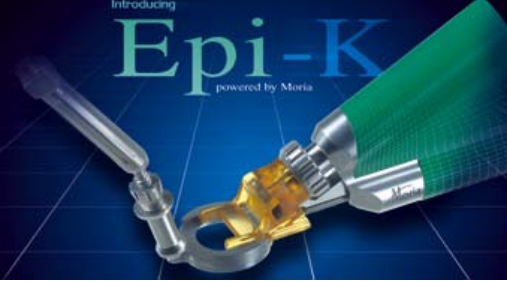
3-6 Month Data

50 eyes: 38 distance, 12 near.



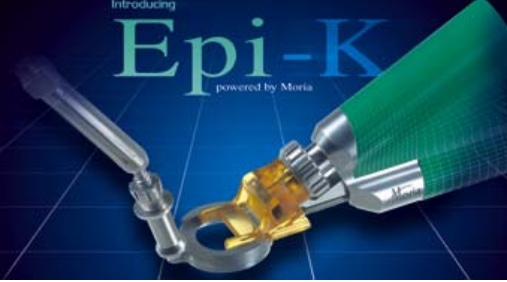
Change in BCVA (1month)

- 1 eye lost 1 line
- 48 % no change
- 36% gained 1 line
- 4% gained 2 lines
- 8% gained 3 lines



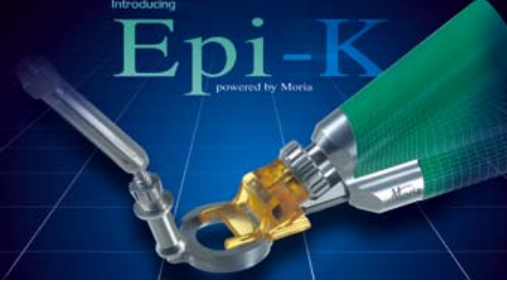
Eyes corrected for near (12 eyes)

- 11 achieved J1 or J1+
- 1 achieved J2
- No enhancements needed



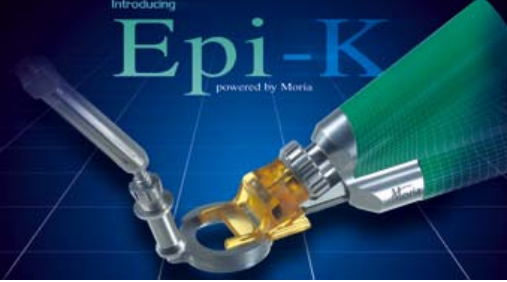
Change in BCVA 3-6mths (50 eyes)

- 14 eyes had 1 line of increased BCVA
- 6 eyes had 2 lines of increased BCVA
- 2 eyes had 3 lines of increased BCVA
- 1 eye had 1 line of decrease in BCVA

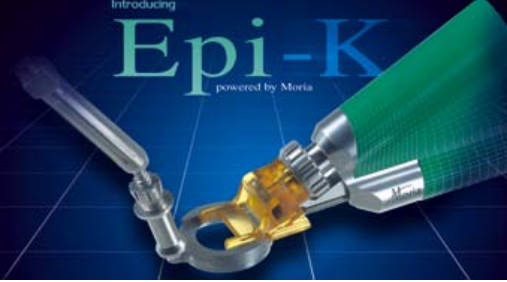


Why I now do Epi-K with flap removal

- In my next 50 pts 3 developed 1 or more lines of decrease n BCVA
 - 2 Developed a MDF change in central epithelium.
 - 1 Developed +2 po haze
(No Mito-C was used)
- Raymond Stein's AAO presentation

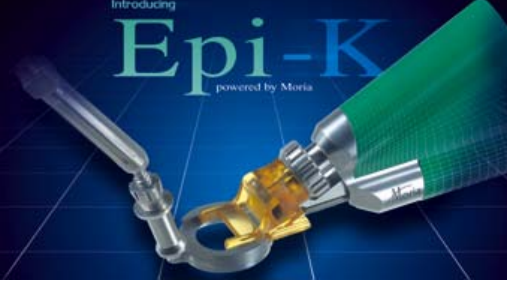


Epi-K with Epithelial Removal



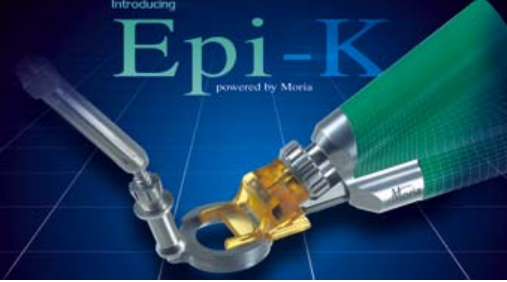
ASA With ETOH Epithelial Removal

QuickTime™ and a
DV/DVCPRO - NTSC decompressor
are needed to see this picture.



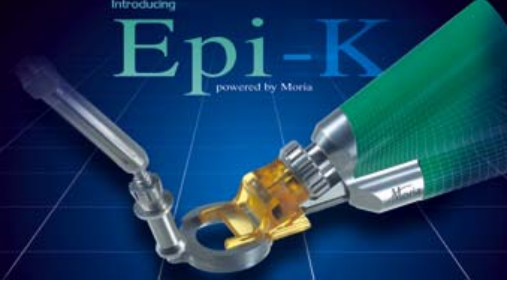
Epi-K epithelial Removal

QuickTime™ and a
DV/DVCPRO - NTSC decompressor
are needed to see this picture.



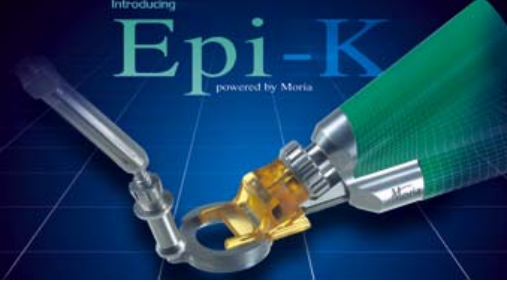
Surface Ablation Issues that Must be addressed

- Visual recovery
 - How fast can the AST patient return to functional vision? (able to return to work)
- Pain- the four letter word



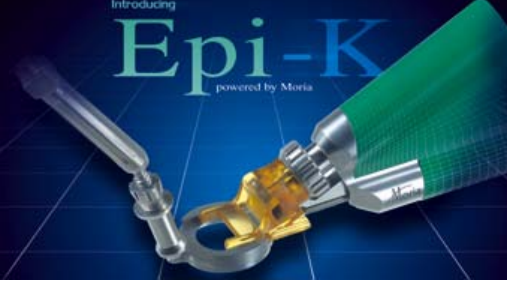
Study of first 100 eyes treated with Epi-K with Epithelial removal

- All had either Neurontin 100 mg Tid or Lyrica 75mg bid
- Mito-C was used in all eyes if ablation depth was greater than 75 microns (.02% for 15 seconds)
- All eyes were treated with Visx Custom cornea with iris recognition.



100 eyes of first 55 patients Tx with AST using Epi-K

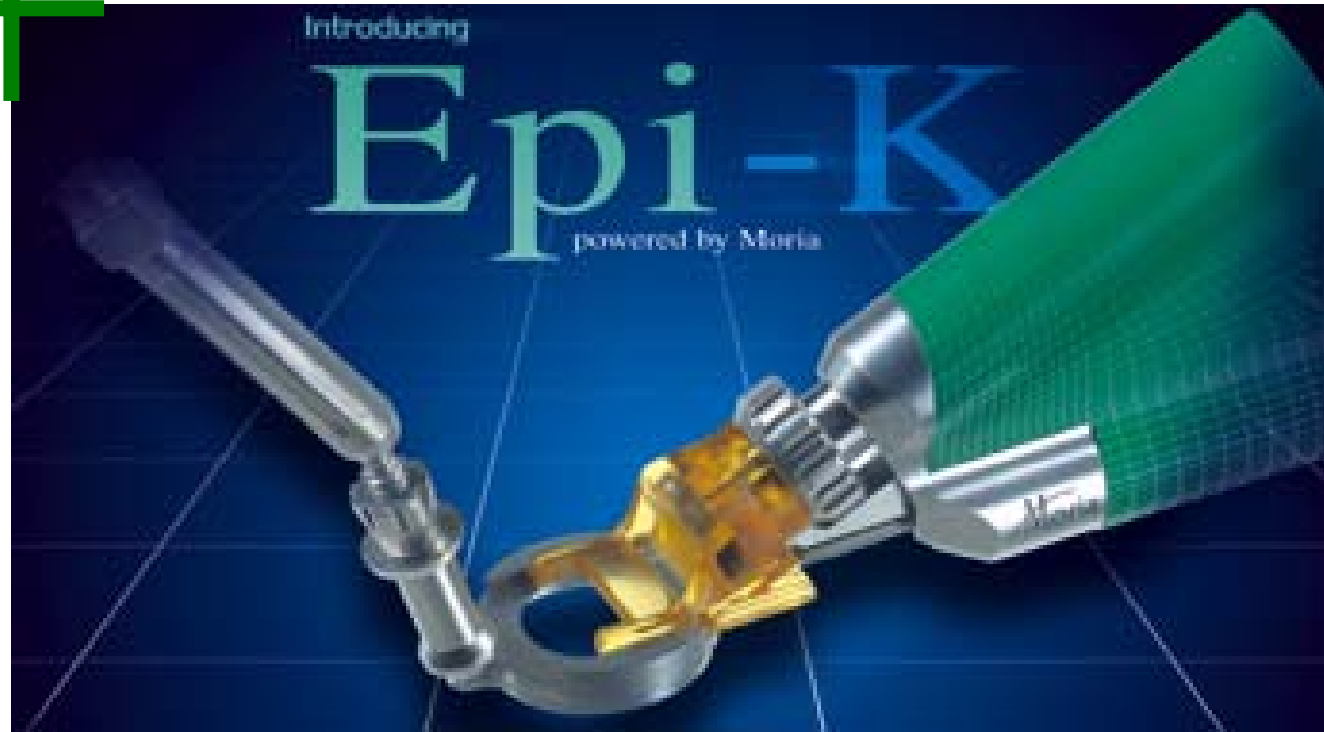
- Was epithelium healed at first Po visit (Day 2.5-3.5)
- Va at first PO visit
- Va at greater than 1 month
- Pain-
 - did the patient have to take any medication other than neurontin
 - Did the patient take any comfort drop



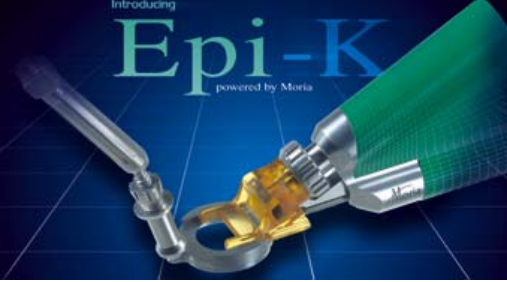
Epithelium Healed

- 1 / 97 not 100% healed by day 3.5
- All eyes checked day 2.5 were 100% healed (6 eyes)
- Epithelium had no devitalized cells centrally.

Moria

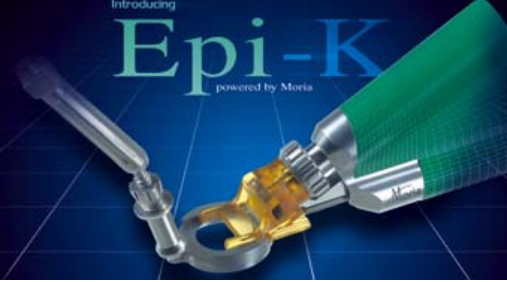


Visual Recovery



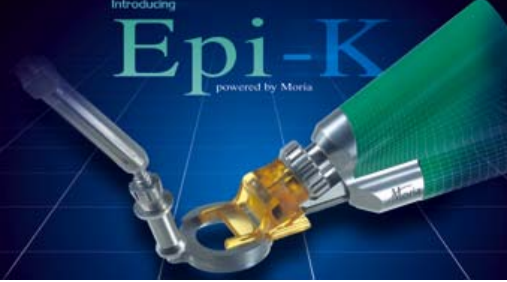
VA at first po check (3.5days po)

- Average 20/40 each eye
 - Range
20/20 - 20/70
- Average 20 / 30 OU
 - Range 20/20 - 20/40 in all but 2 patients
 - (20/50 and 20/70)
- Average Near was J2 in near eye



Able to return to Work

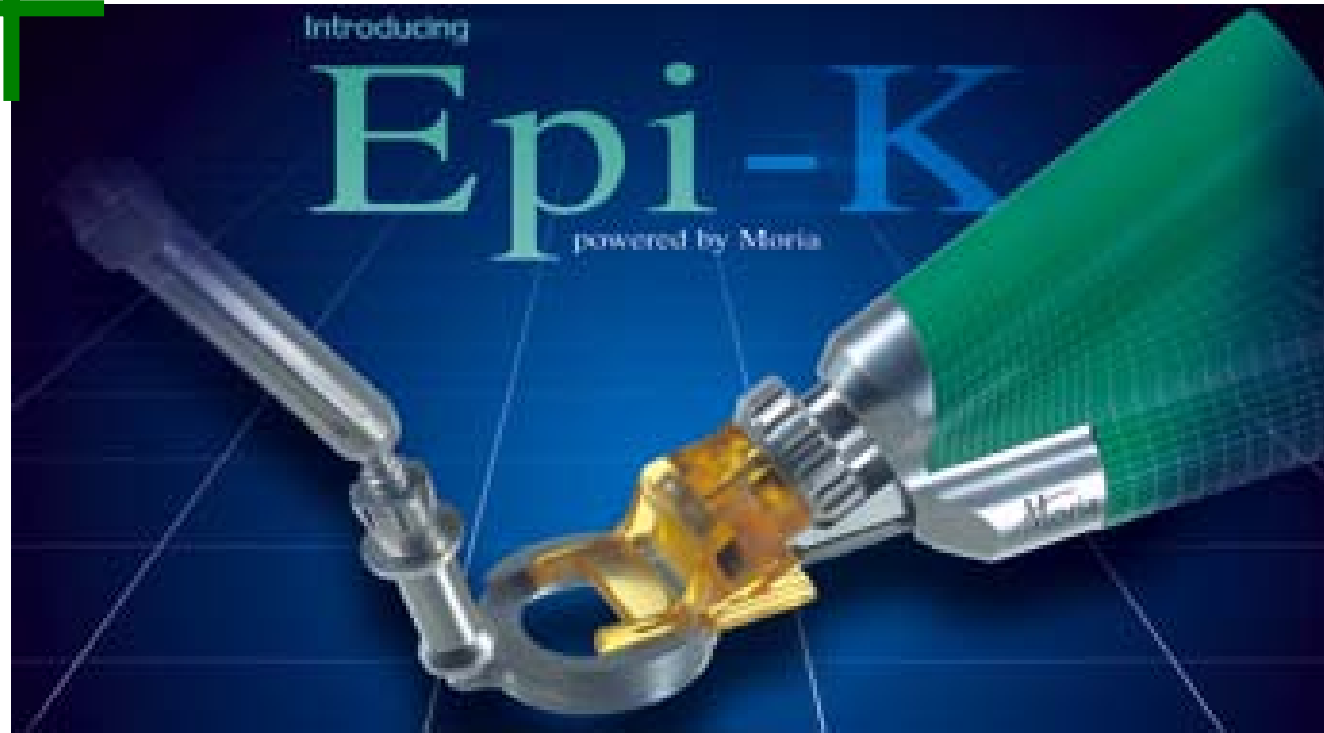
- 54 out of 55 patients had bandage CL removed OU and returned to work by day 3.5



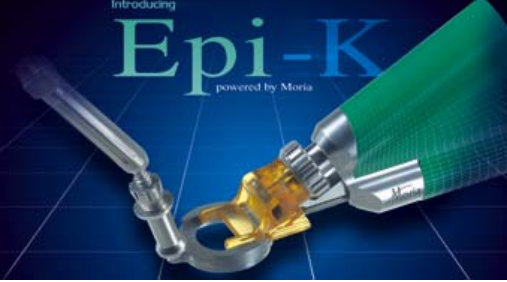
VA in patients after 1 month po

- All patients 20 / 30 or better
- Range 20/15 to 20/30
- No patients are desiring enhancements at this time
- No eyes have lost 1 line of BCVA

Moria

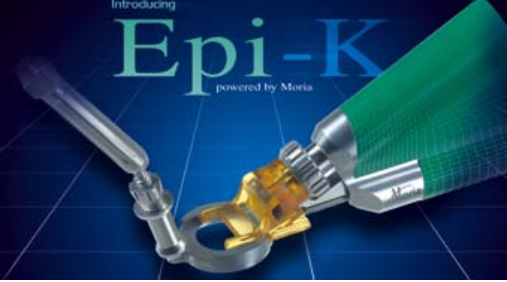


Pain



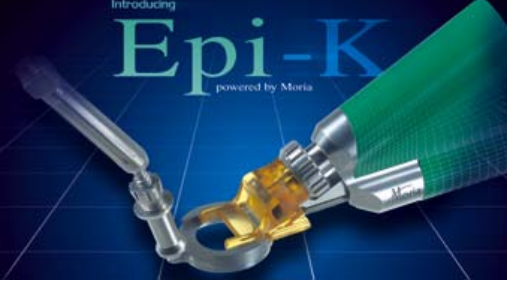
Pain addressed

- **Xibrom QID** on all patients
- **Neurontin 300mg TID**
- Or **Lyrica 75mg BID**
- Freeze Cornea after treatment
- Tight CL for 3 days (day and night 8.4)
- Oral Pain Meds (Mepergan Fortis)
- Comfort Drops (diluted proparicain)
- **Ambien qhs** for 4 days



Pain- did you have to take a pain pill other than Neurontin?

- During first 24 hours 7 of 55 (12%)
- Day 2: 3 of 55 took one pill (5%)
- Day 3 no pain pills taken



Did you have to take a comfort drop?

- 2 of 55 (4%) took 1 or more drops during first 24 hours
- 0 of 55 after first day.

Moria

Advanced Surface Treatment with Epi-K



The procedure my patients and I
have been waiting for.