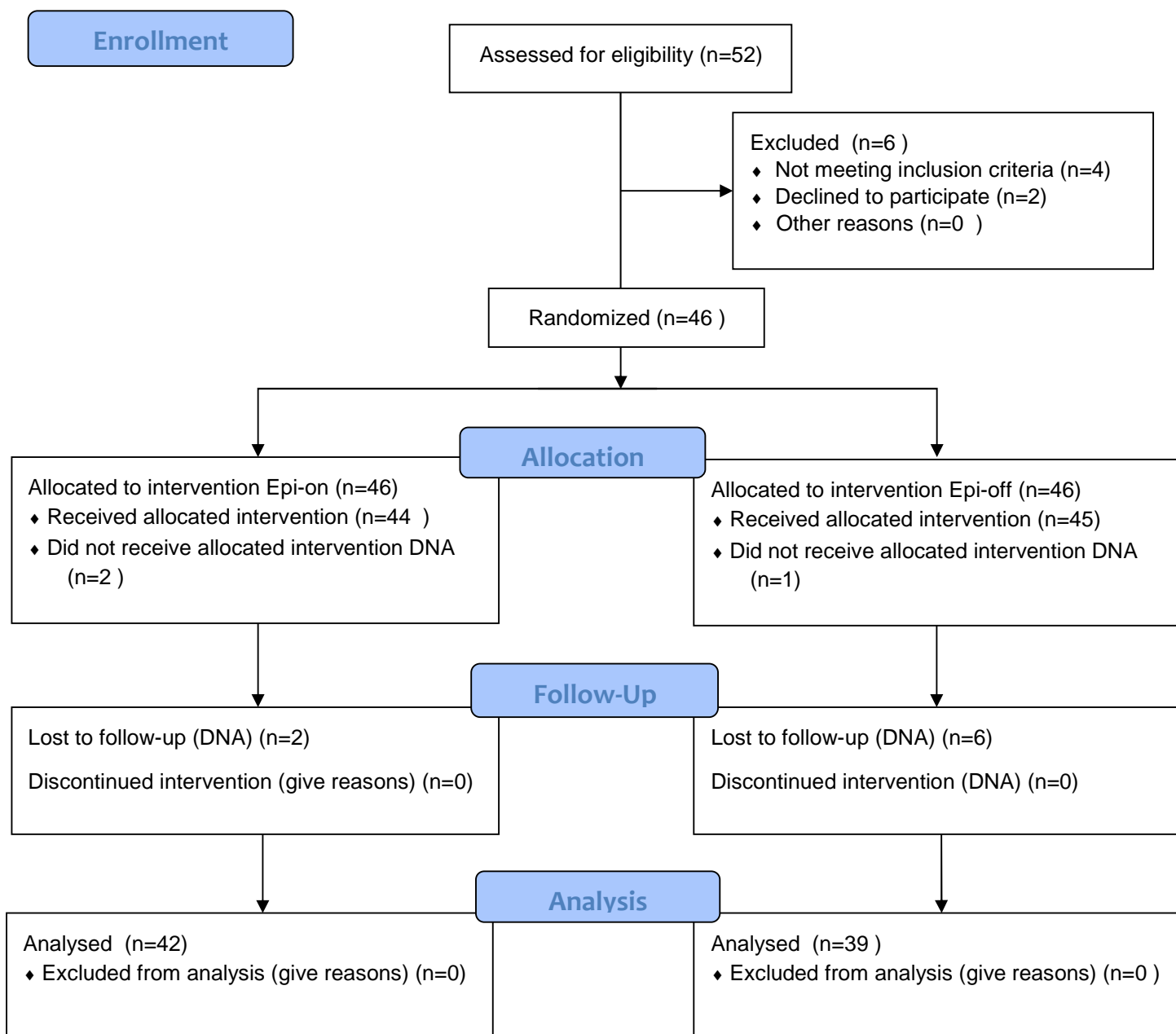


**Long Term Report: A randomized, bilateral, prospective study to compare standard epithelium off Riboflavin/Ultraviolet light corneal collagen cross-linking with an epithelium on technique using Iontophoresis.**

<b>Ethics Committee</b>	BROMLEY, NRESCCommittee.London
<b>Submission date</b>	13/LO/1895
<b>Approval date</b>	May 2014
<b>Sponsor:</b> Department of Research and Development, Guy's and St. Thomas' NHS Foundation Trust	
<b>UKCRN study ID</b>	04451470



## Baseline Characteristics n=46

Age 28.8 years (range 18-50 years)

Sex Male 27: female 19

Uncorrected visual acuity epi-on group 0.28 +/- 0.25 snellen decimal equivalent

Uncorrected visual acuity epi-off group 0.3 +/- 0.25 snellen decimal equivalent

Spectacle corrected visual acuity epi-on group 0.74 +/- 0.3 snellen decimal equivalent

Spectacle corrected visual acuity epi-off group 0.71 +/- 0.3 snellen decimal equivalent

Mean Keratometry epi-on group 48.8 +/- 5.1 diopters

Mean Keratometry epi-off group 48.6 +/- 5.2 diopters

Maximum Keratometry epi-on group 57.9 +/- 8.2 diopters

Maximum Keratometry epi-off group 57.7 +/- 7.8 diopters

Thinnest point pachymetry epi-on group 437 +/- 42.4um

Thinnest point pachymetry epi-off group 440 +/- 38.8um

## Outcome measures at 18 months

Uncorrected visual acuity epi-on group n=42 0.32 +/- 0.31 snellen decimal equivalent

Uncorrected visual acuity epi-off group n=39 0.33 +/- 0.29 snellen decimal equivalent

Spectacle corrected visual acuity epi-on group n=42 0.77 +/- 0.27 snellen decimal equivalent

Spectacle corrected visual acuity epi-off group n=39 0.69 +/- 0.22 snellen decimal equivalent

Mean Keratometry epi-on group n=42 48.4 +/- 4.9 diopters

Mean Keratometry epi-off group n=39 48.2 +/- 5.5 diopters

Maximum Keratometry epi-on group n=42 56.7 +/- 7.8 diopters

Maximum Keratometry epi-off group n=39 57.1 +/- 7.9 diopters

Thinnest point pachymetry epi-on group n=42 436 +/- 46.7um

Thinnest point pachymetry epi-off group n=39 434 +/- 37.6um

## Adverse Events

Epi-on group n=44

2 (4%) eye progressed (Kmax >1.5D)

Spectacle corrected visual acuity 11 (26%) eyes ↓ 1 line (36%) ↑ lines of Spectacle corrected visual acuity

Epithelial defects (52%) in 23 eyes seen 1 day after surgery

Epi-off group n=45

1 (2%) eye progressed (Kmax >1.5D, Kmean >1D)

Spectacle corrected visual acuity 12 eyes (35%) ↓ 1 line, (11 eyes (28%) ↑ lines of Spectacle corrected visual acuity

