Refractive Surgery Graphics

Upload data | Distributions | S.E. preop vs postop | Astigmatism graphics | Standard graphs for reporting outcomes | Documentation

Histograms and bar graphs

You can find here

- S.E. pre-op distribution (N, mean and range)
- S.E. post-op distribution (N, mean and sd)
- Age distribution
- Custom variables distribution (columns 19 and 20)

Options

- Select target for S.E. postop
- Shorten labels for the x-axis

Boxplots

You can find here

- S.E. post-op by age
- S.E. post-op by custom variable
- S.E. post-op by combination of custom Variables

Options

- Select S.E. target or target independent (S.E. attempted − S.E. achieved)
- Switch combination of custom variables
- Shorten labels for the x-axis

Corneal

You can find here

- Pre-op and post-op corneal astigmatism double angle plot
- Mean and S.D. corneal S.I.A..

Options

- Show data with cilinder + or −
- Show astigmatism pre-op and post-op or show SIA from (0,0)
- Separate graphs by custom variable

Notes

If you separate the graphs by custom variable, only an arrow from centroid pre-op to centroid post-op is shown, as well as the number of eyes and S.I.A. per factor, but not the individual points unless you choose Show SIA from (0,0) option

Refractive

You can find here

- Refractive astigmatism double angle plot
- Number of eyes
- Centroid value
- Mean refractive S.I.A.

Options

- Show data with cilinder + or −
- Show pre-op or post-op data
- Show heatmap instead of points

Notes

- Click and drag in left graphic to see that area in the right graphic.
- Click a point or click and drag in right graphic to get a table at the bottom with the chosen points. You can download that table as an excel file

Upload an excel file

- 20 columns
- Up to 100 000 rows (pro)
- Up to 20 rows (demo)
- An excel template with just the headers is available to download

Order the data in ascending order for a column by clicking the column name and in descending order by clicking again

Number of missing values per column (refractions and target will never have missing values due to validation)

Number of unique values for the last 2 columns (custom variables)

Options

- Subset by a single value of one or both of the last 2 cloumns, all graphics Will be shown for the subset data

Spherical Equivalent

You can find here

- S.E. pre-op vs S.E. post-op by target
- S.E. attempted vs S.E. attempted − S.E. achieved (if *target independent* option is chosen)
- N and mean accuracy error of the shown points

Options

- S.E. target or target independent
- Cilinder pre-op range
- Show linear regression line
- Color points by:
  - Don't color points
  - Heatmap (no points shown, only point density)
  - Patient age
  - Change in CDVA
- Separate graphs by custom variable (single variable or combined)

Notes

- Click and drag in the left graphic to see that area in the right graphic. (This option is disabled if you separate the graphs by custom variable)
- Click a point or click and drag in the right graphic to get a table at the bottom with the chosen points. You can download that table as an excel file

Standard graphics and report

You can find here

- Visual acuities
  - UDVA post-op and CDVA pre-op cumulative (for plano target)
  - Difference between UDVA post-op and CDVA pre-op (for plano target)
  - Change in CDVA
  - Safety index
  - Efficacy index
- Spherical Equivalent
  - S.E. attempted vs achieved
  - S.E. refraction accuracy (N, mean and sd accuracy error)
  - S.E. stability (you have to introduce yourself the values in the widget it will not get them from the uploaded data)
- Astigmatism
  - Refractive astigmatism
  - T.I.A. vs S.I.A.
  - Refractive astigmatism angle of error
  - Correction index, angle of error, index of success and success of astigmatism surgery
- Astigmatism − Polar graphics
  - T.I.A. vector
  - S.I.A. vector
  - Difference vector
  - Correction index
- Download report: Download a pdf with the coefficients and the standard graphics (visual acuities, S.E. and astigmatism)

Options

- For S.E. the limits to show for +/− 0.50, 1 and/or 1.5
- For *download report*, you can fill in the title and a text field that will appear on the first page of the report before the coefficients (both optional)

Visit the demo at https://eyedata.shinyapps.io/RSGdemo/

EyeData.net