Supplementary Materials and Methods

Component Analysis of Multi-Purpose Contact Lens Solutions to Enhance Activity Against *Pseudomonas aeruginosa* and *Staphylococcus aureus*

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Supplementary Figure Legends

Fig. S1. **The antibacterial efficacy of multi-purpose contact lens solutions against clinical keratitis isolates of *S. aureus* (A-C) and *P. aeruginosa* (D-F).** Contact lens solutions were serially diluted in cation-adjusted Muller Hinton broth and minimal inhibitory concentration (MIC) was determined by CLSI broth microdilution methodology. FQs = Floroquinolone sensitive. FQr = Floroquinolone resistant. All data points were done in duplicate and are representative of 2 independent experiments.

Fig. S2. **CHD and EDTA have synergistic activity against clinical keratitis isolates of *P. aeruginosa*.** (A-C) Checkerboard assays testing the combination of CHD and EDTA against *P. aeruginosa*. Resazurin probe was used to assess bacterial viability: blue color - no viable bacteria; red color - viable bacteria. Blue wells bounded by the green bars in the bottom right quadrant of the plate all have FIC values <0.5 Green box demarks well with no viable bacteria with a $\sum$FIC < 0.13 indicating synergy of CHD and

EDTA against *P. aeruginosa* **.** FQs = Floroquinolone sensitive. FQr = Floroquinolone resistant. Data representative of 2 independent experiments.

Fig. S3. **ISO 14729 assay conducted with C30/P5/E5000 against clinical keratitis isolates.** Reduction in bacteria concentrations after 1 hour incubation in a phosphate buffered saline solution containing CHD 30 PPM, PAPB 5 PPM, and EDTA 5,000 PPM. ISO 14729 testing guidelines were followed. Data plotted are mean ± SEM and represent the average of 2 independent experiments.

Figure S1

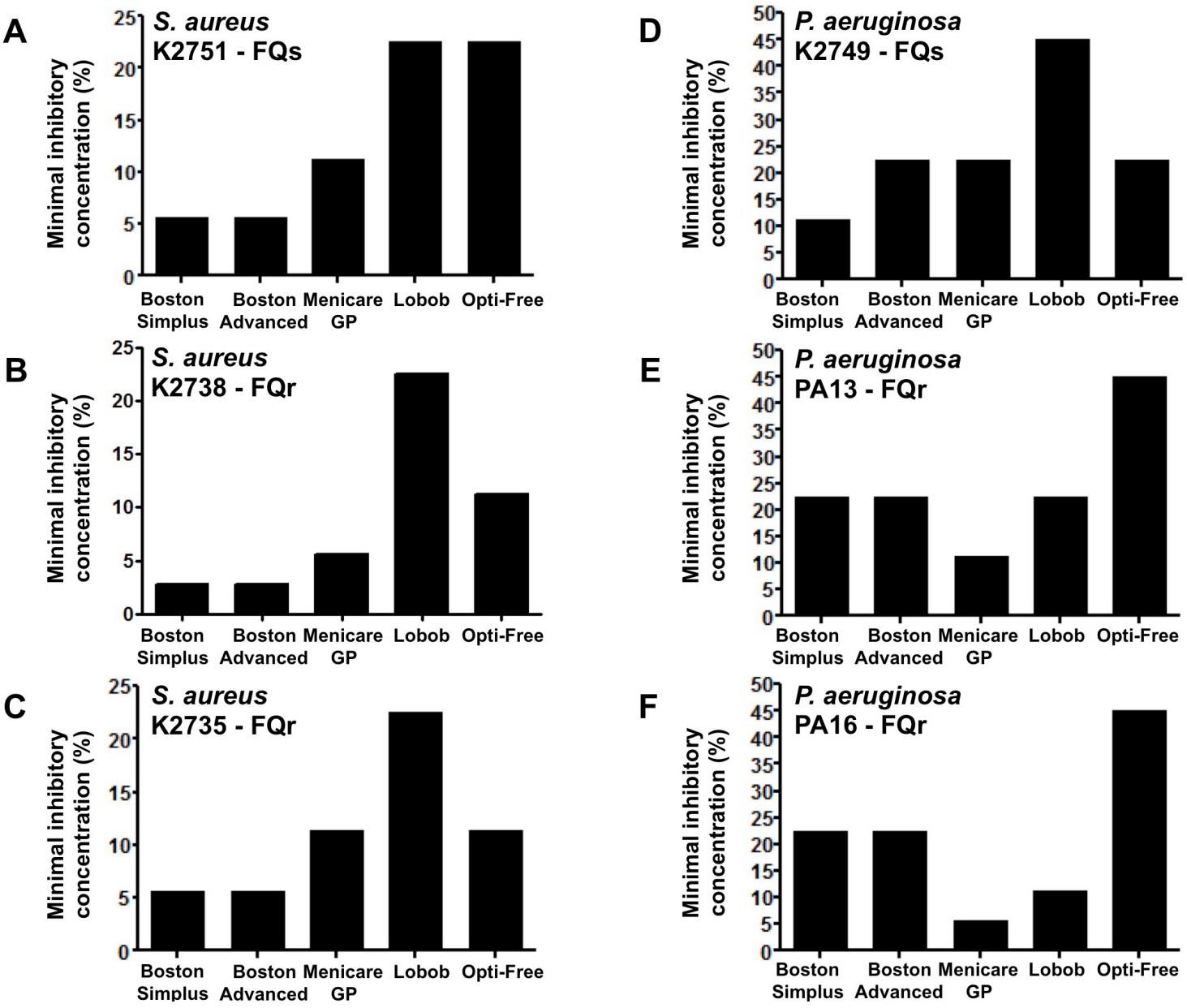
A
S. aureus
K2751 - FQs
Minimal inhibitory concentration (%)
0
5
10
15
20
25
Boston Simplus
Boston Advanced
Menicare GP
Lobob
Opti-Free
B
S. aureus
K2738 - FQr
C
S. aureus
K2735 - FQr
D
P. aeruginosa
K2749 - FQs
0
5
10
15
20
25
30
35
40
45
50
E
P. aeruginosa
PA13 - FQr
F
P. aeruginosa
PA16 - FQr

Figure S2

P. aeruginosa keratitis isolates Checkerboard assays

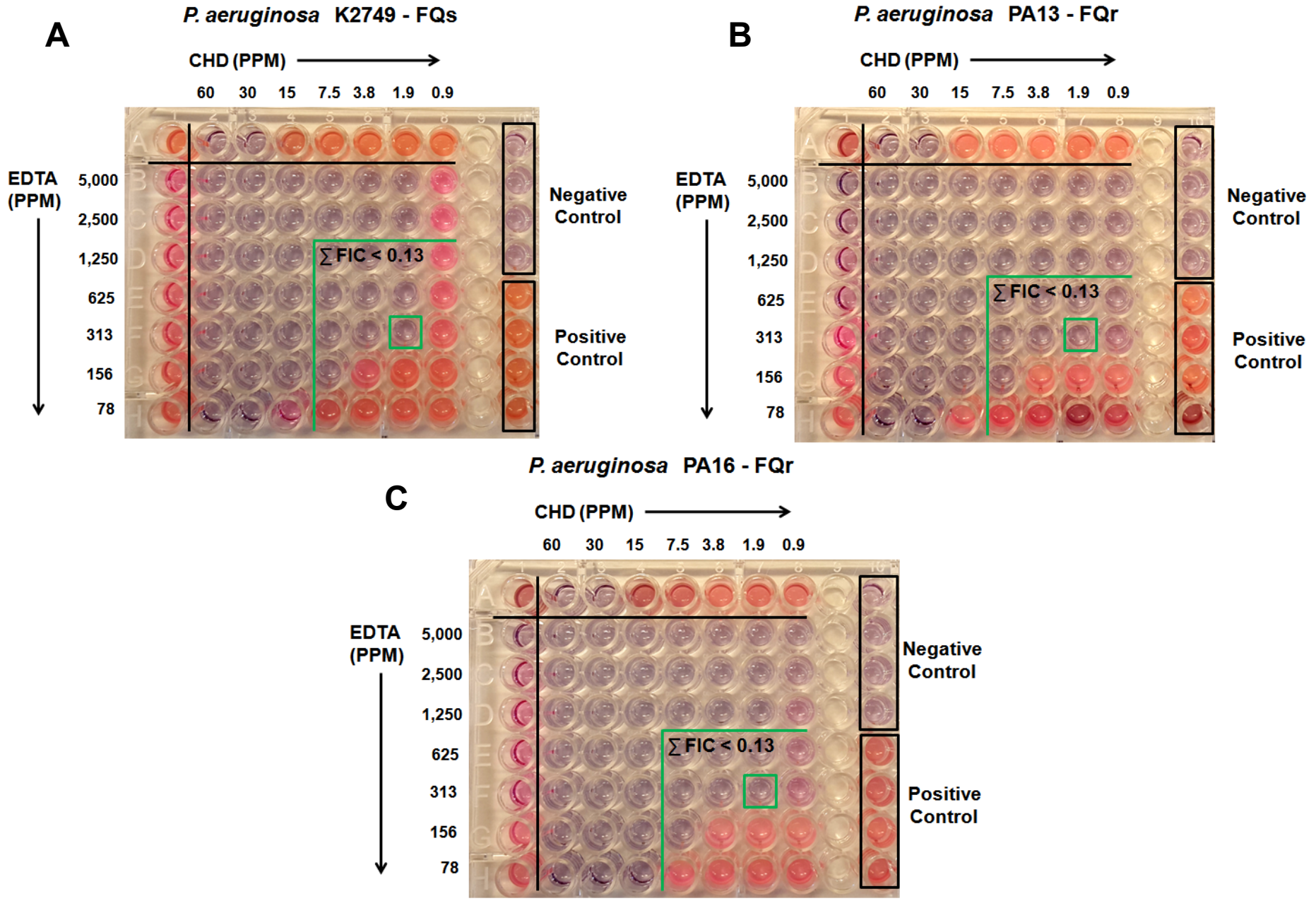

Figure S3

ISO 14729: Reduction in bacterial concentration in 1 h
Clinical keratitis isolates, C30/P5/E5000