

Supplementary Figures for “Topical Timolol 0.5% Gel-Forming Solution for Erythema in Rosacea: A Quantitative, Split-Face, Randomized, and Rater-Masked Pilot Clinical Trial”

Figure S1. Study design

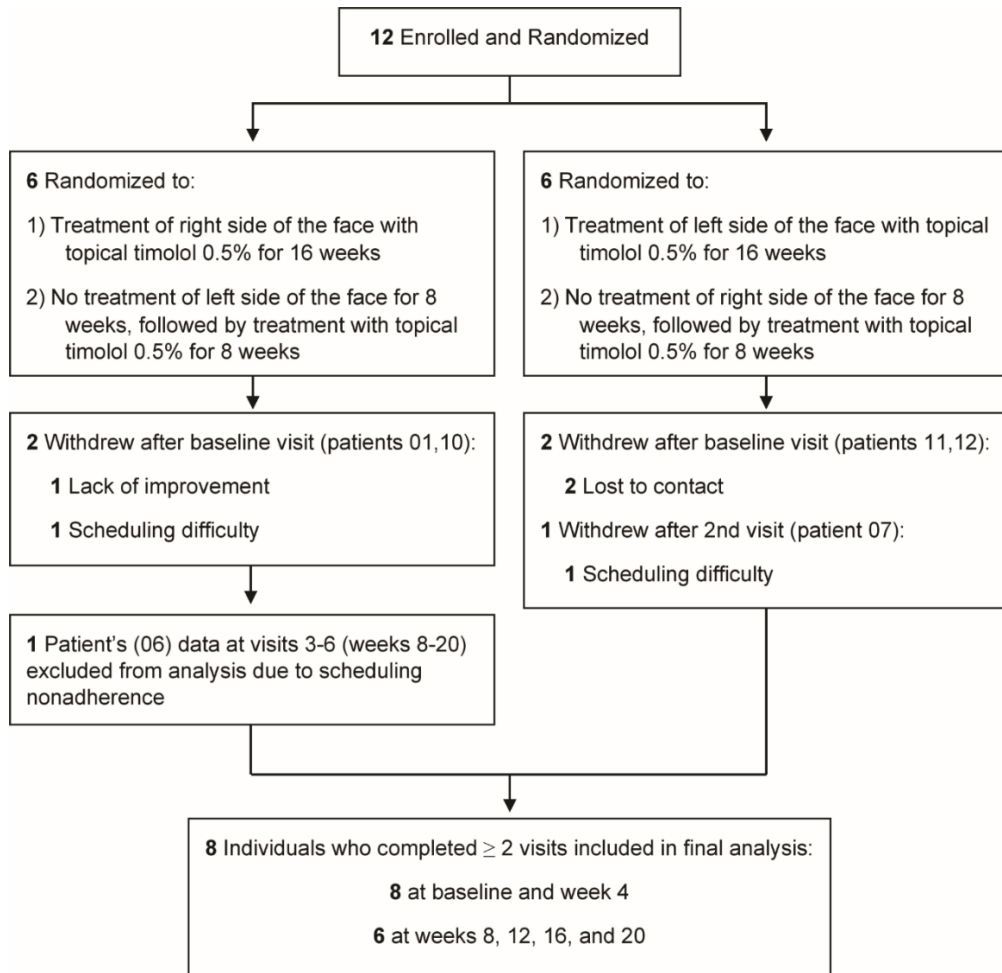
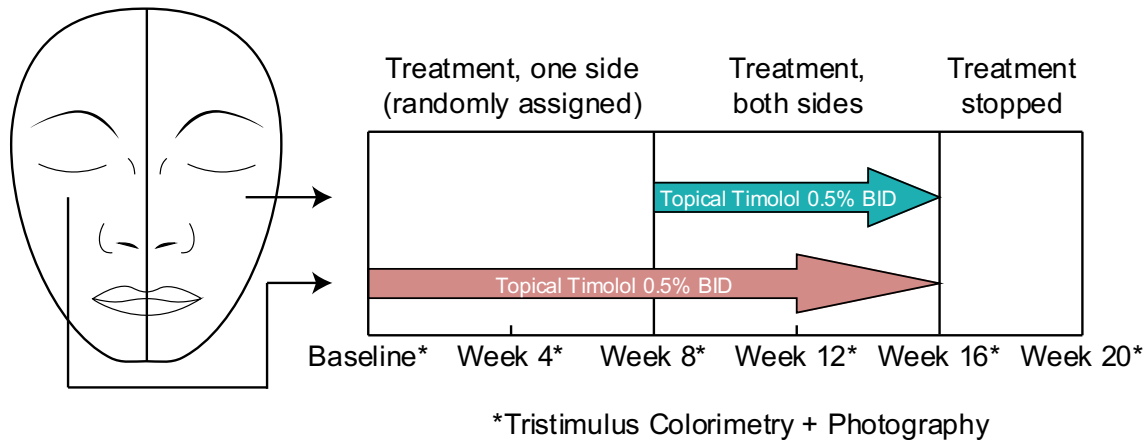


Figure S1. Study design. Schematic diagram of study design and CONSORT patient flow diagram showing number of participants in the enrollment, randomization, follow-up, and statistical analysis stages of the study.

Figure S2. Cross-polarized photographs and measured facial erythema (a^*) of two participants (03, 08) showing response to topical timolol treatment.

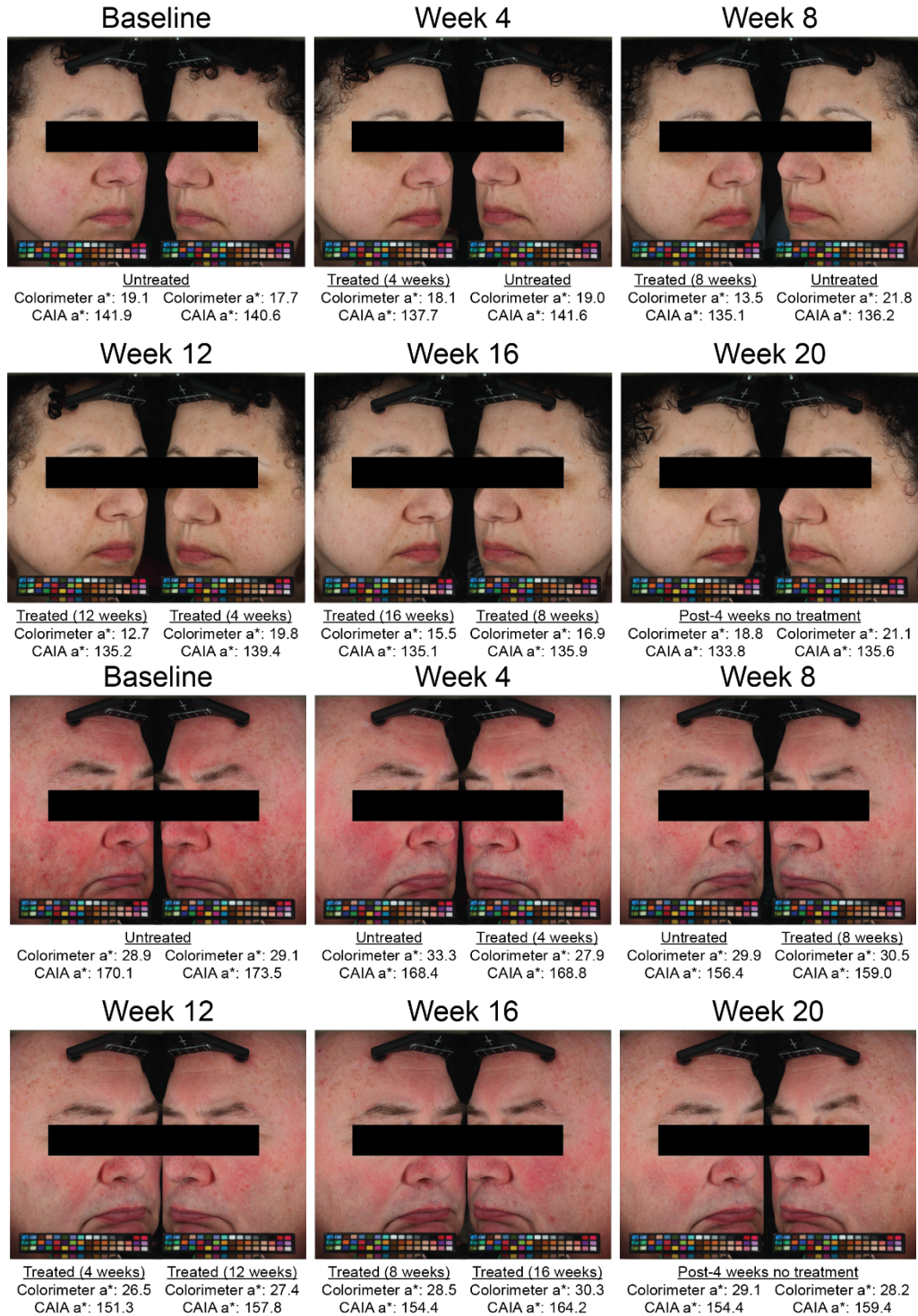


Figure S2. Cross-polarized photographs and measured facial erythema (a^*) of two participants (03, 08) showing response to topical timolol treatment. Participants received treatment with topical timolol on a randomly assigned side of the face from baseline to week 8, both sides of the face from week 8 to week 16, and no treatment from week 16 to week 20. Colorimeter a^* measured with Chroma Meter CR-400 at a standardized point of the malar cheek (intersection of the mid-pupillary line and line drawn laterally from the ipsilateral nasal ala). Computer-aided image analysis (CAIA) a^* obtained by converting cross-polarized photographs to 8-bit grayscale a^* images with ImageJ software, manually outlining the cheek (infraorbital, zygomatic, and mandibular regions), and measuring average pixel intensity across the region. Both measures of erythema indicate red-green chromaticity with different scales; colorimeter a^* may range from -60 (green) to +60 (red), while CAIA a^* may range from 0 (green) to 255 (red).

Figure S3. Participant-reported change in flushing after treatment with topical timolol 0.5% gel-forming solution

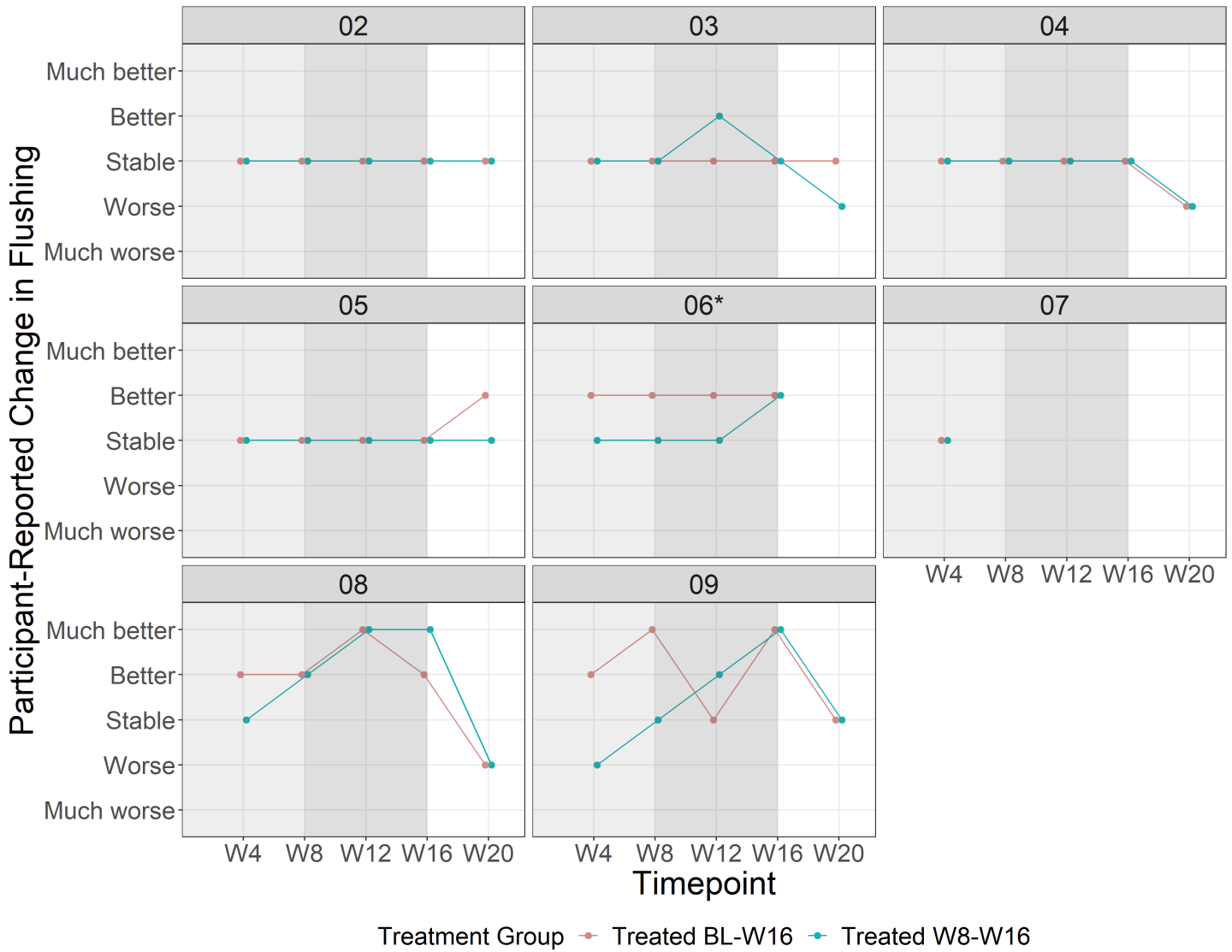
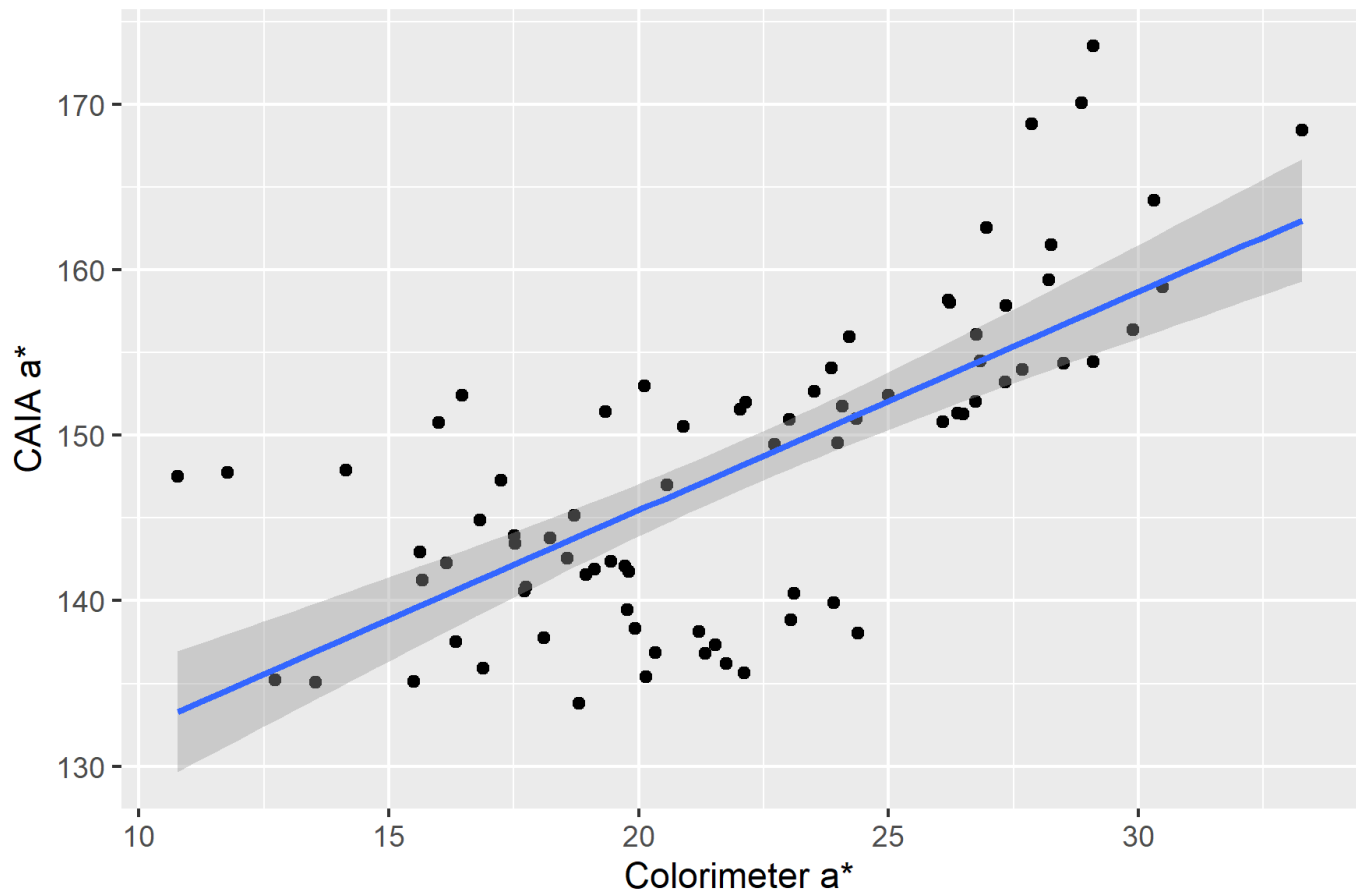


Figure S3. Participant-reported change in flushing after treatment with topical timolol 0.5% gel-forming solution. At each post-baseline visit, participants reported change in flushing from 1 (“much worse”) to 5 (“much better”) for both sides of the face. *W8 visit of participant 06 occurred six weeks later than scheduled. Lightly shaded regions indicate times when participants received treatment on one side of the face, and darkly shaded regions indicate times when participants received treatment on both sides of the face.

Figure S4. Correlation between colorimeter and computer-aided image analysis (CAIA) measured facial erythema (a^*)



Pearson's product-moment correlation

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data: df$Chroma_a and df$ImageJ_Cheek
t = 8.7889, df = 78, p-value = 2.772e-13
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
 0.5747433 0.8009635
sample estimates:
      cor
0.7053837
```

Figure S4. Correlation between colorimeter and computer-aided image analysis (CAIA) measured facial erythema (a^*). Scatterplot shows the relationship between colorimeter and CAIA-measured a^* , with line of best fit plotted and results of correlation test shown.

Figure S5. Change in facial erythema (a^*) before and after treatment with topical timolol 0.5% gel-forming solution, stratified by individual participants

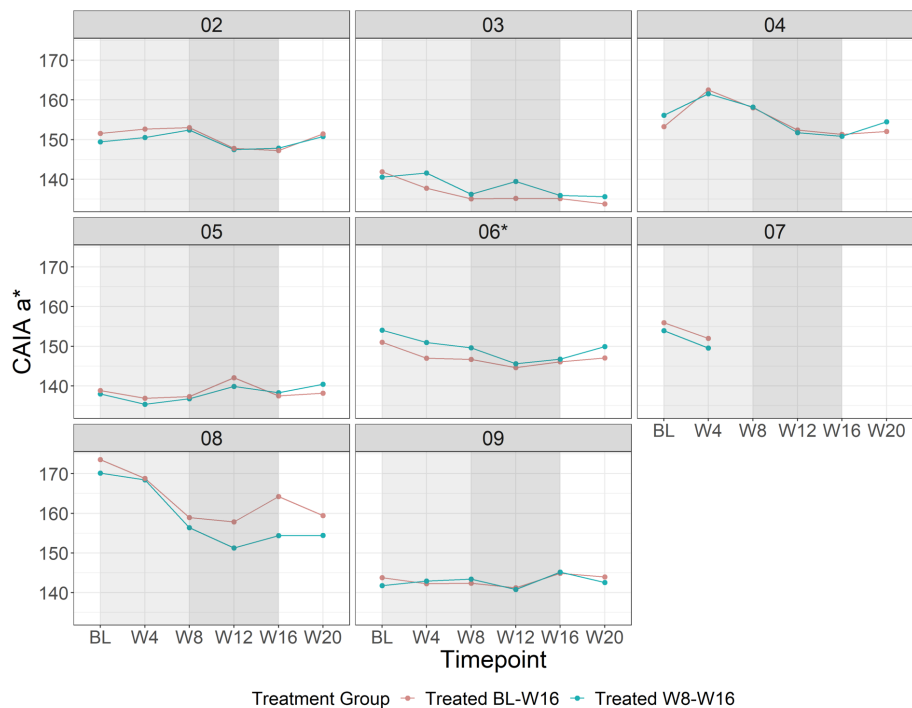
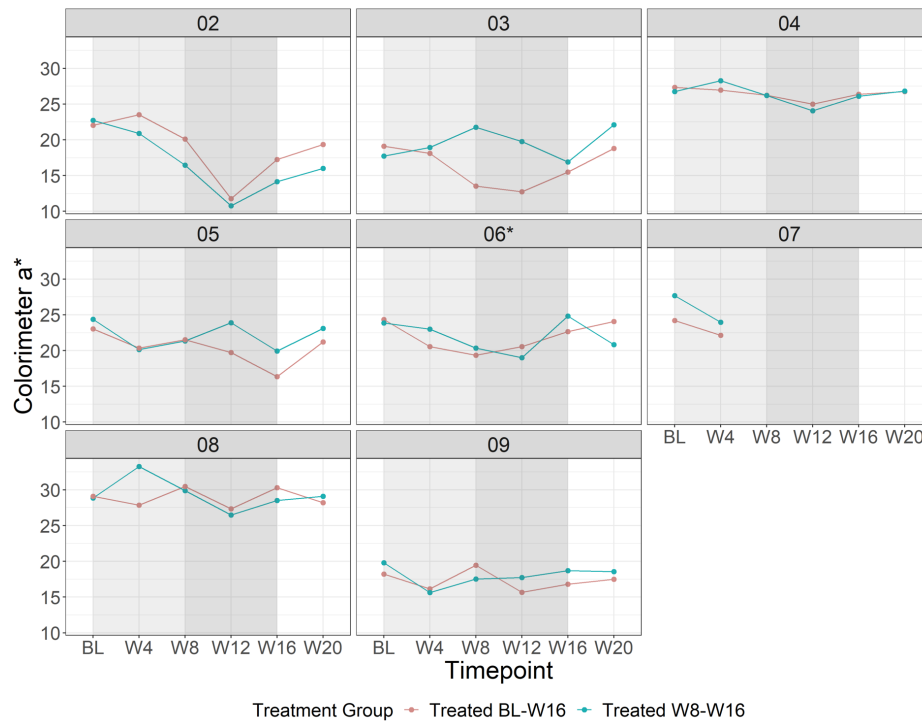


Figure S5. Change in facial erythema (a^*) before and after treatment with topical timolol 0.5% gel-forming solution, stratified by individual participants. *W8 visit of participant 06 occurred six weeks later than scheduled, and all measurements from W8 onwards were not included in statistical analysis. Lightly shaded regions indicate times when participants received treatment on one side of the face, and darkly shaded regions indicate times when participants received treatment on both sides of the face. CAIA, computer-aided image analysis.