

Supplemental Figure 1. 11β-HSD1 activity in control mice 11β-HSD1 enzyme activity increased during healing and was inhibited by topical CBX (n=4-12, two-way ANOVA). Multiple comparisons: * = vs. baseline (day 0) in each treatment group (Dunnet's test), # = vs. VEH at each time-point (Sidak's test). Significance: * = p<0.05, ** = p<0.01, *** = p<0.001



Supplemental Figure 2. PCNA staining A) Representative PCNA immunostaining (n=4) and **B)** PCNA immunostaining quantification showing a trend towards decreased keratinocyte proliferation in CORT mice and improvement following 7 days topical CBX treatment (n=4, one-way ANOVA). Scale bar 50µm.



Supplemental Figure 3. Skin thickness in control mice A) Representative H+E staining following 7 days topical CBX treatment (n=4), **B)** Quantification of epidermal thickness (n=4, Student's t-test), **C)** Quantification of keratinocyte density (n=4, Student's t-test) and **D)** Quantification of dermal area (n=4, Student's t-test). Scale bar 50µm.





Supplemental Figure 4. Epidermal barrier function in control mice A) Baseline trans-epidermal water loss (TEWL) following 7 days topical CBX treatment (n=12, Student's t-test), **B)** Barrier integrity (n=12, Student's t-test) and **C)** Barrier recovery relative to baseline TEWL (n=12, two-way ANOVA). Multiple comparisons: * = vs. 2 hour time-point in each treatment group (Dunnet's test), # = vs. VEH at each time-point (Sidak's test). Significance: * = p<0.05, ** = p<0.01, *** = p<0.001



Supplemental Figure 5. Wound healing in control mice A) Representative wound appearance at day 9 (n=8) and **B)** Quantification of wound areas following topical CBX treatment (n=8-24, two-way ANOVA). Scale bar 12mm. Multiple comparisons for B: * = vs. day 4 in each treatment group (Dunnet's test). Significance: * = p<0.05, *** = p<0.001