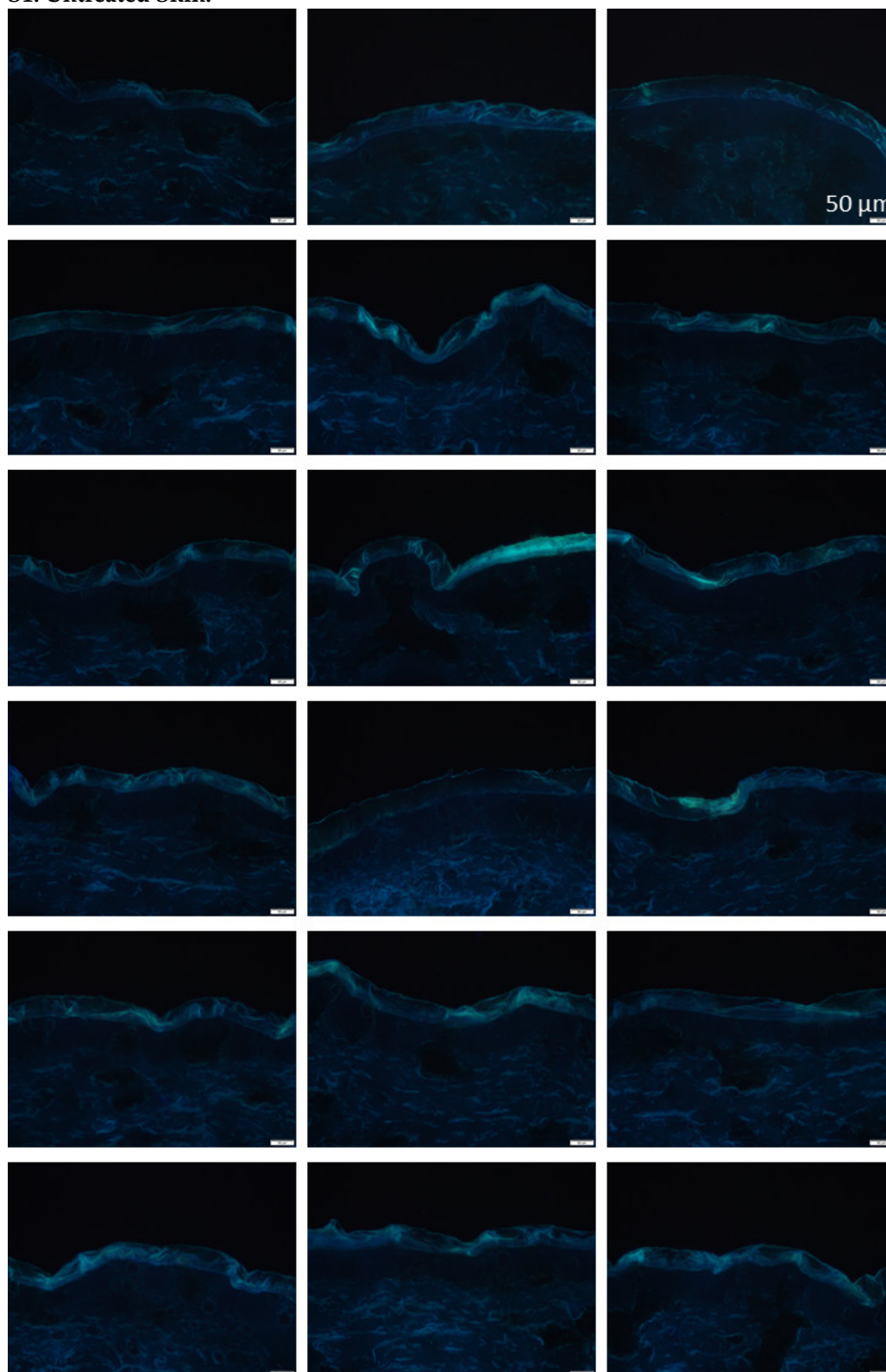


# Supplementary Materials: Hair Follicle Targeting and Dermal Drug Delivery with Curcumin Drug Nanocrystals—Essential Influence of Excipients

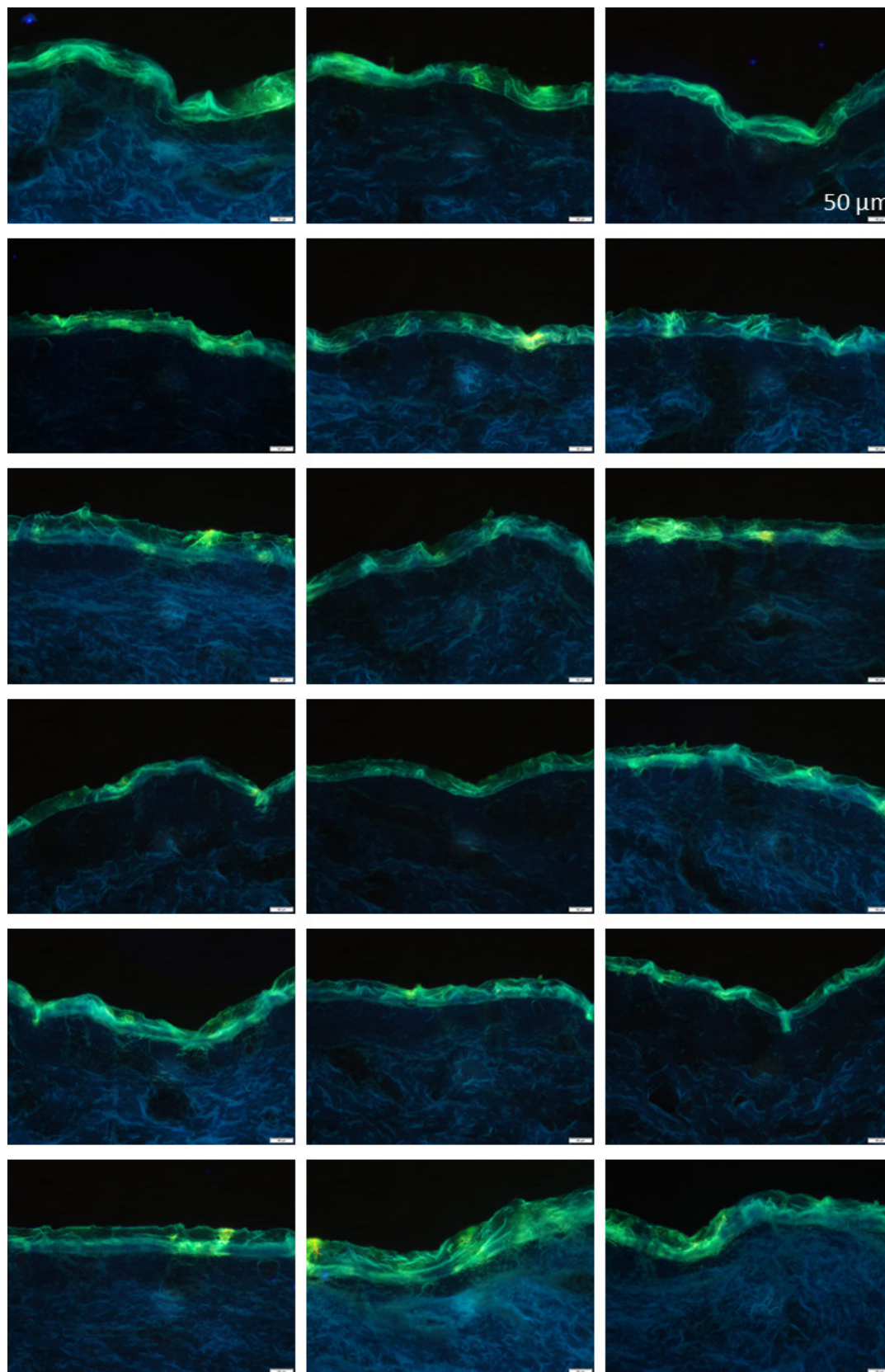
Olga Pelikh and Cornelia M. Keck \*

S1: Untreated Skin.



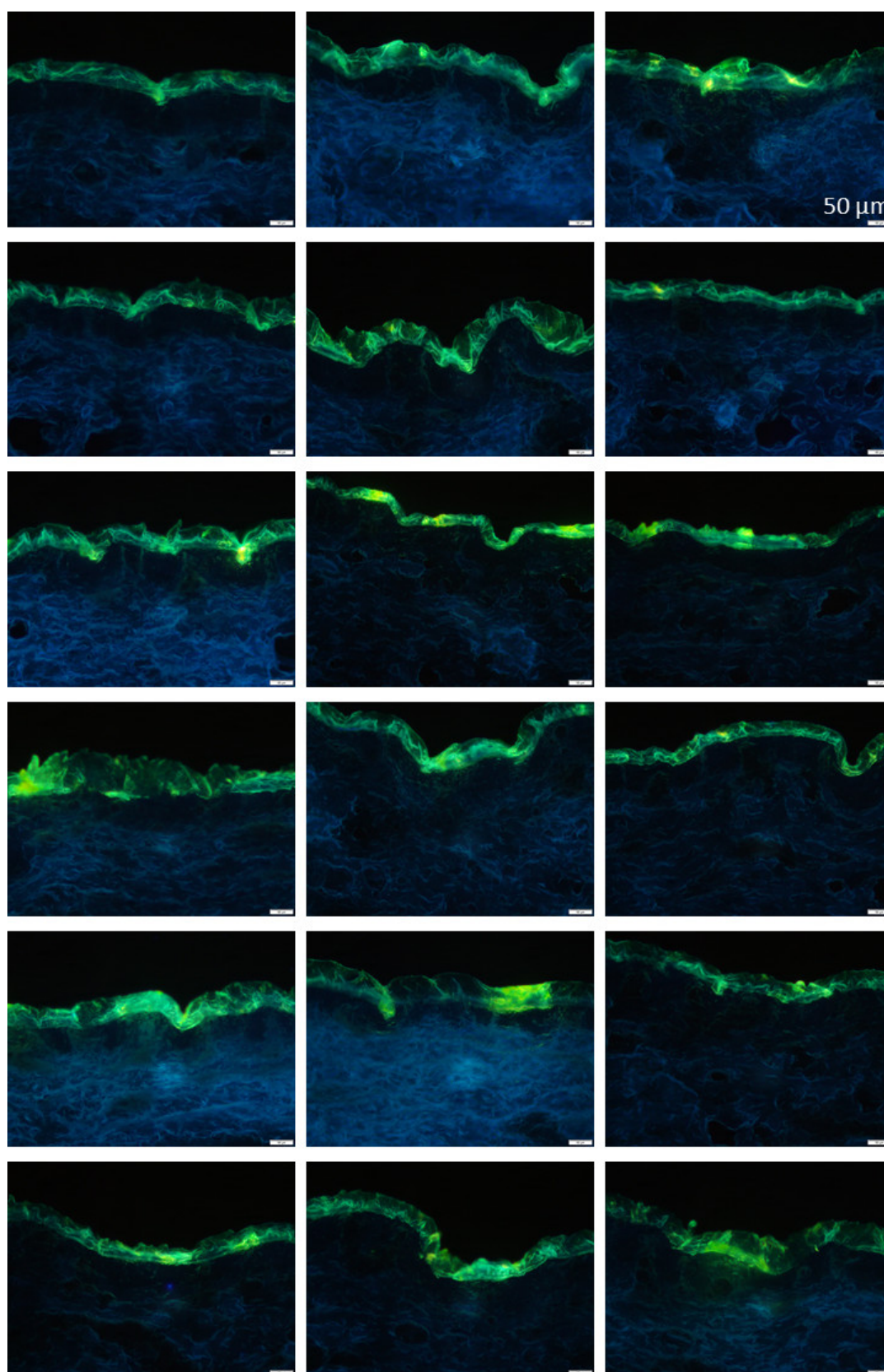
**Figure S1.** Skin sections of untreated skin. Magnification: 200 fold.

**S2: Skin Treated with Nanosuspension without Additives.**



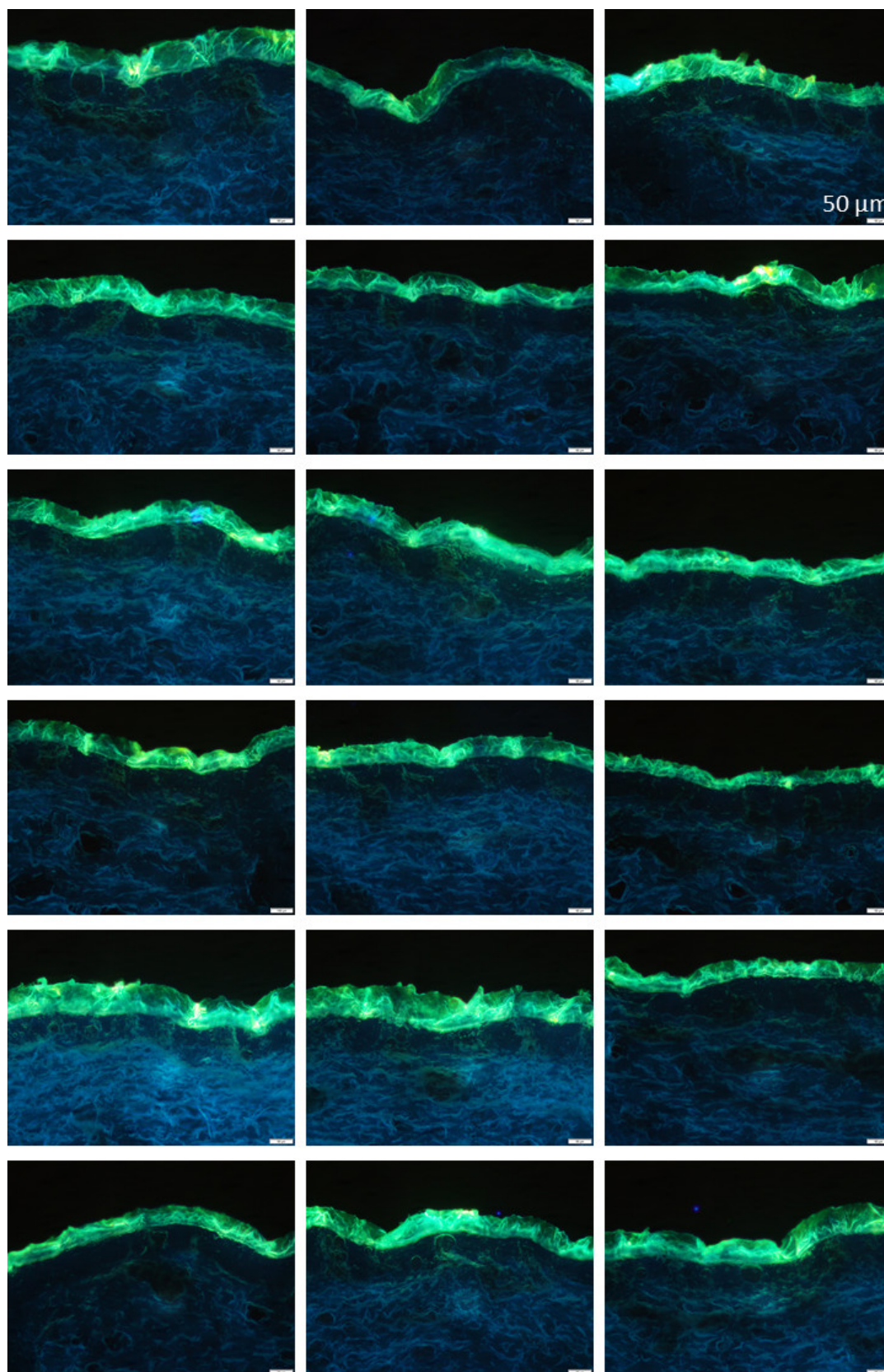
**Figure S2.** Skin sections of skin treated with nanosuspension without additives. Magnification: 200 fold.



**S3: Skin Treated with Nanosuspension with 2% Glycerol.**

**Figure S3.** Skin sections of skin treated with nanosuspension contained 2% glycerol. Magnification: 200 fold.

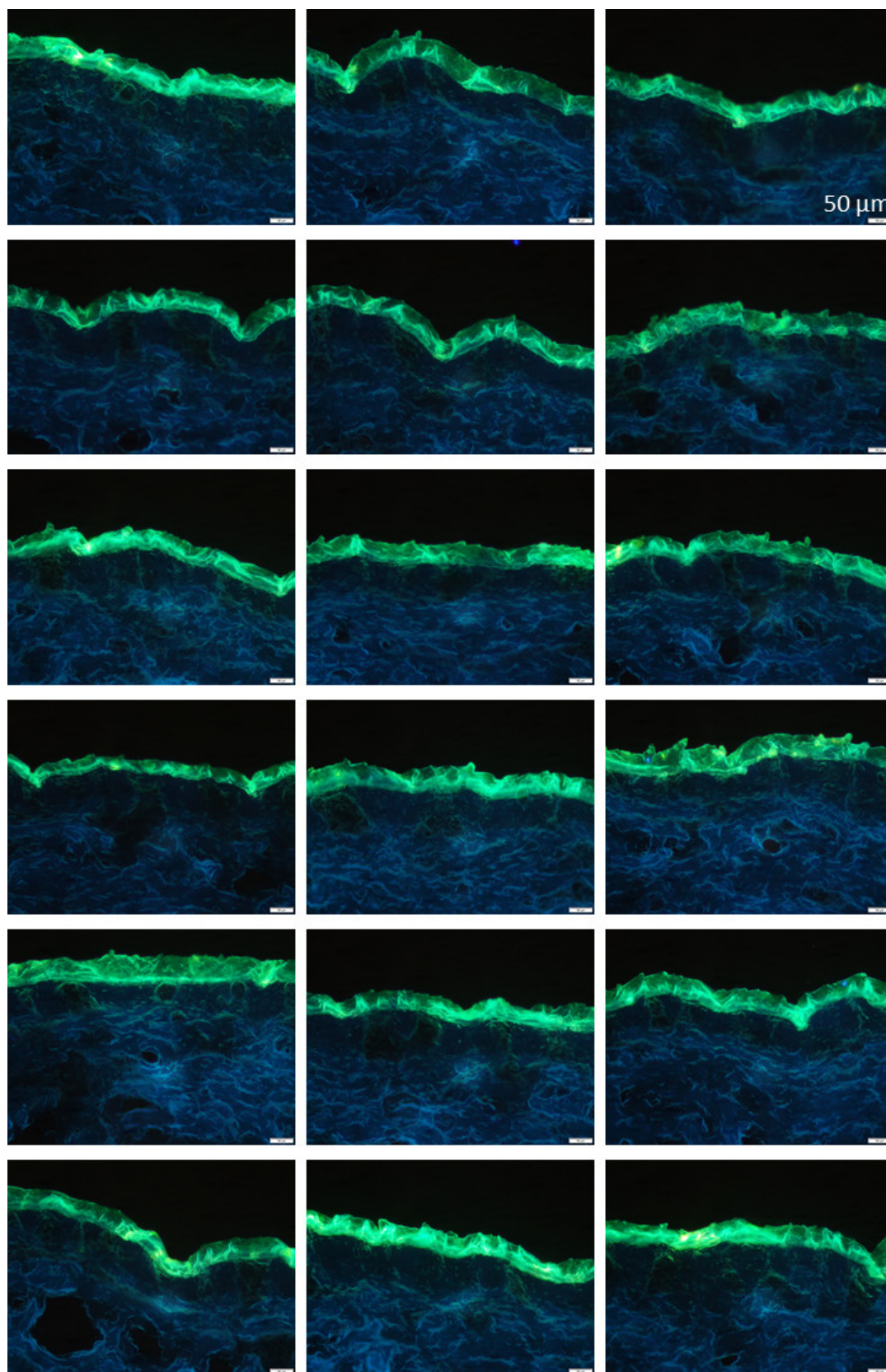
**S4: Skin Treated with Nanosuspension with 5% Glycerol.**



**Figure S4.** Skin sections of skin treated with nanosuspension contained 5% glycerol. Magnification: 200 fold.

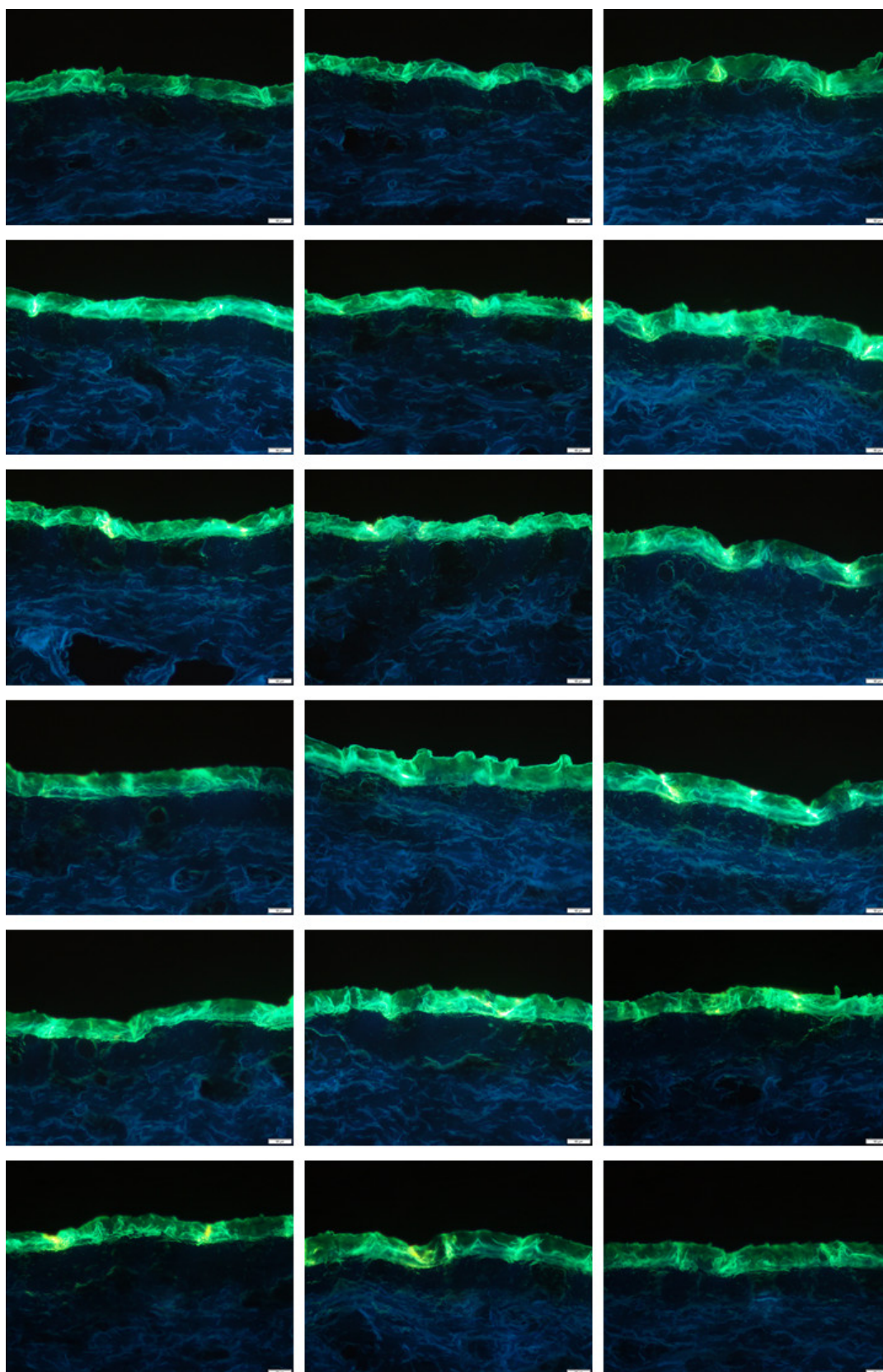
**S5: Skin Treated with Nanosuspension with 5% Urea.**





**Figure S5.** Skin sections of skin treated with nanosuspension contained 5% urea. Magnification: 200 fold.

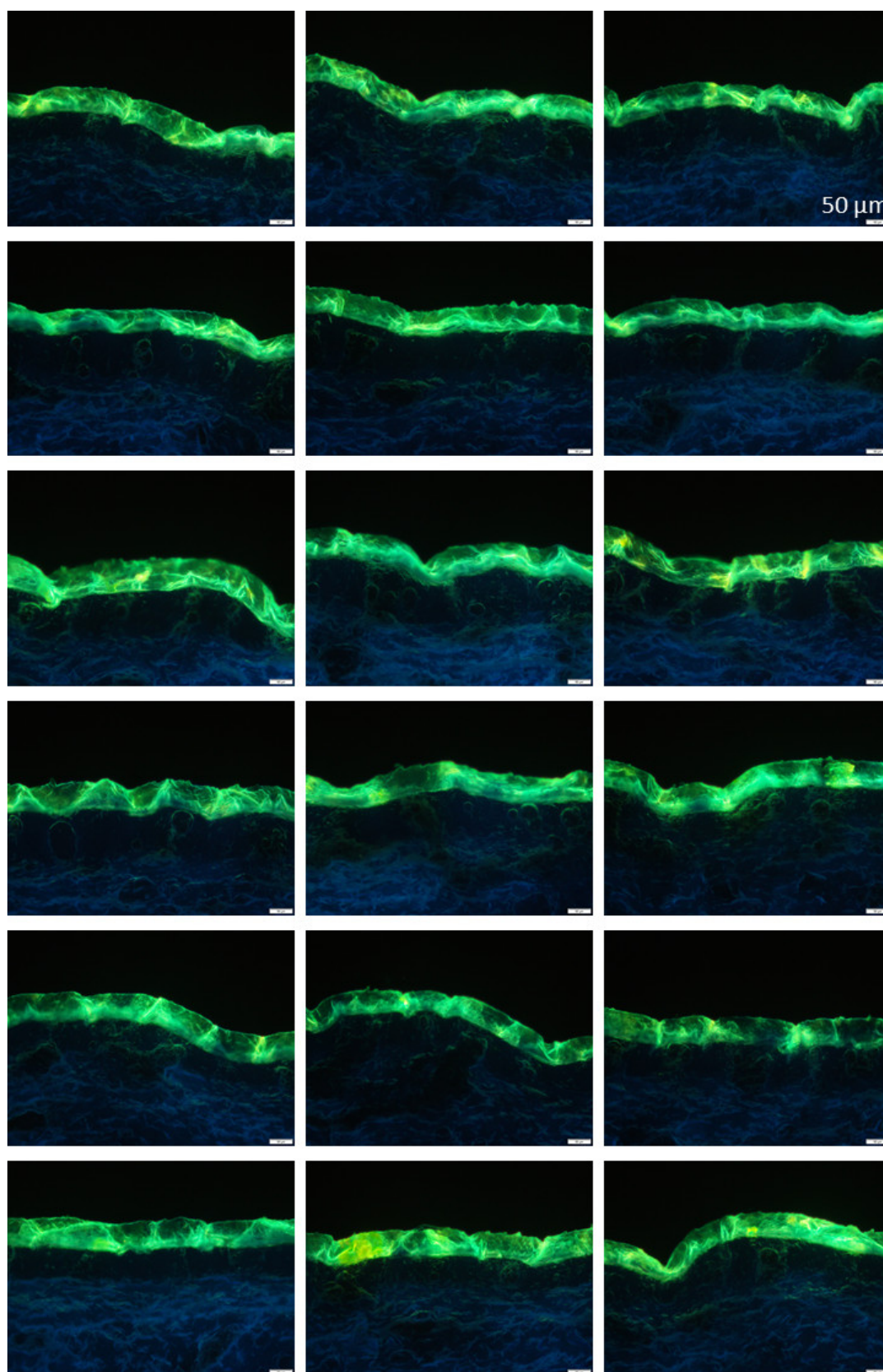
**S6: Skin Treated with Nanosuspension with 10% Urea.**



**Figure S6.** Skin sections of skin treated with nanosuspension contained 10% urea. Magnification: 200 fold.

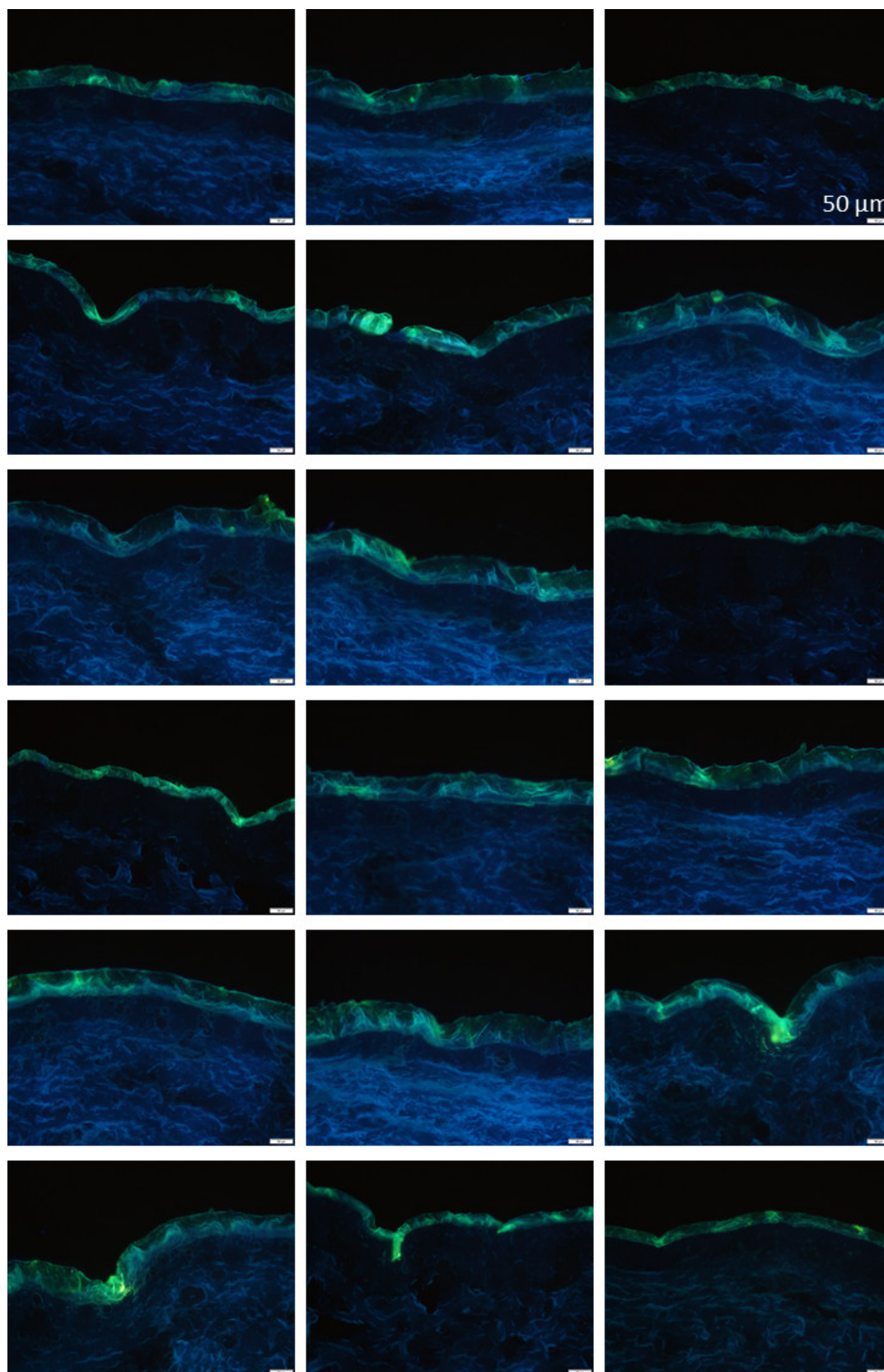
**S7: Skin Treated with Nanosuspension with 5% Propylene Glycol.**





**Figure S7.** Skin sections of skin treated with nanosuspension contained 5% propylene glycol. Magnification: 200 fold.

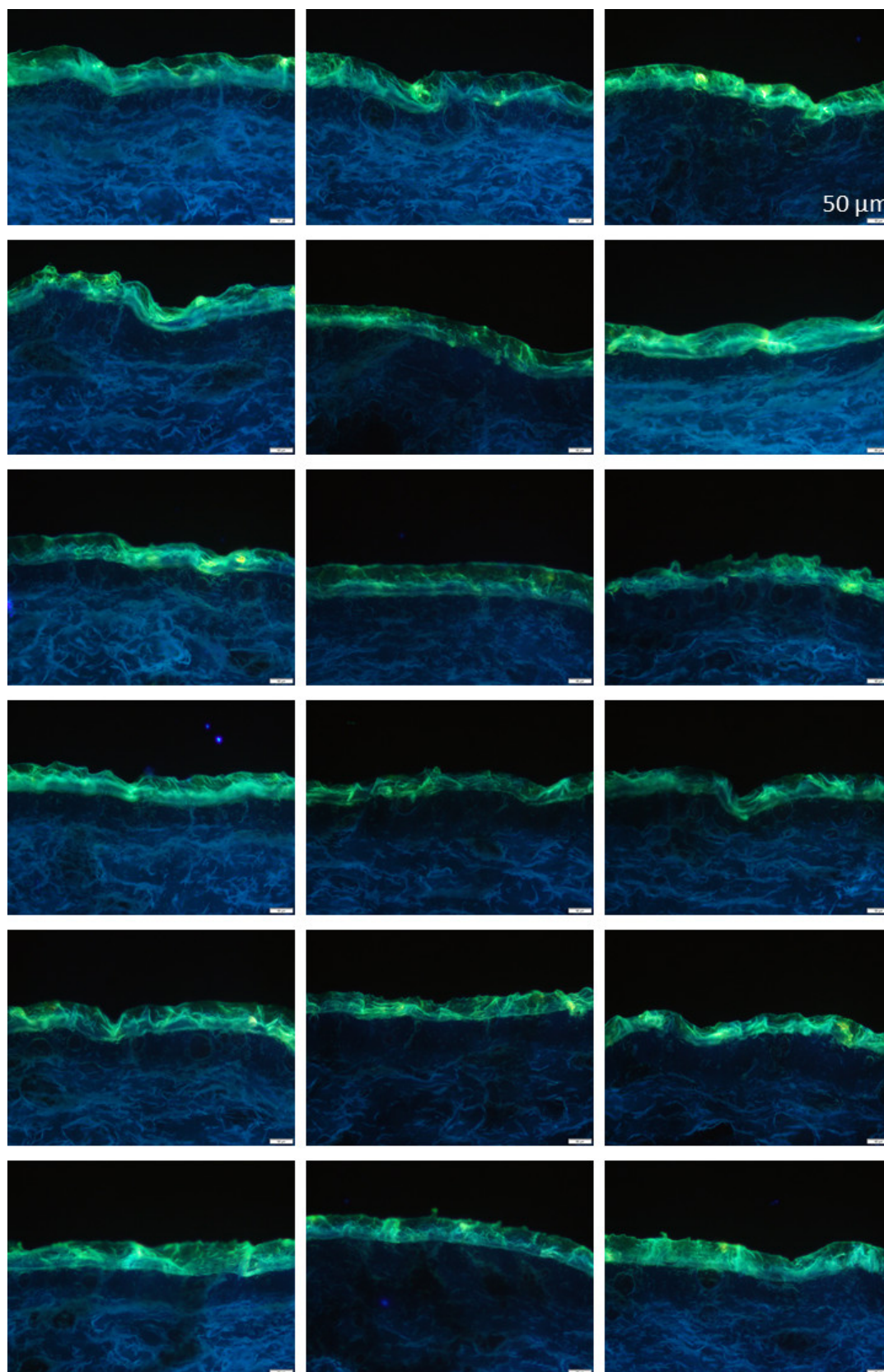
**S8: Skin Treated with Nanosuspension with 2% Ethanol.**



**Figure S8.** Skin sections of skin treated with nanosuspension contained 2% ethanol. Magnification: 200 fold.

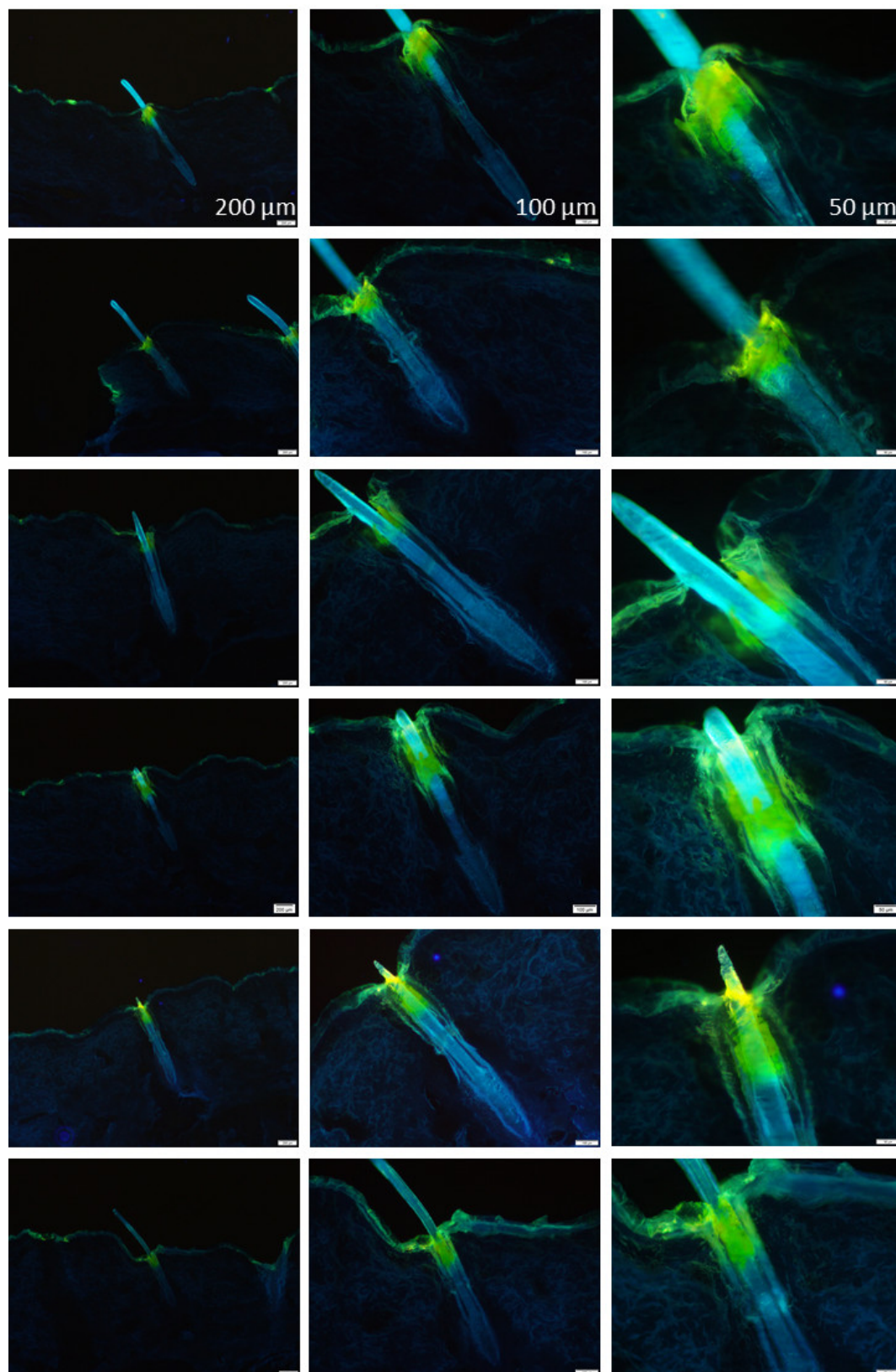
**S9: Skin Treated with Nanosuspension with 2% Olive Oil.**





**Figure S9.** Skin sections of skin treated with nanosuspension contained 2% olive oil. Magnification: 200 fold.

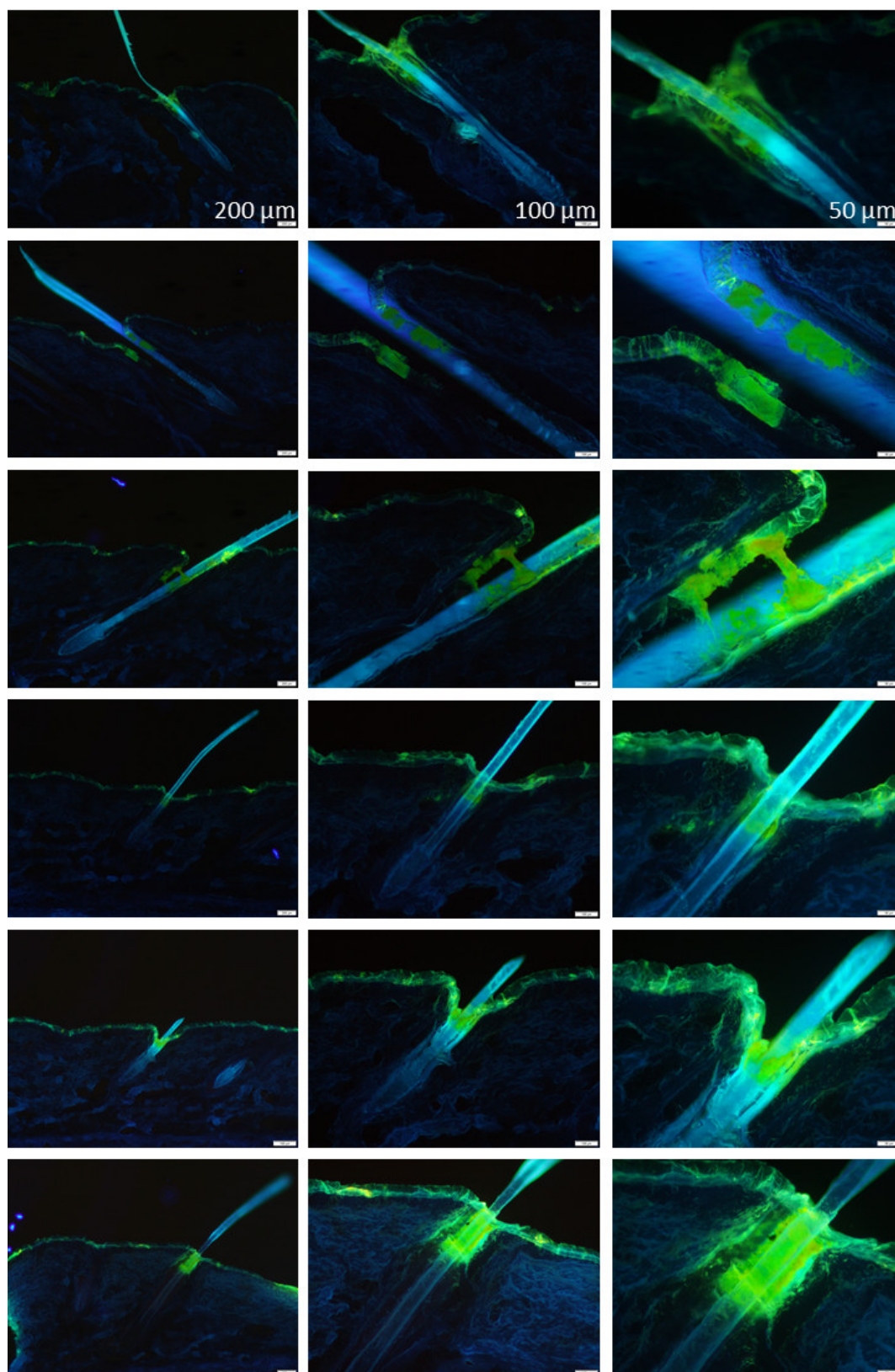
**S10: Hair Follicles Treated with Curcumin Nanocrystals without Additives.**



**Figure S10.** Hair follicles treated with nanosuspension without additives. Left column: images taken at 40fold magnification. Middle column: images taken at 100 fold magnification. Right column: images taken at 200 fold magnification.

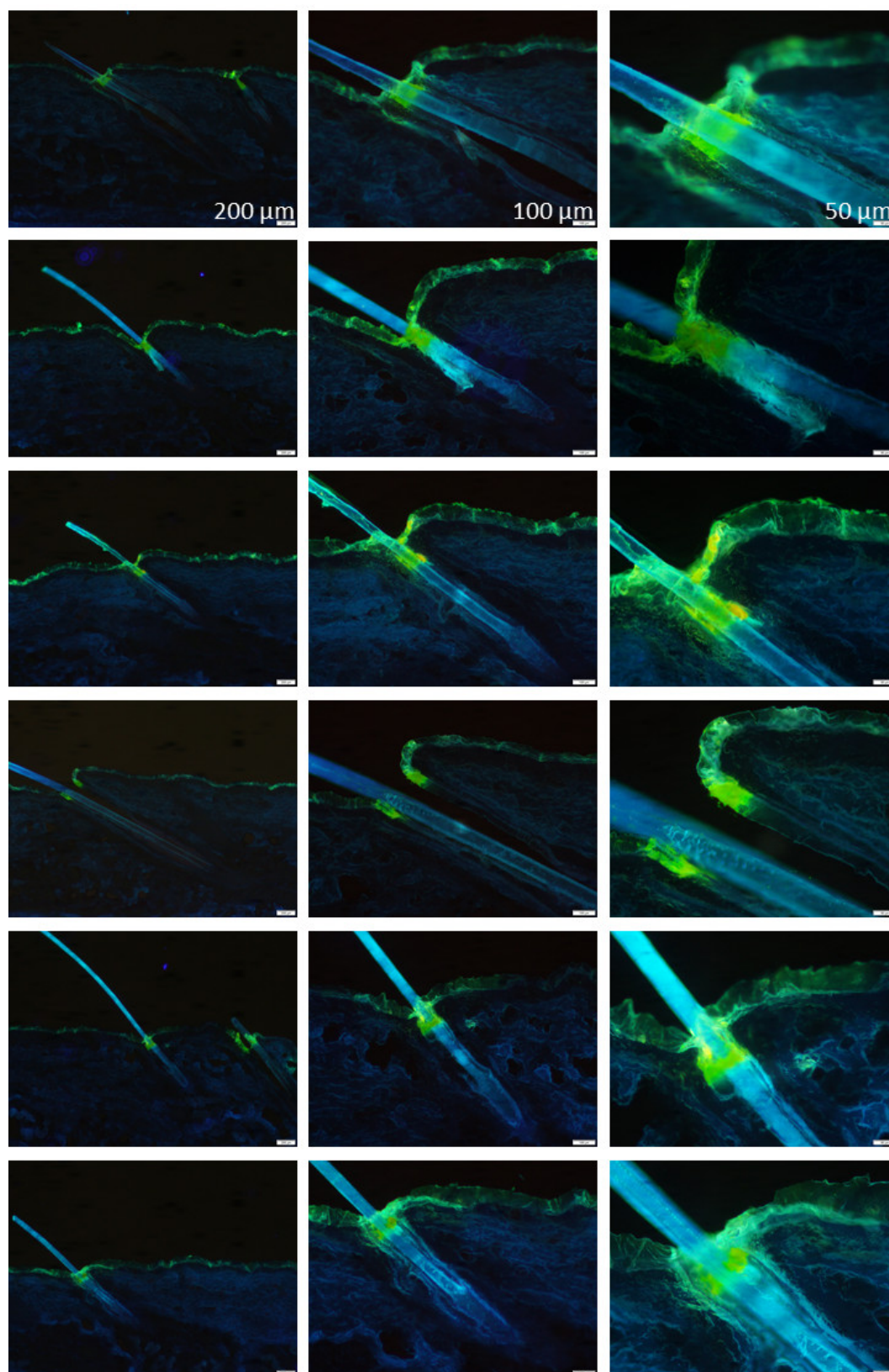
**S11: Hair Follicles Treated with Curcumin Nanocrystals with 2% Glycerol.**





**Figure S11.** Hair follicles treated with nanosuspension with 2% glycerol. Left column: images taken at 40 fold magnification. Middle column: images taken at 100 fold magnification. Right column: images taken at 200 fold magnification.

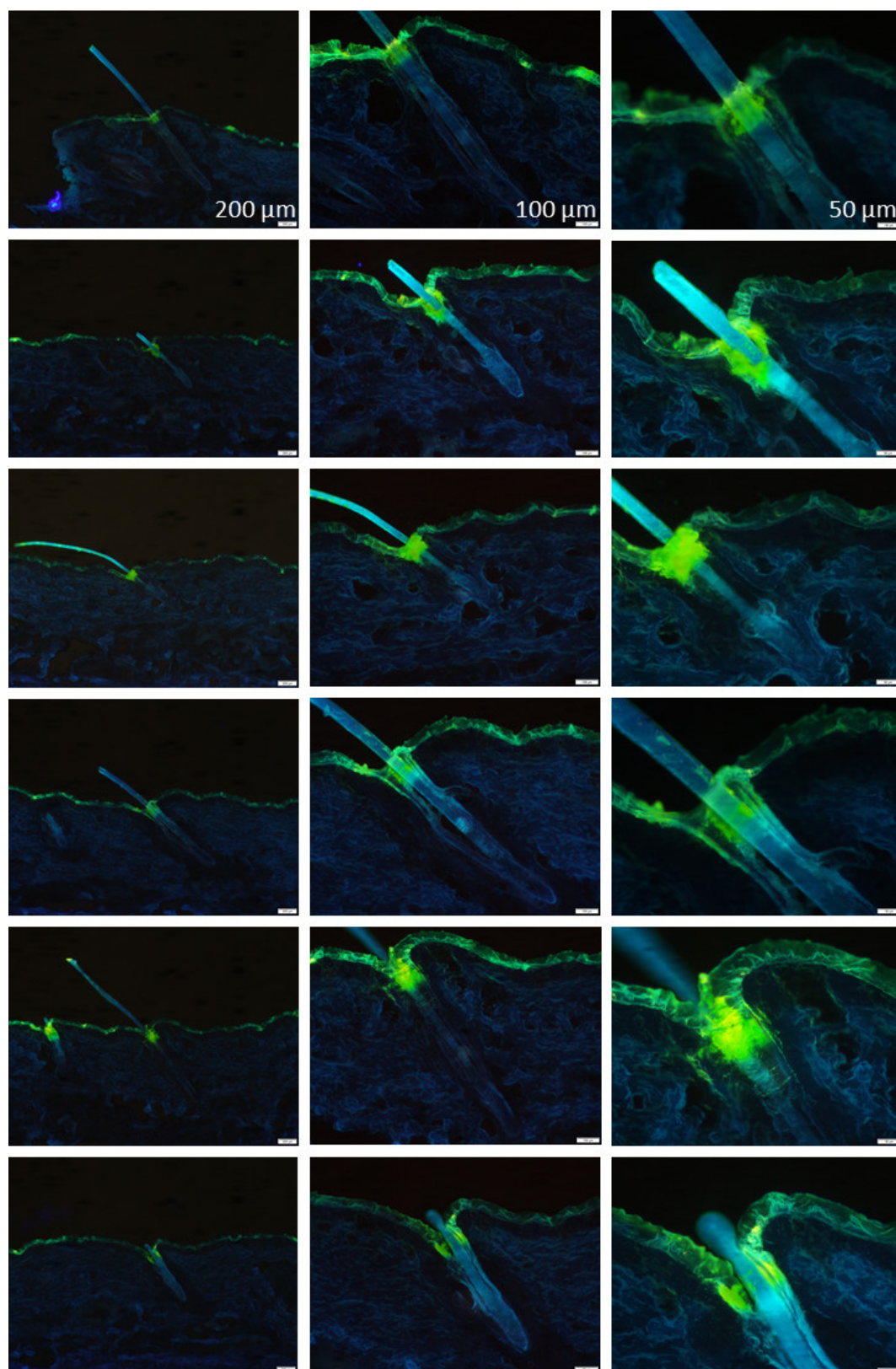
**S12: Hair Follicles Treated with Curcumin Nanocrystals with 5% Glycerol.**



**Figure S12.** Hair follicles treated with nanosuspension with 5% glycerol. Left column: images taken at 40 fold magnification. Middle column: images taken at 100fold magnification. Right column: images taken at 200 fold magnification.

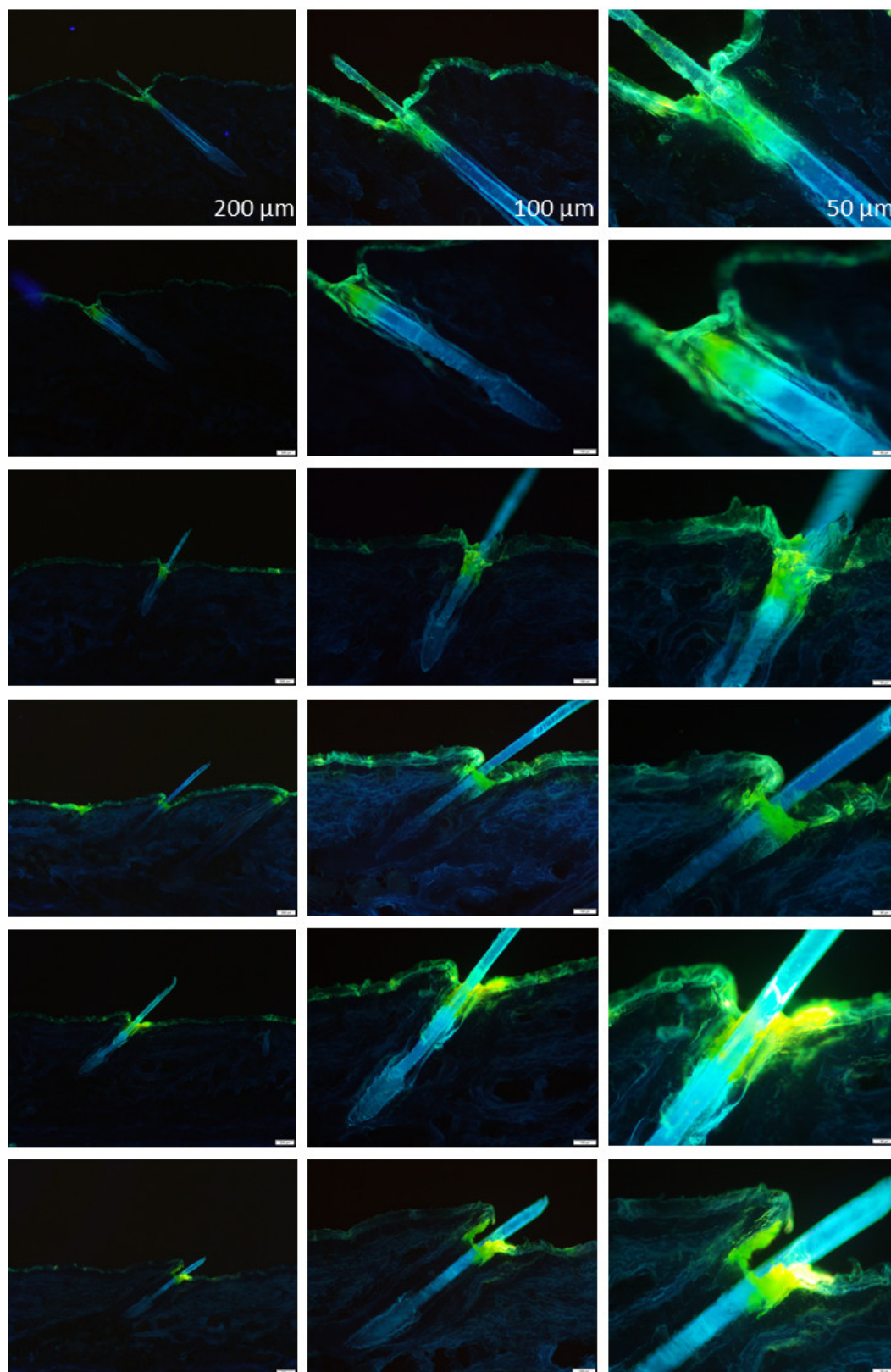
**S13: Hair Follicles Treated with Curcumin Nanocrystals with 5% Urea.**





**Figure S13.** Hair follicles treated with nanosuspension with 5% urea. Left column: images taken at 40fold magnification. Middle column: images taken at 100 fold magnification. Right column: images taken at 200 fold magnification.

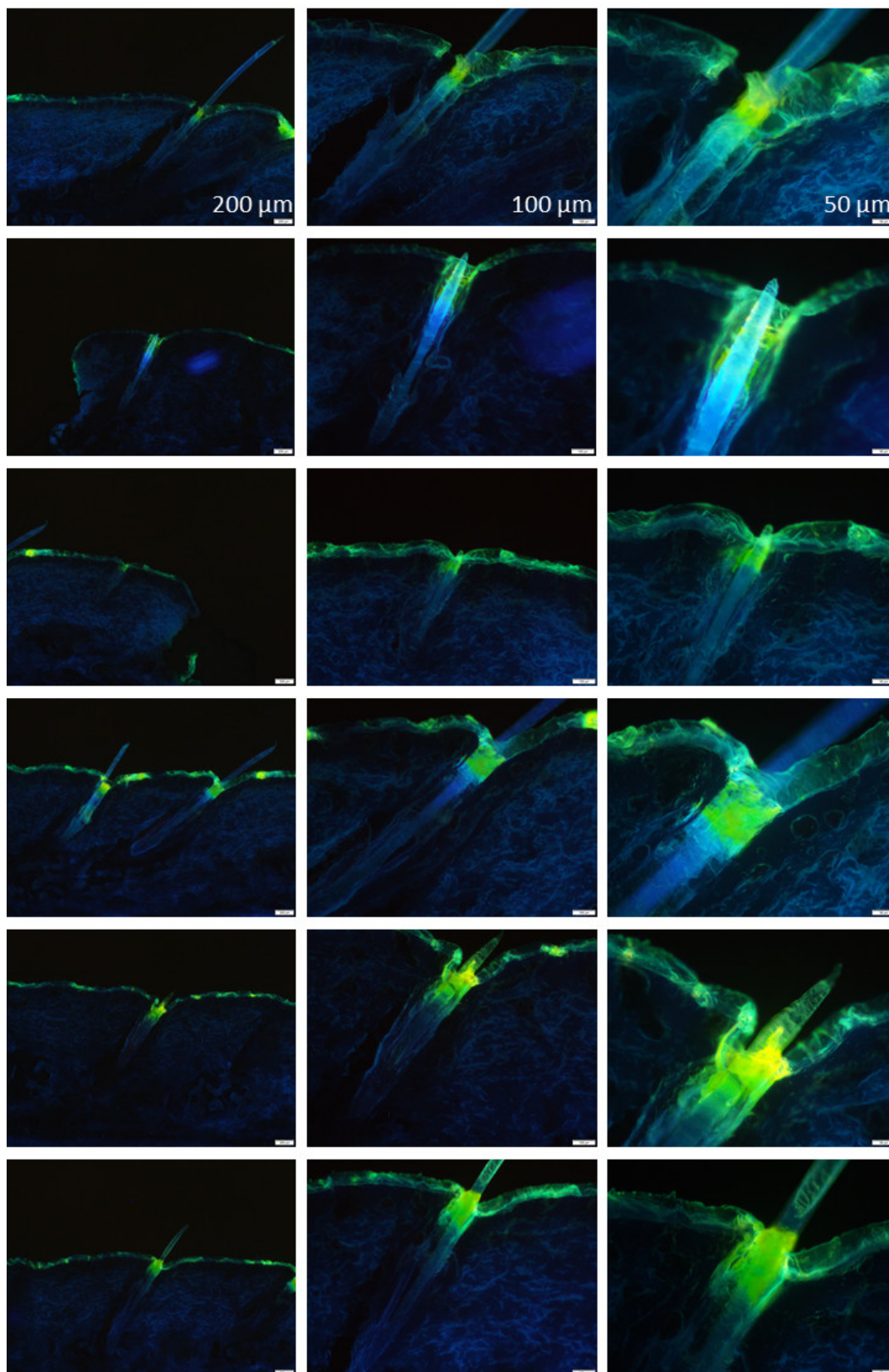
**S14: Hair Follicles Treated with Curcumin Nanocrystals with 10% Urea.**



**Figure S14.** Hair follicles treated with nanosuspension with 10% urea. Left column: images taken at 40 fold magnification. Middle column: images taken at 100 fold magnification. Right column: images taken at 200 fold magnification.

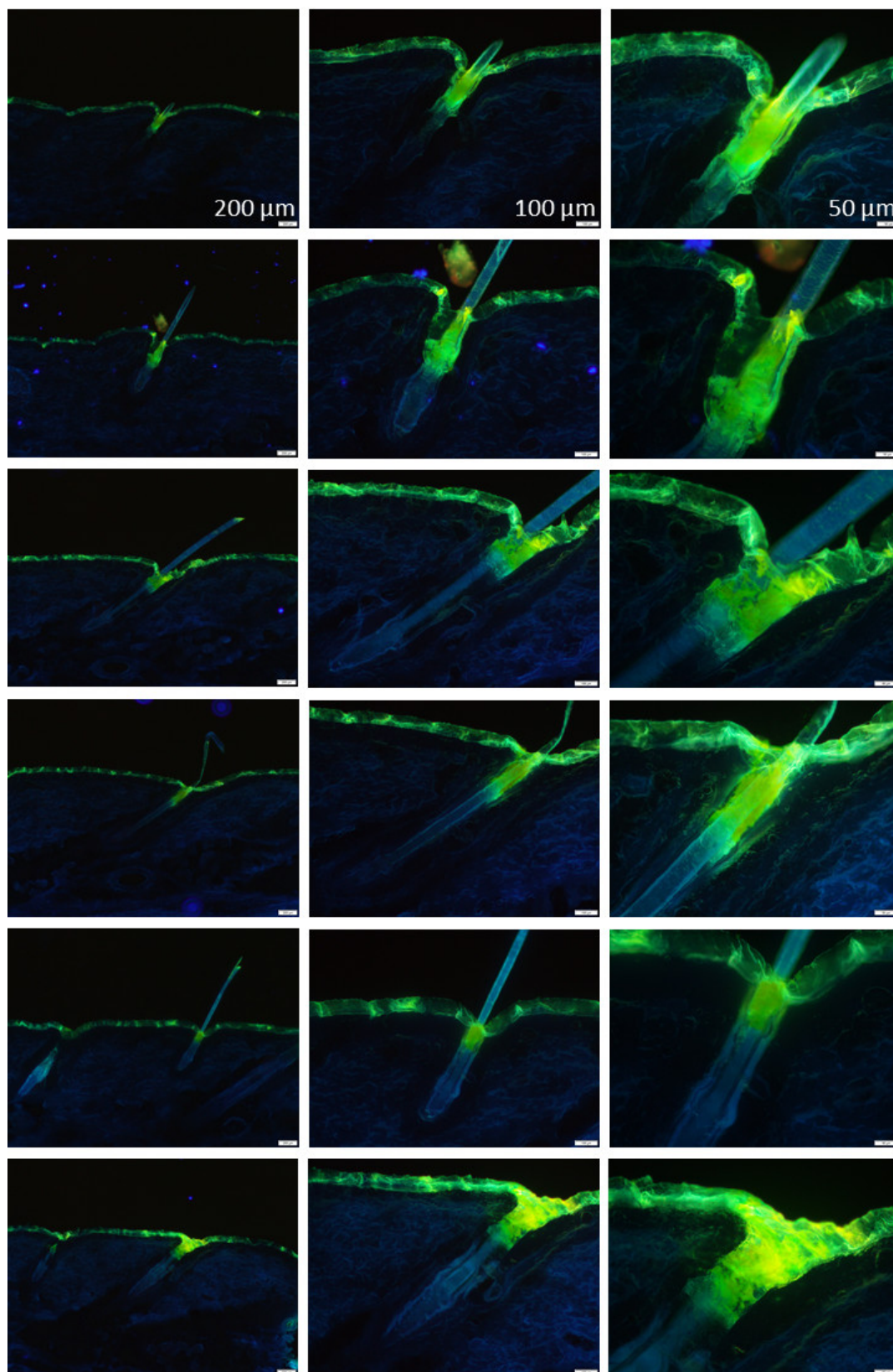
**S15: Hair Follicles Treated with Curcumin Nanocrystals without Additives after 14 days Storage.**





**Figure S15.** Hair follicles treated with nanosuspension without additives after 14 days storage. Left column: images taken at 40fold magnification. Middle column: images taken at 100 fold magnification. Right column: images taken at 200 fold magnification.

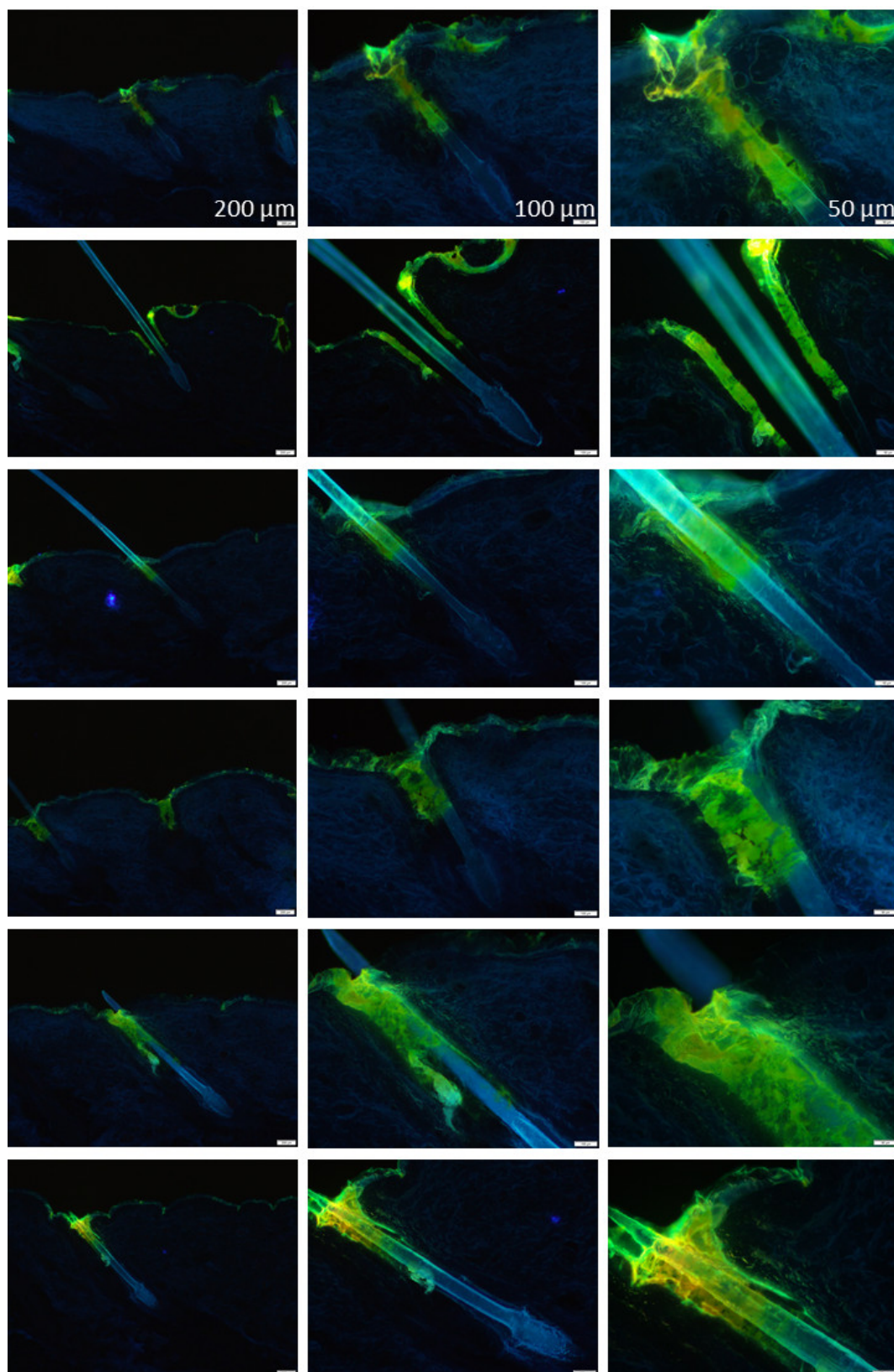
**S16: Hair Follicles Treated with Curcumin Nanocrystals with 5% Propylene Glycol.**



**Figure S16.** Hair follicles treated with nanosuspension with 5% propylene glycol. Left column: images taken at 40 fold magnification. Middle column: images taken at 100 fold magnification. Right column: images taken at 200 fold magnification.

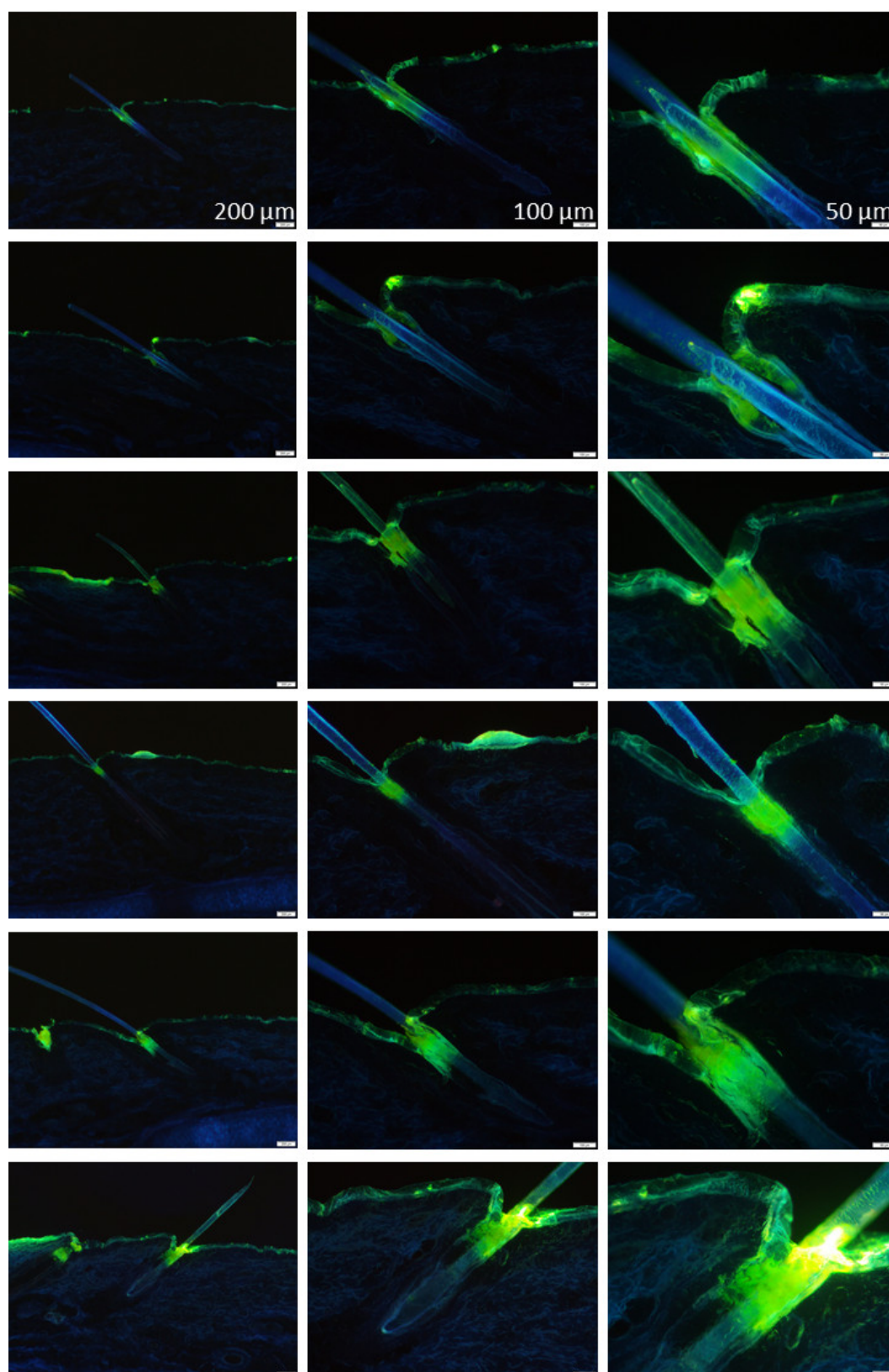
**S17: Hair Follicles Treated with Curcumin Nanocrystals with 2% Ethanol.**





**Figure S17.** Hair follicles treated with nanosuspension with 2% ethanol. Left column: images taken at 40fold magnification. Middle column: images taken at 100 fold magnification. Right column: images taken at 200 fold magnification.

**S18: Hair Follicles Treated with Curcumin Nanocrystals with 2% Olive Oil.**



**Figure S18.** Hair follicles treated with nanosuspension with 2% olive oil. Left column: images taken at 40 fold magnification. Middle column: images taken at 100 fold magnification. Right column: images taken at 200 fold magnification.





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