

Supporting information
of
Investigating the wound healing potential of low-power 661 nm laser light in a pigmented hairless murine model

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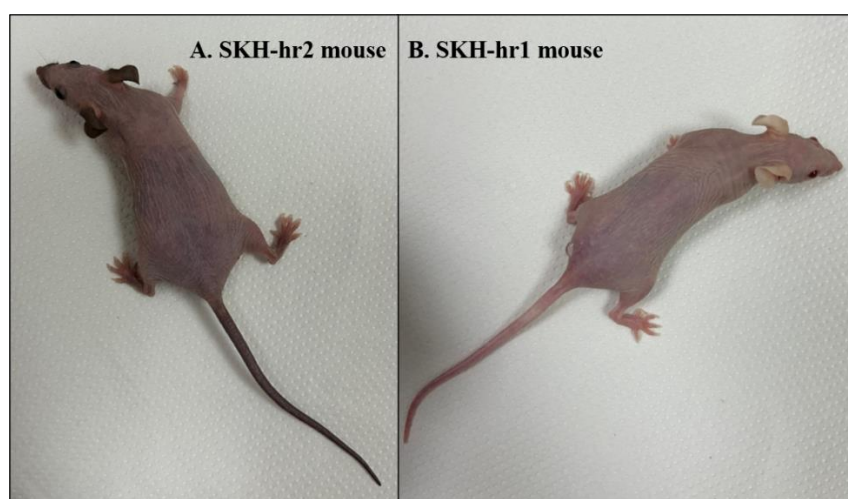


Fig. S1 (A) SKH-hr2 mouse and (B) SKH-hr1 mouse.

Table S1. Melanin content of a representative SKH-hr1 and a SKH-hr2 mouse.

Type of mice	Melanin (mean value out of 5 measurements)
SKH-hr1	140.3 ± 1.7
SKH-hr2	242.7 ± 2.4

SKH-hr2 mice represent a rare strain characterized by the presence of endogenous melanin. Figure S3 presents a macroscopic comparison between an SKH-hr2 mouse and an SKH-hr1 mouse, highlighting their external differences. Notably, the ears, tail and eyes of the SKH-hr2 mouse are dark, while the SKH-hr1 mouse exhibits the characteristic albino appearance.

Melanin content was measured using Mexameter MX-18 (Courage and Khazaka, Köln, Germany). Measurements were performed on the upper dorsal skin of healthy mice. The difference in melanin content between these two mouse strains is presented in Table S1. The 140.3 arbitrary units of melanin obtained for albino hairless mice of the SKH-hr1 type is a background value.

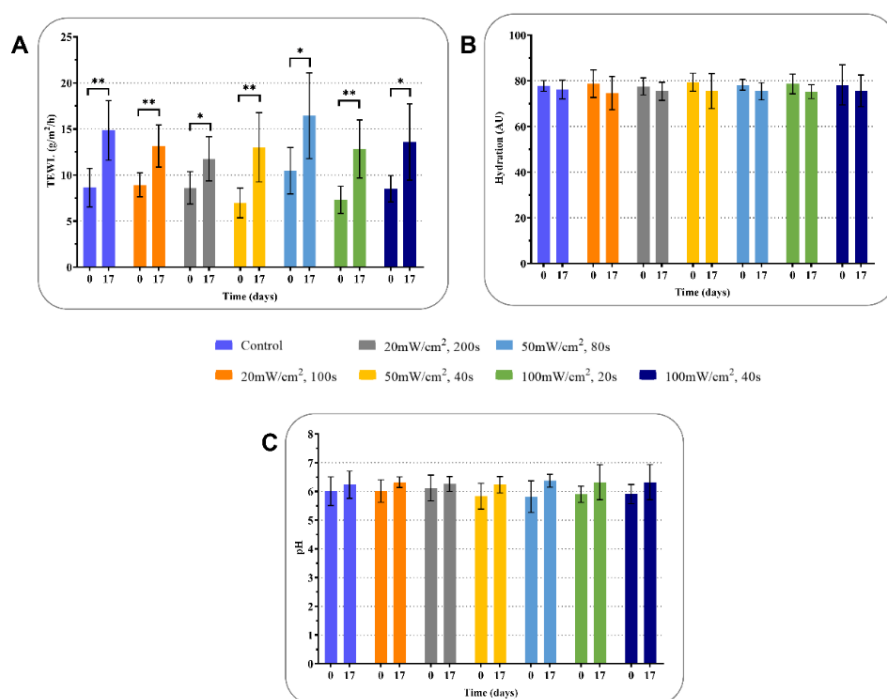


Fig. S2 (A) TEWL (Transepidermal Water Loss) and (B) hydration (C) skin pH values for mice receiving various treatments: control; 20 mW/cm² for 100 seconds; 20 mW/cm² for 200 seconds; 50 mW/cm² for 40 seconds; 50 mW/cm² for 80 seconds; 100 mW/cm² for 20 seconds; 100 mW/cm² for 40 seconds. Statistical significance indicated as *p<0.05, **p<0.01.

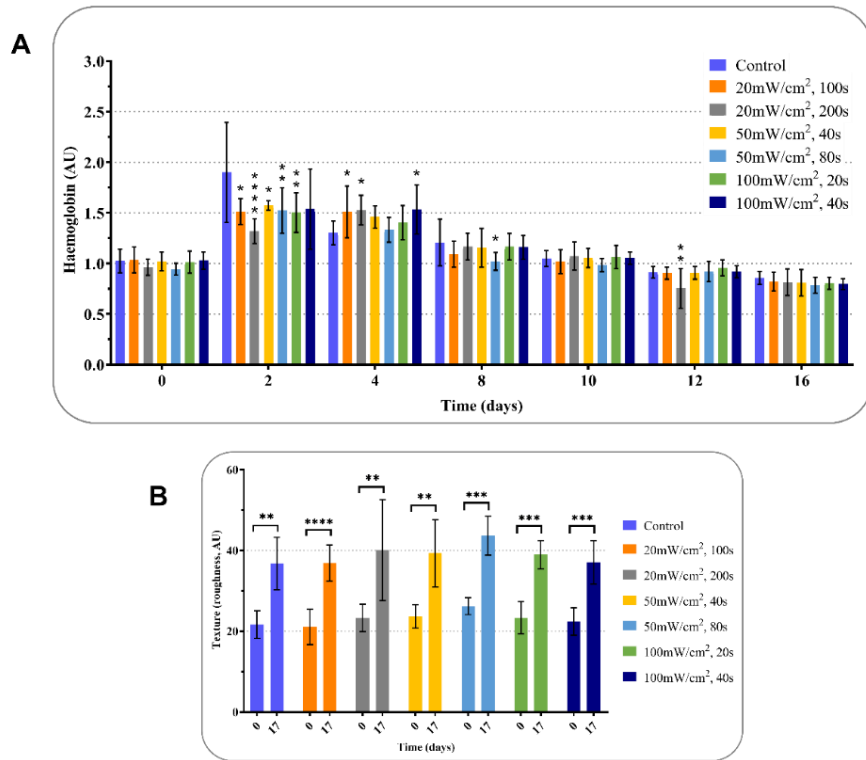


Fig. S3 (A) Haemoglobin levels for mice receiving various treatments: control; 20 mW/cm² for 100 seconds; 20 mW/cm² for 200 seconds; 50 mW/cm² for 40 seconds; 50 mW/cm² for 80 seconds; 100 mW/cm² for 20 seconds; 100 mW/cm² for 40 seconds. All groups were compared with the control group on the corresponding day. (B) Skin texture values for mice receiving various treatments. Statistical significance indicated as * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$.