

1

Figure S1 Lactate promotes the transition of wound macrophages to a reparative phenotype and accelerates wound healing in mice

Twenty mice were randomly divided into two intervention groups: the CTRL group (treated with vehicle, n=10) and the LA group (treated with 20 mM lactate, n=10). (A) The protocol of in vivo study was shown. Immunofluorescence staining with iNOS + CD68 (B) or ARG1 + CD68 (C) was performed to analyze wound macrophages on Day 5 post-injury. Scale bar = 100 μ m. n = 6. (D) The photographs of skin wounds and schematic diagram of comparison of wound area on Day 3 and Day 9. Scale bar = 5 mm. (E) Statistical results of relative wound area (fold of the 10 wound on Day 3). (F) Relative wound area on Day 9 post-injury (fold of the wound on Day 3) 11 was analyzed (n = 14). (G) Skin wound hematoxylin and eosin (HE) staining on Day 5. Scale 12 bar = 400 μ m. (H) Skin wound HE staining on Day 12. Data represents mean ± SEM, **p* < 0.5, 13 ***p* < 0.01.



14

15 Figure S2 PKM2 is far more expressed than PKM1 in BMDM cells

- 16 The protein levels related to the expression of PKM1 and PKM2 in mouse myocardium,
- 17 293T cells, and mouse bone-marrow-derived macrophage cells were detected.

18