## **Supplementary Material**

## Fasting before or after wound injury accelerates wound healing through the activation of pro-angiogenic SMOC1 and SCG2

Ming-Jie Luo<sup>1-4#</sup>, Shan-Shan Rao<sup>1-3#</sup>, Yi-Juan Tan<sup>1,3</sup>, Hao Yin<sup>1,3</sup>, Xiong-Ke Hu<sup>1,3</sup>, Yan Zhang<sup>3,5</sup>, Yi-Wei Liu<sup>3,5</sup>, Tao Yue<sup>1,3</sup>, Ling-Jiao Chen<sup>9</sup>, Li Li<sup>10</sup>, Ya-Rong Huang<sup>11</sup>, Yu-Xuan Qian<sup>1,3</sup>, Zheng-Zhao Liu<sup>3,5,8</sup>, Jia Cao<sup>1,3</sup>, Zhen-Xing Wang<sup>1,3</sup>, Zhong-Wei Luo<sup>1,3</sup>, Yi-Yi Wang<sup>1,3</sup>, Kun Xia<sup>1,3</sup>, Si-Yuan Tang<sup>2\*</sup>, Chun-Yuan Chen<sup>1,3\*</sup>, Hui Xie<sup>1,3,5-8\*</sup>

<sup>1</sup>Department of Orthopedics, Xiangya Hospital, Central South University, Changsha, Hunan 410008, China

<sup>2</sup>Xiangya School of Nursing, Central South University, Changsha, Hunan 410013 China

<sup>3</sup>Movement System Injury and Repair Research Center, Xiangya Hospital, Central South University, Changsha, Hunan 410008, China

<sup>4</sup>School of Nursing, Xinjiang Medical University, Urumqi, Xinjiang 830000 China

<sup>5</sup>Department of Sports Medicine, Xiangya Hospital, Central South University, Changsha, Hunan 410008, China

<sup>6</sup>Hunan Key Laboratory of Organ Injury, Aging and Regenerative Medicine, Changsha, Hunan 410008 China

<sup>7</sup>Hunan Key Laboratory of Bone Joint Degeneration and Injury, Changsha, Hunan 410008, China

<sup>8</sup>National Clinical Research Center for Geriatric Disorders, Xiangya Hospital, Central South University, Changsha, Hunan 410008, China

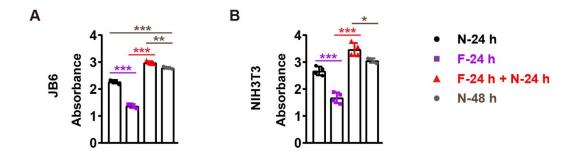
<sup>9</sup>Department of Pathology, Sun Yat-sen Memorial Hospital, Sun Yat-sen University, Guangzhou, Guangdong, 510220, China

<sup>10</sup>The First Affiliated Hospital, Xinjiang Medical University, Urumqi, Xinjiang 830000 China

<sup>11</sup>Changji Hospital of Traditional Chinese Medicine, Changji, Xinjiang 831100 China

<sup>\*</sup>These authors contributed equally to this work.

<sup>\*</sup>Corresponding authors: Hui Xie (huixie@csu.edu.cn); Chun-Yuan Chen (chency19@csu.edu.cn); Si-Yuan Tang (sytang263@csu.edu.cn).



Supplementary Figure 1. The effects of fasting and refeeding on the proliferation of epidermal cells and fibroblasts. (A and B) CCK-8 analysis of the proliferation of mouse epidermal cell line JB6 (A) and embryonic fibroblast NIH3T3 (B) in different treatment groups. n = 4 per group. One-way ANOVA combined with Bonferroni post hoc test. \*P < 0.05, \*\*P < 0.01, \*\*\*P < 0.001.

Supplementary Table 1. DEGs in endothelial cells subjected to fasting/refeeding or non-fasting/refeeding treatments.