Claims

1. A non-invasive method for isolating adipose-derived stem cells from adipose tissue comprising illuminating the adipose tissue with at least one laser for a predetermined time for dissociating fat cells and blood vessels of the adipose tissue to release intact stem cells from the adipose tissue while maintaining the viability of the stem cells, wherein the adipose tissue is in the form of lipoaspirate, and wherein the at least one laser comprises a first laser having a wavelength of between 360nm to 480nm.

2. The method in accordance with Claim 1 wherein the lipoaspirate is obtained by suction-assisted lipoplasty, ultrasound-assisted lipoplasty, excisional lipectomy or combinations thereof.

3. The method in accordance with Claim 1 or 2, further comprising separating the intact stem cells from the adipose tissue after the intact stem cells are released.

4. The method in accordance with any one of Claims 1 to 3 wherein the ~~at least one~~ first laser comprises a pulsed laser or a continuous wave (CW) laser.

5. The method in accordance with any one of Claims 1 to 4 wherein the at least one laser further comprises a second laser having a wavelength of between 800nm to 2µm.

6. The method in accordance with Claim 5 wherein the second laser comprises a pulsed laser or a continuous wave (CW) laser.

7. The method in accordance with Claim 5 or Claim 6 wherein the second laser comprises a pulsed near infrared (NIR) laser having a wavelength of between 800nm to 2µm.

8. The method in accordance with any one of Claims 1 to 7 wherein the first laser comprises a CW blue laser having a wavelength of between 360nm to 480nm.

9. The method in accordance with any of the preceding claims wherein the predetermined time is less than ten minutes.