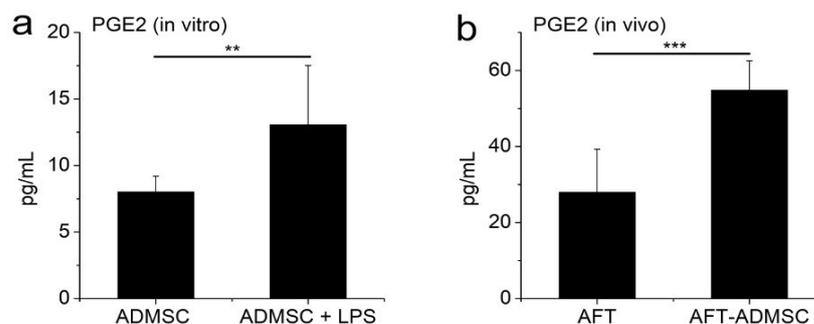


**Figure S1.** H&E staining of a thin layer of connective tissue in the external area of the explants and adipose tissue characterization: (A) AFT graft at 7 days post-transplantation; (B) AFT graft at 60 days post-transplantation; (C) AFT-AD-MSC-GFP graft at 7 days post-transplantation; (D) AFT-AD-MSC-GFP graft at 60 days post-transplantation; connective capsulae are indicated by black arrows; (E) average number of adipocytes per area unit (mm<sup>2</sup>); (F) percentage of adipocytes per area in the group. Images were acquired using an AxioZoom V16 (Zeiss) at a magnification of 270×. Scale bar = 200 μm; \*\* *p*-value < 0.01.



**Figure S2.** PGE2 quantification by in vitro and in vivo assays: (a) AD-MSCs were stimulated for 24 h by LPS (8 μg/mL) in vitro (*n* = 3), and supernatants were collected and analyzed by ELISA, \*\* *p*-value < 0.01; (b) mice sera were collected from the AFT and AFT-AD-MSC groups at 180 days after transplantation, and PGE2 levels were quantified by ELISA, \*\*\* *p*-value < 0.001.