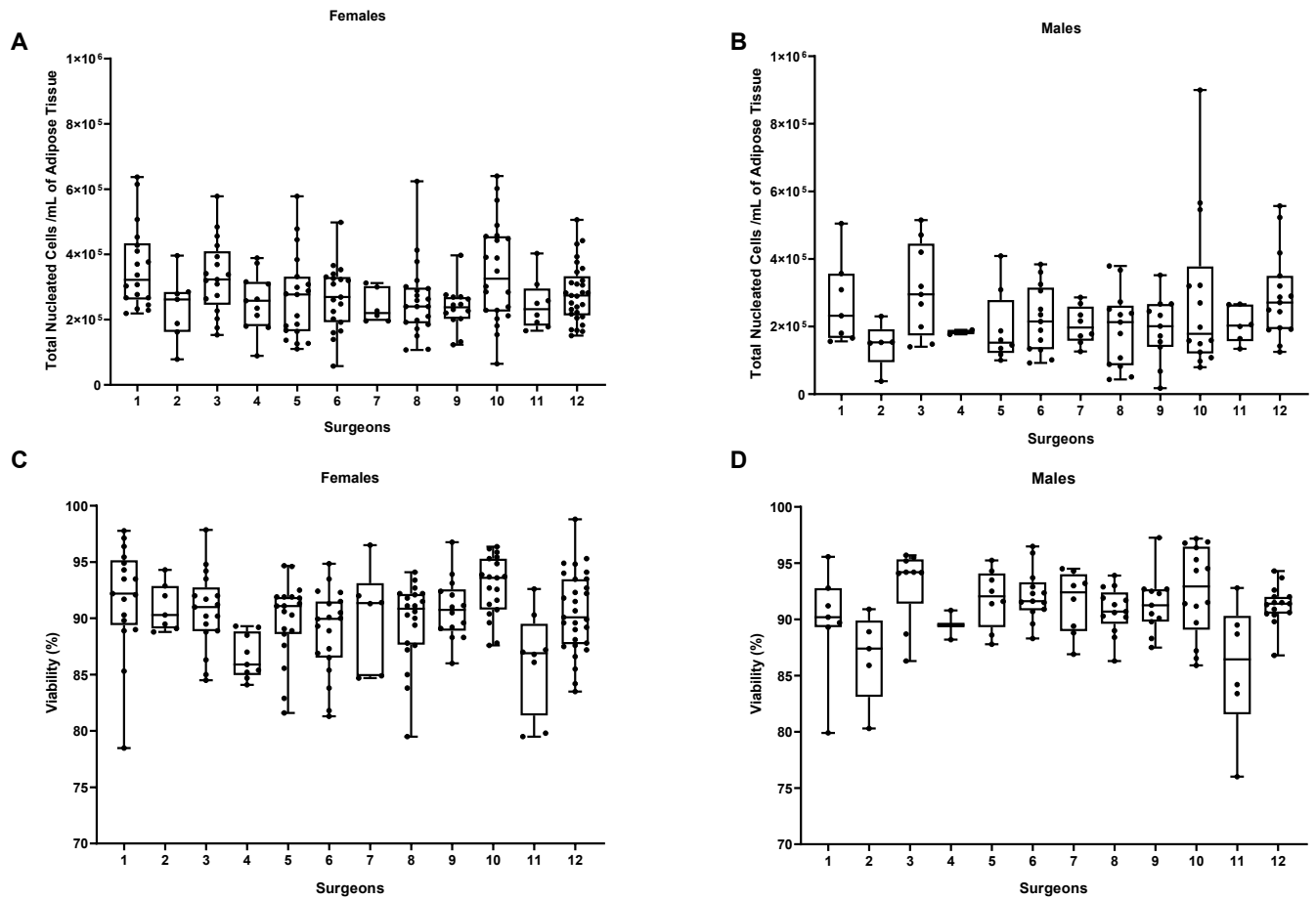


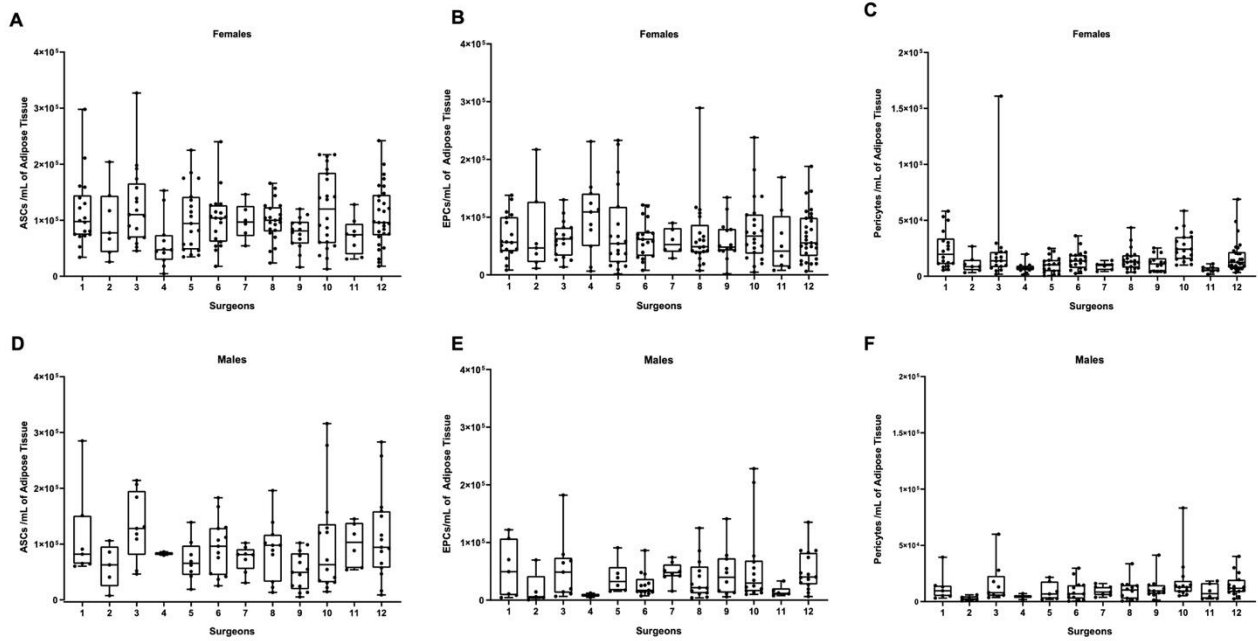
## Supplementary Materials



**Figure S1.** Comparison of the number of TNCs/mL of adipose tissue (A,B) and cellular viability (C,D) in separately females and males cohorts based on surgeons.

Females: 1. N=18, 2. N=7, 3. N=17, 4. N=11, 5. N=19, 6. N=19, 7. N=6, 8. N=21, 9. N=14, 10. N= 22, 11. N=8, 12. N=29.

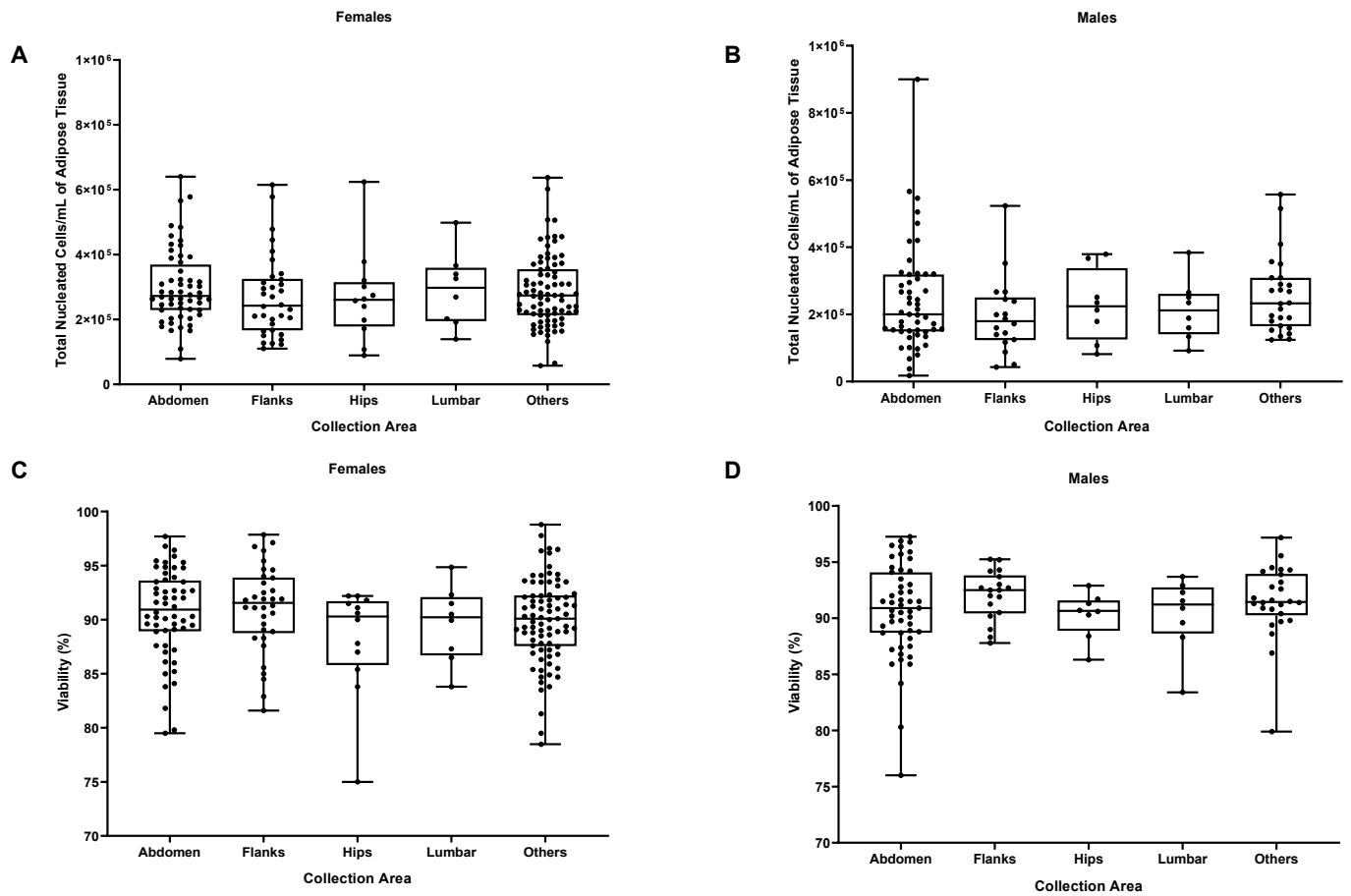
Males: 1. N=7, 2. N=5, 3. N=9, 4. N=2, 5. N=8, 6. N=13, 7. N=8, 8. N=13, 9. N=11, 10. N= 14, 11. N=6, 12. N=15.



**Figure S2.** Sub-populations analyses in females and males cohorts.

(A,B,C) Females: 1. N=18, 2. N=7, 3. N=17, 4. N=11, 5. N=19, 6. N=19, 7. N=6, 8. N=21, 9. N=14, 10. N= 22, 11. N=8, 12. N=29.

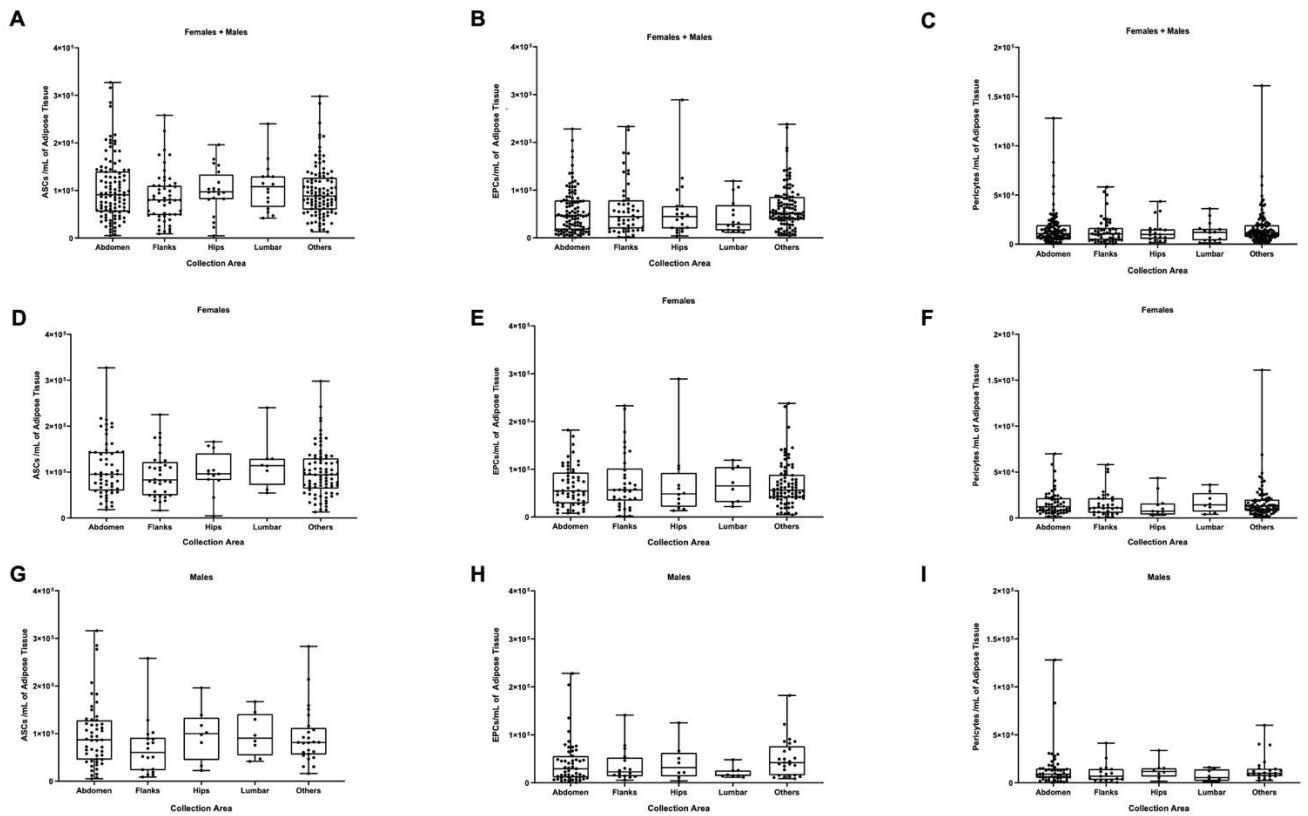
(D,E,F) Males: 1. N=7, 2. N=5, 3. N=9, 4. N=2, 5. N=8, 6. N=13, 7. N=8, 8. N=13, 9. N=11, 10. N= 14, 11. N=6, 12. N=15.



**Figure S3.** Comparison of the number of TNCs/mL of adipose tissue (A,B) and viability (C,D) between the different anatomical areas of collection in females and males.

In females: Abdomen N=56, flanks N=34, Hips N=12, lumbar N=8, others N=81.

In males: Abdomen N=51, flanks N=18, hips N=8, lumbar N=8, others N=26

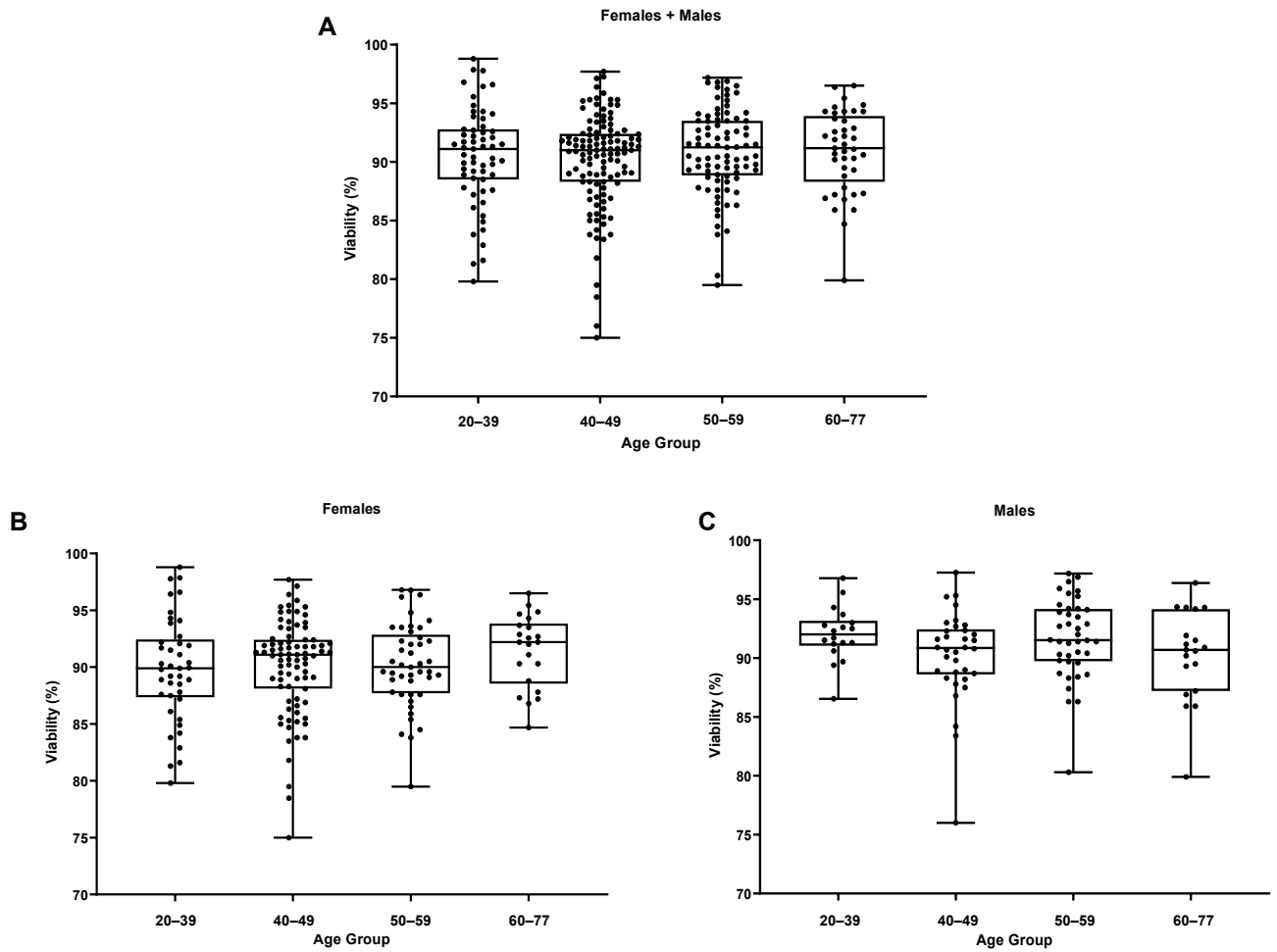


**Figure S4.** Subpopulations analyses in females and males cohorts, comparing different anatomical areas of collection.

(A, B, C) Females + males N=302.

(D, E, F) Females: Abdomen N=56, flanks N=34, hips N=12, lumbar N=8, others N=81.

(G, H, I) Males: Abdomen N=51, flanks N=18, hips N=8, lumbar N=8, others N=26.

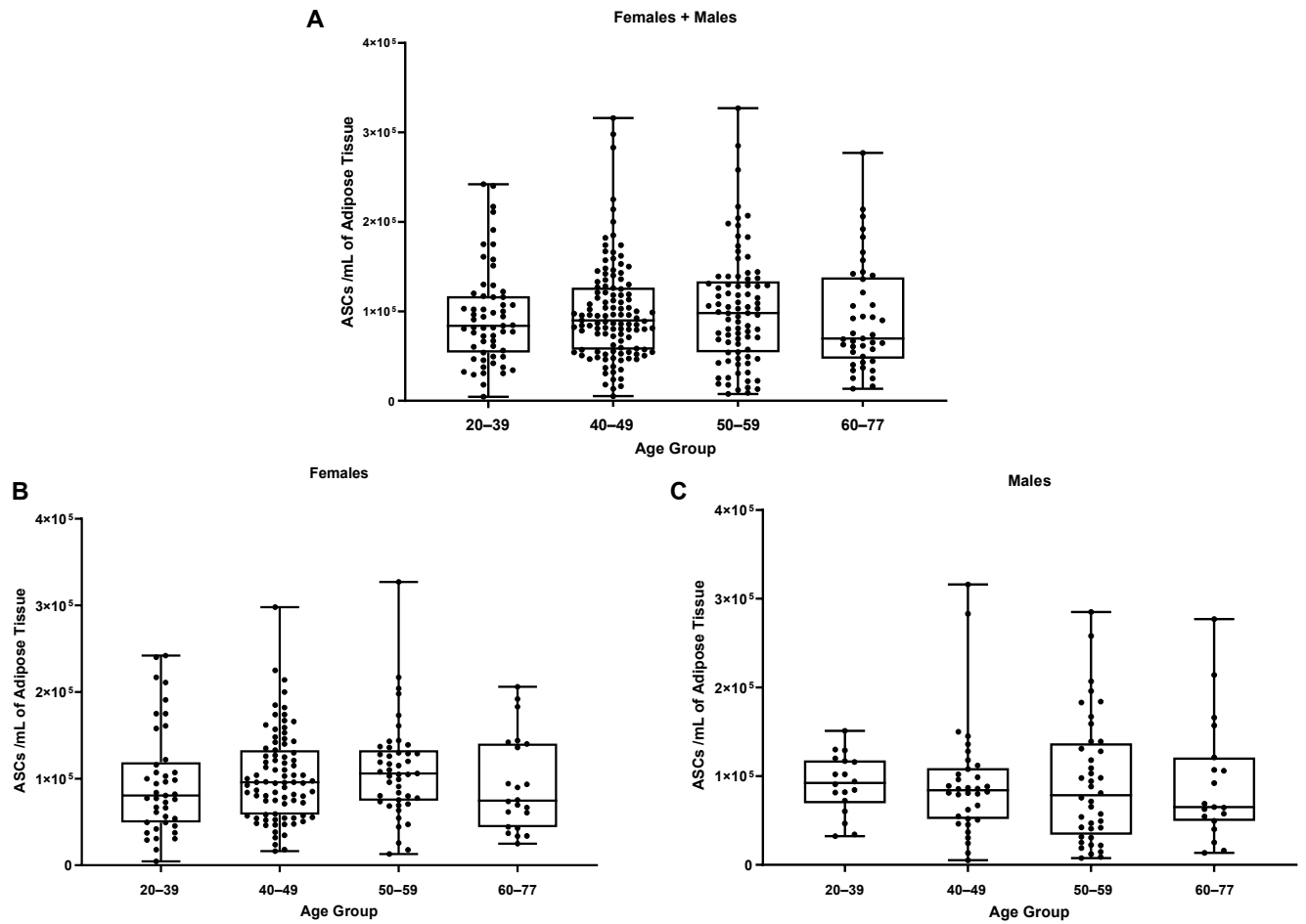


**Figure S5.** Viability comparison between four age groups in both the females + males cohort and separate females and males cohorts.

**(A)** Females + males: (20–39) N=59, (40–49) N=117, (50–59) N=85, (60–77) N=41.

**(B)** Females: (20–39) N=41, (40–49) N=83, (50–59) N=45, (60–77) N=22.

**(C)** Males: (20–39) N=18, (40–49) N=34, (50–59) N=40, (60–77) N=19.

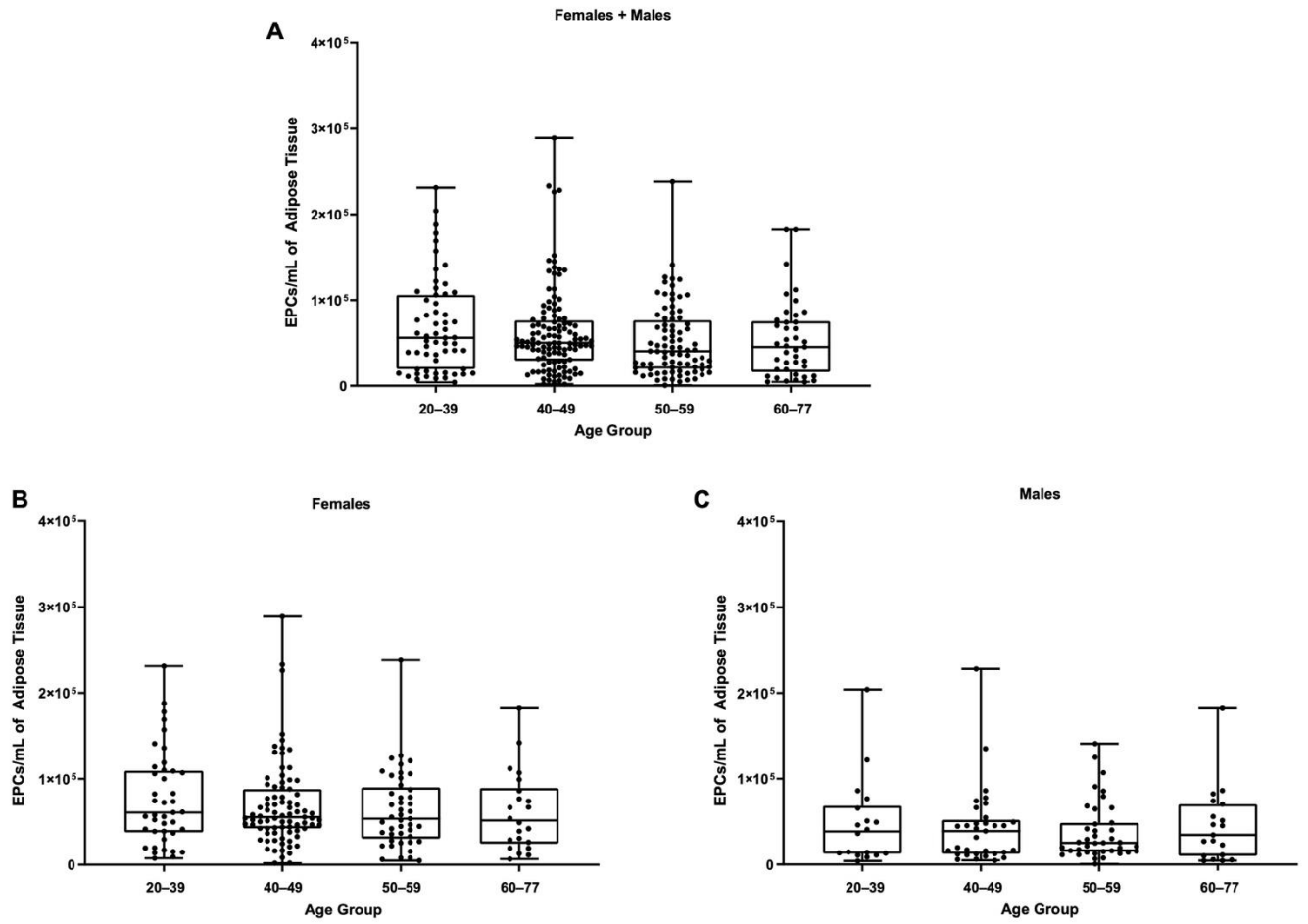


**Figure S6.** Comparison of the number of ASCs/mL of adipose tissue in the females + males cohort and separate females and males cohorts between age groups.

(A) Females+ males: (20–39) N=59, (40–49) N=117, (50–59) N=85, (60–77) N=41.

(B) Females: (20–39) N=41, (40–49) N=83, (50–59) N=45, (60–77) N=22.

(C) Males: (20–39) N=18, (40–49) N=34, (50–59) N=40, (60–77) N=19

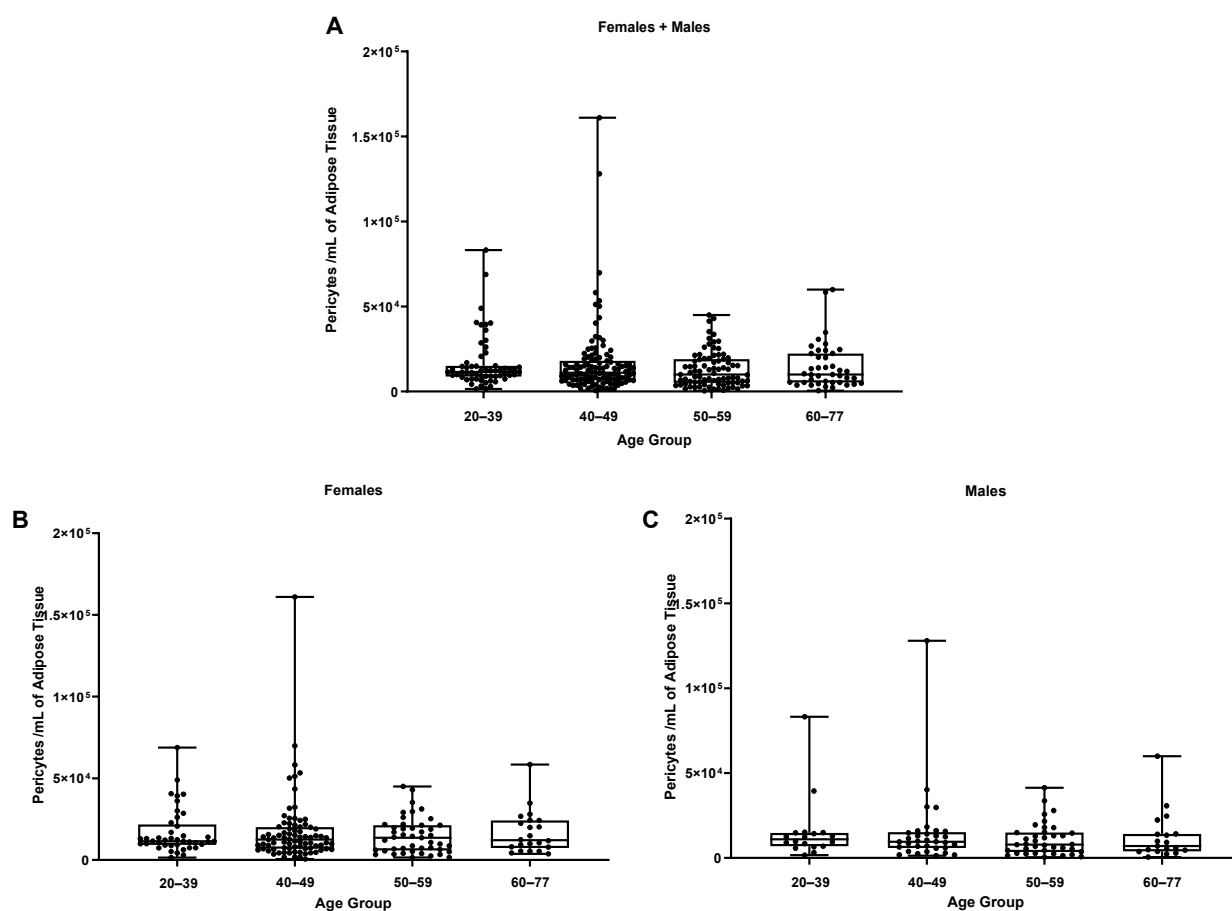


**Figure S7.** Comparison of the number of EPCs/mL of adipose tissue in the females + males cohort and separate females and males cohorts between age groups.

**(A)** Females+ Males: (20–39) N=59, (40–49) N=117, (50–59) N=85, (60–77) N=41.

**(B)** Females: (20–39) N=41, (40–49) N=83, (50–59) N=45, (60–77) N=22.

**(C)** Males: (20–39) N=18, (40–49) N=34, (50–59) N=40, (60–77) N=19.



**Figure S8.** Comparison of the number of pericytes/mL of adipose tissue in the females + males cohort and separate females and males cohorts between age groups.

**(A)** Females + males: (20–39) N=59, (40–49) N=117, (50–59) N=85, (60–77) N=41.

**(B)** Females: (20–39) N=41, (40–49) N=83, (50–59) N=45, (60–77) N=22.

**(C)** Males: (20–39) N=18, (40–49) N=34, (50–59) N=40, (60–77) N=19.