**Table S2**

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| **Factor** | **Elderly-Offspring of centenarians** | **Elderly-Offspring of non long-lived parents** | **Young** |
| **Demographic**  Serum-Targeted MS  Gender, *male/female*  Age, *years* | 14/32  68.4±6 (56-81) | 19/23  70.7± 6 (59-86) | 11/10  30.9±5 (24-40) |
| **Clinical**  BMI, *kg/m2*  HOMA  Diabetes1, *n*  Cholesterol, *mg/dl*  Triglycerides, *mg/dl*  HDL, *mg/dl*  LDL, *mg/dl*  CRP, mg/L  A-SAA, *g/ml*  IL-6*, pg/ml*  IL-8*, pg/ml*  IL-10, *pg/ml*  TNF-alpha, *pg/ml*  Leptin, *ng/ml*  Resistin, *ng/ml*  Adiponectin, *g/ml*  Hypertension, *n*  Cardiovascular therapy, *n*  MMSE2  Heart failure, *n*  Irregular heart rhythm, *n*  Angina pectoris, *n* | 26.5±4.0 (19.6-39.7)  2.65±2.2 (0.5-11)  4  208.0±30.2 (154-276)  120.0±57.6 (41-550)  52.6+16.2 (20-99)  129.1±36.1 (101-192)  2.4±2.8 (0.29-15.9)  180±201.6 (0.01-872)  22.7±17.7 (3.5-78.7)  9.05±3.93 (3.8-12.9)  4.36±5.08 (0.5-20.1)  25.6±32.1 (0.1-146)  25.2±23.0 (2.01-99.2)  9.84±4.4 (4.49-23.4)  42.4±35.7 (1.97-155)  15  5  27.5±1.3 (24-30)  0  2  2 | 27.8±4.6 (25.9-39.1)  2.7±1.3 (0.5-6.10)  6  198.0±34.1 (124-300)  120.1±58.1 (52-332)  58.4+20.3 (31-109)  116±40.8 (101-127)  3.38±4.05 (0.21-20.2)  125.1±154 (0.01-937)  39.4±62.4 (2.3-286)  16.4±17.7 (6.8-29)  4.17±4.83 (0.4-23)  60.1±5.08 (0.1-690)  26.2±27.3 (0.39-94.6)  10.3±4.8 (1.6-27.2)  43.1±40.7 (0.49-188.3)  25  19  26.8±3.1 (9.7-30.0)  1  9  1 | 22.1±2.0 (18.3.24.6)  n/a  n/a  162.3±28.4 (133-207)  71.7±32.1 (28-143)  51.8±8.7 (38-66)  89.8±51.5 (49-144)  0.72±0.4 (0.28-2.08)  n/a  20.3±17.5 (2.70-28.2)  19.3±13.3 (4.4-46.6)  2.38±2.58 (0.80-3.80)  18.5±28.5(5.80-65.5)  n/a  n/a  n/a  n/a  n/a  n/a  n/a  n/a  n/a |

Legend: BMI=body mass index, HOMA=Homeostatic Model Assessment index, HDL= high density lipoprotein,LDL= low density lipoprotein,CRP=C reactive protein, A-SAA= Serum amyloid A (SAA) proteins,IL-6= Interleukin-6, IL-10= Interleukin-10, TNF-alpha= Tumor necrosis factor.

1Diabetes mellitus: history of diabetes, fasting glucose plasma ≥126mg/dl.

2MMSE= Cognitive function measure using the Mini-Mental State Examination (MMSE). The score used in the analysis was corrected by age and years of educations according to Magni et. al for old people.MMSE for elderly cognitive impairment was graded as severe (score 0–17), mild (score 18–23), or not present (score 24–30). MMSE for centenarians ≥ 20 absence of severe cognitive decline; <12 presence of severe cognitive decline according to Franceschi et al.2000a.