of 1,021 older adults were selected from the Korean Frailty MBS with incidence of sarcopenia in older adults. A total of individual biomarkers and to examine the association of this study is to compare the AUC of multiple biomarker risk eously to detect sarcopenia due to its multifactorial etiology.

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FOLLOW-UP
BIOMARKER RISK SCORE OVER TWO-YEAR PREDICTION OF SARCOPENIA USING A MULTIPLE
prevention and intervention.

stand the potential clinical utility of MRSs for early CVD>

than heavy drinkers (≤65 years old: >1 per day for males and

participants, greater increases in BMI and HDL-C in females

groups: higher MRSs were associated with greater increases

age, gender, or alcohol use revealed differences in MRS as

p< 0.001). Adding interaction terms between each MRS and

positively associated with its corresponding CVD risk factor

mean age=69.5 years). In linear regression, each MRS was

cholesterols (LDL-C, HDL-C), triglycerides (TG), and fasting

tolic and diastolic blood pressure, body mass index (BMI),

studies, we created MRSs for eight CVD risk factors: sys

methylation and CVD risk factors differ by demographics or

Variations in DNA methylation and physiology measures of

ager, race, gender, and lifestyle and traditional risk factors.

Innovation in Aging

DNA methylation risk scores (MRS) are biomarkers

older who had complete data for saliva-based telomere

Blood (391 CpG sites), Lin (99 CpG sites), Weidner (3 CpG

Blood (391 CpG sites), Lin (99 CpG sites), Weidner (3 CpG

in risk stratification to achieve healthy aging are warranted.

cess in telomere length, lower cognitive abilities, and

advances independent of lifestyle and traditional risk factors.

Metabolomic signatures of different aspects of the aging

age, race, gender, and lifestyle and traditional risk factors.

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TRANSITIONS BETWEEN SARCOPENIA STATES AND ITS DETERMINANTS IN COMMUNITY-DWELLING OLDER ADULTS
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Sarcopenia is characterized by an age-related progressive reduction in muscle mass and function. Few observational studies have characterized the dynamic nature of sarcopenia, which is potentially reversible. However, little is known about the determinants of sarcopenia reversal among community-dwelling older adults. We aimed to explore transitions in sarcopenia status and identify factors associated with the reversibility of sarcopenia over a 2-year follow-up period. We conducted prospective analyses (n=1,992) among participants (mean age, 76.3±3.9 years; 47.6% men) who underwent measurement of sarcopenia status at baseline and 2-year follow-up from the Korean Frailty and Aging Cohort Study. Sarcopenia status was diagnosed using the criteria of the 2019 Asian Working Group for Sarcopenia. After 2 years of follow-up, 224 (11.2%) individuals developed sarcopenia, 176 (8.8%) had reversed their sarcopenia, 276 (13.9%) remained in a sarcopenic state, and 1,317 (66.1%) had maintained a non-sarcopenic state. For men, moderate to high levels of physical activity (odds ratio [OR]=2.50 [95% confidence interval (CI): 1.31–4.56], resistance training more than 2–3 times per week (OR=2.03, 95% CI: 1.04–3.97), and lower body mass index (OR=0.67, 95% CI: 0.55–0.82) were associated with greater odds reversing sarcopenia. For women, cognitive function (OR=1.12, 95% CI: 1.05–1.26 per 1-point increase in the Mini-Mental State Examination) was associated with higher rates of reversing sarcopenia. To conclude, our results support the dynamic nature of sarcopenia and potentially reversible factors such as higher levels of physical activity and cognitive function, which could be beneficial in the treatment of community-dwelling older adults with sarcopenia.