

# How to publish in high-impact journals

- SCI 논문 게재의 노하우 -

아주 의대 가정의학교실  
김 범 택

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Introduction

1. **P**lan
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3. **N**etwork

Closing










**P.E.N.**

**ORIGINAL ARTICLE**

# Genome-wide association of individual vulnerability with alcohol-associated liver disease: A Korean genome and epidemiology study

IF 17.6

Kwang Yoon Kim<sup>1</sup>  | Jung Oh Kim<sup>2</sup> | Young-Sang Kim<sup>3</sup>  | Ja-Eun Choi<sup>2</sup> |  
Jae-Min Park<sup>4</sup>  | Kunhee Han<sup>5</sup>  | Da-Hyun Park<sup>2</sup> | Yon Chul Park<sup>6,7</sup>  |  
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## Abstract

**Background and aims:** The quantity of alcohol leading to alcohol-associated liver disease (ALD) varies individually. Genetic backgrounds contributing to the divergence in individual susceptibility to alcohol-induced liver damage have not been elucidated in detail.

**Approach and results:** Based on the Korean Genome and Epidemiology Study Health Examination (KoGES-HEXA) cohort data, 21,919 participants (40-79



# Oculomics for sarcopenia prediction: a machine learning approach toward predictive, preventive, and personalized medicine

IF 8.836

Bo Ram Kim<sup>1</sup> · Tae Keun Yoo<sup>2,3</sup>  · Hong Kyu Kim<sup>4</sup> · Ik Hee Ryu<sup>2,3</sup> · Jin Kuk Kim<sup>2,3</sup> · In Sik Lee<sup>2</sup> · Jung Soo Kim<sup>3</sup> · Dong-Hyeok Shin<sup>5</sup> · Young-Sang Kim<sup>6</sup> · Bom Taeck Kim<sup>7</sup> 

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## Abstract












**Aims** Sarcopenia is characterized by a gradual loss of skeletal muscle mass and strength with increased adverse outcomes. Recently, large-scale epidemiological studies have demonstrated a relationship between several chronic disorders and ocular pathological conditions using an oculomics approach. We hypothesized that sarcopenia can be predicted through eye examinations, without invasive tests or radiologic evaluations in the context of predictive, preventive, and personalized medicine (PPPM/3PM).

**Methods** We analyzed data from the Korean National Health and Nutrition Examination Survey (KNHANES). The training set (80%, randomly selected from 2008 to 2010) data were used to construct the machine learning models. Internal (20%, randomly selected from 2008 to 2010) and external (from the KNHANES 2011) validation sets were used to assess the ability to predict sarcopenia. We included 8092 participants in the final dataset. Machine learning models (XGBoost) were trained on ophthalmological examinations and demographic factors to detect sarcopenia.

## Article

# Calcium Supplementation, Risk of Cardiovascular Diseases, and Mortality: A Real-World Study of the Korean National Health Insurance Service Data

IF 6.706

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**Citation:** Park, J.-M.; Lee, B.; Kim, Y.-S.; Hong, K.-W.; Park, Y.C.; Shin, D.H.; Kim, Y.; Han, K.; Kim, K.; Shin, J.; et al. Calcium Supplementation, Risk of Cardiovascular Diseases, and Mortality: A Real-World Study of the

**Abstract:** Few studies have investigated the effects of calcium supplementation on cardiovascular outcomes in individuals with low calcium intake in real-world settings. This study examined the association between calcium supplementation and cardiovascular outcomes in the Korean population

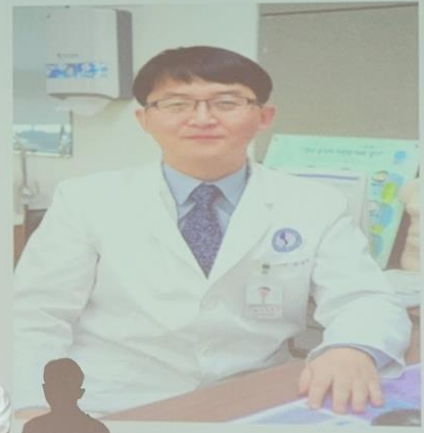
2023년도 제1차  
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# BMC Geriatrics: Reminder of our invitation to review a manuscript

외부

받은편지함 x



**BMC Geriatrics** <do-not-reply@springernature.com>

나에게 ▾

9월 21일 (목) 오전 9:25



영어 ▾



한국어 ▾

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영어 번역 안함 x

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Dear Dr Kim,

On 18 September 2023 we sent you the **invitation** shown below. Please could you accept or decline the **invitation** as soon as possible, by clicking on the link?

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Dear Dr Kim,

BMC Geriatrics has received a manuscript that I'd like to **invite** you to **review**, as you have published related work yourself. You'll find the details appended underneath this email.

Please accept or decline the manuscript using the link below. Should you choose to decline, you'll be given the option to recommend alternative reviewers, which would be greatly appreciated.

Kind regards,

# Invitation to review for Informatics in Medicine Unlocked

외부

받은편지함 x



Informatics in Medicine Unlocked <em@editorialmanager.com>

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2022년 10월 27일 (목) 오전 12:06



🗨️ 영어 ▾ > 한국어 ▾ 메일 번역

영어 번역 안함 x

**Manuscript** Number: IMU-D-22-00611

Utilization of Health Information system in Ethiopian Health sector leaders: a Systematic Review and Meta-Analysis

Dawit Muluneh; Binyam Tilahun; Lemma Derseh; Asmamaw Atnafu

Dear Prof Kim,

I would like to invite **you** to review the above referenced **manuscript** submitted by Mr Dawit Muluneh Muluneh , as I believe it falls within **your** expertise and interest. The abstract for this **manuscript** is included below.

**You** should treat this invitation, the **manuscript** and **your** review (as well as other reviewer comments shared with **you**) as confidential. **You** must not share **your** review or information about the review process with anyone without the agreement of the editors and authors involved, irrespective of the publication outcome. If the **manuscript** is rejected by this journal and the author agrees that the submission be transferred to another Elsevier journal via the Article Transfer Service, we may securely transfer **your** reviewer comments and name/contact details to the receiving journal editor for **their** peer review purposes.

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# Invite Prof. Kim to contribute to J Clin Transl Hepatol (IF: 5.065) 외부 받은편지함 x



Journal of Clinical and Translational Hepatology <jcth@xiahepublishing.com>

나에게 ▾

2월 15일 (수) 오후 3:43



영어 ▾ > 한국어 ▾ [메일 번역](#)

[영어 번역 안함](#) x

Dear Prof. Kim,

Owing to your excellent research and contributions in the field of **hepatology**, I cordially invite you to write an article for publication in the [Journal of Clinical and Translational Hepatology](#) (JCTH).

So far, JCTH has been selected into the Excellence Project for High-Starting Journal initiated by the Chinese Association for Science and Technology, and has been indexed in leading databases like PubMed, Scopus, SCIE, and received its 2nd impact factor of 5.065 in 2022. We have been working towards the goal to further increase the quality and influence of the journal with help from distinguished experts like you.

If you accept this invitation, please kindly confirm by completing the short form below this e-mail and returning it within one week. Then, please submit your manuscript through the Online Submission System (<https://mc03.manuscriptcentral.com/jcth>) by the date you provide, and hopefully no later than May 16, 2023.

Although invited manuscripts are considered for publication with top priority, all manuscripts must undergo our regular peer-review process. To acknowledge your contribution, the journal will offer a 15% discount on the APC for your manuscript

# Dr. Kim - Contribute to - Glucocorticoids - From Systemic Actions to Neuroinflammation



외부 받은편지함 x



**Danijela Saric** <danijela.s@news.intechopen.com>

나에게 ▾

10월 20일 (금) 오후 12:36 (16시간 전)



🗨️ 영어 ▾ > 한국어 ▾ 메일 번역

영어 번역 안함 x

Dear Dr. Kim,

Due to your involvement in the field and the research you published in your paper, "Increase of glucocorticoids is not required for the acquisition, but hinders the extinction, of lithium-induced conditioned taste aversion," IntechOpen invites you to contribute a chapter to "Glucocorticoids - From Systemic Actions to Neuroinflammation," an Open Access book edited by Dr. Carlos M. Contreras and Dr. Ana G. Gutiérrez-García.

Work with an internationally recognized peer group and gain increased visibility for your published work.

Please visit the book project page to start the submission process at:

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We look forward to hearing from you.

Kind Regards,

Danijela  
Publishing Process Manager

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London: 5 Princes Gate Court, London, SW7 2QJ, UK  
+44 20 8089 5702

# **P**EN – Research **P**lan

**PIN** : **P**lan through **I**n-depth review and **N**arrative



# Research Plan

: **B**e Creative but Keep a Narrative





To be Creative



# Albert Einstein and the Violin



frontiers in  
**HUMAN NEUROSCIENCE**

**REVIEW ARTICLE**  
published: 02 June 2014  
doi: 10.3389/fnhum.2014.00389



## Creativity, brain, and art: biological and neurological considerations

**Dahlia W. Zaidel\***

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Creativity is commonly thought of as a positive advance for society that transcends the status quo knowledge. Humans display an inordinate capacity for it in a broad range of activities, with art being only one. Most work on creativity's neural substrates measures general creativity, and that is done with laboratory tasks, whereas specific creativity in art is gleaned from acquired brain damage, largely in observing established visual artists, and some in visual *de novo* artists (became artists after the damage). The verb "to create" has been erroneously equated with creativity; creativity, in the classic sense, does not appear to be enhanced following brain damage, regardless of etiology. The turning to communication through art in lieu of language deficits reflects a biological survival strategy. Creativity in art, and in other domains, is most likely dependent on intact and healthy knowledge and semantic conceptual systems, which are represented in several pathways in the cortex. It is adversely affected when these systems are dysfunctional, for congenital reasons (savant autism) or because of acquired brain damage (stroke, dementia, Parkinson's), whereas inherent artistic talent and skill appear less affected. Clues to the neural substrates of general creativity and specific art creativity can be gleaned from considering that art is produced spontaneously mainly by humans, that there are unique neuroanatomical and neurofunctional organizations in the human brain, and that there are biological antecedents of innovation in animals.

Creativity = Jump to the conclusion



# 2023 융합형 의과학자 양성 사업 정례 *Progress Meeting*

“Relationship between Folate, Vit.B12, SIBO and HRV  
in Chronic Fatigue Syndrome Patients”

아주대병원 가정의학과 \*\*\* (지도교수 김범택/박범희)







### Vitamin B<sub>12</sub> supplementation improves heart rate variability in healthy elderly Indian subjects

S. Sucharita <sup>a,b,\*</sup>, T. Thomas <sup>b</sup>, B. Antony <sup>b</sup>, M. Vaz <sup>a,b</sup>

<sup>a</sup> Department of Physiology, St John's Medical College, Bangalore-34, India

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#### ARTICLE INFO

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Vitamin B<sub>12</sub>

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Elderly

Supplementation

Healthy

#### ABSTRACT

While vitamin B<sub>12</sub> deficiency is global, data in elderly Indians are lacking. The problem in India is likely to be higher because of vegetarianism and malabsorption related to gastro-intestinal parasites. Autonomic dysfunction is known to occur much earlier in pernicious anemia. However, what is not known is whether these changes are reflected in healthy elderly individuals. This study assessed cardiac sympathetic and parasympathetic activity using heart rate variability (HRV) in healthy elderly individuals of low and high vitamin B<sub>12</sub> status and evaluated the effect of vitamin B<sub>12</sub> supplementation in those with low vitamin B<sub>12</sub> status. 140 elderly subjects aged  $\geq 60$  years were screened; 47 healthy subjects were assessed. They underwent blood sampling, anthropometry, HRV and nerve conduction assessment. Subjects were classified based on vitamin B<sub>12</sub> level (148 pmol/L) into deplete vitamin B<sub>12</sub> and replete vitamin B<sub>12</sub> groups. Elderly subjects with low vitamin B<sub>12</sub> status underwent cyanocobalamin supplementation (100  $\mu$ g) for 3 months. Low frequency (LF) HRV in absolute units was significantly lower in the low vitamin B<sub>12</sub> group. Following supplementation, LF HRV in absolute units and total power rose significantly as compared to pre-supplementation values for the entire supplemented group. In conclusion, elderly with lower vitamin B<sub>12</sub> status have reduced low frequency HRV suggestive of sympathetic involvement. Supplementation with vitamin B<sub>12</sub> for 3 months results in a significant increase in low frequency HRV to values comparable with unsupplemented, but vitamin B<sub>12</sub> replete elderly.



### The pathophysiology of elevated vitamin B12 in clinical practice

E. ANDRÈS<sup>1</sup>, K. SERRAJ<sup>1</sup>, J. ZHU<sup>2</sup> and A.J.M. VERMORKEN<sup>2</sup>

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#### Summary

Hypercobalaminemia (high serum vitamin B12 levels) is a frequent and underestimated anomaly. Clinically, it can be paradoxically accompanied by signs of deficiency, reflecting a functional deficiency linked to qualitative abnormalities, which are related to defects in tissue uptake and action of vitamin B12. The aetiological profile of high serum cobalamin predominantly encompasses severe disease entities for which early diagnosis is critical for prognosis. These entities are essentially comprised of solid neoplasms, haematological malignancies and liver and kidney diseases. This review reflects

the potential importance of the vitamin B12 assay as an early diagnostic marker of these diseases. A codified approach is needed to determine the potential indications of a search for high serum cobalamin and the practical clinical strategy to adopt upon discovery of elevated cobalamin levels. While low serum cobalamin levels do not necessarily imply deficiency, an abnormally high serum cobalamin level forms a warning sign requiring exclusion of a number of serious underlying pathologies. Functional cobalamin deficiency can thus occur at any serum level.

# Design

## Mechanisms related to high serum cobalamin levels

High serum levels of cobalamin involve three essential pathophysiological mechanisms, which meet virtually all aetiologies to search for and that will be detailed later on. These mechanisms are<sup>1,37</sup>:

- a direct increase in plasma vitamin B12 by excess intake or administration,
- a direct increase in plasma vitamin B12 by liberation from an internal reservoir,
- an increase in TCB via excess production or lack of clearance and
- a quantitative deficiency or lack of affinity of TCB for vitamin B12.

### Metabolism of vitamin B12

Ingestion

↓  
Dissociation of vitamin B12 from its carrier proteins

↓  
Binding to intrinsic factor

↓  
Ileal absorption and entry into bloodstream

↓  
Binding to transcobalamins

TCB I and III (80%)  
(granulocyte line)

TCB II (20%)  
(hepatocytes, monocytes, endothelium)

→ Excess production of TCBs: MPD, neoplasms, liver diseases, inflammation, overloading

→ Defect in clearance of TCBs: renal failure, anti-TCB antibody

→ Congenital deficiency in TCBs

→ Defect in TCB-B12 affinity

Tissue fixation

Hepatic storage

→ Hepatic release of B12 and TCBs: liver disease

### Pathophysiological and aetiological implications of high serum cobalamin

→ Excess intake in B12 (often parenteral)



# Design

## Conclusions

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High serum cobalamin is a frequent and underestimated anomaly. Clinically, it can sometimes be paradoxically accompanied by signs of deficiency resulting in a functional deficit linked to qualitative anomalies, which are related to defects in tissue uptake and action of vitamin B12. The aetiological profile of high serum cobalamin mostly encompasses severe disease entities for which early diagnosis is crucial to prognosis. These entities are essentially comprised of solid neoplasms, haematologic malignancies and liver diseases. This reflects the potential importance of a vitamin B12 assay as a possible early marker in the working diagnosis of these diseases. A codified approach is needed to determine the potential indications of the search for high serum cobalamin and the approach to adopt upon discovery of elevated cobalamin levels. As in many fields of medicine, further studies are needed more than ever to better understand the clinical data related to high serum cobalamin.



# Methods

- SIBO(+)
  - Hydrogen breath test
  - (Fecal calprotectin), Intestinal Permeability
- Micronutrients
  - (Folate). Vit.B12
  - Urine Organic Acid Test
- HRV
  - TP
  - LF/HF ratio



# Study design

- Cohort study
  - Prospective study : Cost
  - Retrospective study : Data
- Case-control study : Size
- Cross-sectional study : Reality



# DATA

- 최근 3개년 (2021~2023)
  - 입원 231명
  - 외래 15704명 (중복)
  - 응급 2명



# Hypothesis

- SIBO(+) → Vit.B12 functional deficit → decreased HRV
- SIBO(-) → normal Vit. B12 → increased HRV
  
- Vit.B12 functional deficit → SIBO(+) → decreased HRV
- Vit B12 supplement → SIBO(-) → increased HRV
  
- “까마귀 날자 배 떨어진다 ” How to remove Confounding factors?





# Thesis

- Clinical Gastroenterology and Hepatology (12.6)
- Advances in nutrition (9.3)
- Nutrients (5.9)
- Journal of Nutrition, Health & Aging (5.8)
- Journal of functional foods (5.6)
- Korean Journal of Family Medicine (2.3)



# Research Plan : In-depth Review




# SIBO and Degenerative brain disorders

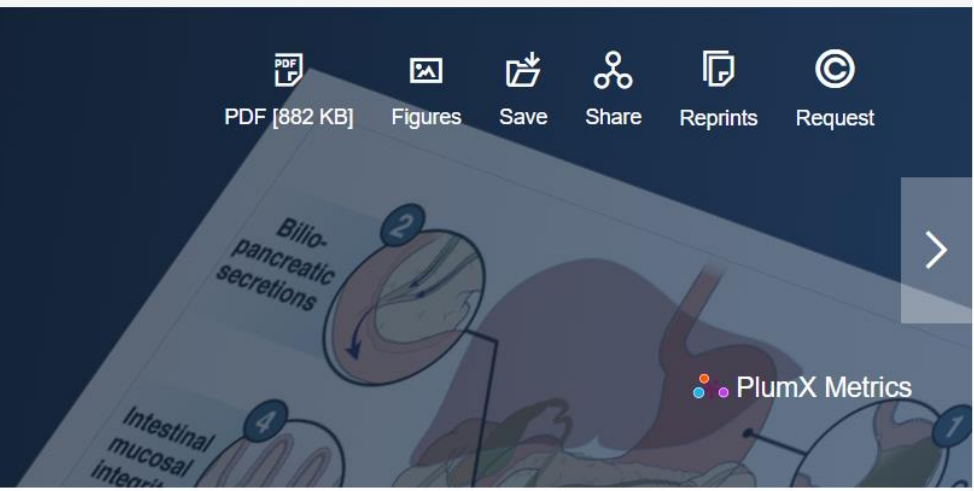
REVIEWS IN BASIC AND CLINICAL GASTROENTEROLOGY AND HEPATOLOGY | VOLUME 163,  
ISSUE 3, P593-607, SEPTEMBER 2022  Download Full Issue

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## Small Intestinal Bacterial Overgrowth—Pathophysiology and Its Implications for Definition and Management

Daniel Bushyhead   • Eamonn M.M. Quigley

Published: April 07, 2022 • DOI: <https://doi.org/10.1053/j.gastro.2022.04.002> •  Check for updates



Keywords

History

The

Clinical

Spectrum

of SIBO

The concept of small intestinal bacterial overgrowth (SIBO) arose in the context of maldigestion and malabsorption among patients with obvious risk factors that permitted the small bowel to be colonized by potentially injurious colonic microbiota. Such colonization resulted in clinical signs, symptoms, and laboratory abnormalities that were explicable within a coherent pathophysiological framework. Coincident with advances in medical science, diagnostic testing evolved from small bowel culture to breath tests and on to next-generation, culture-independent microbial analytics. The advent and ready availability of breath tests generated a dramatic expansion in both the rate of diagnosis of SIBO and the range of associated gastrointestinal and nongastrointestinal clinical scenarios. However, issues with the specificity of these same breath tests have clouded their interpretation and aroused some skepticism regarding the role of SIBO in this expanded clinical repertoire. Furthermore, the pathophysiological plausibility that underpins SIBO as a cause of maldigestion/malabsorption is

# Uninvited Guests: The Impact of Small Intestinal Bacterial Overgrowth on Nutritional Status

by Oren Zaidel and Henry C. Lin

When large numbers of bacteria colonize the small intestine, a syndrome known as small intestinal bacterial overgrowth occurs. Nutrient malabsorption is a hallmark of the disorder and can result in a multitude of problems for the host. Understanding how these bacteria exert their deleterious effects on the host via competition for nutrients, damage of absorptive surfaces, and the production of symptoms, which reduce or alter food intake is key to diagnosing and treating the condition. New links between small intestinal bacterial overgrowth (SIBO) and disease entities such as irritable bowel syndrome (IBS) provide intriguing new insights into the pathophysiology of the syndrome.

clinically apparent vitamin B12 deficiency may be seen in as many as one half to three quarters of patients with SIBO.

# Association between vitamin B12 status and heart rate variability in patients with ischemic stroke

Eo Jin Park, MD<sup>a,\*</sup> 

Medicine (Baltimore). 2023 Apr 21;102(16):e33428.

## Abstract

Autonomic dysfunction is common in patients with ischemic stroke. An ischemic stroke may induce abnormalities in autonomic tone, resulting in poor heart rate regulation and an increased risk of severe cardiac arrest and sudden death. Heart rate variability (HRV) is a reliable index for evaluating autonomic dysfunction. Vitamin B12 deficiency is frequent among older adults and is a known risk factor for ischemic stroke. As vitamin B12 deficiency affects the peripheral nerves and the central nervous system, it can lead to autonomic dysfunction. However, no study has been published on the correlation between HRV and vitamin B12 status in patients with ischemic stroke. This study aimed to investigate the relationship between HRV and vitamin B12 status and to determine whether the serum vitamin B12 level can be a predictor of HRV parameters. This retrospective study enrolled patients with ischemic stroke between January 2015 and December 2022. The patients underwent serum vitamin B12 level measurements and 24-h Holter monitoring. Pearson correlation analysis was used to investigate the correlation between serum vitamin B12 levels and HRV parameters. The impact of serum vitamin B12 status on HRV parameters was determined using multiple linear regression analysis. A total of 87 patients with ischemic stroke were included in this study. HRV parameters were significantly correlated with serum vitamin B12 status in the frequency domain. In multiple linear regression analysis, the serum vitamin B12 status was a significant predictor of HRV parameters. HRV parameters may be correlated with serum vitamin B12 status in patients with ischemic stroke. Therefore, the serum vitamin B12 status may be a significant predictor of autonomic dysfunction. Our results may provide objective evidence for the impact of serum vitamin B12 status on autonomic dysfunction in patients with ischemic stroke.

**Abbreviations:** ANS = autonomic nervous system, ASDNN = average standard deviation of all 5-min RR intervals, HF = high-frequency power, HRV = heart rate variability, LF = low-frequency power, MBI = modified Barthel index, MMSE = Mini-Mental State Examination, pNN50 = percentage of intervals that differ by > 50 ms from the previous interval, rMSSD = root mean square difference of successive RR intervals, SDANN = standard deviation of all mean 5-min RR intervals, SDNN = standard deviation of all normal beat intervals, VLF = very low-frequency power.

**Keywords:** autonomic dysfunction, heart rate variability, ischemic stroke, vitamin B12

# Narrative through in-depth review

1. SIBO -> Degenerative brain disorders
2. Previous study : SIBO -> inflammation -> Degenerative brain disorders
3. SIBO -> nutritional imbalance ----> ? Degenerative brain disorders
4. To prove it, SIBO -> nutritional imbalance -> HRV imbalance
5. Why? Vit B12 def -> a risk factor for stroke and HRV imbalance in stroke pts
6. SIBO -> Vit B12 def -> HRV imbalance in Health individuals or functional GI disorder
7. 후속 연구 : SIBO -> Vit B12 def -> HRV imbalance in pts with Degenerative brain disorders

# Research Plan : How to get a Data

1. National Wide Databases
2. Health insurance Databases
3. Hospital-Based Databases
4. Project-Based Databases
5. Cohort Databases
6. Clinical Trial Databases

# [DB] KNHANES, 국민건강영양조사 원시자료 다운받기



fig1. title

국민건강영양조사 [2018년도 데이터](#)가 최근에 공개됨.

## 원시자료 다운 방법

### 1. [knhanes.cdc.go.kr/knhanes/main.do](http://knhanes.cdc.go.kr/knhanes/main.do)

The screenshot shows a website banner with the following text:

- 건강통계 발간 및 원시자료 공개
- 국민건강영양조사 제7기 3차년도(2018)
- 건강행태, 영양, 만성질환 500개 지표로 구성된 「2018 국민건강통계」 발간
- 공중보건 정책 발간, 역학 연구 등을 위해 원시자료 공개
- 질병관리청 국민건강영양조사 홍보홈페이지
- knhanes.cdc.go.kr

링크 접속 후 **원시자료 클릭**



질병관리청



국민건강영양조사

건강한 대한민국

국민건강영양조사가 그 시작입니다.



HOME | [관리사이트](#) | [사이트맵](#) | [ENGLISH](#)







# Oculomics for sarcopenia prediction: a machine learning approach toward predictive, preventive, and personalized medicine

IF 8.836

Bo Ram Kim<sup>1</sup> · Tae Keun Yoo<sup>2,3</sup>  · Hong Kyu Kim<sup>4</sup> · Ik Hee Ryu<sup>2,3</sup> · Jin Kuk Kim<sup>2,3</sup> · In Sik Lee<sup>2</sup> · Jung Soo Kim<sup>3</sup> · Dong-Hyeok Shin<sup>5</sup> · Young-Sang Kim<sup>6</sup> · Bom Taeck Kim<sup>7</sup> 

Received: 20 June 2022 / Accepted: 25 July 2022 / Published online: 8 August 2022

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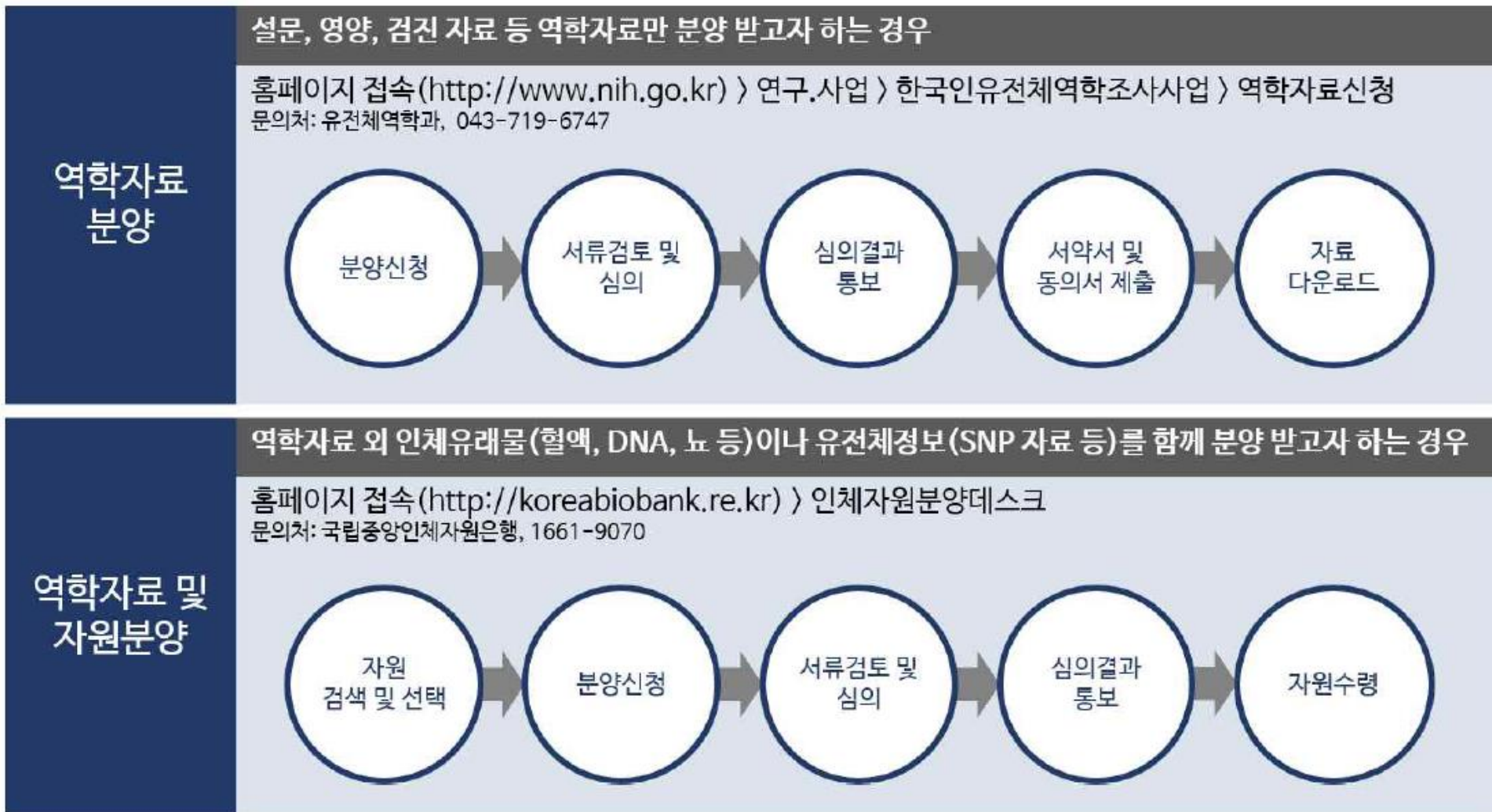
## Abstract

**Aims** Sarcopenia is characterized by a gradual loss of skeletal muscle mass and strength with increased adverse outcomes. Recently, large-scale epidemiological studies have demonstrated a relationship between several chronic disorders and ocular pathological conditions using an oculomics approach. We hypothesized that sarcopenia can be predicted through eye examinations, without invasive tests or radiologic evaluations in the context of predictive, preventive, and personalized medicine (PPPM/3PM).

**Methods** We analyzed data from the Korean National Health and Nutrition Examination Survey (KNHANES). The training set (80%, randomly selected from 2008 to 2010) data were used to construct the machine learning models. Internal (20%, randomly selected from 2008 to 2010) and external (from the KNHANES 2011) validation sets were used to assess the ability to predict sarcopenia. We included 8092 participants in the final dataset. Machine learning models (XGBoost) were trained on ophthalmological examinations and demographic factors to detect sarcopenia.

# KOGES data 분양법








한국인 유전체역학조사사업(KoGES)



ORIGINAL ARTICLE

# Genome-wide association of individual vulnerability with alcohol-associated liver disease: A Korean genome and epidemiology study

IF 17.6

Kwang Yoon Kim<sup>1</sup>  | Jung Oh Kim<sup>2</sup> | Young-Sang Kim<sup>3</sup>  | Ja-Eun Choi<sup>2</sup> |  
Jae-Min Park<sup>4</sup>  | Kunhee Han<sup>5</sup>  | Da-Hyun Park<sup>2</sup> | Yon Chul Park<sup>6,7</sup>  |  
Bom Taeck Kim<sup>1</sup>  | Kyung-Won Hong<sup>2</sup> 

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<sup>2</sup>Healthcare R&D Division, Theragen Bio Co. Ltd., Suwon, Republic of Korea

<sup>3</sup>Department of Family Medicine, CHA Bundang Medical Center, CHA University, Seongnam, Republic of Korea

<sup>4</sup>Department of Family Medicine, Gangnam Severance Hospital, Yonsei University College of Medicine, Seoul, Republic of Korea

<sup>5</sup>Department of Family Medicine, Seonam Hospital, Seoul, Republic of Korea

<sup>6</sup>Department of Family Medicine, Wonju Severance Christian Hospital, Wonju, Republic of Korea

<sup>7</sup>Department of Medical Education, Yonsei University Wonju College of Medicine, Wonju, Republic of Korea

## Correspondence

Kyung-Won Hong, Healthcare R&D Division, Theragen Bio Co., Ltd., Suwon, Gyeonggi-do 16229, Republic of Korea.  
Email: kyungwon.hong@theragenbio.com

Bom Taeck Kim, Department of Family Practice & Community Health, Ajou University School of Medicine, Suwon, Gyeonggi-do 16499, Republic of Korea.  
Email: lovesong@ajou.ac.kr

## Abstract

**Background and aims:** The quantity of alcohol leading to alcohol-associated liver disease (ALD) varies individually. Genetic backgrounds contributing to the divergence in individual susceptibility to alcohol-induced liver damage have not been elucidated in detail.

**Approach and results:** Based on the Korean Genome and Epidemiology Study Health Examination (KoGES-HEXA) cohort data, 21,919 participants (40.79



# Publication – BMC nephrology(IF 2.126) May 2022

## BMC Nephrology

[Home](#) [About](#) [Articles](#) [Submission Guidelines](#) [Blog](#)

Research article | [Open Access](#) | [Published: 26 May 2022](#)

### Serum leptin level and incidence of CKD: a longitudinal study of adult enrolled in the Korean genome and epidemiology study(KoGES)

[Yon Chul Park](#), [Solam Lee](#), [Young-Sang Kim](#), [Jae-Min Park](#), [Kunhee Han](#), [Hunju Lee](#), [Kyung-Won Hong](#), [Jong-Koo Kim](#), [Eun Suk Cho](#), [Tae-Ha Chung](#), [Bom-Taeck Kim](#)  & [Sang Baek Koh](#) 

*BMC Nephrology* **23**, Article number: 197 (2022) | [Cite this article](#)

**384** Accesses | **1** Altmetric | [Metrics](#)

#### Abstract

Background

Download PDF



Sections

Figures

References

[Abstract](#)

[Background](#)

[Methods](#)

[Results](#)

[Discussion](#)

[Conclusion](#)

Availability of data and materials

# 건강보험 DB

서비스이용안내

데이터신청

성과공유

통계

산업계 빅데이터

공공데이터

고객센터

## 건강보험자료 공유서비스

근거중심의 보건 의료 정책 및 학술연구 지원을 선도합니다.

연구DB신청 바로가기

데이터결합신청 바로가기

보안센터 바로가기



연구DB →



성과공유 →



통계 →



의료이용지표 →














### 심의회위원회 일정

회차	마감일	심의일	심의건수
제221차	08/24	09/05	55건
제222차	09/07	09/19	60건
제223차	10/03	10/17	87건
제224차	10/19	10/31	0건

## Article

# Calcium Supplementation, Risk of Cardiovascular Diseases, and Mortality: A Real-World Study of the Korean National Health Insurance Service Data

IF 6.706

Jae-Min Park <sup>1,2,†</sup> , Bora Lee <sup>3,†</sup> , Young-Sang Kim <sup>4</sup> , Kyung-Won Hong <sup>5</sup> , Yon Chul Park <sup>6</sup> , Dong Hyeok Shin <sup>7</sup> , Yonghwan Kim <sup>8</sup> , Kunhee Han <sup>9</sup> , Kwangyoon Kim <sup>10</sup> , Junghwa Shin <sup>10</sup> , Mina Kim <sup>11</sup>  and Bom-Taeck Kim <sup>10,\*</sup>

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  - <sup>2</sup> Department of Medicine, Graduate School of Medicine, Yonsei University, Seoul 03722, Korea
  - <sup>3</sup> Institute of Health & Environment, Seoul National University, Seoul 08826, Korea; mintbora0125@gmail.com
  - <sup>4</sup> Department of Family Medicine, CHA Bundang Medical Centre, CHA University, Seongnam 13496, Korea; zeroup@cha.ac.kr
  - <sup>5</sup> Healthcare R&D Division, Theragen Bio Co., Ltd., Suwon 16229, Korea; kyungwon.hong@theragenbio.com
  - <sup>6</sup> Department of Family Medicine, Wonju Severance Christian Hospital, Wonju 26426, Korea; iamyonchul@yonsei.ac.kr
  - <sup>7</sup> Department of Family Medicine, Major Clinic, Seoul 06279, Korea; drsdh@hanmail.net
  - <sup>8</sup> Department of Family Medicine, Chungbuk National University Hospital, Cheongju 28644, Korea; airsantajin@gmail.com
  - <sup>9</sup> Department of Family Medicine, Seonam Hospital, Seoul 08049, Korea; hankawow@gmail.com
  - <sup>10</sup> Department of Family Practice and Community Health, Ajou University Hospital, Ajou University, Suwon 16499, Korea; hikari65@hanmail.net (K.K.); yooniregina@ajou.ac.kr (J.S.)
  - <sup>11</sup> Data Science Team, Hanmi Pharm. Co., Ltd., Seoul 05545, Korea; mina.kim92@hanmi.co.kr
- \* Correspondence: lovesong@ajou.ac.kr; Tel.: +82-31-219-5309
- † These authors contributed equally to this work.



**Citation:** Park, J.-M.; Lee, B.; Kim, Y.-S.; Hong, K.-W.; Park, Y.C.; Shin, D.H.; Kim, Y.; Han, K.; Kim, K.; Shin, J.; et al. Calcium Supplementation, Risk of Cardiovascular Diseases, and Mortality: A Real-World Study of the

**Abstract:** Few studies have investigated the effects of calcium supplementation on cardiovascular outcomes in individuals with low calcium intake in real-world settings. This study examined the association between calcium supplementation and cardiovascular outcomes in the Korean population



# DB 활용 교육

## 한국인 유전체역학조사사업(KoGES) 연구 활용 쉽게 배우는 코호트 자료 분석

- 2019 한국인유전체역학조사사업(KoGES) 수집자료활용

- ◇ 자료분석능력 향상을 위한 보건 의료 연구자 대상
- ◇ 상세한 설명의 가이드북과 KoGES 자료를 활용한 분석 교육 진행
- ◇ KoGES 자료가 다양한 질환 연구에 활용되는 계기가
- ◇ 향후에도 수요자 맞춤형 교육 지속 추진 예정

□ 질병관리본부(본부장 정은경) 국립보건연구원 유전체·6월 4일(화) 서울 대한상공회의소에서 「한국인유전체역학조사사업(KoGES) 워크숍」을 개최한다.

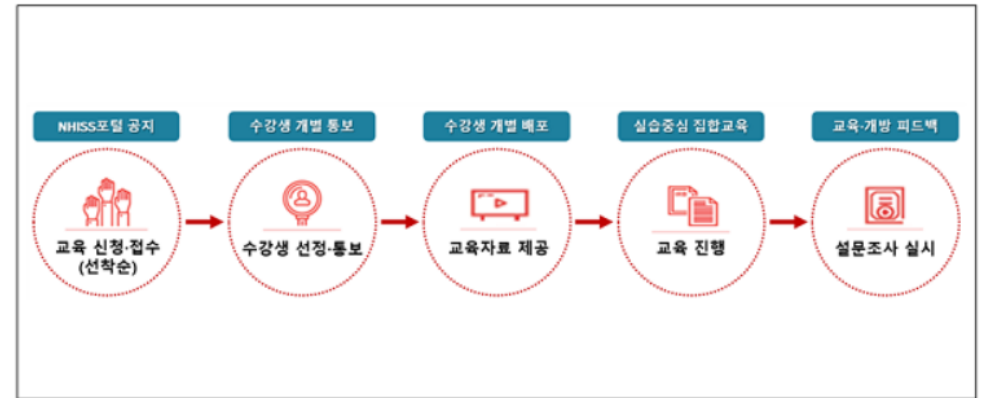
## 건보공단, 연구자·일반인 등 빅데이터 활용 교육 실시

✎ 이승덕 기자 | ⓒ 입력 2021.04.26 11:11 | 🔍 댓글 0



교육 지원을 통한 보건 의료 분야 '정책·학술·산업' 데이터 생태계 활성화

### 건강보험 빅데이터 활용 교육 진행 프로세스



교육 희망자가 교육을 신청하면 공단은 신청자 순으로 수강생을 선정해 수강생들에게 결과를 통보하고, 수강생들에게 교육 전 교육 자료를 제공하여 선행 학습을 유도한 후 집합교육을 진행하고, 교육과 데이터 개방 관련 설문조사 실시 후 그 결과를 다시 개방 현장에 반영한다.

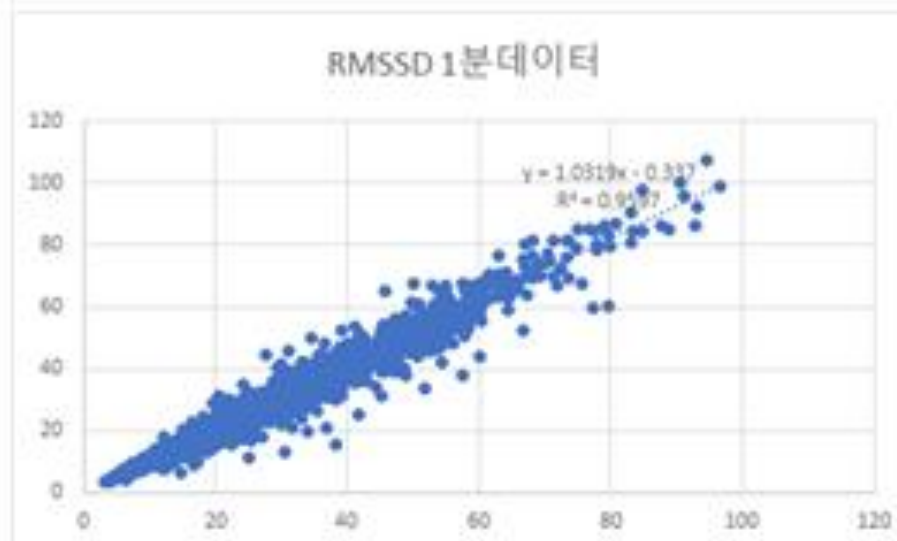
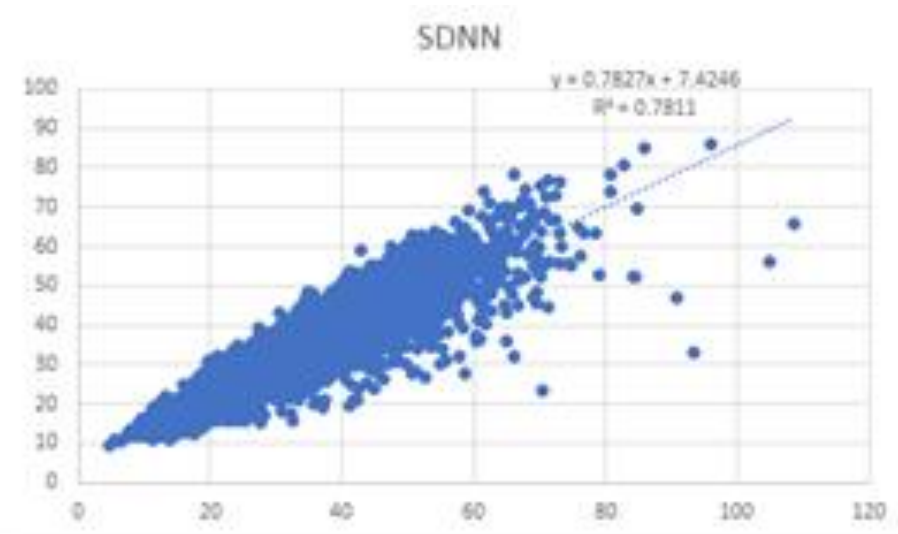
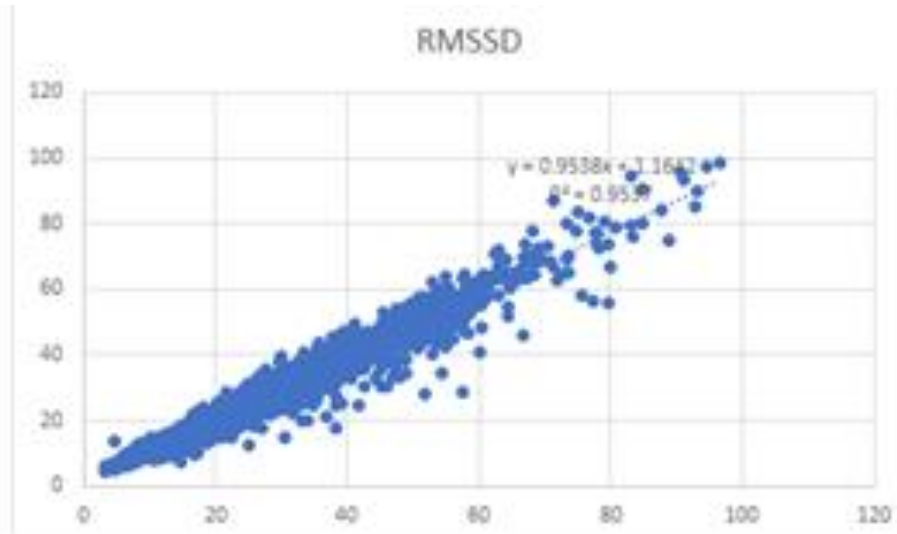


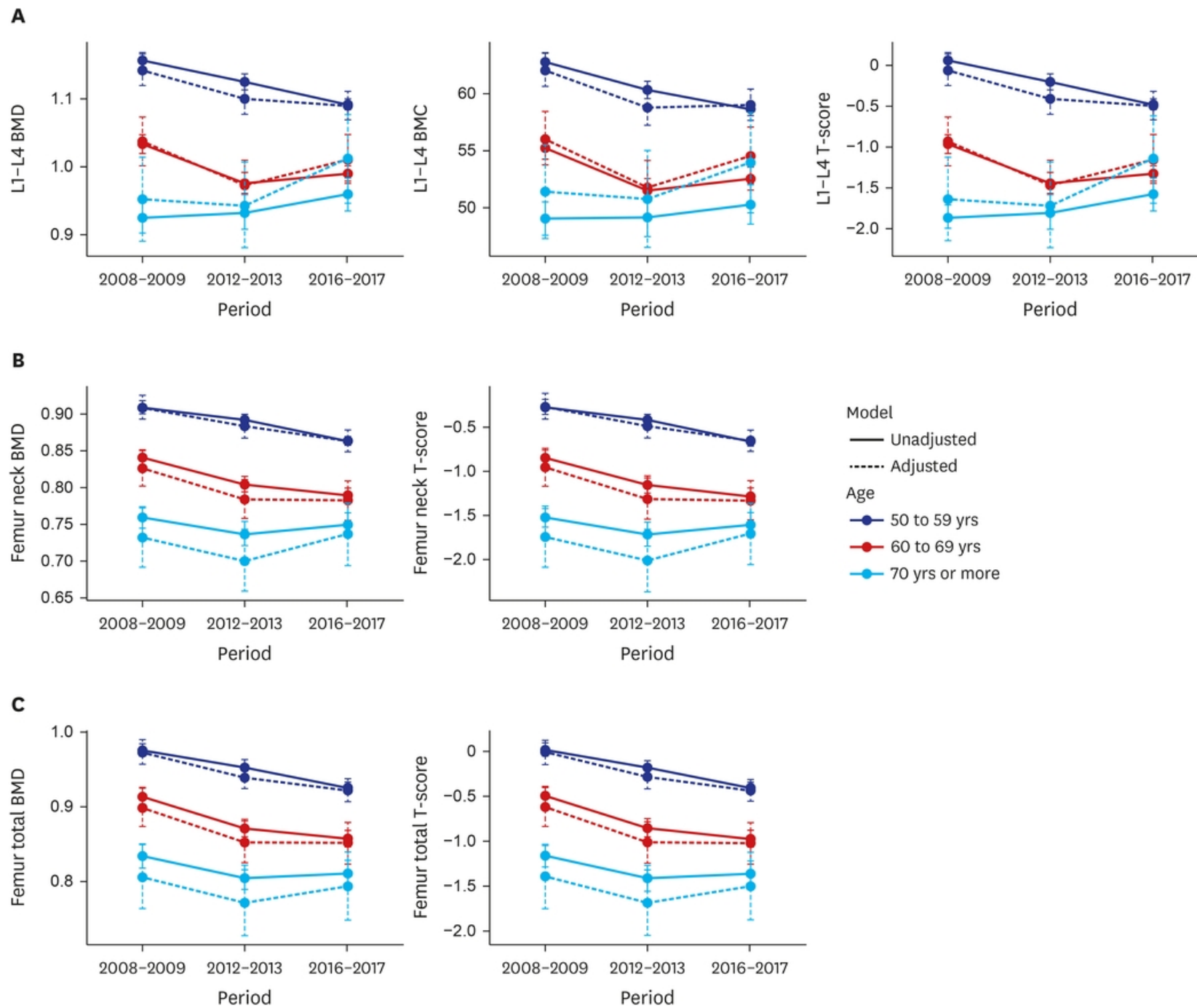
# Study design

- Cohort study
  - Prospective study : Cost
  - Retrospective study : Data
- Case-control study : Size
- Cross-sectional study : Reality

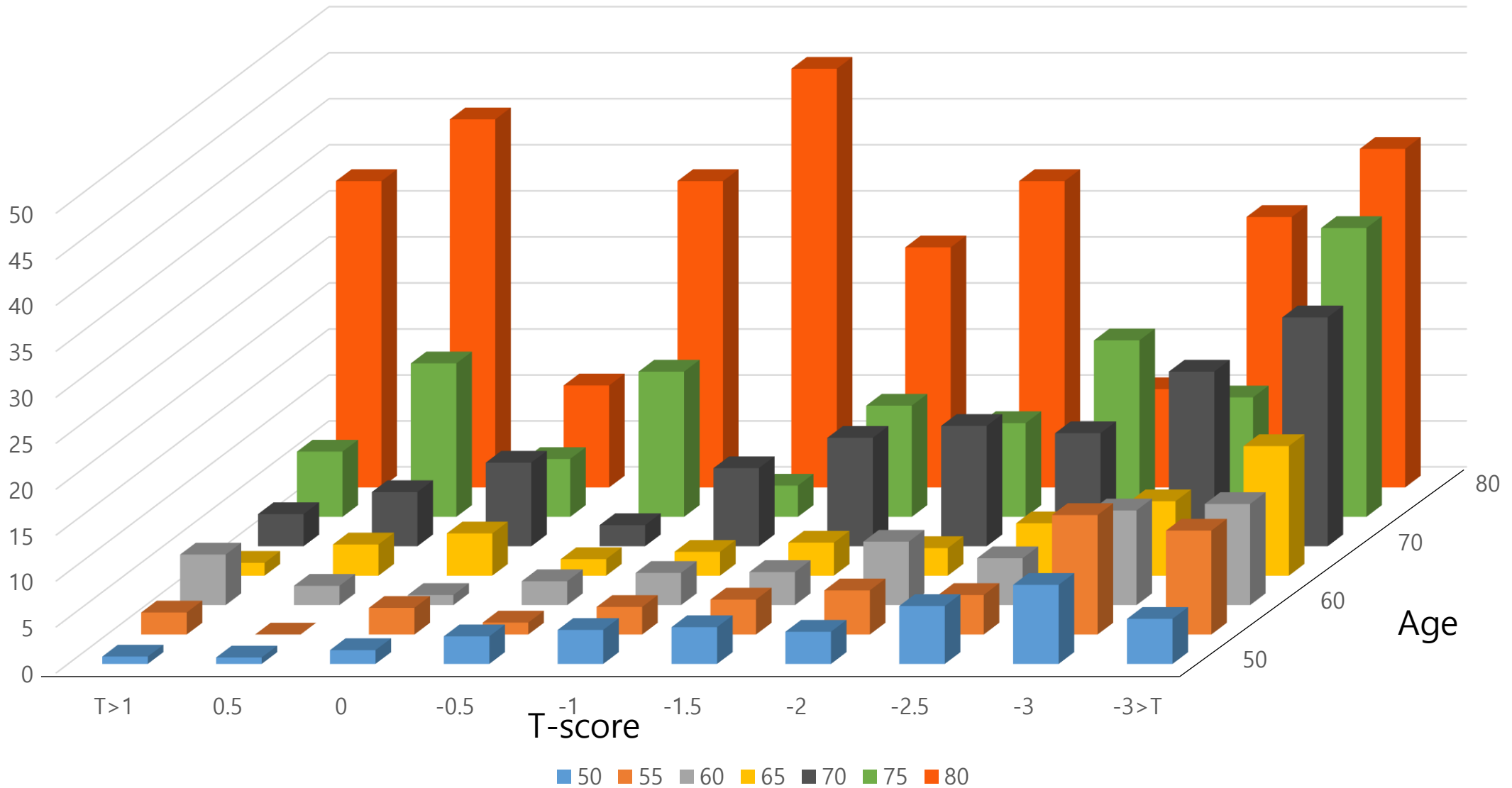


# Under review – Shortening of Heart Rate Variability Measurement by Deep Learning.

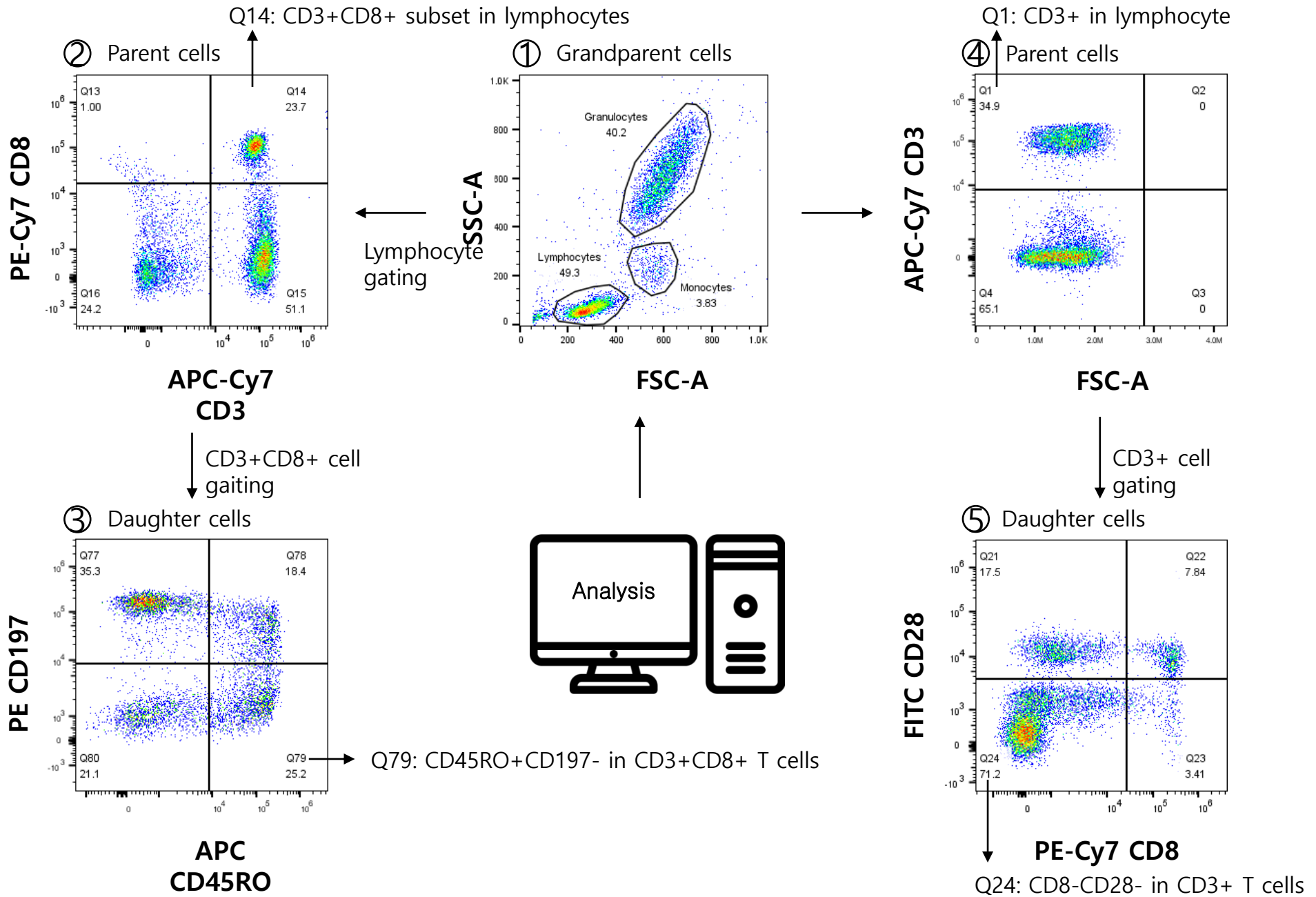




# Writing – The effects of BMD, age and body size on fragility fracture risk in Korean postmenopausal women

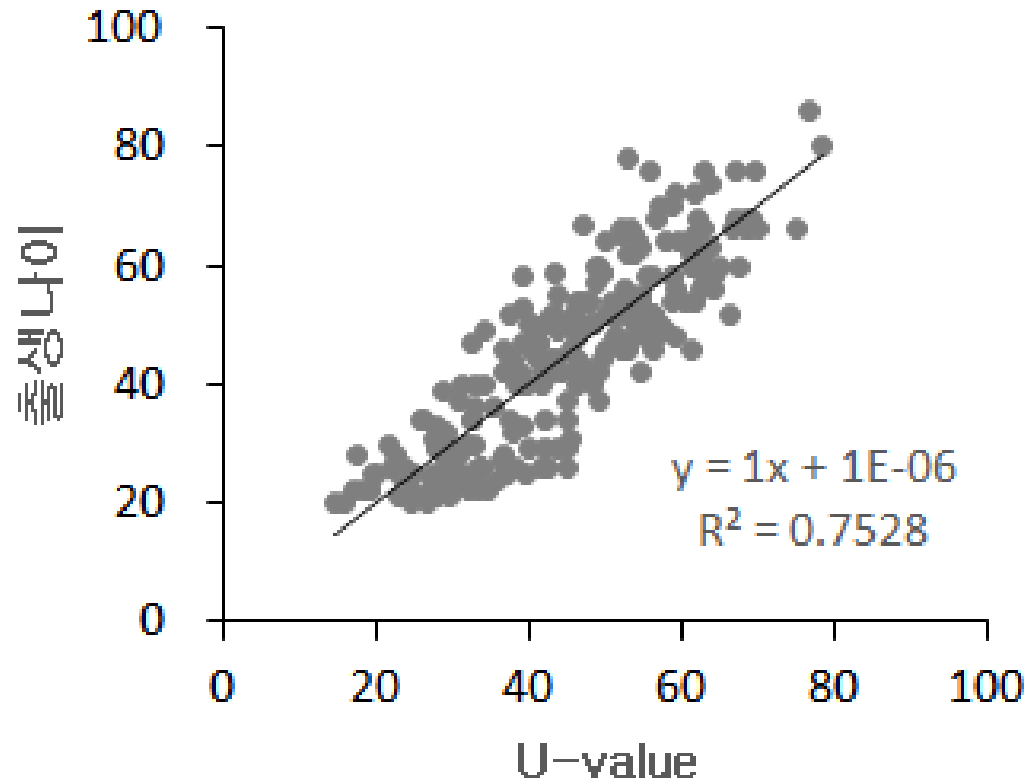


유세포분석 예사

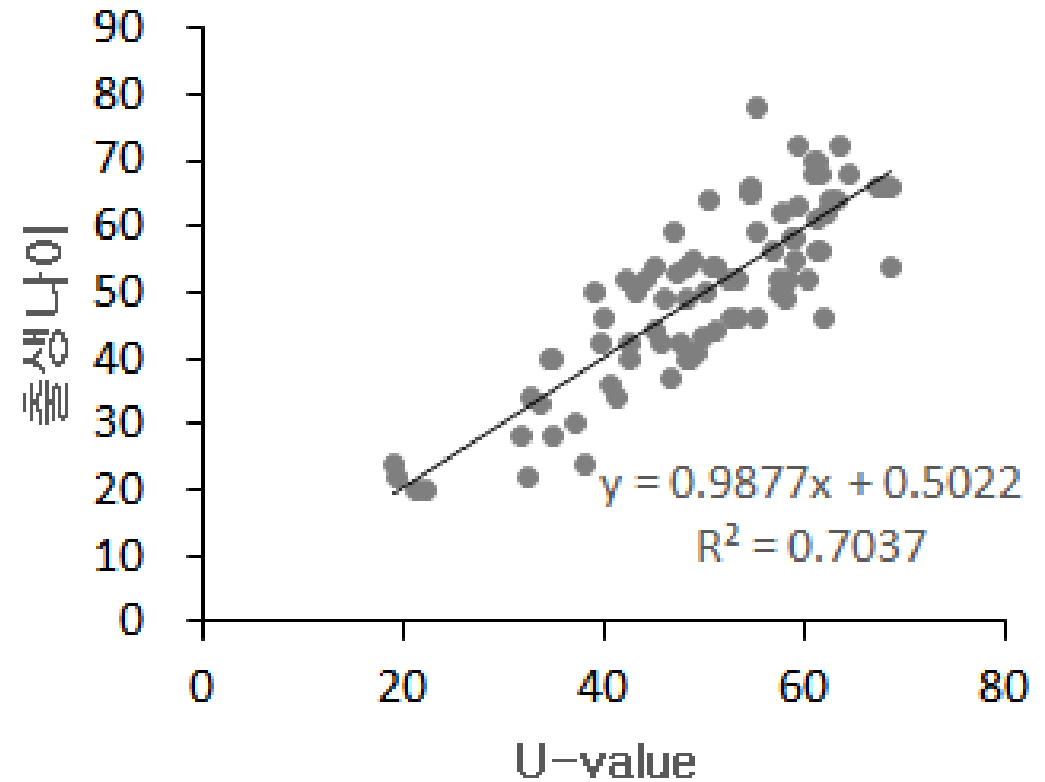


# Writing – An aged immune system correlates to compromised physiological function

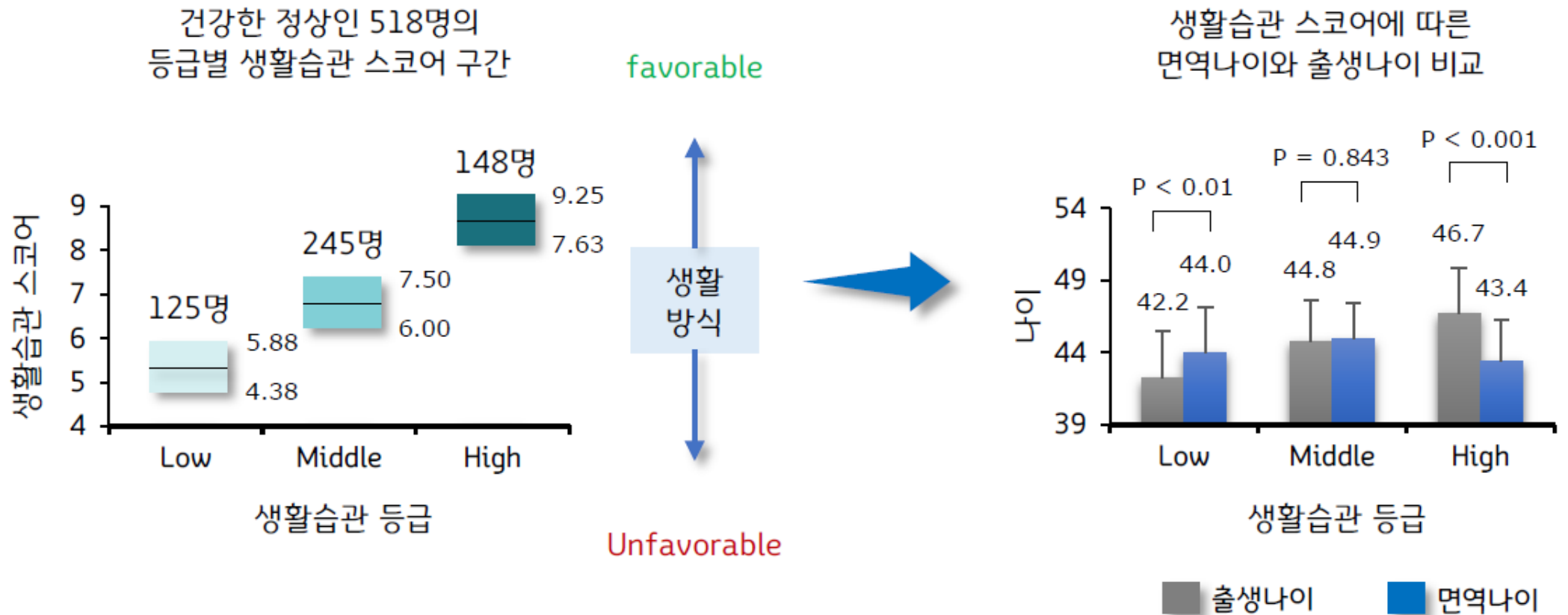
모형 1 (훈련용 데이터)



모형 1 (테스트용 데이터)



# Writing – An aged immune system correlates to compromised physiological function



특허: 생활 건강 평가를 위한 정보의 제공 방법 및 시스템 (출원번호: 10-2021-0186837 | 2021년 12월 24일)

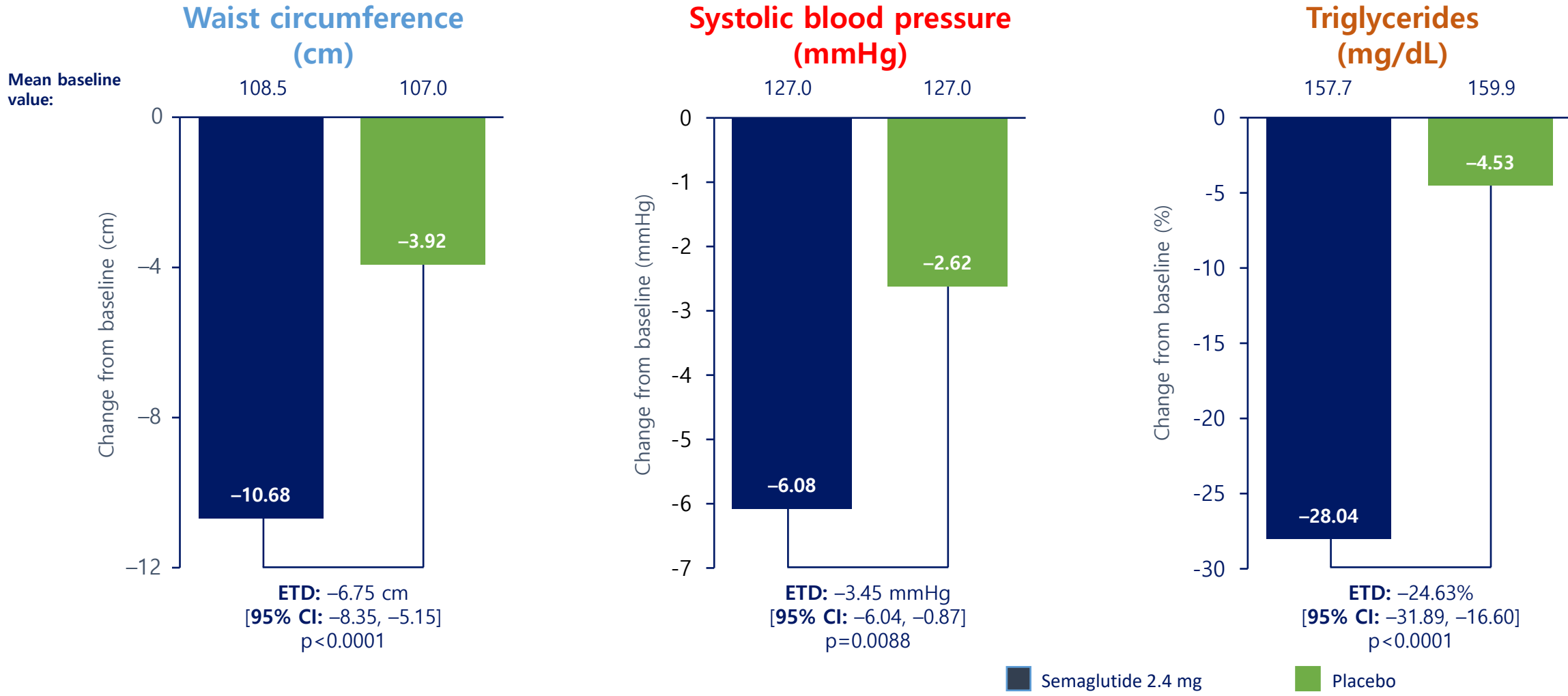
Kim BT unpublished data

# R&D - 노화면역진단키트: immune checkup aging



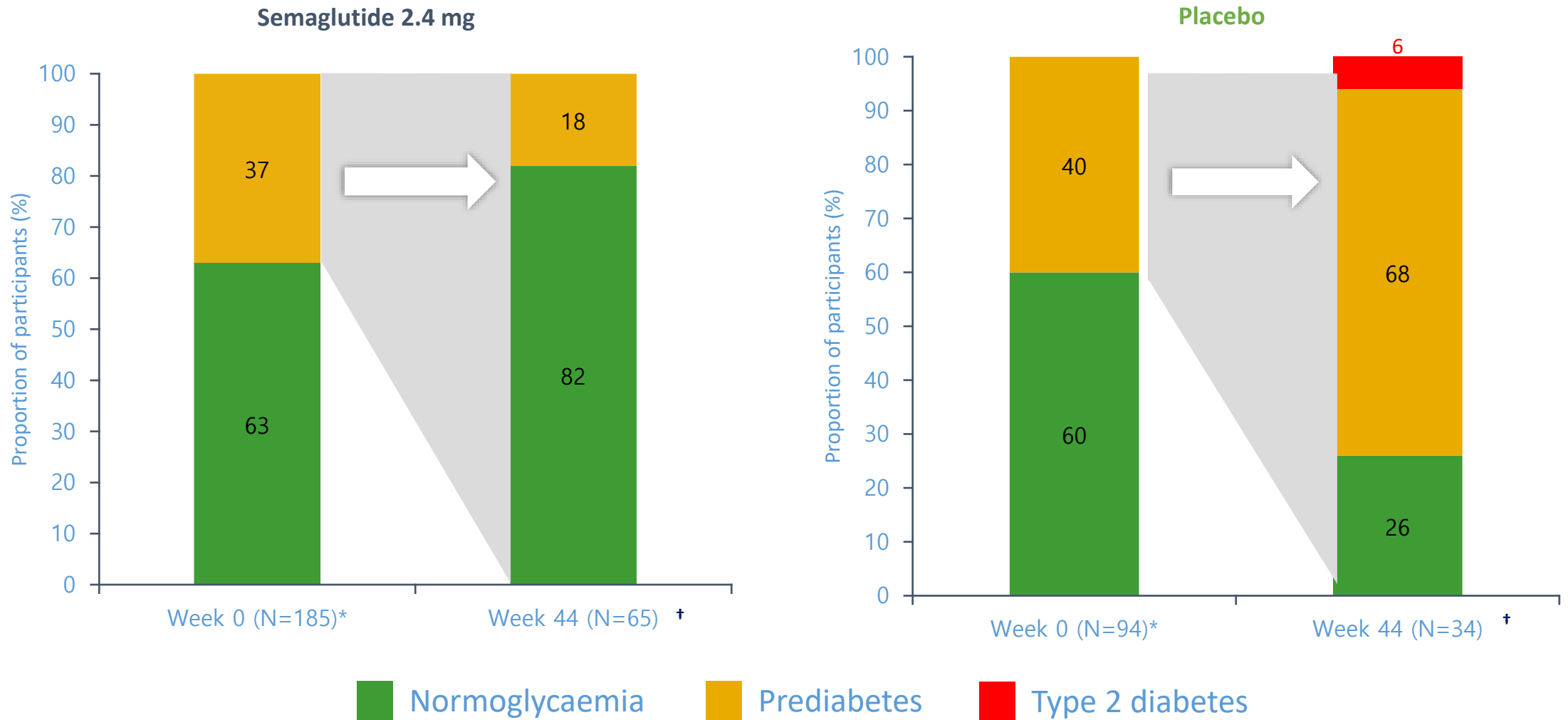


# Changes in Cardiovascular risk factors



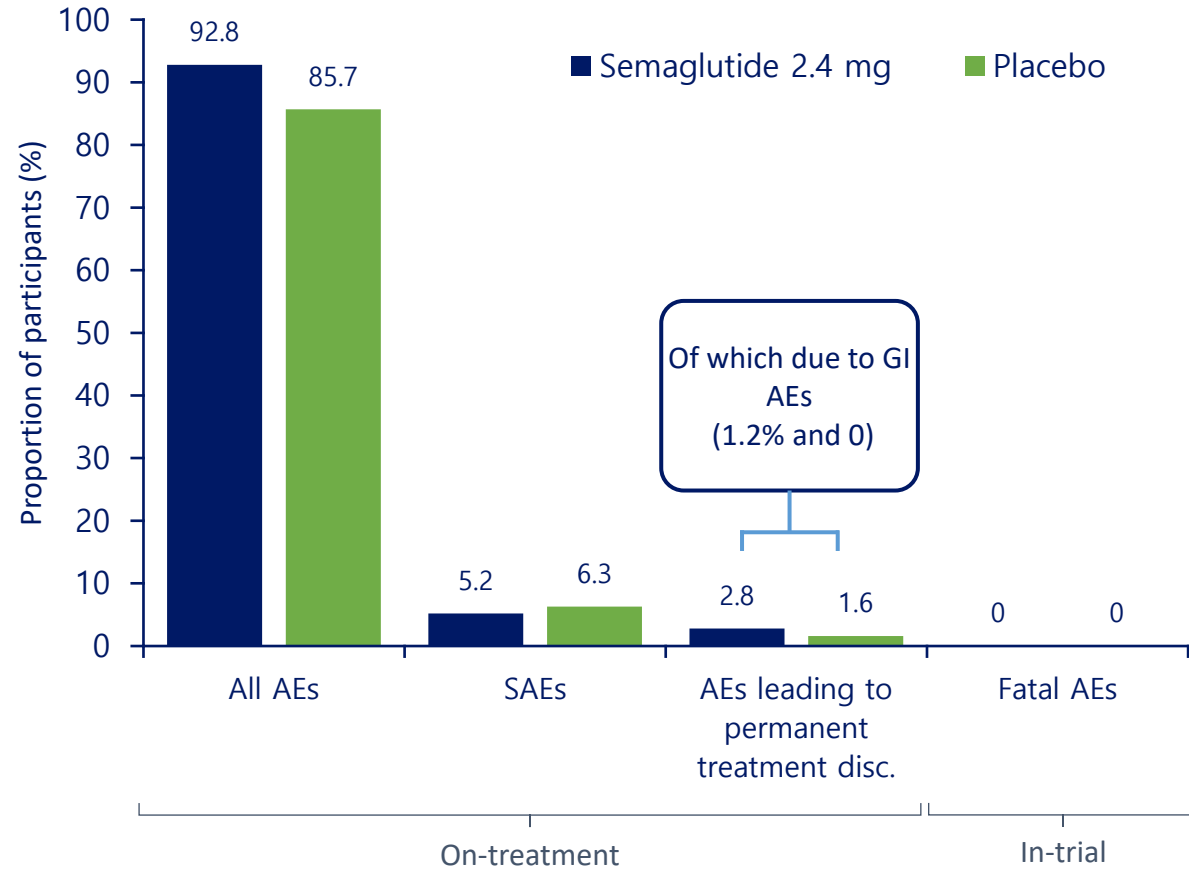
# Shift from baseline to week 44 in glycaemic status

## Participants with prediabetes at baseline



# Adverse events overview

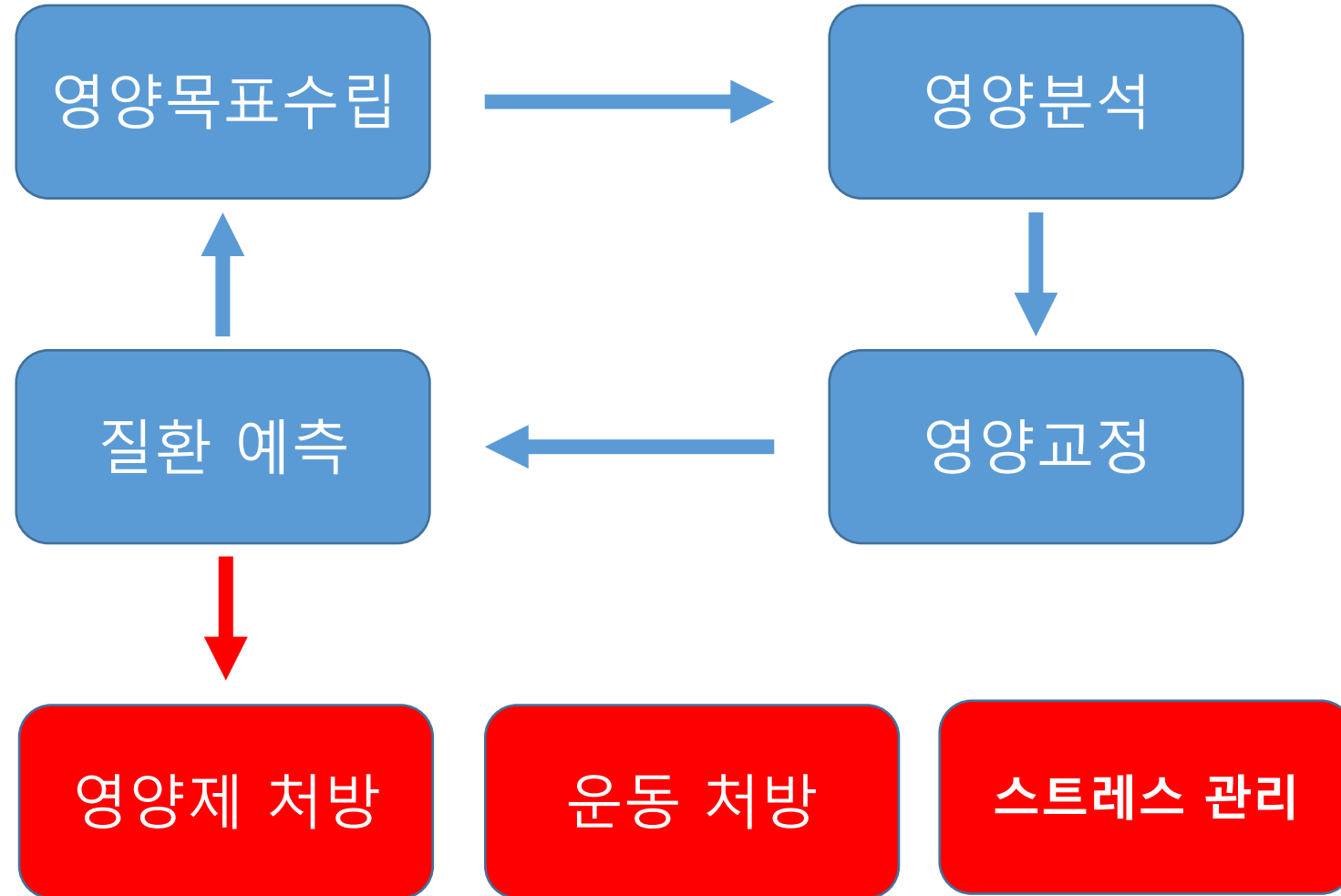
## On-treatment or in-trial observation period



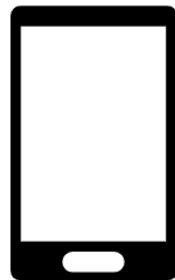
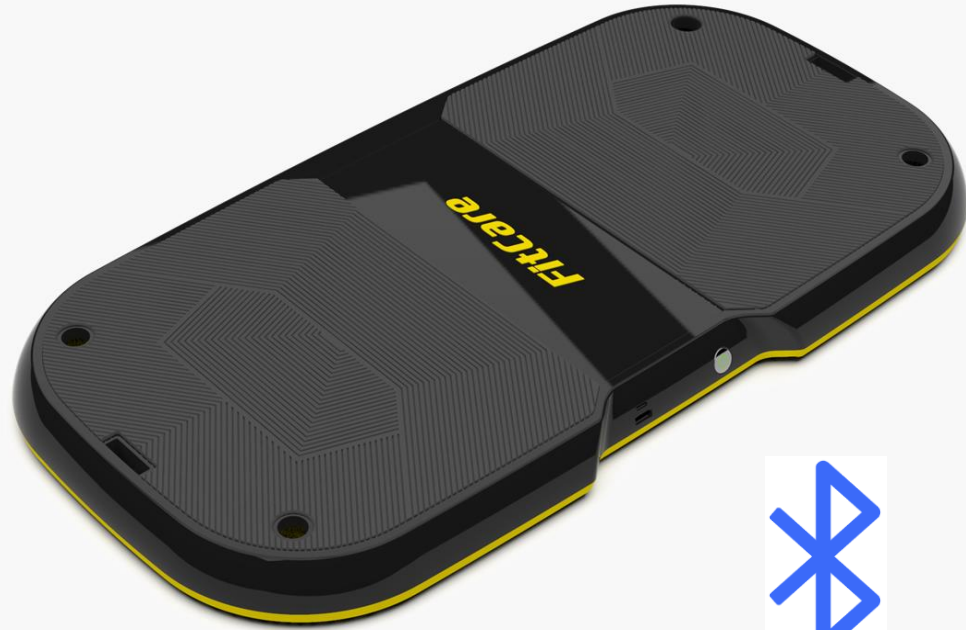
AEs within safety focus areas	Semaglutide 2.4 mg (N=249) N (%)	Placebo (N=126) N (%)
GI AEs (OT)	168 (67.5)	45 (35.7)
Cardiovascular disorders (IT)	33 (13.3)	8 (6.3)
Retinal disorder in participants with T2D (IT)	6 (9.4)	0
Allergic reactions (OT)	20 (8.0)	7 (5.6)
Psychiatric disorder AEs (OT)	13 (5.2)	9 (7.1)
Neoplasms (IT)	12 (4.8)	7 (5.6)
Hepatic events (OT)	8 (3.2)	9 (7.1)
Acute gallbladder disease (OT)	4 (1.6)	3 (2.4)
Rare events (OT)	3 (1.2)	1 (0.8)
Acute renal failure (OT)	2 (0.8)	0
Injection-site reaction (OT)	2 (0.8)	0
Malignant neoplasms (IT)	1 (0.4)	1 (0.8)

The on-treatment period is defined as the interval from first trial product administration to last trial product administration plus a 2-week ascertainment window (excluding any off-treatment time intervals) – used for safety assessments. The in-trial period is defined as the uninterrupted time interval from randomisation to last contact with trial sites – used for deaths and events with potential long latency to diagnosis. AE, adverse event; disc., discontinuation; GI AE, gastrointestinal adverse event; IT, in-trial; OT, on-treatment; SAE, serious adverse event; T2D, type 2 diabetes.

# 영양 분석



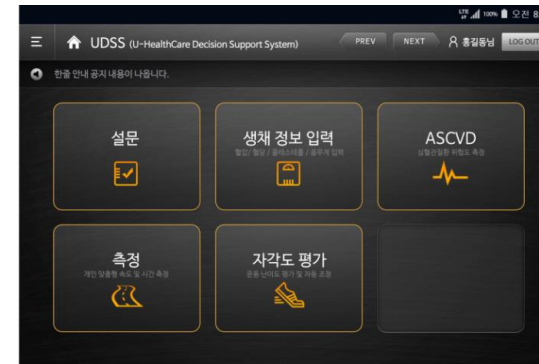
# R&D - 근력운동장비



# 15종의 근력운동기구에 UDSS 적용 (개발완료)

## 5. 융합기술

- 15종 근력운동기구에 UDSS 운동처방 및 연계제어 기술 적용
- 노년층의 전자식 근력운동기구(8종)에도 동일기술로 적용



# Fail – Grant application March 2022

## Planning Team

3년 간 원격 community health care service 운영 경험 및 근력 운동 장비 공동개발 아주의대 FM

3년 간 원격 community health care service system 운영 knowhow 및 근력 운동 장비 공동개발 피트케어

Pubmed 등재 근감소증 분야 국제 의학잡지 편집장 아주의대 내분비내과 정윤석 교수님

Recombinant Tech

## Operation Data Collection Team

3년 간 원격 community health care service 운영 경험 아주의대 FM

3년 간 원격 community health care service system 운영 knowhow 및 근력 운동 장비 공동개발 피트케어

도시

환자  
(당뇨)

농촌

건강인

3년 간 원격 community health care service system 운영 knowhow 및 근력 운동 장비 공동개발 피트케어

## Analyzing & AI Team

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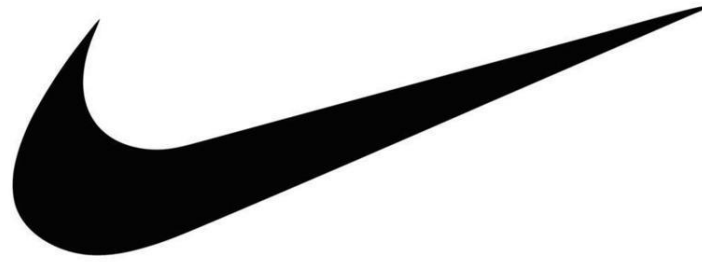
3년 간 원격 community health care service system 운영 knowhow 및 근력 운동 장비 공동개발 피트케어

Deep Learning 및 AI 분석 아주대 소프트웨어학과 유종빈 교수님

# **P**EN – Research **E**xperience



Research Experience : Just Do it



**JUST DO IT**

# Research Experience : Courage to be Rejected




## What I learned from 100 days of rejection

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# Try or Not Try



Jackie googled it and got the colors right

## Your manuscript JBR-101754 - Decision on your manuscript

외부 받은편지함 x



**Journal of Breath Research**

wooyoung, dkstkdrnjs92, echo, turtlesoup, 2bgreat, hwangjh, kshin2023, lovehrh, 나, ktwonm에게

10월 19일 (목) 오후 11:21 (2일 전) ☆ ↶ ⋮

영어 > 한국어 메일 번역

영어 번역 안함 x

Dear Professor Lee,

Re: "Methane Gas in Breath Test is Associated with Non-Alcoholic Fatty Liver Disease"

Manuscript reference: JBR-101754

We have completed the **review** of your Paper, which was submitted to Journal of Breath Research. Unfortunately, the **reviewer(s)** recommend that we should not publish your work.

You can find the reasons for this decision in the **reviewer** report(s). These can be found below and/or attached to this message.

We are sorry that we cannot respond more positively but would like to thank you for your interest in Journal of Breath Research.

Yours sincerely,

Jake Colsell

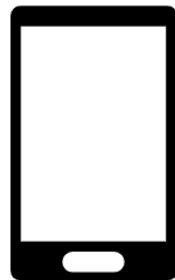
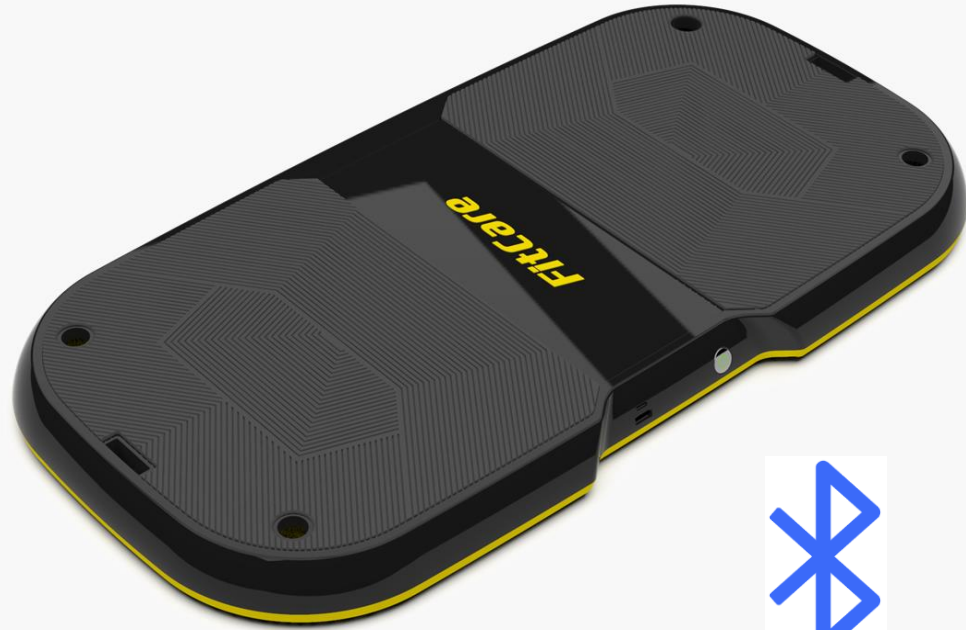
On behalf of:

Journal of Breath Research

Editor-in-Chief: Joachim D Pleil

[iopscience.org/jbr](http://iopscience.org/jbr) | [jbr@iopublishing.org](mailto:jbr@iopublishing.org)

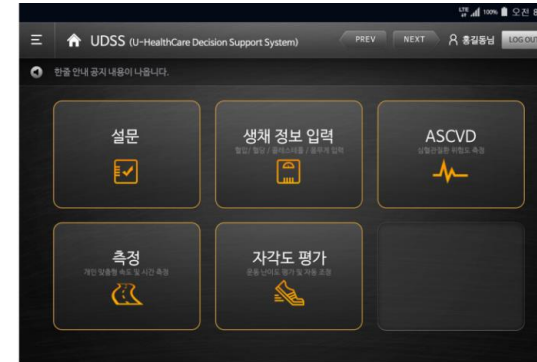
# R&D - 근력운동장비



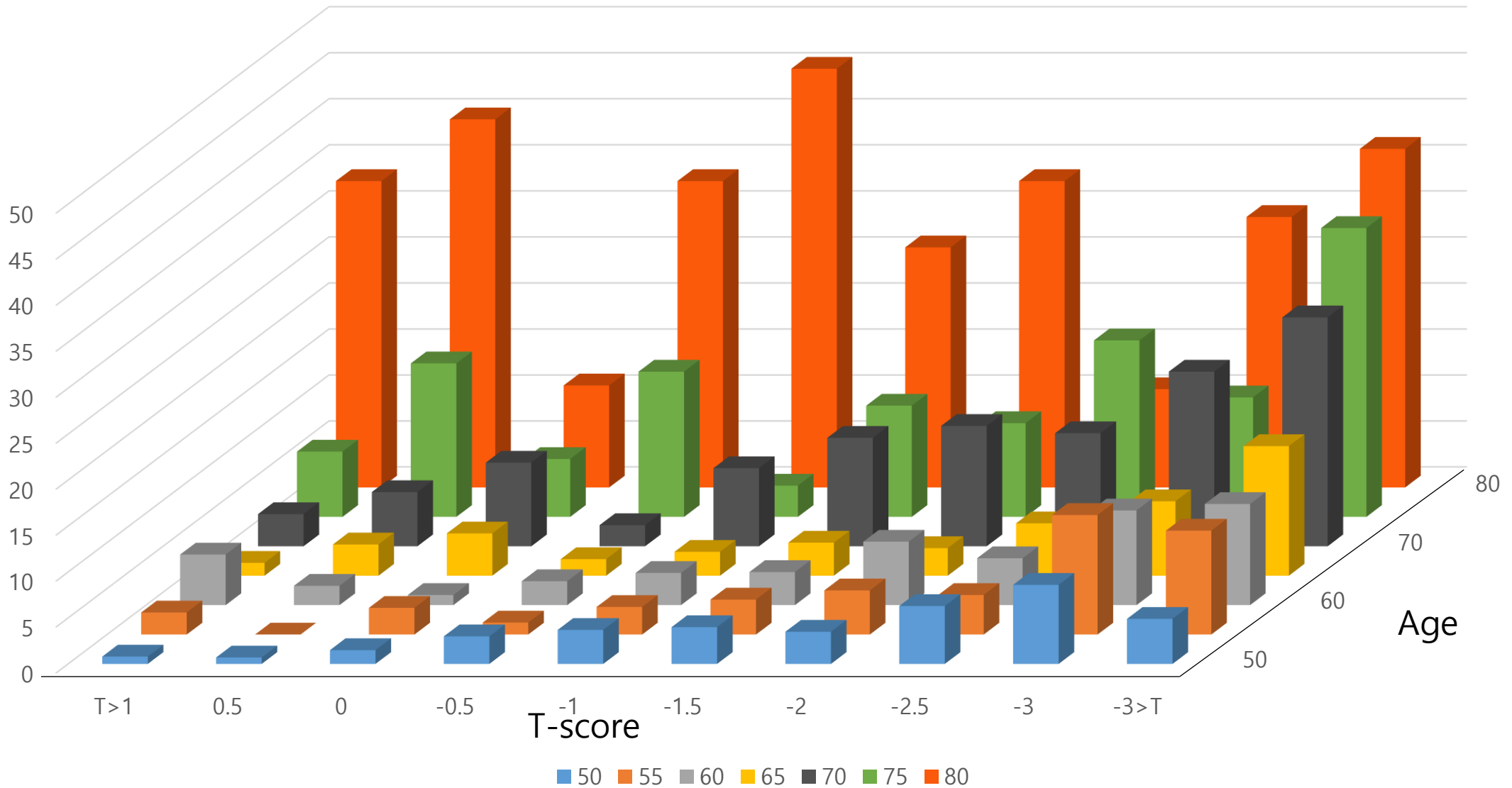
# 15종의 근력운동기구에 UDSS 적용 (개발완료)

## 5. 융합기술

- 15종 근력운동기구에 UDSS 운동처방 및 연계제어 기술 적용
- 노년층의 전자식 근력운동기구(8종)에도 동일기술로 적용



# Writing – The effects of BMD, age and body size on fragility fracture risk in Korean postmenopausal women



# PLOS Medicine: Manuscript transfer offer - [EMID:bdf4da1fc4868b37]

외부

받은편지함 x



PLOS Medicine

나에게 ▾

9월 14일 (목) 오후 2:34



🗨️ 영어 ▾ > 한국어 ▾ [메일 번역](#)

[영어 번역 안함](#) x

**Manuscript** title: Shortening heart rate variability measurement time to 1 minute using deep learning: Implication of real-time measurement of heart rate variability

**Manuscript** ID: PMEDICINE-D-23-02577

Dear Dr KIM,

Thank **you** for **your** recent submission to PLOS Medicine. Although the editors at that journal were not able to consider **your manuscript** for publication, they encouraged **you** to transfer **your manuscript** to another PLOS journal. They have made this recommendation based on **their** assessment of **your manuscript**, **their** knowledge of the other journal, and in some cases after consultation with other journal's editors (please see the **decision** letter for full details regarding the transfer offered).

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Best regards.



# [Nutrients] Manuscript ID: nutrients-2405452 - Declined for Publication

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받은편지함 x



5월 11일 (목) 오후 7:13



**Nutrients Editorial Office** <nutrients@mdpi.com>

Susie, Sanggwon, Eui-young, Junho, Hyunseong, Jungho, Kyusik, 나, Kyu-Nam, Wooyoung, Nutrients, Zoe에게 ▾

영어 ▾ > 한국어 ▾ [메일 번역](#)

[영어 번역 안함](#) x

Dear Dr. Jung,

Thank **you** for submitting the following **manuscript** to Nutrients:

**Manuscript** ID: nutrients-2405452

Type of **manuscript**: Article

Title: Methane Gas in Breath Test Is Associated With Non-Alcoholic Fatty Liver Disease

Authors: Sanggwon An, Eui-young Cho, Junho Hwang, Hyunseong Yang, Jungho Hwang, Kyusik Shin, Susie Jung, Bom-Taeck Kim, Kyu-Nam Kim \*, Wooyoung Lee \*

Received: 3 May 2023

E-mails: [dkstkdnrjs92@yonsei.ac.kr](mailto:dkstkdnrjs92@yonsei.ac.kr), [echo@pcu.ac.kr](mailto:echo@pcu.ac.kr), [turtlesoup@naver.com](mailto:turtlesoup@naver.com), [2bgreat@naver.com](mailto:2bgreat@naver.com), [hwangjh@yonsei.ac.kr](mailto:hwangjh@yonsei.ac.kr), [kshin2023@yonsei.ac.kr](mailto:kshin2023@yonsei.ac.kr), [lovehrh@naver.com](mailto:lovehrh@naver.com), [lovesong@ajou.ac.kr](mailto:lovesong@ajou.ac.kr), [ktwonm@hanmail.net](mailto:ktwonm@hanmail.net), [wooyoung@yonsei.ac.kr](mailto:wooyoung@yonsei.ac.kr)

Submitted to section: Clinical Nutrition,

[https://www.mdpi.com/journal/nutrients/sections/Clinical\\_Nutrition](https://www.mdpi.com/journal/nutrients/sections/Clinical_Nutrition)

Nutrition, Gut Microbiota and Colorectal Cancer

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We are writing to inform **you** that we will not be able to process **your**

**The Effects of Vitamin D and Sarcopenia  
on Bone Mineral Density in Korean women**

by

**Myat Kyi La Thein**

## Abstract

↵

### 1) Background

Imbalance in mineral metabolism, particularly sodium (Na) and potassium (K), is associated with increased risk of coronary artery disease (CAD). There has been no previous study to elucidate the relationship using hair mineral concentration which is a better reflection of body mineral content compared to conventional tests. ↵

↵

### 2) Methods

A cross sectional observation was conducted using 523 men aged 20 years or older, who had visited the Ajou University Hospital for a periodic health check-up between 2009 and 2012. Hair mineral analysis was performed using by mass spectrometry. CAD risk was calculated for each individual using the Framingham risk score (FRS). ↵

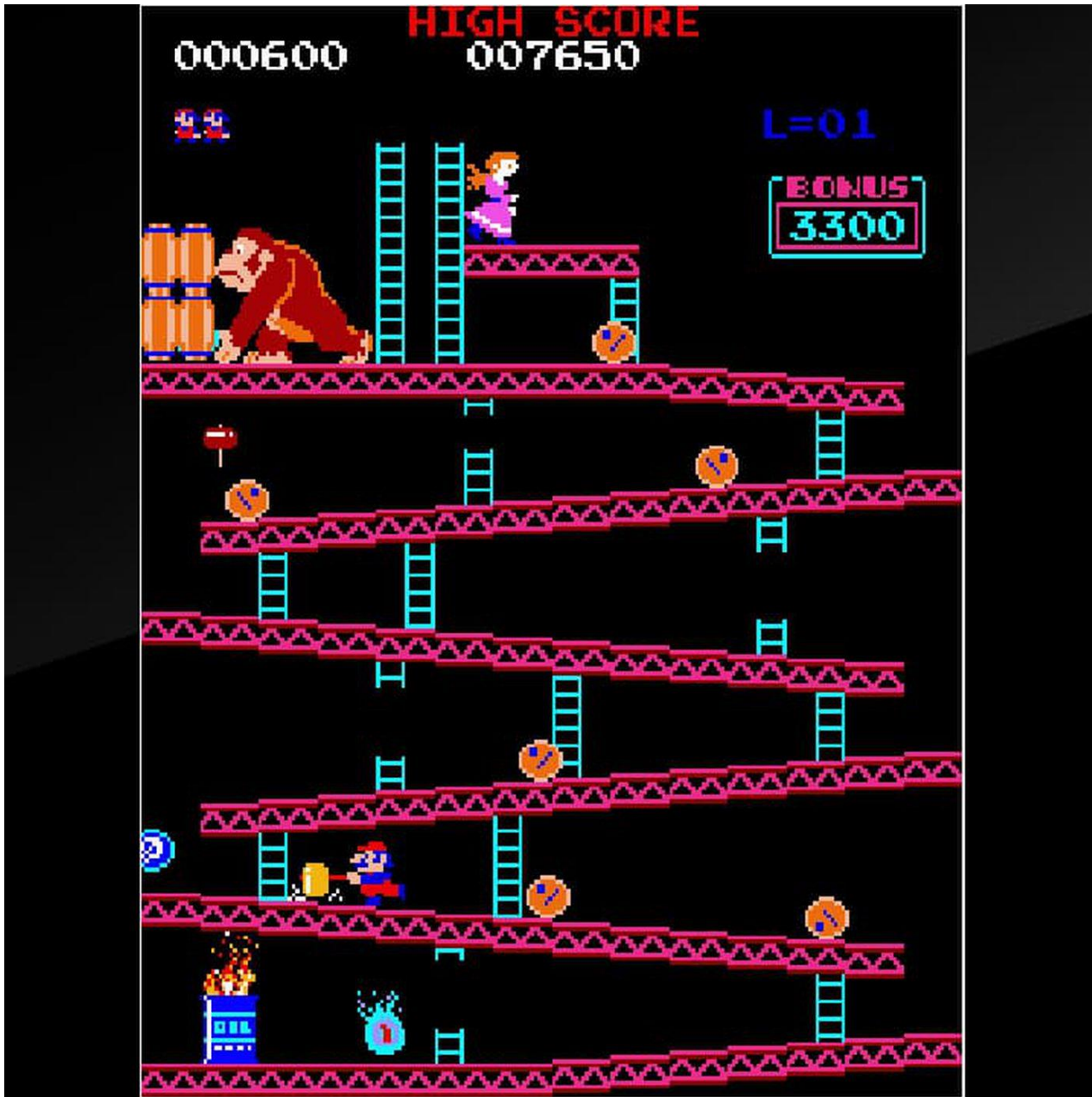
↵

### 3) Results

Hair Na and K concentrations showed positive correlations with FRS. Hair calcium (Ca) and magnesium (Mg) concentrations showed no correlation, while hair Ca/Na and Ca/K ratios showed negative correlations with coronary risk. The highest quartile of hair Na and K had significantly higher odds ratio (3.51

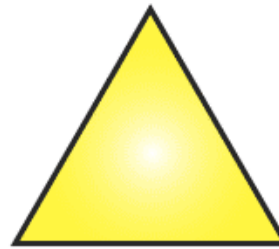
# Research Experience : Balance in Life



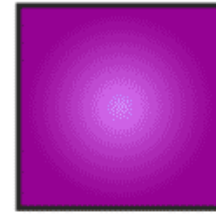


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Research

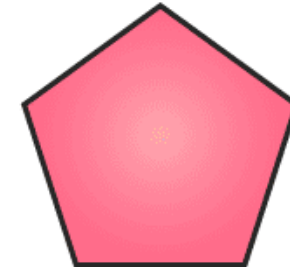
# No Polygonal Life in a Researcher



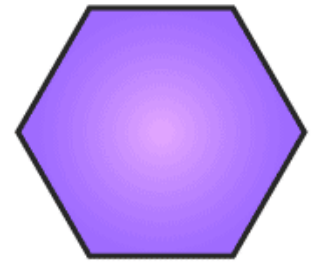
Triangle



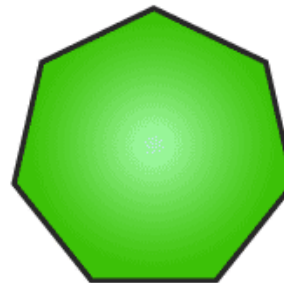
Quadrilateral



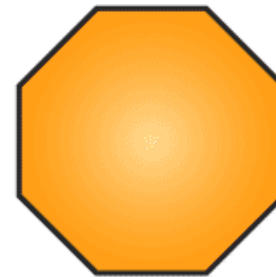
Pentagon



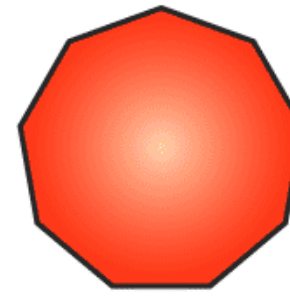
Hexagon



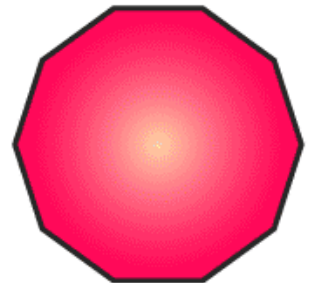
Heptagon



Octagon



Nonagon



Decagon

# To do or Not to do? That is the question.

[대한가정의학회 - 발신전용] 2023년도 가정의학과 전문의고시 문제 출제 신규 의뢰(3차발송)


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Telephone / (02) 3210-1537	Fax / (02) 3210-1538	E-mail / kafm@kafm.or.kr
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문서번호 : 2023 - 11451 2023. 10. 10

수 신 : 아주대학병원 김범택 선생님

제 목 : 2023년도 가정의학과 전문의고시 문제 출제 신규 의뢰

안녕하십니까?

바쁘신 중에도 2021년도 가정의학과 전문의 고시 출제를 위한 문항 작성위원을 수락하여 주심을 감사드립니다.

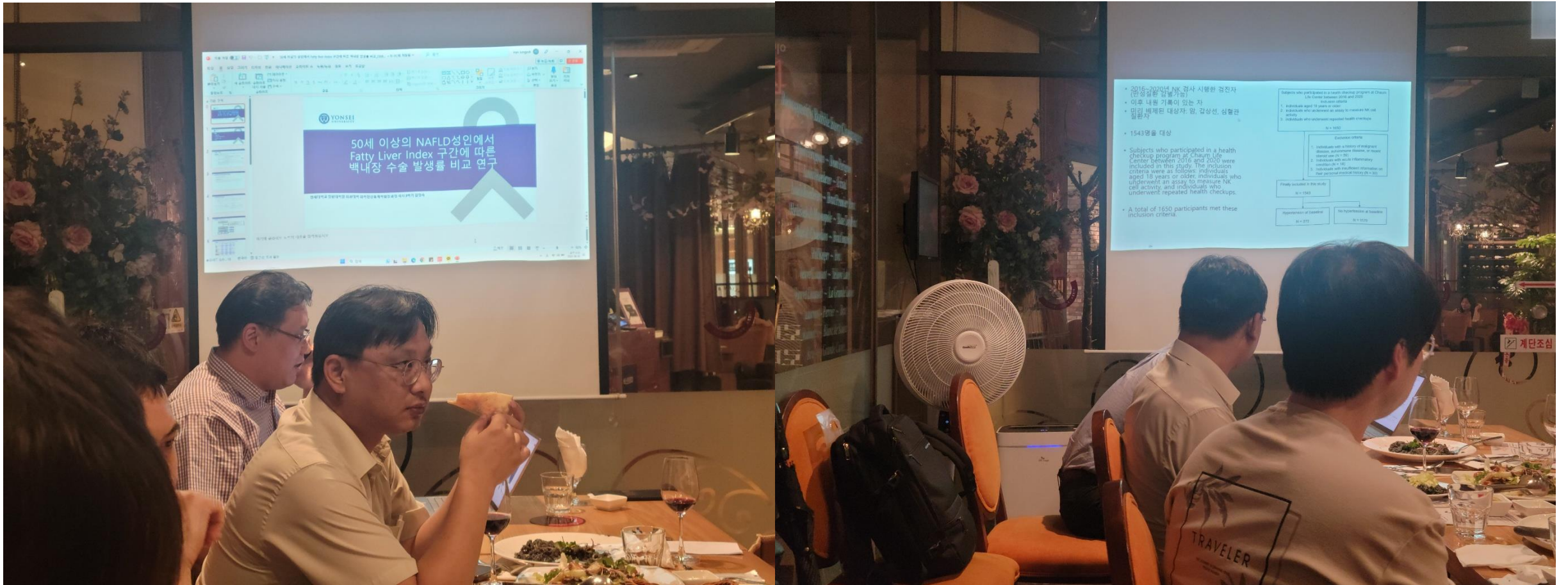
**PEN** – research **N**etwork



# Research Network : Working group



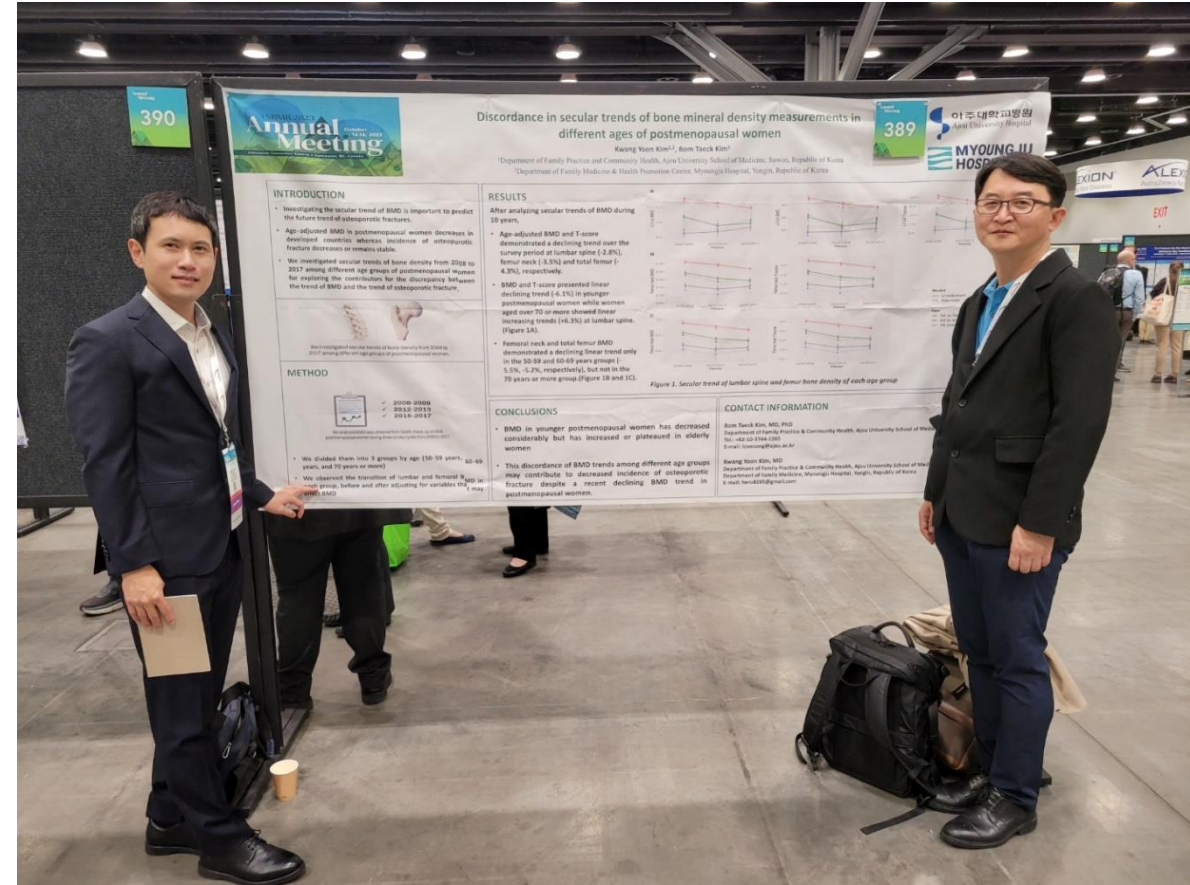
# What to do 1. – Pacemaker and Review



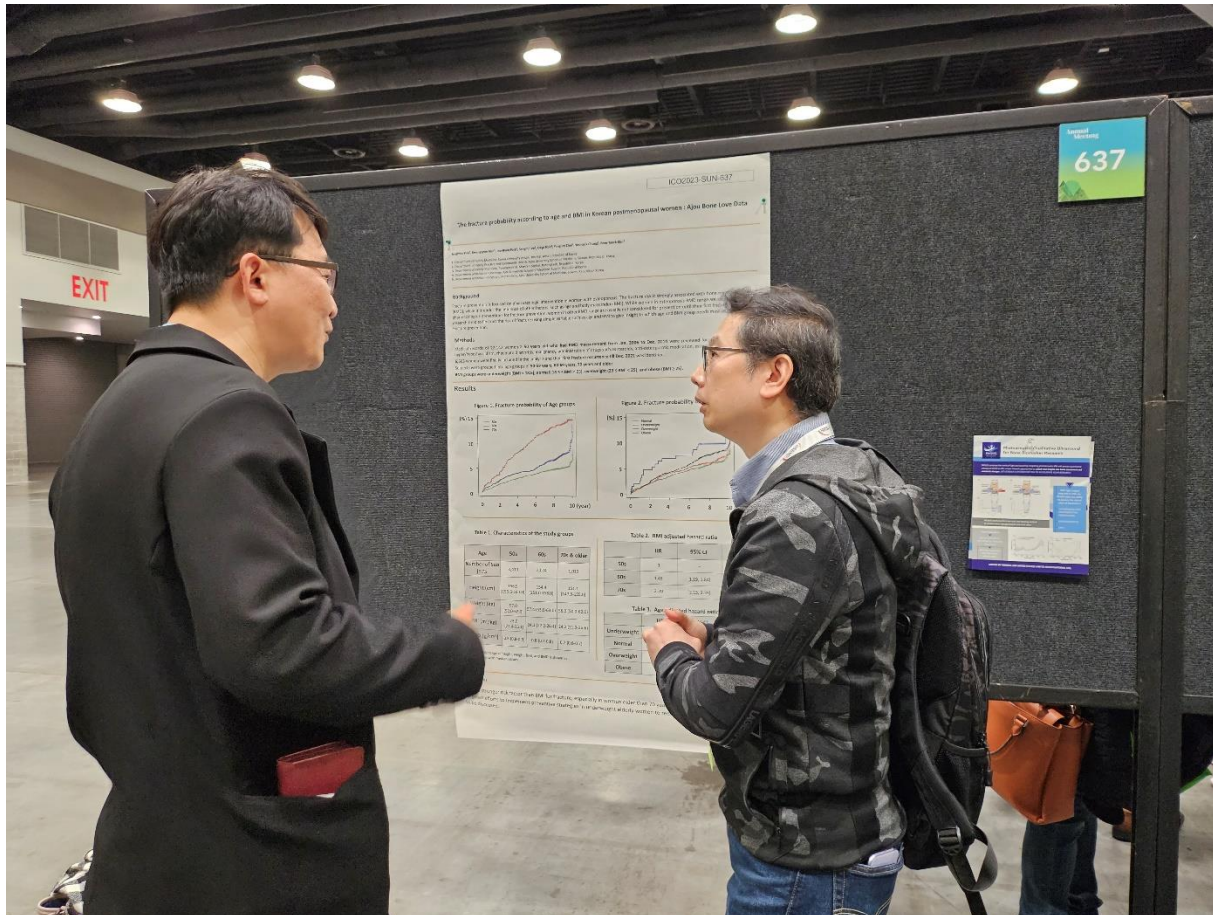
# What to do 2. FUN = Encourage



# What to do 3. Get a Back



# Research Network : International Cooperation



# 당신이 학회에 가서 열심히 포스터를 발표해야 하는 이유



Prediction of Bone-Density from Vitamin-D Receptor Alleles  
Nigel A. Morrison;Jian Cheng Qi;Akifumi Tokita;Paul J. Kelly.  
Nature (1994) 2623 Citations

Mortality after all major types of osteoporotic fracture in men  
and women: an observational study 2275 Citations  
Tuan V Nguyen;Diane Schneider;Philip N Sambrook.  
The Lancet (1999)

Mortality Risk Associated With Low-Trauma Osteoporotic  
Fracture and Subsequent Fracture in Men and Women 1656 Citations  
Dana Bliuc;Nguyen D. Nguyen;Vivienne E. Milch;Tuan V. Nguyen.  
JAMA (2009)

Genome-wide meta-analysis identifies 56 bone mineral  
density loci and reveals 14 loci associated with risk of fracture 1143 Citations  
Karol Estrada;Unnur Styrkarsdottir;Evangelos Evangelou;Yi-  
Hsiang Hsu.  
Nature Genetics (2012)

Effects of a medical emergency team on reduction of  
incidence of and mortality from unexpected cardiac arrests in  
hospital: preliminary study 1029 Citations  
Michael D Buist;Gaye E Moore;Stephen A Bernard;Bruce P  
Waxman.  
BMJ (2002)

Research **N**etwork : Be a Reviewer





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