

**University of California
Scientists Panel**

University of California Davis
Bruce D. Hammock, Ph.D.
Hari A. Reddy, Ph.D.
Ray Rodriguez, Ph.D.

University of California Los Angeles
John Adams, M.D.
Milan Fiala, M.D.
Martin Hewison, Ph.D.
H. Phillip Koeffler, M.D.
Mathew Mizwicki, Ph.D.
Keith C. Norris, M.D.

University of California Riverside
Anthony W. Norman, Ph.D.
Laura P. Zanello, Ph.D.

University of California San Diego
Richard L. Gallo, M.D., Ph.D.
Cedric F. Garland, Dr. P.H.
Frank C. Garland, Ph.D. †
Edward D. Gorham, Ph.D.
Tissa Hata, M.D.

University of California San Francisco
David Gardner, M.S., M.D.
Bernard P. Halloran, Ph.D.

International Scientists Panel

Boston University School of Medicine
Michael F. Holick, Ph.D., M.D.

Creighton University
Robert P. Heaney, M.D.
Joan M. Lappe, Ph.D., R.N.

Emory University
Vin Tangpricha, M.D., Ph.D.

Harvard School of Public Health
Edward Giovannucci, M.D., ScD.
Walter C. Willett, Dr. P.H., M.D.

Institute VitaminDelta
Raimund von Helden, M.D.

International Medical Center of Japan
Tetsuya Mizoue, M.D., Ph.D.

Linus Pauling Institute
Adrian F. Gombart, Ph.D.

Massachusetts General Hospital
Carlos A. Camargo, Jr., M.D., Dr. P.H.

McGill University
John H. White, Ph.D.

Medical University of Graz, Austria
Stefan Pilz, M.D.

Medical University of South Carolina
Bruce W. Hollis, Ph.D.
Carol L. Wagner, M.D.

Roswell Park Cancer Institute
Candace Johnson, Ph.D.
Donald L. Trump, M.D.

Society for Medical Information and Prevention
Joerg Spitz, M.D.

Sunlight, Nutrition and Health Research Center
William B. Grant, Ph.D.

University of Albany - SUNY
JoEllen Welsh, Ph.D.

University of Alberta
Gerry Schwallenber, M.D., CCFP

University of Auckland
Robert Scragg, M.D., Ph.D.

University of Saskatchewan
Susan J Whiting, Ph.D.

University of Toronto, Mt Sinai Hospital
Reinhold Vieth, Ph.D.

Vienna Medical University
Heide S. Cross, Ph.D., Retired

Vitamin D Council
John J. Cannell, M.D.

www.grassrootshealth.net



Vitamin D*action

A Consortium of Scientists, Institutions and Individuals
Committed to Solving the Worldwide Vitamin D Deficiency Epidemic

25(OH)D SERUM LEVELS ≥ 50 NG/ML MAY PROVIDE ADDITIONAL REDUCTION IN BREAST CANCER RISK

Sharon L. McDonnell¹, Christine B. French¹, Leo L. Baggerly¹, Edward D. Gorham² and Cedric F. Garland²

Prospective study of 844 female participants aged 60+ years, 18 months
Predictor Variables: 25(OH)D concentration, age and BMI

Objective

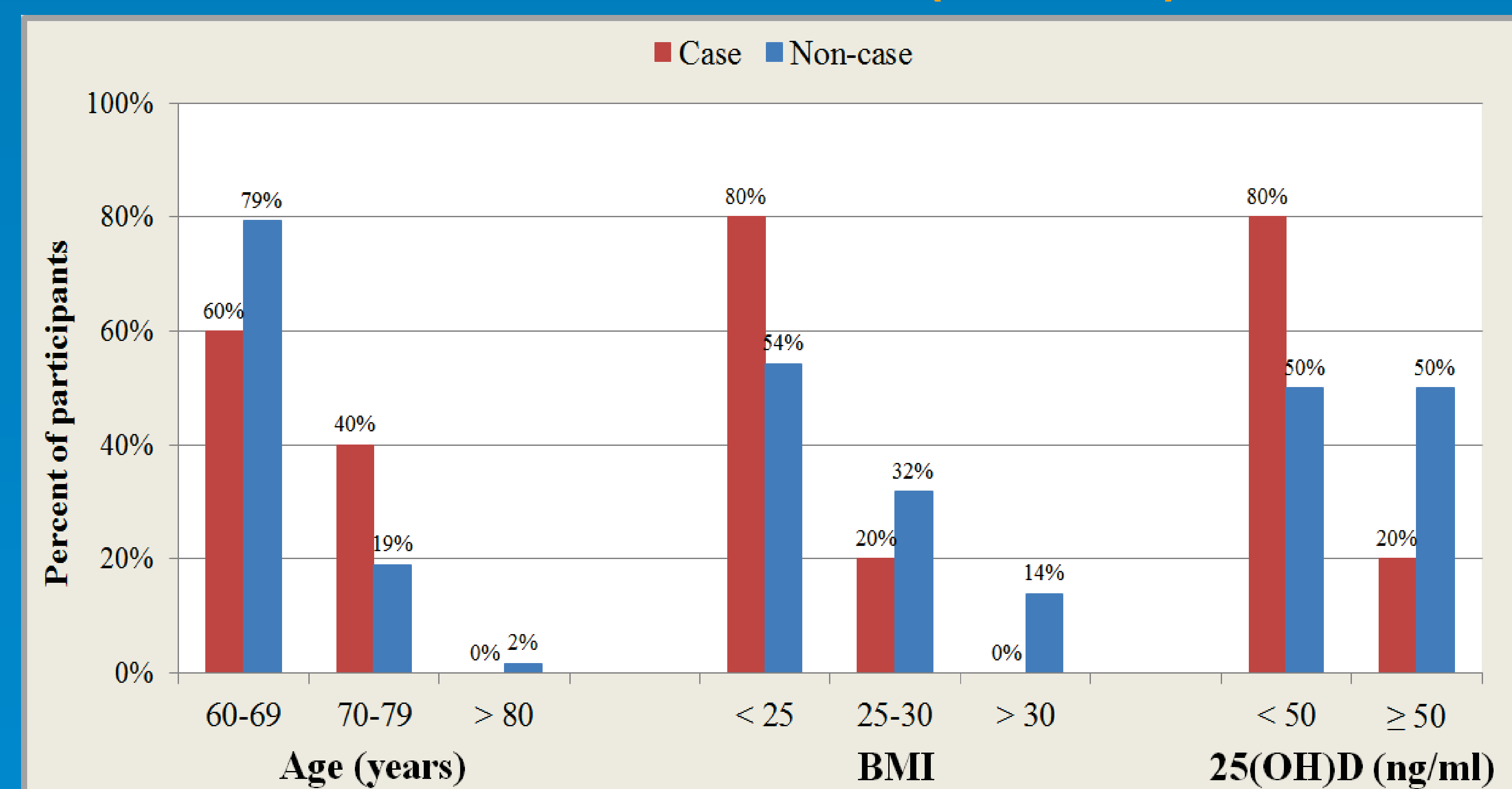
Examine relationship between serum 25(OH)D and incidence of breast cancer.

Background

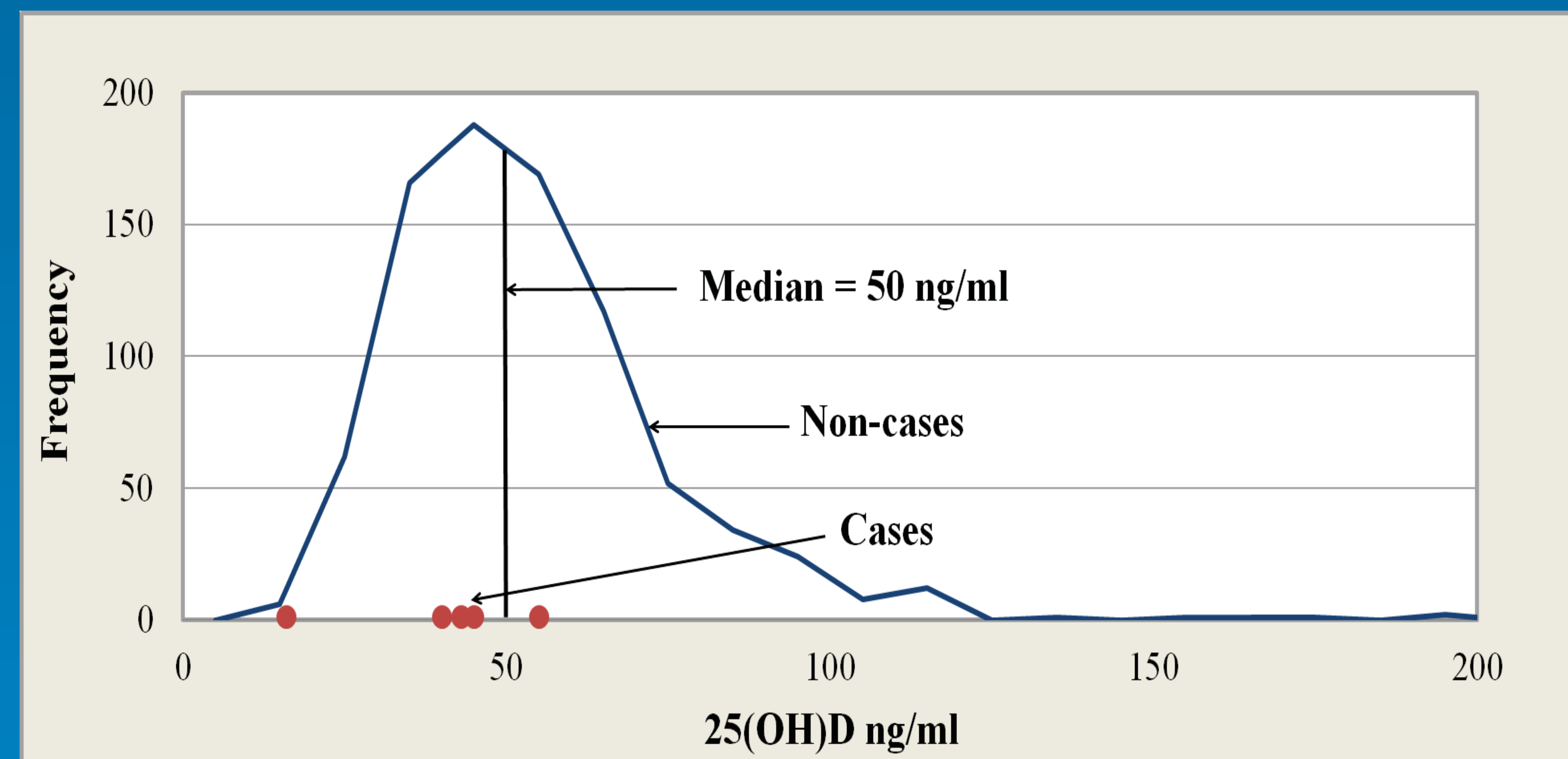
- Higher serum 25(OH)D concentrations are associated with lower risk of breast cancer.
- Serum levels in the range of 40-60 ng/ml could prevent a substantial number of breast cancer cases.

Results

Demographic Characteristics of GrassrootsHealth Cohort, 2009-2014 (N = 844)



Frequency Distribution of 25(OH)D among Cases and Non Cases of Breast Cancer, GrassrootsHealth Cohort, 2009-2014 (N=844)



- 5 cases (3.9 per 1,000 person years)
- 4 below 50 ng/ml
- 1 above 50 ng/ml

- Hazard ratio of breast cancer for those with serum 25(OH)D <50 ng/ml was 5.1 (95%CI=0.56, 46.3) compared to ≥ 50 ng/ml, adjusting for age and BMI.

Conclusions

- Trend suggests that serum 25(OH)D concentrations from 50-80 ng/ml may provide additional benefit in prevention of breast cancer.
- The median 18-month follow-up may have limited the possibility of finding statistical significance. The study will be continued to obtain larger sample size and power.