



Ain Shams University
Faculty of Science
Biochemistry Department



Validation of biomarkers for risk of cardiovascular diseases in hemodialysis patients

A Thesis

Submitted for the degree of Master of Science as a partial fulfillment for requirements of the Master Degree of Science

Presented by

Marwa Abdel Samai Mohamed

(B.Sc. of Biochemistry, 2002)

Under Supervision of

Dr. Nadia Y.S. Morcos

Professor of Biochemistry
Biochemistry Department
Faculty of Science
Ain Shams University

Dr. Emam A. Latif Waked

Professor of Nephrology
Nephrology Department
Theodor Bilharz Research Institute

Dr. Eman Mohamed Saleh

Assistant Professor of Biochemistry
Biochemistry Department
Faculty of Science
Ain Shams University

2017

Introduction

Review
Of
the Literature

*Subjects
and
Methods*

Results

Discussion

References

Conclusion

Abstract

*Aim
Of
The Work*

Summary

DECLARATION

This thesis has not been submitted in this or any other university.

Marwa Abdel Samai Mohamed

BIOGRAPHY

Name: Marwa Abdel Samai Mohamed

Date and place of birth: 4/7/1980, Cairo, Egypt.

Date of graduation: May, 2002.

Degree awarded: B.Sc. of Biochemistry, 2002.

Grade: Very good.

Date of registration: Jan, 2011

Supervisors:

1. <i>Prof.Dr. Nadia Y.S. Morcos</i>	Professor of Biochemistry Biochemistry Department Faculty of Science Ain Shams University
2. <i>Prof.Dr. Emam Abdel Latif Waked</i>	Professor of Nephrology Nephrology Department Theodor Bilharz Research Institute
3. <i>Dr. Eman Mohamed Saleh</i>	Assistant Professor of Biochemistry Biochemistry Department Faculty of Science Ain Shams University

DEDICATION

My deepest gratitude and thanks to Allah the most merciful for guiding me through, and giving me the strength to complete this work with the way it is.

I would like to dedicate this work to the soul of my father and to all my family who presented a great moral support to achieve this work.

Marwa Abdel Samai Mohamed

ACKNOWLEDGEMENT

I am deeply indebted to ***Prof. Dr. Nadia Y.S. Morcos***, Professor of Biochemistry, Faculty of science, Ain Shams University, for helping me choosing the delightful subject of this work and for her endless support and sincere advice. It has been an honor and privilege to work under her generous supervision.

I would also like to express my sincere gratitude to ***Prof. Dr. Emam Abdel Latif Waked***, Professor of Nephrology, Nephrology Department, Theodor Bilharz Research Institute, for his close supervision, his patience and continuous encouragement.

I wish to express my deepest thanks to ***Dr. Eman Mohamed Saleh***, Assistant professor of Biochemistry, Faculty of Science, Ain Shams University, for her guidance, valuable help, kind directions, generous support and friendly attitude.

Last but not least, I would like to thank all the staff of the Biochemistry Department, Faculty of Science, Ain Shams University, Theodor Bilharz Institute, El Nasr-Helwan clinic, and everyone who shared in the successfulness of this work.

Marwa Abdel Samai Mohamed