سامية محمد مصطفى

شبكة المعلومات الجامعية

# بسم الله الرحمن الرحيم


سامية محمد مصطفى

شبكة المعلومات الجامعية


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# التوثيق الالكتروني والميكروفيلم


شبكة المعلومات الجامعية

سامية محمد مصطفى

# جامعة عين شمس

## التوثيق الإلكتروني والميكروفيلم

# قسم

## نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات


# يجب أن

## تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

سامية محمد مصطفى

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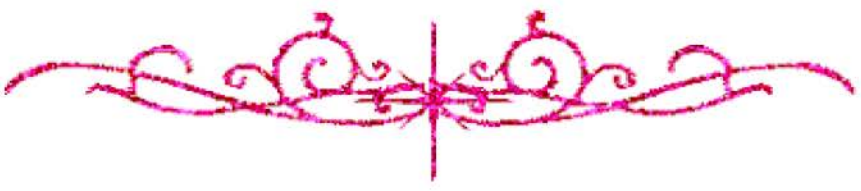
# بعض الوثائق الأصلية تالفة



سامية محمد مصطفى

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# بالرسالة صفحات لم ترد بالأصل

# Assessment of Dual Blockade of the Renin-Angiotensin System in Patients with Type II Diabetic Nephropathy

A Thesis
Submitted for the partial fulfillment
of Master Degree in Pharmaceutical Sciences
*(Clinical Pharmacy)*


**By**
**Gehad Abdul Rahman El Nakeeb (B.Sc)**

**Supervisors**

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Associate Professor
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Faculty of Pharmacy,
Tanta University

**Dr. Mohammed Y. Abdel Aziz**
Associate Professor
of Internal Medicine,
Faculty of Medicine,
Mansoura University

Clinical Pharmacy Department
Faculty of Pharmacy
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بسم الله الرحمن الرحيم

قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا
عَلَّمْتَنَا إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ

صدق الله العظيم

البقرة آية: (٣٢)

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# Acknowledgments

*I am deeply indebted to my supervisor* **Porf. Dr. Mohsen A. Hedaya,** *Associate Professor of Clinical Pharmacy Department, Faculty of Pharmacy, Tanta University, whose sincere guidance, valuable instructions, and immense assistance have remarkable influence throughout the entire time of the work and of writing the thesis.*

*My grateful and sincere thanks are due to* **Prof. Dr Mohammed Y. Abdel Aziz,** *Associate Professor of Internal Medicine Department, Faculty of Medicine, Mansoura University, for his constant encouragement and support and for his kind help during the accomplishment of this work.*

*I would like to express my great thanks and appreciation to* **Dr. Saher K. Hegazy,** *Lecturer of Clinical Pharmacy Department, Faculty of Pharmacy, Tanta University, for her revision of the thesis.*

*I wish to extend my warm thanks to all staff members of the endocrinology department, Specialized Internal Medicine Hospital, Mansoura University, for their help and cooperation.*

# Table of Contents

# List of Abbreviations

| | |
|---|---|
| **AI** | Angiotensin I |
| **AII** | Angiotensin II |
| **ACE** | Angiotensin converting enzyme |
| **ACE-I** | Angiotensin converting enzyme inhibitor |
| **ADA** | American diabetes association |
| **AGE** | Advanced glycosylation end products |
| **ALLHAT** | The antihypertensive and lipid lowering treatment to prevent heart attack trial |
| **AR** | Aldose reductase |
| **AIIRB** | Angiotensin II receptor blocker |
| **AT1** | Angiotensin II type 1 receptor |
| **AT2** | Angiotensin II type 2 receptor |
| **BENEDICT** | Bergamo nephrologic diabetes complication trial |
| **BP** | Blood pressure |
| **CALM** | The candesartan and lisinopril microalbuminuria study |
| **CARDS** | The collaborative atrovastatin diabetes study |
| **CCB** | Calcium channel blocker |
| **CKD** | Chronic kidney disease |
| **DCCT** | Diabetes control and complication trial |
| **CHARM** | Candesartan in heart failure- assessment of reduction in mortality and morbidity program |
| **CTGF** | Connective tissue growth factor |
| **CV** | Cardiovascular |
| **DN** | Diabetic nephropathy |
| **ECM** | Extracellular matrix |
| **ESRD** | End stage renal disease |
| **ETs** | Endothelins |
| **ET-1** | Endothelin-1 |
| **GFAT** | Glutamine fructose-6 phosphate amidotransferase |
| **GFR** | Glomerular filtration rate |
| **GH** | Growth hormone |
| **HbA1c** | Glycosylated haemoglobin |