شبكة المعلومات الجامعية

التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم

HANAA ALY

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

HANAA ALY

شبكة المعلومات الجامعية

التوثيق الإلكتروني والميكروفيلم

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

HANAA ALY

Evaluation of Interleukine17 and Transforming growth factor-beta in Hepatitis C Patients

Thesis submitted to Biochemistry Department

Faculty of Science

Ain Shams University

In partial fulfillment of the requirements for the degree of Master of Science

By

Walaa Kamal Mohamed

Supervised by

Prof. Dr. Shadia Abd El-Hamid Fathy

Professor of Biochemistry
Faculty of Science
Ain Shams University

Prof. Dr. Raafat Atta Ibrahim

Professor of Hepatology and Gastroenterology
Theodor Bilharz Research institute

Dr. Marwa G.A. Hegazy

Assist. Professor of Biochemistry
Faculty of Science
Ain Shams University

(2021)

بسم الله الرحمن الرحيم

قالوا

سبحانك لا علم لنا
إلا ما علمتنا إنك أنت
العليم الحكيم

صدق الله العظيم

سورة البقرة الآية: ٣٢

اللهم إني أسألك

علما نافعا

ورزقا طيبا

وعملا متقبلا

Approval sheet

Name of candidate / **Walaa Kamal Mohamed.**

Title of the thesis **/ Evaluation of Interleukine17 and Transforming growth factor-beta in Hepatitis C Patients.**

This thesis has been approved for submission by:

Supervisors

Prof. Dr. Shadia Abd El-Hamid Fathy

Professor of Biochemistry, Faculty of Science, Ain Shams University

Prof. Dr. Raafat Atta Ibrahim

Professor of Hepatology and Gastroenterology, Theodor Bilharz Research institute.

Dr. Marwa G.A. Hegazy

Assist. Professor of Biochemistry, Faculty of Science Ain Shams University.

Examiners committee

Prof. Dr. El Said Mohamed El Said Mahdy

Professor of Biochemistry, Faculty of Science, Helwan University.

Prof. Dr. Zakaria Abed Elhaliem Elkhiat

Professor of medical Biochemistry, National Research Centre

Prof. Dr. Shadia Abd El-Hamid Fathy

Professor of Biochemistry, Faculty of Science, Ain Shams University

Ain Shams University
Faculty of Science
Biochemistry
Department

Biography

Name:	Walaa Kamal Mohamed.
Degree Awarded:	B.Sc. in Biochemistry.
Faculty:	Faculty of Science.
University:	Ain Shams University.
Specialty:	Biochemistry – chemistry.
Date of Graduation	June 1999.
Grade:	Good
Diploma:	Physiology/Biochemistry diploma / Faculty of Science/ Suez Canal University/2010.

Declaration

I declare that thesis has been composed by myself and the work which is recorded has been done by myself.

This thesis has not been submitted for a degree at this university or any other one.

Walaa Kamal Mohamed Elbanany.

ACKNOWLEDGMENT

First of all, I should thank **"Allah",** the most Gracious, The most Beneficial and the most Merciful for his help and guidance in my whole life and throughout this study.

I would like to express my sincere appreciation and deepest gratitude to **Prof. Dr. Shadia Abd El-Hamid Fathy**, Professor of Biochemistry, Faculty of Science, Ain Shams University, the person who gave me the honor by reading every word written in this thesis. I thank her for her perpetual support and guidance, fruitful discussion and profound reviewing of the results and discussion of the manuscript.

I am also grateful to **Prof. Dr. Raafat Atta Ibrahim,** Professor of hepatology and gastroenterology Theodor Bilharz Research institute, for suggesting the point of the study providing the facilities necessary for the experimental work and his continuous help and encouragement.

Deep thanks are also due to **Dr. Marwa G.A. Hegazy,** Assist. Professor of Biochemistry, Faculty of Science, Ain Shams University, for her kind, sincere, valuable instructions, careful reading and unlimited advisement, encouragement and criticism throughout the whole work.

Special thanks are also due to my Family for their encouragement.

CONTENTS