بسم الله الرحمن الرحيم

MONA MAGHRABY

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

MONA MAGHRABY

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

MONA MAGHRABY

Comparative Efficacy of Intravitreal Aflibercept, Bevacizumab and Ranibizumab for Treatment of Macular Oedema Secondary to Central Retinal Vein Occlusion

Systematic Review

For Partial Fulfillment of Master Degree in Ophthalmology

By

Noura Hashem Hashem

Bachelor of medicine and surgery Ain shams University

Supervised By

Prof. Dr. Abd El Rahman Gaber Salman

Professor of Ophthalmology
Faculty of Medicine Ain Shams University

Dr. Weam Mohamed Ebeid

Assistant Professor of Ophthalmology
Faculty of Medicine Ain Shams University

Dr. Noureldin Hussein Abozeid

Lecturer of Ophthalmology
Faculty of Medicine Ain Shams University

Faculty of Medicine
Ain Shams University
2021

سورة البقرة الآية: ٣٢

Acknowledgment

First and foremost, I feel always indebted to
ALLAH, *the Most Kind and Most Merciful.*

I'd like to express my respectful thanks and profound gratitude to ***Prof. Dr. Abd El Rahman Gaber Salman,*** *Professor of Ophthalmology, Faculty of Medicine Ain Shams University for his keen guidance, kind supervision, valuable advice and continuous encouragement, which made possible the completion of this work.*

I am also delighted to express my deepest gratitude and thanks to ***Dr. Weam Mohamed Ebeid,*** *Assistant Professor of Ophthalmology, Faculty of Medicine Ain Shams University, for her kind care, continuous supervision, valuable instructions, constant help and great assistance throughout this work.*

I am deeply thankful to ***Dr. Noureldin Hussein Abozeid,*** *Lecturer of Ophthalmology, Faculty of Medicine Ain Shams University, for his great help, active participation and guidance.*

Noura Hashem

List of Contents

List of Abbreviations

Abb.	Full term
AMD	Age related macular degeneration
Ang-2	Angiopoietin-2
Anti-VEGF	Antivascular endothelial growth factor
BCVA	Bestcorrected visual acuity
BRVO	Branch retinal vein occlusion
CRA	Central retinal artery
CRT	Central retinal thickness
CRV	Central retinal vein
CRVO	Central retinal vein occlusion
DCP	Deep capillary plexus
DME	Diabetic macular edema
DRIL	Disorganization of the retinal inner layers
ETDRS	Early Treatment Diabetic Retinopathy Study
EZ	Ellipsoid zone
FA	Fluorescein angiography
FAZ	Fovea avascular zone
FcRn	Neonatal Fc Receptor
FDA	Food and Drug Administration
IL	Interleukin
ILM	Inner limiting membrane
ME	Macular edema
n-AMD	Neovascular age related macular degeneration
NPAS	Non-perfusion areas
NVD	Neovascolarization of the disc
NVE	Neovascularization elsewhere

List of Abbreviations Cont...

Abb.	Full term
OCT	Optical coherence tomography
OCTA	Optical coherence tomography angiography
OVCS	Optic disc venous collaterals
PIGF	Placenta growth factor
PK	Population pharmacokinetic
PRN	Pro re nata
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-analyses
RCT	Randomized control trials
RVO	Retinal vein occlusion
SAES	Serious adverse events
SCP	Superficial capillary plexus
VA	Visual acuity
VEGF	Vascular endothelial growth factor

List of Tables

List of Tables Cont...

List of Figures

List of Figures Cont...

List of Figures Cont...

Fig. No.	Title	Page No.