

**EFFECTIVENESS AND DIRECT MEDICAL COST ANALYSIS OF
METFORMIN-BASED DUAL COMBINATION THERAPY FOR TYPE 2
DIABETES MELLITUS OUTPATIENT**

THESIS

Submitted to fulfill partial requirements in achieving the Master of Pharmacy
Management Degree (M.Pharm.)

Master of Pharmacy Management



I Kadek Suardiana

23/525417/PFA/02329

**POSTGRADUATE PROGRAM
MASTER PROGRAM OF PHARMACY MANAGEMENT
FACULTY OF PHARMACY
UNIVERSITAS GADJAH MADA
YOGYAKARTA**

2024

APPROVAL PAGE

Thesis

EFFECTIVENESS AND DIRECT MEDICAL COST ANALYSIS OF METFORMIN-BASED DUAL COMBINATION THERAPY FOR TYPE 2 DIABETES MELLITUS OUTPATIENT

prepared and written by

I Kadek Suardiana
23/525417/PFA/02329

Has been defended in front of Board of Thesis Examiners on 9 October 2024

Supervisor



Dr. apt. Dwi Endarti, M.Sc.

Co-Supervisor

Tuangrat Phodha

Asst. Prof. Tuangrat Phodha, B.Pharm, PhD.

Acknowledged by,
The Faculty of Pharmacy
Universitas Gadjah Mada



Prof. Dr. apt. Satibi, M.Si.

The Board of Thesis Examiner:

Chair : Prof. Dr. apt. Tri Murti Andayani, Sp.FRS

Member :

1. Dr. apt. Nanang Munif Yasin, M.Pharm.

2. Dr. apt. Dwi Endarti, M.Sc.

3. Asst. Prof. Tuangrat Phodha, B.Pharm, PhD.



Tuangrat Phodha