



شبكة المعلومات الجامعية  
التوثيق الإلكتروني والميكرو فيلم

# بسم الله الرحمن الرحيم



**HANAA ALY**



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# شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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# 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**



A THESIS FOR PARTIAL FULFILMENT OF M.D. DEGREE IN  
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**Comparison between RECIST and PERCIST  
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cases of Lymphoma**

**Postgraduate Student:** Marwa Mohammed Hasan Tawfik

**Degree:** M.B.B. Ch, M.Sc Radiology

**DIRECTOR:** Ahmed Mohamed Monib

**Academic Position:** Professor of Radiodiagnosis

**Department:** Radiodiagnosis department, Ain Shams University

**Co-DIRECTOR:** Aya Yassin Ahmed

**Academic Position:** Assistant Professor

**Department:** Radiodiagnosis department, Ain Shams University

**Co-DIRECTOR:** Susan Adil Ali

**Academic Position:** Lecturer

**Department:** Radiodiagnosis department, Ain Shams University

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# List of Abbreviations

Abb.	Full term
• AC.....	Attenuation correction
• BAT.....	Brown adipose tissue
• bFGF.....	Basic fibroblast growth factor
• CMR.....	Complete metabolic response
• CR.....	Complete response
• CT... ..	Computed tomography
• DLBCL....	Diffuse Large B-Cell Lymphomas
• EANM ....	European Association of Nuclear Medicine
• EBV.....	Epstein-Barr virus
• EORTC....	European Organization for Research and Treatment of Cancer
• FISH.....	Fluorescence in situ hybridization
• GALT.....	Gastric associated lymphoid tissue
• GLUT.....	Glucose transporters
• HIV... ..	Human Immunodeficiency Virus
• HL .....	Hodgkin lymphoma
• HPF .....	High-power fields
• HRCT.....	High-resolution CT
• ILSG.....	International Lymphoma Study Group
• LP .....	Lymphocytic predominant
• MALT .....	Mucosa associated lymphoid tissue
• MC ... ..	Mixed cellularity
• MF.....	Mycosis fungoides
• NCI.....	National Cancer Institute
• NHL.....	Non-Hodgkin lymphoma
• NK .....	Natural killer
• NSCHL....	Nodular sclerosis classical Hodgkin lymphoma
• PCNSL.....	Primary CNS lymphoma
• PD.....	Progressive disease
• PDGF.....	Platelet derived growth factor
• PET.....	Positron Emission Tomography
• PERCIST...	Positron Emission tomography Response Criteria in Solid Tumors
• PMBL.....	Primary mediastinal B cell lymphoma
• PMD.....	Progressive metabolic disease

- PMR..... Partial metabolic response
- PMT.....Photomultiplier tubes
- PR.. .....Partial Response
- REAL.....Revised European-American Classification of Lymphoid
- RECIST....Response Evaluation Criteria In Solid Tumors
- rIPI.....Revised international prognostic index
- RS.....Reed Sternberg cells
- SD.....Stable disease
- SMD.....Stable metabolic disease
- SPSS .....Statistical package for social science
- SS..... ..Sézary syndrome
- SUL.....Standardized uptake corrected to lean body mass
- SUV..... Standardized uptake value
- TCL ..... T-Cell lymphoma
- VEGF.....Vascular endothelial growth factor
- VOI.....Volume of interest
- WHO.....World Health Organization

## INTRODUCTION

**L**ymphomas have had a somewhat different approach to response assessment than solid tumours. Briefly, residual or even bulky masses after therapy completion are frequent in both Hodgkin disease and non-Hodgkin lymphoma. Masses often do not regress completely after adequate (curative) treatment because of residual fibrosis and necrotic debris. (*Baratto et al. , 2016* )

In patients with lymphoma, anatomic response criteria often underestimate the chemotherapeutic effect.( *Maffione et al , 2015*)

RECIST and RECIST 1.1 are the standard anatomic response assessments currently accepted by most regulatory agencies, however this anatomic processes do not have the ability to detect functional changes in tumours resulting from early effective treatment. Hence, Functional imaging with PET offered major advantages.( *Moghbel et al, 2016*)

PET assessments of treatment response with 18F-FDG appear to have substantial biologic relevance when obtained at the end of treatment, at mid treatment, or soon after treatment is started. Tracer uptake by a tumour is expected to decline over time with effective treatment. Thus, capturing and reporting the fractional change in SUV from the starting value and when the