



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

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تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



HANAA ALY



A retrospective analysis of epidemiology and clinical outcomes of patients with adult gliomas treated in Ain Shams clinical oncology department in the period from 2017 till 2020.

Thesis

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By

Hadeer Hesham Mostafa Mohamed

M.B., B.Ch., Ain Shams University

Supervised by

Prof. Dr. Lobna Rashed Ezz El Arab

*Professor at Clinical Oncology and Nuclear Medicine
Faculty of Medicine, Ain Shams University*

Dr. Mai Ezz El Din

*Assistant Professor at Clinical Oncology and Nuclear Medicine
Faculty of Medicine, Ain Shams University*

Dr. Ahmed Said Ibrahim

*Lecturer at Clinical Oncology and Nuclear Medicine
Faculty of Medicine, Ain Shams University*

Dr. Ghada Refaat Meckawy

*Lecturer at Clinical Oncology and Nuclear Medicine
Faculty of Medicine, Ain Shams University*

*Faculty of Medicine
Ain Shams University*

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

سبحانك لا علم لنا
إلا ما علمتنا إنك أنت
العليم العظيم

صدق الله العظيم

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List of Abbreviations

Abb.	Full term
<i>MLH1</i>	<i>MutL homolog 1</i>
<i>MSH2</i>	<i>MutS homolog 2</i>
<i>MSH6</i>	<i>MutS homolog 6</i>
<i>PMS2</i>	<i>Mismatch repair endonuclease PMS2</i>
<i>HNPCC</i>	<i>Hereditary nonpolyposis colorectal cancer</i>
<i>TERT</i>	<i>Telomerase reverse transcriptase</i>
<i>CDKN2A/CDKN2B</i>	<i>Cyclin-dependent kinase inhibitor 2A/ Cyclin-dependent kinase 4 inhibitor B</i>
<i>RTEL1</i>	<i>Human telomere length regulator</i>
<i>PHLDB1</i>	<i>Pleckstrin homology-like domain family B member 1</i>
<i>EGFR</i>	<i>Epidermal growth factor receptor</i>
<i>NGS</i>	<i>Next-generation sequencing</i>
<i>ATRX mutation</i> ..	<i>The chromatin regulator gene, alpha- thalassemia/mental retardation syndrome X-linked (ATRX)</i>
<i>IDH</i>	<i>Isocitrate dehydrogenase</i>
<i>SEGA</i>	<i>Subependymal giant cell astrocytoma</i>
<i>OS</i>	<i>Overall survival</i>
<i>PFS</i>	<i>Progression free survival</i>
<i>PCV</i>	<i>Procarbazine, lomustine, and vincristine</i>
<i>GTR</i>	<i>Gross total resection.</i>
<i>MSR</i>	<i>Maximal safe resection.</i>
<i>STR</i>	<i>Subtotal resection.</i>
<i>TMZ</i>	<i>Temozolomide</i>

List of Abbreviations *(Cont...)*

Abb.	Full term
<i>MGMT</i>	<i>Methyl-guanine methyl transferase</i>
<i>CNS</i>	<i>Central nervous system</i>
<i>WHO</i>	<i>World Health Organization</i>
<i>ECOG P.S.</i>	<i>Eastern Cooperative Oncology Group performance status.</i>
<i>MRS</i>	<i>Magnetic resonance spectroscopy</i>
<i>ENCR</i>	<i>European Network of Cancer Registries.</i>
<i>UK</i>	<i>United Kingdom</i>
<i>CT</i>	<i>Computed tomography</i>
<i>MRI</i>	<i>Magnetic resonance imaging</i>
<i>IARC</i>	<i>The International Agency for Research on Cancer</i>
<i>TP53</i>	<i>Tumor protein 53</i>
<i>LFS</i>	<i>The Li-Fraumeni syndrome</i>
<i>IgE</i>	<i>Immunoglobulin E</i>
<i>ICT</i>	<i>Increased intracranial tension.</i>
<i>CSF</i>	<i>Cerebrospinal fluid</i>
<i>FLAIR</i>	<i>Fluid-attenuated inversion recovery</i>
<i>NOS</i>	<i>Non-otherwise specified</i>
<i>FISH</i>	<i>Fluorescence in situ hybridization</i>
<i>PXA</i>	<i>Pleomorphic Xanthoastrocytoma</i>
<i>dMMR</i>	<i>Mismatch repair deficiency</i>
<i>ORR</i>	<i>Overall response rate</i>
<i>EORTC</i>	<i>the European Organisation for Research and Treatment of Cancer</i>

List of Abbreviations *(Cont...)*

Abb.	Full term
<i>RCTs</i>	<i>Randomized controlled trials.</i>
<i>NCRP</i>	<i>National Council in Radiation Protection and Measurements</i>
<i>KPS</i>	<i>Karnofsky Performance Status</i>
<i>mTOR</i>	<i>Mammalian target of Rapamycin.</i>
<i>GTR</i>	<i>Gross total resection.</i>
<i>HR</i>	<i>Hazard ratio.</i>

INTRODUCTION

Gliomas are the most common primary malignant brain tumors in adults. The term refers to tumors that have histologic features similar to normal glial cells (astrocytes and oligodendrocytes). Glioma comprises a wide spectrum of tumors with varying biologic aggressiveness (**Schwartzbaum *et al.*, 2006**).

The classification of glioma has developed over time. Historically, WHO (world health organization) has classified glioma into low-grade glioma (grade I-II) and high grade glioma (grade III-IV), based on the growth pattern of these tumors (**Louis *et al.*, 2016a**). Starting from 2016, WHO edition has incorporated the molecular features along with the hisopathologic characteristics in the classification of glioma, this has highly impacted the classification of oligodendroglioma and astrocytoma that are now categorized as diffuse glioma based not only on growth pattern and behaviour but also IDH (Isocitrate dehydrogenase) molecular status (**Capper *et al.*, 2018**).

A new WHO classification was issued in mid-2021. The fifth WHO classification introduces major changes that incorporates additional molecular approaches, as those discussed in the Consortium to Inform Molecular and Practical Approaches to CNS Tumor Taxonomy (cIMPACT) updates one through seven. It has also included changes in nomenclature; the use of the term “type” and “subtype” instead of “entity” and