

# بسم الله الرحمن الرحيم



HOSSAM MAGHRABY



# شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم



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# جامعة عين شمس

## التوثيق الإلكتروني والميكروفيلم

### قسم

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# **The prognostic utility of long non-coding RNAs in acute myeloid leukemia**

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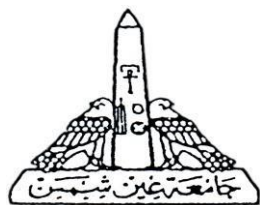
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# DEDICATION

*I dedicate this thesis to the cancer patients and appreciation to my beloved father, and my little sweetie daughter, my family, my friends, and consultants at Hematology and Bone Marrow Transplantation unit, Nasser Institute for Research and Treatment, for their time, kind help and support during conduction of this work.*

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*Mona Ali Mohammed Hola*



## List of abbreviations

Abbreviation	Full name
+8	Trisomy 8
+12	Trisomy 12
ABL	Acute Basophilic Leukemia
ALL	Acute Lymphocytic Leukemia
AML	Acute Myeloid Leukemia
AOX2P	Aldehyde Oxidase 2 Pseudogene
APL	Acute Promyelocytic Leukemia (Aml-M3)
APMF	Acute Panmyelosis With Myelofibrosis
ara-C	Arabinofuranosyl Cytidine
AUL	Acute Undifferentiated Leukemia
BM	Bone Marrow
CA	Cytogenetically Abnormal AML
CD	Cluster Of Differentiation
CEBPA	Ccaat/Enhancer-Binding Protein Alpha
ceRNA	Competing Endogenous RNA
CI	Confidence Interval
cis-lncRNA	Cis-Acting Long Non Coding RNA
CLL	Chronic Lymphocytic Leukemia
CML	Chronic Myeloid Leukemia
CN-AML	Cytogenetically Normal AML
CR	Complete Remission
CRNDE	Colorectal Neoplasia Differentially Expressed
del	Deletion
EDTA	Ethylenediaminetetracetic Acid
EFS	Event-Free Survival
ELN	European Leukemia Net
eRNAs	Enhancer Derived RNAs
FAB	French-American-British
FISH	Fluorescence In Situ Hybridization
FLT3	Fms-Like Tyrosine Kinase 3

FLT3-ITD	Fms-Like Tyrosine Kinase 3-Internal Tandem Duplication
GAPDH	Glyceraldehyde 3-Phosphate Dehydrogenase
G-CSF	Granulocyte-Colony Stimulating Factor
Hb	Hemoglobin
IDA	Idarubicin
IDAC	Intermediate Dose Ara-C
inv	Inversion
IPA	Ingenuity Pathway Analysis
IQR	Interquartile Range
ISCN	International System For Human Cytogenetic Nomenclature
ITD	Internal Tandem Duplication
IV	Intravenous
lincRNAs	Long Intergenic Noncoding RNAs
lncRNAs	Long Non-Coding RNAs
M4Eo	M4 With Eosinophilia
MDS	Myelodysplastic Syndrome
MDS/MPN	Myelodysplastic/Myeloproliferative Neoplasm
MiRNAs	microRNAs
MLL	Mixed-Lineage Leukemia Gene
MPAL	Mixed Phenotype Acute Leukemia
NATs	Natural Antisense Transcript
ncRNAs	Noncoding RNAs
NOS	Not Otherwise Specified
NPM1	Nucleophosmin-1 Gene
OR	Odds Ratio
OS	Overall Survival
p	Short Arm Of The Chromosome
PB	Peripheral Blood
Plt	Platelets
PO	Per Os, By Latin Oral Administration
q	Long Arm Of The Chromosome
qRT-PCR	Quantitative Reverse Transcriptase Polymerase Chain Reaction

RNA pol II	RNA-Polymerase II
SD	Standard Deviation
SPSS	Statistical Package For The Social Sciences
trans-lncRNA	Trans-Acting Long Non Coding RNA
TUCRNAs	Transcribed-Ultraconserved RNAs
WBC	White Blood Cells
WHO	World Health Organization's
$\chi^2$	Pearson's Chi-Square