

**EFFECT OF METHYLATION OF P<sup>15</sup>INK<sup>4B</sup>  
GENE IN ADULT AND CHILDREN ACUTE  
LYMPHOBLASTIC LEUKEMIA AND ITS  
PROGNOSTIC VALUE**

Thesis

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**Clinical And Chemical Pathology**

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قَالُوا سُبْحَانَكَ  
لَا عِلْمَ لَنَا  
إِلَّا مَا عَلَّمْتَنَا  
إِنَّكَ أَنْتَ  
الْعَلِيمُ الْحَكِيمُ

صدق الله العظيم  
سورة البقرة الآية  
(٣٢)

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## List of abbreviations

Abbrev.	Meaning
AIF:	Apoptosis inducing factor
AL:	Acut leukemia
ALL:	Acute lymphoblastic leukemia
AML:	Acute myeloid leukemia
AP:	Acid phosphatase
APL:	Acute promyelocytic leukemia
APS:	Ammonium persulfate
ATM:	Ataxia telangiectasia mutated
B-ALL:	Bcell acute lymphoblastic leukemia

BM:	Bone marrow
CAE:	Chloroacetate esterase
CBC:	complete blood count
CD:	Cluster of differentiation
CDKs:	Cyclin dependent kinases
CDKN $\gamma$ B:	Cyclin dependent kinase inhibitor $\gamma$ B.
CGH:	Comparative genomic hybridization

### List of abbreviations

Abbrev.	Meanin
CKIs:	Cyclin dependent kinase inhibitors
CML:	Chronic myeloid leukemia
CNS:	Central nervous system
CPG:	Cytosine guanosine pair
CSF:	Cerebrospinal fluid
CSF- $\gamma$ :	Colony stimulating factor
del:	Deletion
DFS:	Disease free survival
DI:	DNA index

DIC:	Disseminated intravascular coagulation
DNA:	deoxyribonucleic acid
DNMTs:	DNA methyltransferase
EDTA:	Ethylene diamine tetra acidic acid
FAB:	French American British classification
FISH:	Fluorescent in situ hybridization
G <sub>1</sub> , G <sub>2</sub> :	Gap 1, gap 2

### List of abbreviations

<b>Abbrev.</b>	<b>Meaning</b>
Hb:	Hemoglobin
HCC:	Human cell carcinoma.
HIV-1:	Human immunodeficiency virus-1
HTLV-1:	Human Tcell leukemia/lymphoma virus
IH:	immunohistochemical staining
INK4B:	inhibitor of the kinase 4
JAK:	Janus activated kinase
LDH:	Lactate dehydrogenase

LRP:	Lung resistance related protein
MDS:	Myelodysplastic syndrome
MDR:	Multidrug resistance
MgCl <sub>2</sub> :	Magnesium chloride
MGUS:	Monoclonal gammopathy of undetermined significance.
MM:	Multiple myeloma.
INF:	Interferon

### List of abbreviations

<b>Abbrev.</b>	<b>Meaning</b>
MPF:	Mitosis promoting factor
MPO:	Myeloperoxidase
MRP:	Multidrug resistance-associated protein
MSP:	Methylation specific PCR
OS:	Overall survival
P:	Short arm
PCR:	Polymerase chain reaction

PH:	Philadelphia
q:	Long arm
Rb:	Retinoblastoma
RFS:	Relapse free survival
RT-PCR:	Reverse transcriptase polymerase chain reaction
SBB:	Sudan black B
SBH:	Southern blot hybridization
SDS:	Sodium dodecylsulphate

### List of abbreviations

<b>Abbrev.</b>	<b>Meaning</b>
SOCS:	Suppressor of cytokine stimulation
SPF:	Synthetic promoting factor
t:	Translocation
Taq:	Thermus aquatic
T-ALL:	Tcell Acute lymphoblastic leukemia
TBE:	Tris borate EDTA.
TCR:	T cell receptor