

# **KARYOTYPING AS A PROGNOSTIC CRITERION IN PEDIATRIC SOLID TUMORS**

## **THESIS**

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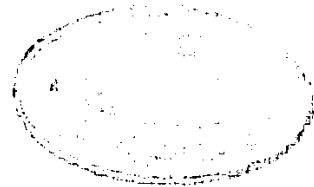
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قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا  
عَلَّمْتَنَا إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ .  
سَدَقَ اللَّهُ النَّبِيُّ  
البقرة - ٣٢ -



***Dedication***

*To my beloved parents  
"Everything I do,  
I do it for you"*



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## SYMBOLS AND ABBREVIATIONS

Arrow (→)	From → to
b	Break
Cen	Centromere
Colon, single (:)	Break
Colon, double (::)	Break and reunion
cs	Chromosome
del	Deletion
der	Derivative chromosome
d mins	Double minute
dup	Duplication
EBV	Epstein-Barr virus
ESD	Esterase D enzyme
HD	Hodgkin's disease
HSRs	Homogeneously staining regions
HVA	Homovanillic acid
i	Isochromosome
inv	Inversion
LD	Lymphocyte depletion
LP	Lymphocyte predominance
LOH	Loss of heterozygosity
MC	Mixed cellularity
minus (−)	Loss
NHL	Non Hodgkin's lymphoma
NS	Nodular sclerosis
NSE	Neuro-specific enolase
p	Short arm of chromosome

## **ii      Symbols and Abbreviation**

plus (+)	Gain
q	Long arm
rcp	Reciprocal
RB	Retinoblastoma
RMS	Rhabdomyosarcoma
S	Satellite
semicolon (;)	Separate regions i
t	Translocation
ter	Terminal
VIP	Vasodilator
VMA	Vanillylmandelic acid
WT1	Wilms' tumor 1

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