Circulating Cell-Free Nuclear DNA in Early Diagnosis of Breast Cancer

Thesis

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List of Abbreviations

Abb.	Full term
AJCC	American Joint Committee on Cancer
AMI	Acute myocardial infarction
ATM	Ataxia telangiectasia mutated
AUC	Area under curve
BC	Breast cancer
bp	Base pairs
BSE	Breast self-exams
CA	Cancer antigen
CBE	Clinical breast examination
Ccf DNA	Circulating cell-free DNA
Ccf nDNA	Circulating cell-free nuclear DNA
cDNA	Complementary DNA
CEA	Carcinoembryonic antigen
CISH	Chromogenic in situ hybridization
CNB	Core needle biopsy
CT	Computed tomography
Ct	Threshold cycle
DCIS	Ductal carcinoma in situ
DNA	Deoxyribonucleic acid
DV	Dengue Virus
ECLIA	Electrochemiluminescence immunoassay
EDTA	Ethylenediaminetetraacetic acid
ELISA	Enzyme linked immunosorbent assay
ER	Estrogen receptors
FISH	Fluorescent in situ hybridization
FN	False negative

Abb.	Full term
FNAB	Fine needle aspiration biopsy
FNAC	Fine needle aspiration cytology
FP	False positive
FRET	Fluorescence resonance energy transfer
GAPDH	Glyceraldehyde 3-phosphate dehydrogenase
GIT	Gastrointestinal tract
HAMA	Human anti-mouse antibody
HER 2/neu	Human epidermal growth factor receptor 2
HPLC	High performance liquid chromatography
HRT	Hormone replacement therapy
IHC	Immunohistochemistry
IQR	Interquartile range
LCIS	Lobular carcinoma in situ
MAb	Monoclonal antibodies
MBs	Molecular beacons
MRI	Magnetic resonance imaging
NPV	Negative predictive value
OC	Oral contraceptive
PCR	Polymerase chain reaction
PET	Positron emission tomography
PPV	Positive predictive value
PR	Progesterone receptors
PTEN	Phosphatase and TENsin
qPCR	Quantitative PCR
ROC	Receiver operating characteristic
RT	Reverse transcription
RT-qPCR	Real time quantitative PCR

Abb.	Full term
SLNB	Sentinel lymph node biopsy
Sq PCR	Semiquantitative PCR
STM	Serum tumor markers
TN	True negative
TNM	Tumor- node- metastasis
TP	True positive
US	Ultrasonography

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Introduction

Aim of the Work

Chapter One

Breast Cancer

Chapter Two

Circulating Cell-Free Nuclear DNA (ccf nDNA)

Subjects and Methods