بسم الله الرحمن الرحيم

MONA MAGHRABY

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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MONA MAGHRABY

Prognostic implication of PD-L1 expression and associated tumor infiltrating lymphocytes in metastatic breast cancer

Thesis

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List of Abbreviations

Abb.	Full term
APC	Antigen-presenting cells
ASCO	American Society of Clinical Oncology
ASIR	Age-standardized incidence rate
BCG	Bacillus Calmette-Guerin
BCSS	Breast cancer-specific survival
CD	Cluster of differentiation
CDH1	Cadherin 1 gene
CTCs	Circulating tumor cells
ctDNA	Circulating tumor DNA
CTLA-4	Cytotoxic T-lymphocyte-associated protein 4
DCIS	Ductal carcinoma in situ
DFS	Disease-free survival
EGFR	Epidermal growth factor receptor
EPCAM	Epithelial cell adhesion molecule gene
ER	Estrogen receptor
FDA	Food and Drug Administration
HDGC	Hereditary diffuse gastric cancer
HER2	Human epidermal growth factor receptor 2
HR	Hazard ratio
IDC	Invasive ductal carcinoma
IFNgamma	Interferon gamma
IHC	Immunohistochemical
IL	Interleukin
ILC	Invasive lobular carcinoma
IM	Immunomodulatory
ITC	Isolated tumor cells
KIR	Killer immunoglobulin-like receptor
KPS	Karnofsky performance status
LCIS	Lobular carcinoma in situ

List of Abbreviations Cont...

Abb.	Full term
LFS	Li-Fraumeni syndrome
MBC	Metastatic breast cancer
MHC	Major histocompatibility complex
MHT	Menopausal hormonal therapy
MINDACT	Microarray in Node-Negative Disease May Avoid Chemotherapy
MMR	Mutations in mismatch repair
NACT	Neoadjuvant chemotherapy
NK	Natural killer
NMSC	Non-melanoma skin cancer
NOS	Not otherwise specified
NSCLC	Non-small cell lung cancer
OS	Overall survival
PAM50	Predictor Analysis of Microarray 50
PD-1	Programmed cell death protein 1
PD-L1	Programmed death-ligand 1
PFS	Progression-free survival
PHTS	Phosphatase and hamartoma tumor syndrome
PLVI	Peritumoral lymphovascular invasion
PR	Progesterone receptor
PTEN	Phosphatase and tensin homolog tumor suppressor gene
RCC	Renal cell carcinoma
RR	Relative risk
RS	Recurrence Score
SEER	Surveillance, Epidemiology, and End Results
SRR	Summary RR
TCR	T cell receptor
TDLU	Terminal duct-lobular unit
Th1	T helper 1

List of Abbreviations Cont...

Abb.	Full term
Th2	T helper 2
TILs	Tumor-infiltrating lymphocytes
TMAs	Tissue microarrays
TN	Triple negative
TNBC	Triple-negative breast cancer
TNM	Tumor, Node, Metastasis
WHO	World Health Organization
WTS	Whole tissue section

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INTRODUCTION

Globally, breast cancer is the most frequently diagnosed malignancy, accounting for over a million cases diagnosed each year (1.67 million cases diagnosed per year) ***(Ferlay et al., 2015).*** In the recent National Population-Based Cancer Registry Program in Egypt, the annual age specific incidence rates for female breast cancer in Egypt was 48.8/100,000 ***(Ibrahim et al., 014).***

Breast cancer is a highly heterogeneous disease, in terms of its etiology and pathological characteristics; some cases show slow growth with excellent prognosis, while others take a highly aggressive clinical course ***(Verma et al., 2012).*** Gene expression studies have identified several distinct breast cancer molecular subtypes that differ markedly in the prognosis and the therapeutic targets they express ***(Sotiriou et al., 2003).***

Triple-negative breast cancer (TNBC) is a term that has been applied to breast cancers that are low in expression of the estrogen receptor (ER), progesterone receptor (PR), and human epidermal growth factor receptor 2 (HER2), representing about 10-20% of breast carcinomas ***(Boyle, 2012).*** TNBC usually tends to have a worse prognosis, relapse early and behave more aggressively, compared to other types of breast cancer. Unlike other subtypes (ER positive, HER2 positive), TNBC has yet no approved target treatments available, other than the administration of chemotherapy ***(Dawood, 2010).***