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Peptide vaccines in breast cancer: the immunological basis for clinical response

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Contents

Abbreviations: TAAs: tumor-associated antigens; **MUC1:** mucin 1; **HER2/neu:** human epidermal growth factor receptor 2; **CEA:** carcinoembryonic antigen; **HLA:** human leukocyte antigen; **TSA:** tumor-specific antigen **TAP:** transporter associated with antigen processing**; ER:** endoplasmic reticulum; **APCs:** antigen presenting cells; **NOX_2:** oxidases molecule Family; **MHC:** Major Histocompatibility Complex; **BCG:** Bacille Calmette-Guérin; **DC:** dendritic cell; **IL-2:** interleukin – 2; **CTLA4:** cytotoxic T lymphocyte antigen 4 receptor (immune inhibitory checkpoints molecule); **PD1:** programmed death-1 receptor; **CD28:** T cell receptor which recognizes the B7 protein; **CD4:** helper T cell receptor-associated MHC II; **CD3:** TCR protein (T lymphocyte receptor $CD4^+$ helper); **CD8:** T cell receptor associated with the MHC I; **TCR:** T cell receptor; **HLA-A:** human leukocyte antigen; **ICAM:** intercellular adhesion molecule; **B7:** T cell-associated protein; **MHC:** major histocompatibility complex; **HTL:** T helper lymphocytes; **CD - 40L:** CD-40 receptor binding; **CD – 40:** receptor binding CD-40L; **IL-R:** recombinant interleukin; **BCR:** B cell receptor; **Ig:** Immunoglobulins; **NK:**