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Synthetic Breast Cancer Peptides-Tetanus Toxoid-Montanide ISA-51 Vaccine

National Cancer Institute

Source

National Cancer Institute. *Synthetic Breast Cancer Peptides-Tetanus Toxoid-Montanide ISA-51 Vaccine*. NCI Thesaurus. Code C61076.

A cancer vaccine comprised of multiple synthetic breast cancer peptides and the adjuvant tetanus toxoid helper peptide emulsified in the adjuvant Montanide ISA-51 with immunopotential activity. Vaccination with this cancer vaccine may elicit a specific cytotoxic T-lymphocyte response against breast cancer cells. Synthetic breast cancer peptides may stimulate the immune response against cells that produce breast cancer markers such as erbB2 (HER2/neu) while tetanus toxoid helper peptide binds to class II MHC molecules as a nonspecific vaccine helper epitope, resulting in a long-term immunopotential by increasing the helper T-cell response. Montanide ISA-51, also known as incomplete Freund's adjuvant or IFA, is a stabilized water-in-oil emulsion adjuvant containing mineral oil with mannide oleate added as a surfactant that non-specifically stimulates cell-mediated immune responses to antigens.