Review

Affibody molecules for molecular imaging and targeted drug delivery in the management of breast cancer

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A B S T R A C T

Breast cancer is one of the leading reasons for the morbidity and mortality of cancer related death globally. The modern therapies are basically the combination of the breast-preserving surgeries or ablation with or without node biopsy or destroying the carcinoma cells adjuvant with chemotherapy, radiotherapy, hormonal or biological therapies depending upon the nature of the receptor of the cancerous cells, nature of the lymph node, as well as the tendency of the recurrence. For decade's carcinoma management suffered by the limitation of imagining, targeting and penetrability problem associated with management and cure of this deadly disease leads to unwanted chemo-toxicity and side effects. Alike other antibody mimetics, affibodies are designed with the combinatorial protein engineering approaches which are small and robust protein scaffolds retaining the favorable folding and stability. Affibody is one of the significantly important tools for imaging and diagnosis of the affinity specific over expressed proteins in the breast cancer management. The review summarizes the various affibody strategies uses in the management of breast cancer.

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