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# Anti-HER2/PBD-MA Antibody-drug Conjugate DHES0815A

National Cancer Institute

## Source

National Cancer Institute. *Anti-HER2/PBD-MA Antibody-drug Conjugate DHES0815A*.  
NCI Thesaurus. Code C155940.

An antibody-drug conjugate (ADC) consisting of a monoclonal antibody targeting human epidermal growth factor receptor 2 (ERBB2; EGFR2; HER2) linked to a DNA minor groove crosslinking agent pyrrolo[2,1- c][1,4]benzodiazepine monoamide (PBD-MA), with potential antineoplastic activity. Upon intravenous administration of ADC DHES0815A, the monoclonal antibody moiety targets and binds to HER2 expressed on tumor cells. Following receptor internalization and lysosome-mediated cleavage, the cytotoxic PBD-MA moiety is released. In turn, the imine groups of the PBD-MA moiety bind to and crosslink specific sites of DNA, resulting in DNA strand breaks, cell cycle arrest, and cell death in HER2 expressing tumor cells. HER2, a tyrosine kinase receptor, is overexpressed by many cancer cell types.