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(54) Title: PROSTATE-SPECIFIC MEMBRANE ANTIGEN ANTIBODY DRUG CONJUGATES

(57) Abstract: This invention relates to prostate-specific membrane antigen (PSMA) antibodies and antibody drug conjugates comprising at least one non-naturally-encoded amino acid. Disclosed herein are αPSMA antibodies with one or more non-naturally encoded amino acids and further disclosed are antibody drug conjugates wherein the αPSMA antibodies of the invention are conjugated to one or more toxins. Also disclosed herein are non-natural amino acid dolastatin analogs that are further modified post-translationally, methods for effecting such modifications, and methods for purifying such dolastatin analogs. Typically, the modified dolastatin analogs include at least one oxime, carbonyl, dicarbonyl, and/or hydroxylamine group. Further disclosed are methods for using such non-natural amino acid antibody drug conjugates, dolastatin analogs, and modified non-natural amino acid dolastatin analogs, including therapeutic, diagnostic, and other biotechnology uses.

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