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(54) Title: B-LYMPHOCYTE SPECIFIC AMATOXIN ANTIBODY CONJUGATES

	R_1	R_2	R_3	R_4
α-amanitin	OH	OH	NH_2	OH
β-amanitin	OH	OH	OH	OH
γ-amanitin	H	OH	NH_2	OH
ε-amanitin	H	OH	OH	OH
amanin	OH	OH	OH	H
amaninamide	OH	OH	NH_2	H
amanullin	H	H	NH_2	OH
amanullinic acid	H	H	OH	OH
γ-amanin	H	OH	OH	H
γ-amaninamide	H	OH	NH2	H

FIG. 1

(57) Abstract: The present application relates to conjugates comprising an amatoxin, a target-binding moiety wherein the target is CD37, i.e., a CD37-binding moiety, and optionally a linker linking said amatoxin and said CD37-binding moiety. The invention further relates to the synthesis of said conjugates. In addition, the invention relates to a pharmaceutical composition comprising such conjugate for use in the treatment of immune cell-, particularly B-cell and/or lymphoma associated diseases and/or malignancies.

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