Antitumor activity of monoclonal antibodies can be dramatically enhanced via alternative toxicity mechanisms. The most promising approach is the conjugation of toxins to tumor specific monoclonal antibodies, resulting in homogenous ADCs.

**INTRODUCTION**

Conjugation of Antitbody Targeted Amanitin Conjugates (ATACs)

Amanitin is a highly toxic 6-amino-4-oxopurine riboside of RNA polymerase II (RNA pol II) and thereby inhibits the cellular transcription at known toxin of the amatoxin family. Amanitin binds to the eukaryotic RNA polymerase II (RNA pol II) and inhibits the cellular transcription at the promoter of the targeted gene. ATACs (Antibody Targeted Amanitin Conjugates), comprising a new class of ADCs, Heidelberg Pharma has been focused on amanitin as an antitumor agent. ATACs (Antibody Targeted Amanitin Conjugates), comprising a new class of ADCs, Heidelberg Pharma focuses on amanitin as an antitumor agent.

In order to improve the efficacy of ATACs, amanitin was derivatized on the 6-OH or N-methylammonium variant or without 6-OH variant or without 6-OH variant.

**RESULTS**

In order to improve the efficacy of ATACs, amanitin was derivatized on the 6-OH or N-methylammonium variant or without 6-OH variant or without 6-OH variant.

**CONCLUSION**

To get insight into the relationship between structure and activity, we chemically synthesized six different linker variants and tested for their respective antibodies using maleimide chemistry, resulting in homogenous ATACs having DAR of 2.

**METHODS**

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**REFERENCES**


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