SYNTHESIS OF NOVEL AZA-BODIPY DERIVATES FOR PHOTODYNAMIC THERAPY

Tobias Zweiböhmer and Thomas Ziegler

Institute of Organic Chemistry, University of Tuebingen, 72076 Tuebingen, Germany

Photodynamic therapy has been of great interest over the past years. Our workgroup has previously published a number of promising third-generation photosensitizers, such as Phthalocyanines [1-3] and Porphyrazines [4].

Given that annulated aza-BODI PYs offer excellent photophysical properties [5], we established an accessible synthetic route to glycoconjugated aza-BODIPYs. For this, we used a triazole linkage to connect the benzoannulated aza-BODIPY core (A) with the carbohydrate moiety (B).

Using this strategy, it is possible to generate a wide variety of glycoconjugated aza-BODIPYs by variation of the applied carbohydrate-azides.