

Title (en)
ANTI-MICROBIAL PHOTODYNAMIC THERAPY

Title (de)
ANTIMIKROBIELLE PHOTODYNAMISCHE THERAPIE

Title (fr)
THÉRAPIE PHOTODYNAMIQUE ANTIMICROBIENNE

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Abstract (en)
[origin: WO2009014524A2] Antimicrobial molecular conjugates for the treatment and prevention of infectious diseases caused by pathogenic microorganisms in human and animals are provided. The key to these conjugates is a special spacer connecting at least one photosensitizer to a microorganism receptor (vector) which in turn binds selectively to the surface of a microorganism bringing about photo-destruction upon irradiation. Spacers having hydrophilic structure such as ethylene glycol units and amino carboxyl end capped ethylene glycol units must be used for linking the vector to the photosensitizer. In a preferred embodiment a spacer would have at least 3 ethylene glycol units and be end capped with a carboxyl group on one end and a amino group at the other end. The present invention effectively works to combat bacterial infection in the real patient-related environments where blood, serum and other body fluids are always present or at least nearby, of selected length and structure, in preferred embodiments, are used for linking the vector to the photosensitizer. These conjugate are found to be very effective in combating bacterial infection in the real patient-related environments where blood, serum and other body fluids are always present or a least nearby. A method of use is also provided.

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