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(54) Title: MEMBRANE INCORPORATION OF TEXAPHYRINS

(57) Abstract

Compositions having a texaphyrin-lipophilic molecule conjugate loaded into a biological vesicle and methods for imaging, diagnosis and treatment using the loaded vesicle are provided. For example, liposomes or red blood cells loaded with a paramagnetic texaphyrin-lipophilic molecule conjugate have utility as a blood pool contrast agent, facilitating the enhancement of normal tissues, magnetic resonance angiography, and marking areas of damaged endothelium by their egress through fenestrations or damaged portions of the blood vascular system. Liposomes or cells loaded with a photosensitive texaphyrin-lipophilic molecule conjugate can be photolysed, allowing for a photodynamic therapy effect at the site of lysis. Availability of red blood cells loaded with a photosensitive texaphyrin-lipophilic molecule conjugate provides a method for delivering a photodynamic therapeutic agent to a desired site with a high concentration of oxygen. By presenting the agent in this way, it is expected that a patient will experience less toxicity.