

5,20-bis(4-sulphophenyl)-10,15-bis(2-methoxy-4-sulphophenyl)-21-thiaporphyrin as a new potent sensitizer in photodynamic therapy.

Autorzy

Piotr Ziółkowski
J. Milach
Krzysztof Symonowicz
Piotr J. Chmielewski
Lechosław Latos-Grażyński
E. Marcinkowska

Rok wydania

1995

Czasopismo

Tumori

Numer woluminu

81

Strony

364-369

DOI

10.1177/030089169508100512.

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

The main purpose of the study was to investigate the effectiveness of a new photosensitizer for photodynamic therapy. 5,20-bis(4-sulphophenyl)-10,15-bis (2-methoxy-4-sulphophenyl)-21-thiaporphyrin (21-thiaporphyrin) was compared to chlorin e6 and tetra(m-hydroxyphenyl)porphyrin (m-THPP) for its ability to sensitize tumors and skin to light. Chlorin e6 and m-THPP induced a strong tumor and skin photosensitization. In contrast, the same doses of 21-thiaporphyrin produced no skin sensitization and gave approximately 10 mm tumor necrosis after light exposure, in comparison to the 5-6 mm necrosis induced by chlorin e6 or m-THPP under identical conditions. 21-Thiaporphyrin, tested as a potential photosensitizer, induced no skin sensitization even at doses as high as 7.5 mg/kg body weight. 21-Thiaporphyrin presents a high potency in tumor sensitizing, i.e. a feature required for an efficient photosensitizer in photodynamic therapy applications.

Adres publiczny

<https://doi.org/10.1177/030089169508100512>.