

**Conflict-of-interest statement:**

The following authors disclose financial relationships relevant to this publication: Koizumi N, Harada Y, Otsuji E and Takamatsu T have filed an international patent application (WO/2013/002350) for a novel imaging strategy to specifically detect accumulated protoporphyrin IX, which is cited in this review.

Signature: T Takamatsu Date: Sep .28 .2015