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## The Quest to Achieving a Concerted Cancer Treatment: Challenges in Nanotheranostics Delivery

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The complexity of cancer remains a huge obstacle to achieving an antidote, and as such the disease requires pragmatic strategies for effective treatment. Cancer theranostics is regarded as a promising approach for the future treatment of all forms of cancer. With the rapid development of nanotechnology, an intimate combination of therapy and diagnosis by a single delivery system combined with an imaging technique will obviously hold the key to early cancer diagnosis and site-specific treatment. With several biological barriers and physiological constraints, the delivery of nanotheranostics remains a challenge to researchers. A few of these theranostics are under clinical studies while others are still under development. It is expected that theranostic medicines will be fast-tracked from the bench to bedside in the next couple of years. Apparently, the expectation seems impossible unless the major challenges in site-specific delivery can be efficiently managed. Herein, we seek to offer a detailed discussion of the challenges involved in the major delivery systems employed in cancer theranostics. This review also provides specific techniques or strategies that can be used to overcome these difficulties.

### Biography

Yaw Opoku-Damoah is a postgraduate student at China Pharmaceutical University. As part of his National Service, he worked with the Import and Export Control Department of the Food and Drugs Authority, Ghana, West Africa before being awarded a Joint Chinese Government Scholarship/ Ghana Government Scholarship to pursue postgraduate studies in Pharmaceutics. His research is focused on Nanotechnology, Drug Delivery and Theranostics. He is specifically interested in the use of nanotheranostics for site-specific delivery and diagnosis. He recently published a paper in Biomaterials IF: 8.57 and has another accepted paper in press which is focused on the design of versatile delivery systems for cancer theranostics (Theranostics IF 8.022)

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