

## Accepted Manuscript

Title: Recent progress in polymer-based platinum drug delivery systems

Authors: Haihua Xiao, Lesan Yan, Elizabeth M. Dempsey, Wantong Song, Ruogu Qi, Wenliang Li, Yubin Huang, Xiabin Jing, Dongfang Zhou, Jianxun Ding, Xuesi Chen



PII: S0079-6700(18)30166-7  
DOI: <https://doi.org/10.1016/j.progpolymsci.2018.07.004>  
Reference: JPPS 1092

To appear in: *Progress in Polymer Science*

Received date: 21-5-2018  
Revised date: 18-6-2018  
Accepted date: 4-7-2018

Please cite this article as: Xiao H, Yan L, Dempsey EM, Song W, Qi R, Li W, Huang Y, Jing X, Zhou D, Ding J, Chen X, Recent progress in polymer-based platinum drug delivery systems, *Progress in Polymer Science* (2018), <https://doi.org/10.1016/j.progpolymsci.2018.07.004>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## Recent progress in polymer-based platinum drug delivery systems

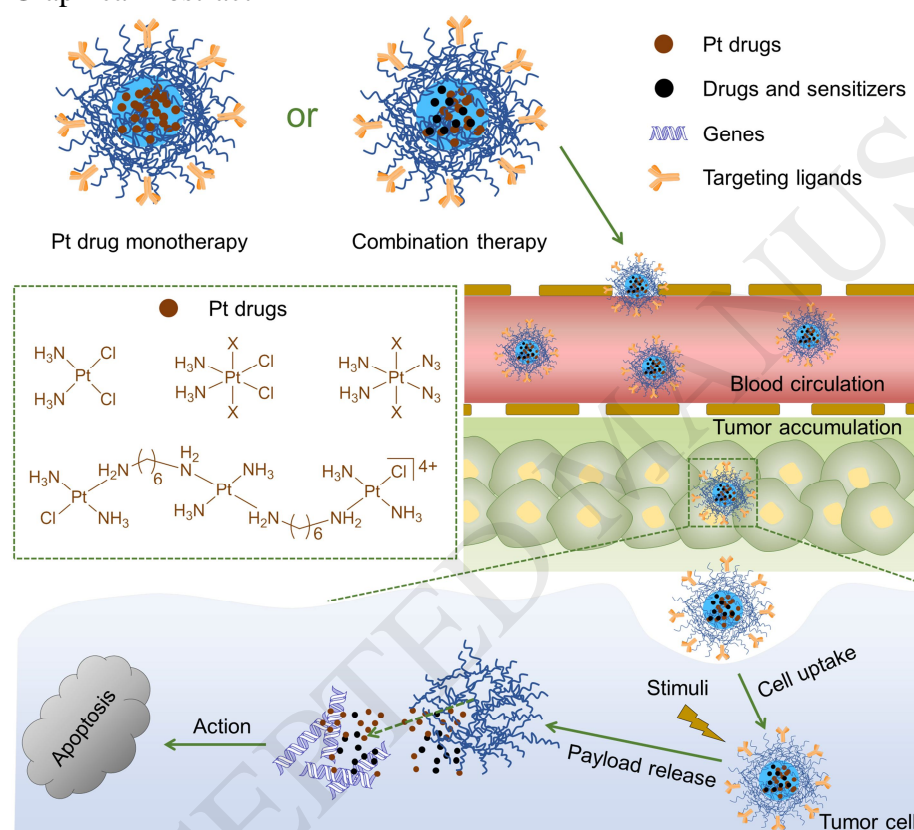
Haihua Xiao<sup>a,b</sup>, Lesan Yan<sup>b</sup>, Elizabeth M Dempsey<sup>c</sup>, Wantong Song<sup>a</sup>, Ruogu Qi<sup>b</sup>, Wenliang Li<sup>b</sup>,  
Yubin Huang<sup>b</sup>, Xiabin Jing<sup>b</sup>, Dongfang Zhou<sup>b</sup>, Jianxun Ding<sup>a</sup>, Xuesi Chen<sup>a,\*</sup>

<sup>a</sup> Key Laboratory of Polymer Ecomaterials, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun 130022, People's Republic of China

<sup>b</sup> State Key Laboratory of Polymer Physics and Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun 130022, People's Republic of China

<sup>c</sup> Department of Bioengineering, University of Pennsylvania, Philadelphia, PA 19104, United States

### Graphical Abstract



### ABSTRACT

Platinum drugs comprise almost 50% of all currently used anticancer drugs. They are now widely used in the clinical therapy of various solid tumors, including ovarian, head and neck, colorectal, and lung cancers, and so forth. However, their extensive systemic toxicity and the drug resistance acquired by cancer cells limit their applications. Modern nanobiotechnology provides the possibility for targeted delivery of platinum drugs to the tumor site, thereby minimizing toxicity and optimizing the efficacies of the drugs. Numerous drug delivery carriers, such as polymer nanoparticles, solid lipids, and inorganic nanoparticles, have been developed

Download English Version:

<https://daneshyari.com/en/article/7825605>

Download Persian Version:

<https://daneshyari.com/article/7825605>

[Daneshyari.com](https://daneshyari.com)