

## Accepted Manuscript

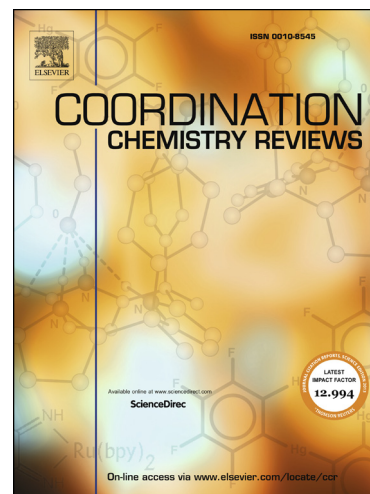
Update on metal *N*-heterocyclic carbene complexes as potential anti-tumor metallodrugs

Wukun Liu, Ronald Gust

PII: S0010-8545(16)30217-X  
DOI: <http://dx.doi.org/10.1016/j.ccr.2016.09.004>  
Reference: CCR 112306

To appear in: *Coordination Chemistry Reviews*

Received Date: 31 May 2016  
Accepted Date: 5 September 2016



Please cite this article as: W. Liu, R. Gust, Update on metal *N*-heterocyclic carbene complexes as potential anti-tumor metallodrugs, *Coordination Chemistry Reviews* (2016), doi: <http://dx.doi.org/10.1016/j.ccr.2016.09.004>

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.

**Update on metal *N*-heterocyclic carbene complexes  
as potential anti-tumor metallodrugs**

Wukun Liu<sup>\*a</sup> and Ronald Gust<sup>\*b</sup>

<sup>a</sup>. Institute of Pharmacy, Freie Universität Berlin, Königin-Luise-Str 2+4, 14195 Berlin, Germany. E-mail: liuwukun0000@hotmail.com

<sup>b</sup>. Department of Pharmaceutical Chemistry, Institute of Pharmacy, University of Innsbruck, Innrain 80/82, 6020 Innsbruck, Austria. E-mail: ronald.gust@uibk.ac.at; Fax: +43 512 507 58299; Tel: +43 512 507 58200

## Contents

1. Introduction
2. Silver *N*-heterocyclic carbene complexes
3. Gold *N*-heterocyclic carbene complexes
4. Platinum and palladium *N*-heterocyclic carbene complexes
5. Copper and mercury *N*-heterocyclic carbene Complexes
6. Ruthenium and osmium *N*-heterocyclic carbene complexes
7. Rhodium and iridium *N*-heterocyclic carbene complexes
8. Conclusions and outlook

## Acknowledgments

## References

## Keywords

Metal *N*-heterocyclic carbene complexes, Anti-tumor, Metallodrugs, Mode of action, Structure–activity relationships

## Highlights

Transition metal (Ag, Au, Pt, Pd, Cu, Hg, Ru, Os, Rh and Ir) complexes containing NHC ligands as anti-tumor agents are reviewed since the publication of our previous review.

The anti-tumor properties of these complexes as well as possible structure–activity relationships are discussed.

The mechanisms of action of metal-NHC complexes at the cellular level are discussed.

The advantage of NHCs as ligands for metal complexes is highlighted.

Download English Version:

<https://daneshyari.com/en/article/5150853>

Download Persian Version:

<https://daneshyari.com/article/5150853>

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