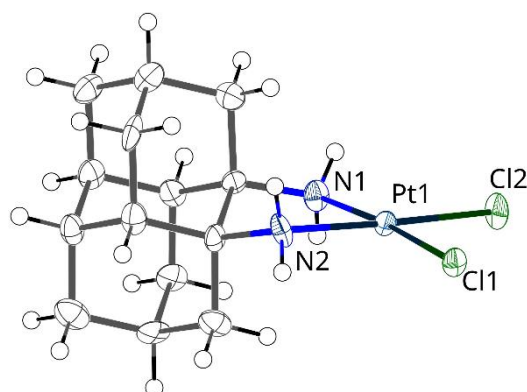


Diaplatin – a new and powerful active pharmaceutical ingredient (API) against cancer

Cancer therapy, Cisplatin/Oxaliplatin, Diamantane complexes

DESCRIPTION OF TECHNOLOGY

Cisplatin, resp. oxaliplatin, are well known API's for the treatment of cancer. Nevertheless, due to the development of increasing resistance against even these well established high performance compounds there is great need for new API's in cancer therapy.



© Vladyslav Bakhonskyi, JLU

Recently, a whole new class of API's has been created and successfully tested as being effective against some cancer lines. Some exemplary compounds of this new class of API's are already available in high enantiomeric purity for individual additional testing.

The tests carried out so far were run with the human ovarian cancer cell line A2780 and its cisplatin-resistant variant A2780cis. The results demonstrate that one enantiomer of the sample compound performed better than cisplatin.

Additional nucleotide binding experiments were also carried out, which showed good binding affinity, characteristic for high potential regarding effectiveness against cancer growth.

AT A GLANCE ...

Application Field

- Cancer therapy

Business

- Pharmacy
- Medical research

USP

- New type of ligand
- Higher activity than cisplatin

Development Status

- First successful tests of efficacy on laboratory scale by use of A2780 and A2780cis cell-lines.
- Nucleotide binding experiments on laboratory scale also showed a high binding affinity.

Patent Status

Priority application, filed 18.09.2019 at the European Patent Office.

REFERENCE NO.: **TM 1060**

APPLICATION FIELDS

The new diaplatin complexes (complexes of platinum(II) with 1,2-diaminodiamantane ligands) show activity against human cancer cell lines, thus proving their applicability in cancer therapy.

ADVANTAGES OVER PRIOR ART

The (*R,R*)-enantiomer of *cis*-[1,2-diaminodiamantane] platinum(II) dichloride complex, so far exemplarily tested, showed even better performance against A2780- and A2780cis cell lines.

STATE OF PRODUCT DEVELOPMENT

Two examples of the diaplatin complexes are already commercially available for performing own tests, both in racemic form and as pure enantiomers:

- *cis*-[(*R,R*)-1,2-diaminodiamantane] platinum(II) dichloride
- *cis*-[(*S,S*)-1,2-diaminodiamantane] platinum(II) dioxalate

COOPERATION OPPORTUNITIES

On behalf of its shareholder Justus-Liebig-University Giessen TransMIT GmbH is looking for cooperation partners or licensees for distribution or further development in Germany, Europe, US, and Asia.

A TECHNOLOGY OF



Contact

TransMIT Gesellschaft
für Technologietransfer mbH
Kerkrader Straße 3
35394 Giessen
GERMANY
www.transmit.de

Contact Person

Dr. Andreas Fuß.
Tel: +49 (0) 641 9 43 64 58
Fax: +49 (0) 641 9 43 64 55
E-Mail: andreas.fuss@transmit.de

