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# New Technology Offer

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## Novel cytotoxic Rhodium and Iridium Compounds and their use as anticancer drugs and antimetastatic agents

Following the great success of the platinum-containing compounds Cisplatin and Carboplatin as anticancer drugs, recent research effort has concentrated on new types of compound with different metal atoms. The required demands on such compounds are a good bioavailability, adequate solubility in water or human secretions, specific cytotoxicity against cancer cells and a compatibility to healthy tissue.

Many metal complexes show a good cytotoxicity against cancer cell lines but not in the range of Cisplatin. Our novel rhodium complexes were tested on breast cancer (MCF-7) and colon cancer (HT-29) cell lines and exhibit cytotoxicities of up to 100 times higher than Cisplatin. The analogous iridium complexes exhibit a similar or somewhat higher activity than Cisplatin. The complexes induce a programmed cell death (apoptosis).

### Application

- cancer therapy
- treatment of breast and colon cancer

### Advantages

- much higher cytotoxicity than Cisplatin towards breast and colon cancer cells
- low dosis requirements
- rapid inducement of apoptosis in cancer cells

### Status quo

This technology was collaboratively invented by the Freie Universität Berlin and the Ruhr-Universität Bochum, Germany.

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**Contact:** rubitec GmbH  
Dietmar Tappe  
Stiepeler Str. 129  
44801 Bochum  
Phone: +49 (234) 32-11969 /-11933  
Fax: +49 (234) 32-14194  
E-Mail: [rubitec@ruhr-uni-bochum.de](mailto:rubitec@ruhr-uni-bochum.de)

