

AROPLATIN™

INVESTIGATIONAL DIAMINOCYCLOHEXANE PLATINUM AGENT



ANTIGENICS' CANCER PORTFOLIO INCLUDES AROPLATIN™, AN INVESTIGATIONAL LIPOSOMAL FORMULATION OF A PROPRIETARY PLATINUM CHEMOTHERAPEUTIC. AROPLATIN IS A THIRD-GENERATION DACH (DIAMINOCYCLOHEXANE) PLATINUM. IT IS A NEW CHEMICAL ENTITY THAT IS STRUCTURALLY SIMILAR TO ELOXATIN® (OXALIPLATIN, SANOFI-AVENTIS), AN APPROVED TREATMENT FOR COLORECTAL CANCER. AROPLATIN IS CURRENTLY BEING EVALUATED IN A PHASE 1 TRIAL INVOLVING PATIENTS WITH ADVANCED SOLID TUMORS OR B-CELL LYMPHOMA.

NEXT-GENERATION COMPOUND Platinum compounds have become mainstays of cancer chemotherapy and have proven effective against many types of solid tumor. Although earlier platinum-based therapies such as carboplatin and cisplatin exhibit activity against solid tumors, some tumors are either resistant to these agents or become resistant during treatment. More importantly, these compounds can have toxic side effects on the nervous system and kidneys that can limit treatment. Similarly, oxaliplatin has been associated with dose-limiting neurotoxicity.

Laboratory studies indicate that as an analog of platinum compounds, Aroplatin demonstrates measurable antitumor activity. These findings suggest that Aroplatin may be useful in cancers that are already resistant to earlier platinum agents.

THE LIPOSOMAL APPROACH Liposome encapsulation can radically alter a drug's absorption, distribution, metabolism and excretion (the treatment's pharmacokinetics) and allow for improved delivery of medicines into the body. Enclosing a drug within a liposome – shells of phospholipids, the basic components of human cell walls – protects it from early degradation within the body.

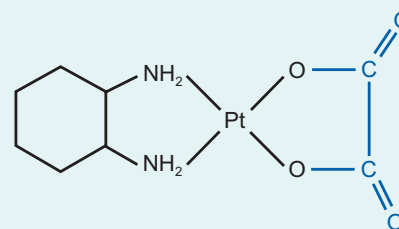
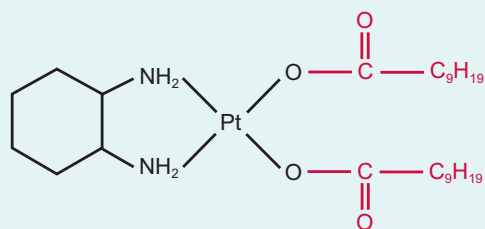
Liposome encapsulation has also been shown to increase a medication's bioavailability (the amount of time and specific distribution within the body), which may extend the treatment's effect. In addition, the liposomal delivery system may help to reduce the damaging effects of some drugs on healthy tissues.

CLINICAL DATA To date, nine clinical studies involving 213 patients have been conducted to test the safety and efficacy of

Aroplatin in a wide range of cancers, including colorectal and kidney cancers. Initial results suggest that Aroplatin treatment appears to be associated with tumor response and may be a promising approach to therapy for a range of different cancers. Preliminary data from a Phase 1/2 study of an earlier formulation of Aroplatin in advanced colorectal cancer showed that of the 18 patients who received at least two courses of Aroplatin, one had a partial response, and three patients experienced disease stabilization that lasted for at least three months.

Antigenics recently reformulated Aroplatin to enhance its pharmacological activity. The new formulation of Aroplatin is currently being evaluated in a Phase 1 clinical trial involving up to 28 patients with advanced solid tumors or B-cell lymphoma. The dose-ranging study will evaluate the safety and pharmacokinetic profile of Aroplatin, as well as assess its clinical activity.

ADVERSE EVENTS The most common side effects reported in clinical studies with Aroplatin can be divided into those related to the liposomal component, and those related to the platinum agent contained within the liposome. Side effects related to the liposomal component, usually seen during and within 24 hours after IV infusion, include dyspnea (shortness of breath), back or chest pain, general pain, pyrexia (fever) and leukocytosis (increase in white blood cells in the blood). Side effects related to the platinum component of Aroplatin include fatigue, constipation, diarrhea, dehydration, neutropenia (decrease in body's white blood cells, which may make fighting infection more difficult) and thrombocytopenia (reduced platelets in the blood, which makes blood clotting more difficult).



Chemical structure of Aroplatin (left) versus oxaliplatin (right).