Company Profile

Industry Sector: Therapeutics

Company Overview: MetalloPharm has pioneered the development of novel, target-specific catalytic metallodrugs for the treatment of HCV and other serious infectious diseases, coupling an innovative approach to the development of new classes of therapeutics with a deep understanding of the urgent need for drugs with new modes of action to help combat drug resistance.

Unique Mode of Action: Catalytic metallodrugs combine a unique mode of action by incorporating a degradative domain that causes irreversible and catalytic destruction of multiple copies of the therapeutic target. Lead candidates can be quickly identified by use of published literature data to identify recognition elements for validated targets for each disease and coupling these to the metal domain for catalytic chemistry. MetalloPharm is the only company, developing this patented technology.

Target Market(s): Infectious diseases - especially HCV and antimicrobial infection.

Key Value Drivers

Technology*: In contrast to traditional drug designs that promote reversible inhibitory binding, MetalloPharm’s innovative catalytic metallodrug products are designed to treat and prevent HCV and other infectious diseases, by catalyzing irreversible destruction following binding to therapeutic targets. Catalytic metallodrugs are designed to contain two functional: (1) a target-binding domain; and (2) a reactive metal-binding domain.

Competitive Advantage:
- First-in-Class with a unique mode of action
- Versatile catalytic drug platform, applicable to multiple disease indications.
- Novel mechanism of action by catalytically-active metallodrugs
- New drug candidates can be rapidly generated, no screening of libraries required; design of drugs that attack known targets via available binding information
- Useful for extending patent lifetime for existing drugs
- Significant decrease in dosage
- Improved selectivity with two functional domains
- Decrease in side effects and toxicity
- Less prone to the development of drug resistance

Plan & Strategy: Seek partners and licensees.

Product Pipeline

I. Antiviral Program
The long term goal of MetalloPharm’s antiviral program is to develop metallodrug therapies for treatment of a large-spectrum of viral infections. Early proof-of-concept data has been generated for HCV IRES RNA and protease. We are in the process of “down selecting” a set of anti-HCV drug candidates and, through safety and efficacy studies, identifying one or two lead compounds that are ready for formal non-clinical testing toward assembly of an IND data package to support the initiation of clinical trials.

II. Antimicrobial Program
MetalloPharm has identified a series of novel metallodrugs against different microbial targets including gram positive and negative organisms. We intend to generate prototype broad spectrum antimicrobials that should be effective against a wide array of organisms, in addition to more host-specific metallodrugs. Because the drugs function by a novel mechanism, there is a significant likelihood of success against drug resistant strains.