The Metaplex Solution
Drug candidates often have poor *in vivo* properties; including poor bioavailability, limited parenteral utility, suboptimal delivery of the active component to the site of need, etc.

Formulation is Key to a Drug Candidate’s Development
Our technology enables the preparation of poorly soluble small molecules into injectable formulations using nanotechnology and coordination chemistry.
Can achieve orders of magnitude increase in solubility of your drug and make it suitable for parenteral and oral administration.

Is your drug suitable for a Metaplex solution?
Example: CX-5461- a RNA I Polymerase Inhibitor

- Poorly soluble (< 1 mg/mL) at physiological pH
- Developed as the first-in-human RNA I polymerase inhibitor and was found later to also act as a DNA damaging agent
- Given intravenously as a low pH formulation

The Metaplex Solution

The Metaplex formulation of CX-5461 also increases circulation lifetime, and improves efficacy relative to the low pH formulation.
Applications of Cuprous’ Metaplex Technology

Can our technology and know-how help you?
Cuprous’ Technology is Well Suited for Development of Combination Products

Can we talk about how our technology can help develop your first-in-class combination product?

e.g. Vyxeos® - approved for treatment of AML
Combination Therapy Vyxeos® (CPX-351)

Vyxeos® (CPX-351) is a combination of cytarabine/daunorubicin prepared at a 5:1 molar ratio.

The formulation can ensure that the two drugs are maintained at a constant ratio following intravenous administration.

The formulation shows strikingly better efficacy with:
- 50-fold less cytarabine and
- 2-fold less daunorubicin

Vyxeos® was approved in August 2017 for adults with secondary AML and AML-MRC.

Lancet et al., 2018, J Clin Oncol
The Cuprous Approach Can

- Increase solubility of sparingly or poorly soluble small molecules
- Prepare formulations of drug combination products
- Obtain proof-of-principle preclinical data (safety, PK/BD, efficacy)
- Reduce Cmax-related toxicity
- Improve therapeutic activity
- Define a method for scale up manufacturing
- Support CMC for development of a Cuprous formulation
Business Model: Licensing Partnerships

Cuprous’ Goal: To enable a partner’s drug candidate-defining a formulation that can be used in patients through out-licensing our technology to pharmaceutical partners

- Co-develop Formulation Solutions
- Demonstrate utility in partnership through conduct proof-of-concept studies
Management Team

Dr. Thomas Redelmeier
Founder, CEO & President
(Former CEO & President, Transferra Nanosciences)

Dr. Marcel Bally
Founder, CSO
(Distinguished Scientist, BC Cancer and Professor University of British Columbia)

Dr. Michael Abrams
Vice President, Research
(Former CEO & President, AnorMED Inc.)

Dr. Ada Leung
Founder, Director of Operations
(Management Leader)

>$2 billion acquisition transition
4 regulatory approved drugs, inventors and entrepreneurs