## Name of Organization / 会社名

Miromatrix

URL

Organizatio

www.miromatrix.com

## Brief Descriptions of Organization / 会社概要

Miromatrix is a regenerative company on a mission to save and drastically improve patients' lives by eliminating the organ transplant waiting list. Through their proprietary perfusion decellularization and recellularization technology, the company is developing fully implantable human organs including livers, kidneys, lungs and hearts. The company has also developed and commercialized the only liver-derived biological products including MIROMESH® (soft tissue reinforcement) and MIRODERM® (advanced wound care) to provide key regulatory data about the safety of the decellularize liver matrix. Miromatrix' perfusion decellularization and recellularization technology is protected by a series of issued patents and pending patent applications in all major markets worldwide. Miromatrix' collaborators include The Mayo Clinic, Texas Heart Institute and Mount Sinai Hospital.

## Title of Presentation / 講演タイトル

Bioengineering Transplantable Livers, Kidneys and Lungs

## Abstract / 要旨

Miromatrix, a leading regenerative medicine company bioengineering transplantable organs including livers, kidneys, hearts and lungs based on its patented perfusion decellularization and recellularization technology. Our approach has the potential to end the transplantable organ shortage and access billion-dollar market opportunities.

We have made significant progress towards our goal, starting with our transplantable liver and kidney programs. We have removed major barriers including our ability to revascularize the liver grafts, transplant them back into large animals and obtain sustained perfusion. We are proceeding with studies to

demonstrate that our engineered liver can rescue a pig once their native liver has been removed. Following this, we anticipate initiating human clinical studies within 2 years and we recently welcomed our first large US strategic partner.

Our second advanced program is a bioengineered kidney to treat end stage renal disease (ESRD), and Phase I clinical studies are targeted for 2022. The

development of bioengineered lungs and hearts are in early preclinical development. In addition to our whole organ program and providing a solid regulatory foundation, we have commercialized perfusion decellularized liver grafts for wound repair and soft tissue reinforcement, demonstrating our ability to scale, manufacture, receive

FDA clearance and the safety of the decellularized liver matrix.

# Objectives and/or Motives / 目的

Japan is leading the world in regenerative medicine. We are seeking companies interested in strategic equity investments in Miromatrix. We are also seeking companies interested in the rights to develop and commercialize whole organ programs in Japan in parallel with our US clinical studies. Lastly, we are seeking strategic collaborations around the use of stem cells in with our perfusion decellularization organ development.

**Oral Presentation**