

Case #568 Vascular Integrity Preserved by "VasoPlex" Post Heart Attack

Compromised distal myocardial perfusion is commonly observed in 25-30% of patients with acute myocardial infarction (MI) despite action to restore blood flow in local lay vessels via thrombolytics and PCI/stenting. No treatments are currently available that preserve this vascular integrity after MI. The Spees lab has shown that treatment with a defined HGF/IgG complex, "VasoPlex" reduces infarct size and adverse ventricular remodeling and disfunction after reperfusion, improving cardiac perfusion and outcomes in both rat and pig models of MI. VasoPlex provides a novel approach to preserving vascular integrity that may substantially limit long term damage in a wide spectrum of patients, both after MI and in other ischemic events, such as stroke and organ transplant.

Applications:

- Reduction of reperfusion injury in MI.
- May also be useful in peripheral artery disease, stroke and organ transplants.

Advantages:

- Defined, peptide based vaso-protectant.
- Promotes vascular integrity and protection post MI.
- Reduces infarct expansion and tissue damage.
- Limits long-term damage of reperfusion.

Intellectual Property and Development Status:

US Patent 10,239,926; US Non-Provisional Application 16/270,365; EP Patent Application EP3261659A4 Looking for both licensing and start-up collaboration partners.

References:

Human epicardial cell-conditioned medium contains HGF/IgG complexes that phosphorylate RYK and protect against vascular injury. Rao KS *et al* PMC4565990

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