

3D vascularized pancreatic islets - for islets transplantation (Technion)

code: CTT-0895

The present invention provides an advanced tissue-engineering technique for the development of 3D co-culture systems that reconstruct vascularization of pancreatic tissue ex-vivo. In this novel engineered 3D pancreatic model, isolated pancreatic islets can be co-cultured with endothelial cells. The endothelial cells organize into 3D tubes throughout the engineered construct and form vascular network-like structures resembling in-vivo vasculature. This presence of endothelial cells forming 3D vessel-like structures was found to be critical for islet survival. This model can provide an important tool for the therapeutic transplantation of islets, greatly increasing the success of the procedure.

Contact for more information:

Santiago Ini , +972-4-8294856

T - Technion Technology Transfer
Technion City, Senate Bldg., Haifa 32000, Israel
Tel. 972-4-829-4851; 972-8325-375
Fax. 972-4-832-0845