

Bio Artificial Pancreas
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Since the 1960s, researchers have been interested in the possibility of treating type 1 diabetes by transplanting islet cells — the pancreatic cells that are responsible for producing insulin and the most adequate way is by encapsulating them to prevent the need for immunomodulation .

Implementing this approach has proven challenging, however. One obstacle is that once the islets are encapsulated and transplanted, they will die if they don't receive an adequate supply of oxygen. To help overcome that challenge, we, at Beta-O₂Technologies, have implant our proprietary capsule that furnishes islet cells with their own supply of oxygen, we have gained positive results in different models (small animals, large animals and humans) and with different cells type (Rat islets, pig islets human islets and stem cells derived islets)