

Trina Treatment: Artificial Pancreas Treatment® PERFORMANCE CHART

Severe Kidney Disease	<p>Patients without kidney disease have Creatinine Clearance ("CCL") of about 100-130 ml/min of filtration. Patients who have progressed to a CCL of 60 should expect to continue to lose 10 CCL per year on average, with kidney failure and dialysis at 10-12 CCL. After dialysis they only live for 5-10 years without a transplant, and 75% will not live past 7 years.</p>	<p>Patients on APT should expect to feel good, live longer, and not lose significant CCL levels, as studies have shown of 31 patients with CCL of 46, after 37 months, remained at 46, and many should have been on or near renal dialysis. Other multi-center studies show an improvement in just 9 months. Patients on dialysis have achieved better health and a slow return of kidney function with liver improvements.</p>
Brittle Diabetes	<p>Diabetic patients do not metabolize carbohydrates and lipids correctly, and many do not properly store and release glycogen, expecting wide swings in their blood glucose.</p>	<p>Patients on APT will not have the wide swings and excursions as their bodies both store and release glycogen (glucose). This is shown by the uptake of glucose from their blood and their blood glucose levels.</p>
Diabetic Retinopathy	<p>Patients often suffer from diabetic eye disease and require laser treatments. Diabetes is a major cause of blindness.</p>	<p>Patients on APT experience a remarkable stabilization and reversal of eye disease including proliferative retinopathy, and generally do not require laser treatments after just 3 to 5 months treatment. Some patients going blind, or blind in one eye, will avoid blindness.</p>
Hypertension	<p>Hypertension (high blood pressure) is a major problem for many diabetic patients. Their blood pressure stays elevated even while asleep, and is unhealthy.</p>	<p>Patients on APT experience a 50% reduction in high blood pressure, measured 24 hr. daily with prescriptions, and surprisingly, they can also eliminate orthostatic hypotension (low blood pressure), also regaining a healthy change at night.</p>
Wound Healing	<p>Because of poor circulation, the requirement of extra oxygen, and the lack of proper metabolism at the cellular level, diabetic patients often do not heal well.</p>	<p>Patients on APT will heal more quickly, even sores of several years duration, and can avoid amputations due to wounds and sores. This happens even after one limb is amputated or sores are seemingly beyond help.</p>
Heart Metabolism	<p>Diabetic cardiovascular disease (CVD) is caused by needing extra oxygen, ischemia from free fatty acids, reduced cellular energy and inflammation due to improper metabolism causing inflammatory cytokines.</p>	<p>Patients on APT will reduce free fatty acids, require less oxygen, eliminate improper metabolic inflammation, improve ejection fractions, and anecdotally remove plaque, enjoying renewed physical abilities as their hearts no longer require extra oxygen, no longer have 30% less energy than normal, and no longer are inflamed by inflammatory cytokines caused by improper carbohydrate metabolism.</p>
Nerve Damage	<p>Diabetic neuropathy is common, and causes pain even while at rest. The problem is severe, and pain can be life altering.</p>	<p>Patients on APT enjoy, for the first time, the reversal of neuropathy, to a level approximately 5 years prior, with 65% nerve conduction velocity improvement and reduced gastroparesis. In addition, erectile dysfunction can reverse or improve.</p>
Hypoglycemia Awareness	<p>Patients who have had diabetes for years can lose their ability to sense the onset of low blood sugar, and can "pass out".</p>	<p>Patients on APT regain their ability to sense low blood sugar, and decrease episode of hypoglycemia by 98%.</p>
Basic Quality of Life - Depression	<p>Diabetic patients have slowly degraded into a state of depression and lost energy. They feel badly, and never achieve a feeling of physical and mental well-being due to their improper metabolism and the problems of not being able to perform. This is partially due to the fact that diabetes causes a 30% reduction in energy inside each cell because energy rich carbohydrates cannot be processed well.</p>	<p>Patients on APT immediately realize that they had slowly become chronically ill, regain their former energy levels, feel better, have renewed stamina, their brains work better, and have hope for their lives, knowing that they have finally found a treatment which addresses the core of their disease.</p>

Conclusion: There is no known aspect of diabetes which healthy carbohydrate and lipid metabolism does not greatly help. There has never been a failure or adverse reaction in over 200,000 treatments as it re-establishes what is normal.