



## DIABETES: PROBLEM & SOLUTION

Diabetes is a major health crisis in the U.S. and is on the rise in many countries across the world. Diabetes was estimated to have affected 25.8 million adults, or 8.3% of the U.S. population in 2012. By 2030, diabetes is projected to affect 46 million adults in the U.S.<sup>11</sup>

In this discussion, the reader will encounter current statistics regarding diabetes as well as answers to the most frequently asked questions the GARM Clinic receives regarding diabetes. Finally, the GARM Clinic offers a viable, affordable, and promising cutting edge *solution* for patients suffering from Type II Diabetes. Please continue to read to learn how you can reverse and possibly eliminate Type II Diabetes by [scheduling an appointment](#) at the GARM Clinic today.

### *What are current statistics regarding Diabetes?*

- In 2015, diabetes was the **7th leading cause of death** in the United States. <sup>7</sup> The incidence of diabetes continues to rise globally.
- In 2013, the global incidence of diabetes was estimated at 8.3% of the world's population. North America and the Caribbean have a higher prevalence, at 11%.<sup>1</sup>
- 1.5 million Americans are diagnosed with diabetes every year.<sup>7</sup>
- The average out of pocket medical expenditures for only diabetes are estimated at \$13,700 per patient per year.<sup>10</sup>
- \$327 billion is the estimated total cost of diabetes in the U.S. in 2017.<sup>7</sup>
- Type II diabetes accounts for 90% to 95% of all diabetes cases.<sup>7</sup>
- Diabetes cuts about **8.5 years off the life span** of the average 50-year-old compared to a 50-year-old without diabetes.<sup>2</sup>
- Diabetes is one the leading causes of **amputation** of the lower limbs throughout the world. <sup>3</sup>
- 20% to 50% of diabetic patients risk losing the contralateral leg to vascular disease up to 4 years after the original lower limb **amputation**. <sup>4</sup>
- Diabetes is the leading cause of non-traumatic, lower-limb amputations, kidney failure, and blindness among adults. <sup>6</sup>

- About 30 percent of patients with Type 1 diabetes and 10 to 40 percent of those with Type 2 diabetes eventually **will suffer from kidney failure**.<sup>5</sup>

***What additional complications might some Diabetics expect?***

- Hypoglycemia and/or hyperglycemia
- High Blood Pressure
- High Cholesterol
- Neuropathy
- Erectile Dysfunction (E.D.)
- Cardiovascular Disease
- Chronic systemic inflammation which may result in an additional chronic disease
- Non-healing wounds and chronic infections
- Heart Attack & Stroke Rates: 50% of diagnosed diabetics die from heart disease and stroke<sup>9</sup>
- Blindness and Eye Problems: In 2005–2008, adults with diabetes aged 40 years or older, 4.2 million (28.5%) people had diabetic retinopathy, damage to the small blood vessels in the retina that may result in loss of vision.<sup>5</sup>

***What is the projected impact of diabetes?***

If populations remain on this trajectory, the future is not bright. In short, diabetes will remain a major health crisis in America, in spite of medical advances and prevention efforts. The prevalence of diabetes (type 2 diabetes and type 1 diabetes) will increase by 54% to more than 54.9 million Americans between 2015 and 2030; annual deaths attributed to diabetes will climb by 38% to 385,800; and total annual medical and societal costs related to diabetes will increase 53% to more than \$622 billion by 2030. Improvements in management reducing the annual incidence of morbidities and premature deaths related to diabetes over this time period will result in diabetes patients living longer, but requiring many years of comprehensive management of multiple chronic diseases, resulting in dramatically increased costs.<sup>8</sup>

***I have Type II Diabetes. Is it possible to reverse or stop this disease process?***

For many patients, the answer is “yes”. The treatment process at the GARM Clinic is a multi-discipline approach incorporating individualized diet and lifestyle coaching, a customized supplementation plan, and an IV treatment utilizing isolated stem cells from your adipose (fat) tissue. The stem cell treatment is complex and is accomplished over a two day period to maximize stem cell counts and to potentially boost specific types of stem cells to increase each patient’s chance for an optimal outcome.

***What can I expect by choosing GARM’s treatment plan for Type II Diabetes?***

The goal of the elective treatment option offered by GARM Clinic is to restore patients’ quality of life by slowing, stopping, and/or reversing the chronic disease process and,

ultimately, reinstating optimal health.

Many patients have reported:

- ✓ A reduction or elimination of the need for insulin
- ✓ A reduction or elimination of the need for other medications
- ✓ A reduction in systemic inflammation
- ✓ The perception of improved symptoms of neuropathy
- ✓ The perception of increased energy
- ✓ Improvement in E.D. symptoms
- ✓ Possible reduction in risk for stroke and/or heart attack

***What is the treatment process?***

When you arrive at the [GARM Clinic](#) in Roatán, the GARM Clinic Team will be entirely focused on you.

Day one consists of a thorough evaluation by the GARM physicians including a discussion of the results of comprehensive review of records by the physicians. The evaluation appointment also includes a discussion of your customized treatment plan which includes: individualized nutrition & lifestyle counseling and goals, customized supplement plan, and a pre-procedure evaluation for an autologous stem cell treatment.

Day two consists of an isolated stem cell preparation provided by IV infusion made with stem cells from your adipose (fat) tissue. To obtain the stem cells, the physicians harvest adipose tissue using local anesthesia (general anesthesia is not required). After the harvesting process, your tissue is processed and will result in an isolated preparation for the IV treatment. The stem cell treatment is complex and designed to maximize stem cell counts.

***Do all patients receive the same treatment?***

No. Because the regenerative medicine procedures at GARM Clinic are highly customized to each patient's needs, GARM Clinic physicians take the time to listen to each patient, provide a comprehensive examination, and therefore, gain a deep understanding and extent of his/her problems prior to planning each treatment.

***Why is GARM Clinic special?***

GARM Clinic Physicians embrace the fact that each patient is special; each patient's history and examination are unique to him/her. A unique treatment plan is required and created that is specific for each individual.

***Why does GARM Clinic prefer fat as a source for stem cells instead of bone marrow or blood?***

GARM Clinic has three options for autologous sources of stem cells: blood, bone marrow, and adipose tissue. Blood has the lowest number of stem cells per milliliter. Bone marrow has more stem cells per millimeter (ml) than blood, but less than adipose tissue.

GARM Clinic prefers adipose tissue for five reasons: 1) adipose tissue provides approximately 500x more stem cells per ml of tissue harvested than one ml of harvested bone marrow, 2) the harvesting process (as well as post procedure) provides greater comfort for the patient versus the harvesting of bone marrow, 3) adipose tissue delivers generous numbers of stem cells 4) culturing stem cells to increase numbers is not required, thus allowing for a same day procedure, and 5) Cell isolation techniques allow for a safe, same day IV infusion of the isolated stem cells.

***Does the number of stem cells provided during a treatment process matter?***

Yes. Substantial stem cell counts are important in achieving optimal outcomes for patients. At the end of each procedure, GARM Clinic physicians evaluate a retained sample of prepared cells used in the treatment process. This sample is analyzed using a flow cytometer to determine the estimated number of cells that were administered in the treatment process. GARM Clinic's proprietary lab techniques are designed to maximize the cell counts for every patient. Again, when it comes to treatment outcomes, stem cells numbers matter.

***Why is GARM Clinic located in Roatán?***

Dr. Terry moved to Roatán because the regenerative medicine treatment options offered by GARM Clinic are not yet legal in the United States. Dr. Terry will not position himself, his practice, or his patients in possible "gray" legal areas. For more information, see the FDA's most recent guidance discussing regenerative medicine (specifically autologous based stem cell (from any source) treatments' requirements for minimal manipulation and homologous use) issued in December 2017. When reviewing this guidance, please note that the FDA placed all healthcare practitioners in the U.S. on notice with the intention of enforcing its ruling over the next 36 months.

Note the following excerpt from the FDA's most recent guidance:

*"In addition, we are informing manufacturers, healthcare providers, and other interested persons that over the next 36 months, we intend to exercise enforcement discretion under limited conditions with respect to the investigational new drug (IND) application and premarket approval (biologics license application (BLA)) requirements, for certain HCT/Ps."* To read the guidance in its entirety, please go to <https://www.fda.gov/downloads/BiologicsBloodVaccines/GuidanceComplianceRegulatoryInformation/Guidances/CellularandGeneTherapy/UCM585403.pdf> or request a PDF from GARM Clinic.

### ***Is this treatment safe?***

Yes. There is very little to no chance for a host/graft reaction or a teratogenic reaction, since the stem cells are autologous and already differentiated. Since general anesthesia is not required and only small amounts of local anesthesia are utilized, anesthesia risks are also significantly reduced. Finally, in GARM Clinic's fourth year of targeted adipose derived stem cell treatments, no complications from any of the patient's own autologous injections have been observed.

### ***How do I schedule an appointment for a consultation?***

You can send an email to [info@garmclinic.com](mailto:info@garmclinic.com) or you can call the clinic at 305-848-0144 or 011-504-2408-3544.

### ***References:***

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