

LIPOGEMS: Thousands of Orthopaedic Patients May Benefit From FDA-Cleared Technology Using Their Own Body Fat

NORCROSS, Ga., Sept. 5, 2018 /PRNewswire/ -- An exciting medical technology that is FDA-cleared has been used by thousands of orthopaedic patients across the United States and is backed by strong scientific evidence. The state-of-the-art **LIPOGEMS** system relies on a patient's own adipose (fat) cells to help support the healing process. The technology is being used by carefully selected, highly respected orthopaedic surgeons and physicians affiliated with major academic universities and private practices across the country.



Among those leading physicians is Riley Williams, MD of New York City's renowned Hospital for Special Surgery. "Ours is the number one orthopaedic hospital in the United States. We strive to give our patients the best options available," said Dr. Williams, a nationally recognized leader in sports medicine. "The use of reparative medicine in orthopaedics is rapidly expanding."

"We evaluate all technologies to ensure they are cleared for use by the FDA and have strong scientific evidence. I believe **LIPOGEMS** is best in class reparative medicine technology, and I'm intrigued by the healing qualities of adding fat processed by the **LIPOGEMS** system to my orthopaedic procedures," added Dr. Williams, the orthopaedic surgeon who is also Medical Director for both the NBA Brooklyn Nets and pro soccer's New York Red Bulls.

Lipogems: One Giant Leap For Orthopaedics

"There is good evidence showing that other longtime, standard options traditionally offered to patients are not always the right option," said John Kennedy, MD, FRCS, also an orthopaedic surgeon at the Hospital for Special Surgery and co-president of the International Society of Cartilage Repair of the Ankle, "For example, corticosteroids are often offered to patients with cartilage or soft tissue injuries, even though there is no evidence steroids will help repair or regenerate tissue and may in fact cause detrimental effects over time." Kennedy continues, "My patients are all athletes whether they are 19 or 91 and are well educated in options available."



"Fat contains from one-hundred to five-hundred times *more* reparative cells compared to other, similar tissues. And these cells are *so powerful*," said Dr. Kennedy. "Fat derived cells are easy to harvest from the patient and have a low risk of rejection and infection. **LIPOGEMS** is based on *convincing basic and clinical science*. The company is entering the orthopaedics world the *responsible way*."

Doctors are always looking to provide their patients with options. Dr. Kennedy underscores how important it is for him to consider patients' everyday lives. "Nowadays, with the high stress and demands of work and family, having an orthopaedic condition really impacts a patient's well-being- emotionally, financially, and physically.

Dr. Kennedy added that "**LIPOGEMS** gives patients a minimally invasive option that could be performed in the office and fits with their lifestyle and goals. Some patients have chosen

LIPOGEMS over a major surgical procedure because they could not take time away from taking care of their families or the work or businesses."

Dr. Williams added that he recognizes the growing importance of a patient's own fat to help restore quality of life. "Patients are living longer and are also more active. They desire to exercise, maintain their activity levels, and improve quality of lifestyle in their later years. Medicine is forced to keep up with the patient demands and the load/forces placed on muscles, joints and tendons."

"As a result," the doctor continued, "we are understanding more about reparative medicine options. Fat has the *highest concentration of reparative cells*, compared to other, similar tissue. Plus, as people age, their fat cells do not decline in reparative effectiveness, unlike cells from other similar tissues. I believe cells from one's own body are the best cells a patient can use."

Dr. Williams asserts with confidence, that "Fat represents a fertile ground to help patients with the healing process."

How It Works

The hour-long **LIPOGEMS** procedure is often performed right in a doctor's office or added to the surgical procedure. Once a local anesthetic is applied, fat tissue and cells are easily extracted in a minimally-invasive procedure from either the belly or "love handles." The **LIPOGEMS** technology uses a simple saline solution to safely and effectively cleanse the extracted cells, screening out impurities such as oil and blood.

The **LIPOGEMS** system resizes the extracted fat tissue to an optimal size in a process called "micro-fragmentation". The freshly-washed cells are then injected into a tissue where the doctor feels that cushioning and support of a reparative process would be helpful-an injured knee, or shoulder, etc.

"Orthopaedic issues impact many, from young athletes to weekend warriors to professional athletes," Dr. Williams added. "I offer this technology to patients who are suffering from orthopaedic issues and are in need to support or cushion in the area to repair, reconstruct, or replace damaged or injured tissue. If a patient suffers from multiple orthopaedic conditions, more fat may be removed and processed through the **LIPOGEMS** technology to help with those conditions at the same time."

"From professional athletes to weekend warriors, I offer **LIPOGEMS** to give my patients another option to heal the *natural* way," Dr. Williams revealed. "My experience with the professional leagues include the NBA, MLB, NFL, and MLS. Professional athletes load their bodies with a lot of high impact forces. They desire to remain durable and effective to be able to play their sports. They have a tight timeline for healing, and desire to speed up the healing process, if surgery is needed or a way to avoid invasive surgery, if possible." Dr Kennedy echoes these sentiments stating "**LIPOGEMS** will not eliminate the need for surgery in the athlete or general population but it may reduce the need for surgery and may augment healing in those who do require surgery."

"For all of my patients, I'm dedicated to providing the best possible course of treatment to meet their lifestyle goals," Dr. Williams said.

The Proof is Here

Micro-fragmented fat possesses strong basic and clinical evidence to support its use in orthopaedics.



"We always evaluate the science behind the technologies that we use at the Hospital for Special Surgery," Dr. Kennedy asserted. "Evidence-based medicine is *extremely important*, and we did our own due diligence behind this technology. When it comes to **LIPOGEMS**, the evidence is strong *and growing*-and that's why we offer it to our patients.

"All of our patients," Dr. Kennedy added, "are enrolled in a database so we can evaluate the outcomes."

Equally impressed by the **LIPOGEMS** system is Diego Correa, MD, PhD, Assistant Professor, Department of Orthopaedics (Division of Sports Medicine) & Diabetes Research Institute- Cell Transplant Center at the University of Miami's Miller School of Medicine, "There is continuously growing interest among researchers and physicians to understand the basic science foundations of reparative medicine," Dr. Correa said, "and how such innovative approaches may be translated into clinical solutions.

"Micro-fragmented fat is gaining popularity, as it has strong basic scientific support with the clinical counterpart also growing fast. We still have a lot to discover, understand and learn about this fascinating area of medicine, but we are certainly committed to doing it by drawing basic and clinical research closer to each other."

Patients: Beware of Stem Cell Ads and Injection Clinics

With the explosion of news coverage on stem cell advances, questionable organizations have sprung up to capitalize on the frenzy. Dr. Kennedy says, in effect, orthopaedic patient beware:

"The American Academy of Orthopaedic Surgeons has a committee evaluating the use of injections and reparative medicine options. Many people that offer these options are actually *NOT* orthopaedic physicians and offer technologies that are *NOT* FDA-cleared. It is important to see an *orthopaedic physician* for your orthopaedic issues."

"I encourage patients to check out their doctor and *be discerning* about stem cell ads and injection clinics offering to 'grow your own cartilage.' There is a lot of vagueness and a lack of clarity on just what reparative medicine is. If it sounds too good to be true, then it probably is."

Dr. Williams added: "Also please check to ensure that the technology is cleared for use by the FDA as many of these injection centers are using non-compliant technologies. Also, these injection centers may charge a lot of money for the procedure."

Looking for LIPOGEMS?

In the United States, the **LIPOGEMS** technology is available from the top orthopaedic physicians from the best orthopaedic institutions from around the world. Besides board certified orthopaedic surgeons, this select group includes doctors specially trained in physical medicine and rehabilitation; sports medicine physicians; and surgeons who specialize in sports medicine and total joint, foot and ankle.