

Joe Rogan talking about stem cells did more for public curiosity about regenerative medicine than most medical conferences combined. When someone with his reach describes flying to another country, getting high dose stem cell infusions, then returning to the podcast studio raving about pain relief and recovery, patients start asking very specific questions.

Where did he go. Why that clinic. Is it safe. Could it help me. And perhaps most important, how do I separate hope from hype.

I work with patients who ask these questions every week. Some bring printouts from clinics in Panama or Mexico. Others quote Joe Rogan or professional athletes who claim stem cells saved their careers. The pattern is always similar: genuine suffering, high expectations, and a field of medicine that is advancing fast, but not nearly as fast as the marketing.

This article looks at Rogan's decision, then uses it as a lens to understand regenerative medicine: what these doctors actually do, who may be a good candidate, what it costs, where insurance fits, and what the current science really supports.

Where did Joe Rogan get his stem cell treatment?

Joe Rogan has repeatedly said on his podcast that he received stem cell treatment at the Stem Cell Institute in Panama City, Panama, founded by Dr. Neil Riordan. The clinic uses mesenchymal stem cells derived from donated umbilical cord tissue, expanded in a laboratory, and given primarily through intravenous infusion, sometimes combined with targeted joint injections.

Several key things about his choice are worth understanding:

1. He went outside the United States.

Panama has a regulatory framework that allows the clinical use of expanded allogeneic (donor) stem cells in ways that are not currently approved by the U.S. Food and Drug Administration for routine clinical care. That does not automatically mean unsafe or unscientific, but it does mean the treatments are offered under a different regulatory standard.

2. He received high dose treatments.

Patients who travel to clinics like this often receive tens of millions, or even over a hundred million, mesenchymal stem cells over several treatment days. In the U.S., most legally compliant stem cell procedures use a patient's own bone marrow or fat in far smaller cell numbers, because culture expansion of stem cells is considered a drug manufacturing process and tightly regulated.

3. He was a strong baseline candidate.

Rogan is a physically active middle aged man who lifts, runs, and pays close attention to diet and sleep. When such a patient has an orthopedic problem - say, chronic joint pain from years of training - even moderate improvements in inflammation and tissue quality can translate into dramatic perceived benefits. That colors how the story lands with listeners whose health status is very different.

When patients ask, "What country is best for stem cell treatment," they usually mean, "Where can I get the most powerful treatment with the least red tape." Rogan chose Panama partly because it fits that profile. Whether it is the best choice medically is a more nuanced question.

What is a regenerative medicine doctor, really?

The term "regenerative medicine doctor" sounds more specific than it is. There is no single board certification in regenerative medicine that is widely recognized in the same way as cardiology or orthopedic surgery.

In practice, a regenerative medicine doctor is usually a physician from another specialty who focuses a large part of their practice on biologic therapies that try to repair, replace, or regrow damaged tissue. Common backgrounds include:

- Physical medicine and rehabilitation
- Orthopedic surgery or sports medicine
- Pain medicine
- Neurosurgery or neurology (for spine and nerve conditions)
- Internal medicine or family medicine physicians who subspecialize later

They may offer treatments like platelet rich plasma (PRP), bone marrow aspirate concentrate, fat derived cell preparations, and, in some countries or under certain research protocols, donor derived stem cell products.

When **Regenerative Medicine Doctor Scottsdale** patients ask, "What is a regenerative medicine doctor," I usually reframe it as, "Which physician has both the specialty training relevant to my problem and deep experience with biologic therapies." For a knee cartilage problem, that would usually be an orthopedist or sports medicine physician who performs many image guided injections and understands how regenerative procedures integrate with surgery and rehab, not just someone who bought a centrifuge last year.

Why would someone travel abroad for stem cells?

Rogan's trip to Panama captures several forces that shape this field.

Regulatory differences

In the United States, any product where cells are substantially manipulated, culture expanded, or used in a manner not considered "homologous" to their source tissue is regulated as a drug. That requires rigorous clinical trials, manufacturing protocols, and formal approval. At present, only a handful of cell based therapies are FDA approved, and almost none are the high dose mesenchymal stem cell infusions people hear about on podcasts.

Many other countries, including Panama, Mexico, and some in Eastern Europe and Asia, allow clinics to use culture expanded cell products more freely, often within a "medical innovation" or "hospital exemption" pathway. Again, that does not mean unscientific. It means the balance between regulatory oversight and physician discretion is set differently.

When people ask, "What country is best for stem cell treatment," they usually weigh:

- Regulatory strictness versus access to newer therapies
- Perceived quality of clinics and labs
- Travel distance, language, and cost
- Track record with their specific condition

Right now, there is no single "best" country. Panama, Mexico, and some European centers have experience with musculoskeletal and autoimmune conditions. South Korea and Japan have strong research programs and some approved products. But outcomes vary more by specific clinic and protocol than by flag.

Availability and cost

In many U.S. Practices, regenerative options are limited to what can be done with your own tissues during a single procedure, such as PRP or bone marrow concentrate. For some patients and conditions that is sufficient. For others, especially those seeking systemic effects for autoimmune or neurodegenerative conditions, those options may feel limited.

Patients who travel abroad often accept higher financial risk because they cannot access similar treatments at home. That does not automatically mean they made a poor decision. It does mean they have to tolerate more uncertainty about long term safety and efficacy.

What is the biggest problem with regenerative medicine?

If I had to pick one problem, it would not be the science. The science is evolving predictably. It is the mismatch between marketing and evidence.

Patients hear phrases like "cell regeneration," "rebuilt cartilage," or "biologic cure." Meanwhile, the best controlled trials show mixed results. Some conditions respond meaningfully, others not at all. Dosage, timing, and patient selection matter enormously.

Several specific issues sit under that umbrella:

Regulation lag and loopholes.

Legitimate clinics working hard to run ethical, data driven practices are competing with pop up "stem cell centers" in strip malls that perform the same injection protocol for every problem from dementia to erectile dysfunction. Patients have a hard time telling them apart.

Overpromising.

Some clinics advertise success rates that are not supported by published data or careful tracking. When patients ask, "What is the success rate of regenerative medicine," the only honest answer is, "It depends heavily on the specific treatment, the condition, the severity, and the definition of success." For knee osteoarthritis, for example, good PRP studies show clinically meaningful pain reduction in many patients for 6 to 24 months, but not true cartilage regrowth.

Fragmented data.

Much of the evidence is small, single center, or uses different cell preparations and outcome measures. That makes it hard to compare studies and to give patients reliable individualized probabilities.

Cost exposure.

Because most regenerative procedures are not covered by insurance, patients often pay thousands of dollars out of pocket for something that might help, but might not. The financial risk can be as significant as the medical risk.

How much do regenerative medicine doctors make?

When patients ask, "How much do regenerative medicine doctors make," they often are really asking whether financial incentives skew recommendations.

There is no clean salary number because "regenerative medicine doctor" is not a single job category in the compensation surveys. Instead, income tracks with the underlying specialty. In the United States, approximate ranges (before overhead) often look like this:

- Orthopedic surgeons: commonly in the range of 500,000 to over 700,000 dollars per year
- Pain management physicians: roughly 350,000 to 550,000 dollars
- Physical medicine and rehabilitation: often 250,000 to 400,000 dollars
- Sports medicine non surgical: typically 250,000 to 450,000 dollars

Doctors who build a cash pay regenerative practice can, in some cases, exceed these ranges, especially if they own the clinic and perform high volume procedures costing several thousand dollars each. On the other hand, some physicians make less than their peers because they spend more time with each patient, collect detailed outcome data, and refuse to sell unproven high ticket treatments.

The question "Who is the highest paid doctor specialty" is more straightforward. Year after year, orthopedic surgery, neurosurgery, cardiology (especially procedural cardiology), and plastic surgery tend to occupy the top tiers, with average incomes often above 600,000 dollars, sometimes well over 800,000 in certain practice models.

At the other end, "What is the lowest paying doctor specialty" is typically answered with primary care fields: pediatrics, family medicine, and sometimes infectious disease or endocrinology. Those often sit in the 200,000 to 275,000 dollar range in many surveys. That does not mean those physicians are any less skilled. It reflects reimbursement structures, not importance.

Financial incentives do exist in regenerative medicine, particularly for high priced, cash only procedures. A responsible physician must consciously counter those incentives when recommending treatments.

What does regenerative medicine actually cost?

When someone hears Joe Rogan praise his experience in Panama, the next question often is, "What is the average cost of regenerative medicine" and "Will insurance pay for regenerative medicine."

Costs vary widely by:

- Country
- Type of procedure
- Setting (hospital, academic center, private clinic)
- Use of imaging guidance
- Whether it is a single joint or multiple sites, or systemic infusion

For context in the United States:

PRP injections.

Single joint PRP often ranges from 500 to 2,000 dollars per treatment session. Some protocols require 2 or 3 sessions. This is rarely covered by insurance.

Bone marrow or fat derived procedures.

These are more complex and can range from 3,000 to 8,000 dollars or more, depending on the number of areas treated and whether it is part of a larger surgical procedure.

Spine related regenerative injections.

These can be 3,000 to 10,000 dollars when multiple levels are treated under fluoroscopic or CT guidance.

For international stem cell clinics using donor derived culture expanded cells, multi day treatment packages often fall in the 10,000 to 30,000 dollar range, sometimes more for extensive protocols.

As for "Will insurance pay for regenerative medicine," the answer is usually no for biologic injections like PRP or most cell based treatments. Insurance may cover supportive elements such as imaging, physical therapy, or surgery if needed later, but not the regenerative procedure itself. A few experimental protocols are conducted within insured hospital systems as part of clinical trials, but those are not the norm.

Patients sometimes ask about specific branded offerings, such as "Does insurance cover Kinetix." Kinetix is used by various clinics and products, often for sports medicine and regenerative programs. Coverage depends on whether the underlying service is a standard, recognized treatment billed under existing codes, or a proprietary regenerative package treated as elective. Broadly, most branded regenerative programs like that are cash pay, with occasional partial coverage for associated evaluation or rehab. Anyone considering such care should request detailed written estimates and ask the clinic to verify benefits with their insurer before committing.

Who is a good candidate for regenerative medicine?

When I screen patients, I do not start with the product. I start with the person, the tissue status, and the alternatives.

A good candidate for regenerative medicine usually has several features:

1. A clearly defined diagnosis with structural or inflammatory damage that is biologically plausible to modify, such as mild to moderate knee osteoarthritis, tendon tears, or certain spine issues.
2. Failure or intolerance of simpler measures like targeted exercise therapy, weight optimization, bracing, and judicious use of medications or basic injections.
3. A desire to avoid or delay major surgery, combined with realistic expectations about what regenerative therapy can and cannot do.
4. Reasonable overall health and metabolic status. For instance, uncontrolled diabetes, heavy smoking, or severe obesity can reduce the chances of a favorable response.
5. Emotional and financial resilience to handle a treatment that might help, might help partially, or might not help at all.

Conversely, red flags for poor candidacy include severe bone on bone arthritis where the joint space is essentially gone, significant mechanical instability, or advanced systemic disease. In those settings, joint replacement, fusion, or other definitive mechanical interventions often outperform biologic attempts.

Is regenerative medicine painful?

The word "stem cells" sounds futuristic, but the procedures themselves are physical and very grounded. Pain depends on the approach.

PRP injections from a simple blood draw are mildly uncomfortable, similar to any blood test plus the injection itself. When injected into a joint under ultrasound, most patients describe it as a brief sharp ache followed by soreness that can last a few days.

Bone marrow harvesting can be more uncomfortable, since it normally involves inserting a needle into the back of the pelvic bone. With proper local anesthesia and, in some cases, mild sedation, most patients tolerate it well, but there is usually bruising and soreness for several days.

Spine or deep joint procedures done under fluoroscopy carry their own profile. The injection itself can be uncomfortable, and afterward there may be a flare of pain before any benefit appears.

So when patients ask, "Is regenerative medicine painful," the honest answer is: there can be short term discomfort or pain from the procedure, usually manageable with appropriate anesthesia and post procedure instructions. It is rarely worse than surgical pain, but it is not pain free.

What are the 4 types of regeneration?

In biology, "regeneration" has multiple meanings. When students ask about "the 4 types of regeneration," they are often referring to general categories such as:

1. **Physiological regeneration**

Routine cellular turnover, like skin, intestinal lining, or blood cells constantly renewing.

2. **Repair after injury**

Healing where damaged tissue is replaced partly with scar tissue, such as myocardial scarring after a heart attack.

3. **True tissue or organ regeneration**



Replacement of lost structures with restoration of original architecture and function, as seen in liver regeneration or limb regeneration in salamanders.

4. **Compensatory hyperplasia**

When remaining tissue enlarges or increases cell number to compensate for a lost portion, such as kidney hypertrophy after loss of the other kidney.

Regenerative medicine aims to tip the balance away from scar dominated healing and toward more complete regeneration, using cells, growth factors, scaffolds, and gene modulation.

What is the success rate of regenerative medicine?

Patients want numbers, not theory. They ask, "What is the success rate of regenerative medicine," as if talking about a single drug. There is no global percentage, but we can sketch patterns.

Knee osteoarthritis with PRP.

Multiple randomized trials show meaningful pain and function improvement in a substantial portion of patients, often better than steroid injections at 6 to 12 months. Response rates vary, but a common pattern is that roughly half to two thirds of appropriately selected patients experience clinically significant improvement for at least several months.

Tendinopathies (tennis elbow, patellar tendon, Achilles).

PRP and some cell based injections show favorable results in chronic cases that failed physical therapy, with many studies showing better outcomes than dry needling or steroids at longer follow up.

Severe neurologic or systemic diseases.

For conditions like advanced multiple sclerosis, ALS, or dementia, the evidence for stem cell therapies remains early and mixed. There are encouraging case reports and small studies, but no large, definitive trials that justify the strong claims often made by commercial clinics. Here, success may mean slowed progression rather than reversal.

Spine degeneration.

Data for disc injections and certain spine procedures is still evolving, with some positive but heterogeneous results. Careful technique and patient selection matter a great deal.

Whenever someone quotes a clinic claiming "an 80 percent success rate," the response should be, "How are you defining success, how are you tracking it, and how do your results compare to a matched group that did not receive the treatment."

What are the disadvantages of regenerative medicine?

Hope has a price. The disadvantages fall into several buckets.

Uncertain benefit.

For many conditions, especially severe or advanced disease, the chance of no meaningful improvement is real. Unlike a medication you can stop, a several thousand dollar injection is a sunk cost.

Financial strain.

High out of pocket costs can create pressure to see improvement, which can color subjective reporting. Some patients later regret spending money they needed for other priorities.

Time and opportunity cost.

Travel abroad for treatment can consume weeks, with associated risks like travel complications and limited follow up support at home.

Safety concerns.

Serious adverse events are uncommon but not nonexistent. Infections, nerve injury, and inappropriate injections into dangerous locations have all been reported. Systemic infusions, particularly of poorly characterized products, carry potential risks of immune reactions, clots, or unanticipated long term effects.

Regulatory exposure.

When you seek treatment in a jurisdiction with looser oversight, you also give up some protections. If something goes wrong, legal recourse may be limited.

None of this means regenerative medicine is a bad choice. It means it is a choice that requires adult level risk assessment.

Does fasting for 72 hours regenerate cells?

Extended fasting has become a minor obsession in health circles, and the phrase "Does fasting for 72 hours regenerate cells" appears often. The idea traces partly to animal studies where prolonged fasting cycles appear to reduce white blood cell counts, then stimulate hematopoietic stem cells in the bone marrow to repopulate the immune system when feeding resumes.

In mice, several studies suggest that repeated long fasts can promote a more "youthful" immune profile and may help with chemotherapy tolerance. Early human studies are far smaller and less definitive. Some show shifts in markers of inflammation, insulin sensitivity, and certain growth factors like IGF 1.

However, there is no solid human evidence that a 72 hour fast meaningfully regenerates joints, reverses major organ damage, or duplicates what targeted cell based regenerative therapies attempt. There may be modest benefits for metabolic health and some aspects of immune function in carefully selected individuals, but long fasting also carries risks, especially for people with diabetes, eating disorders, low body weight, or on certain medications.

Fasting, if used at all, should be considered an adjunct lifestyle intervention, not a replacement for proper medical evaluation and treatment.

How to evaluate a clinic that looks like Rogan's choice

When someone walks in with a brochure for an international stem cell clinic, I do not dismiss it. Instead, we go through a systematic set of questions.

Here is a simple [Regenerative Medicine Doctor Scottsdale](#) checklist that helps many patients sort marketing from substance:

1. What exact cell product is being used, and how is it sourced and processed
2. What evidence exists for this protocol in my specific condition, not just in laboratory models or unrelated diseases
3. How are outcomes tracked, and can I see published or at least systematically collected data
4. What is the full cost, including pre evaluation, travel, follow up, and potential repeat treatments
5. What is the plan if I experience complications after I return home

If a clinic cannot answer these clearly, or becomes evasive when asked for details, that is more informative than any testimonial.

Practical red flags when exploring regenerative options

Over the years, certain patterns repeat. Patients who avoid trouble usually steer clear of clinics that:

1. Claim to treat dozens of unrelated conditions with the exact same protocol
2. Guarantee specific outcomes or advertise impossibly high success rates without credible data
3. Have no meaningful follow up structure or coordination with your local physicians
4. Are vague about credentials, using titles like “stem cell specialist” without listing actual board certifications
5. Push for large upfront payments or non refundable packages before a thorough evaluation

Joe Rogan described a positive experience in Panama, and many others have as well. That does not mean every clinic in every country offering similar treatments is operating at the same level.

What Joe Rogan’s story means for real patients

Rogan’s platform accelerated public interest in regenerative medicine. That has upsides. More attention can drive research, and more patients ask their doctors intelligent questions about biologic choices before jumping straight to surgery.

It also has downsides. Stories like his compress complex biology into a simple narrative: I had pain, I flew to a clinic, I got stem cells, now I feel great. Hidden inside that story are all the variables that matter: his baseline health, his specific diagnosis, the exact product and dose, the timing and rehab afterward, and the placebo boosting effect of high expectation.

For a patient considering similar treatment, his experience can serve as a starting point, not a template. The responsible next steps are:

- Clarify your diagnosis with imaging and a specialist who treats your condition regularly.
- Learn what standard and regenerative options already exist locally, including their evidence and costs.
- If you explore international clinics, interrogate their protocols, data, and follow up rigorously.
- Align your decision with your risk tolerance, financial reality, and personal values, not with a celebrity narrative.

Regenerative medicine is not magic, and it is not fraud by default. It is a young, uneven field where genuine progress coexists with exaggeration. Joe Rogan chose a particular path within that landscape. Patients do best when they understand the terrain before deciding whether to follow anything similar.

Integrated Spine, Pain and Wellness

7425 E Shea Blvd Suite 102, Scottsdale, AZ 85260

4806608823

