“A Cancer Hacker Solves His Own Needs and Helps Others Access the Best, New, Personalized Tests and Treatments” (Mark Taylor) [#71]

Brad Power
October 4, 2023

“About a year into the study, it became very predictable how people would do based on what high level strategy they would take.” – Mark Taylor

“What's happening now in this space is medical knowledge is meant to be doubling every three months. So if you stand still for three months, you're behind. This whole thing needs to be real time, despite the practicalities around that in the real world.” – Mark Taylor

“The only way I can deal with this personal impact on myself is making this available for other people as well.” – Mark Taylor

Meeting Summary

"Engaged patients get better outcomes" is one of our core beliefs at the Cancer Patient Lab. But what does a very engaged patient look like?

Consider the story of Mark Taylor. Diagnosed with early stage pancreatic cancer in 2016, he was rejected for standard medical treatments since his level of cancer was below what mainstream medicine recognized as a formal diagnosis. This forced him to consider “integrative medicine” (complementary therapies to traditional treatments, such as acupuncture, dietary supplements, exercise, meditation, and yoga), even though he was skeptical. He read over 3000 clinical papers, traveled and spoke to over 20 of the world’s leading integrative doctors and clinics, and spent over $500,000 on treatments and tests. He found limited treatment options, biased views, and limited evidence to support their treatments, and was left with a large bill and few patient referrals.

He started the “Patient Led Oncology Trials” Facebook group, where he engaged hundreds of patients in filling out their experiences and tracked their progress following almost every well known integrative cancer treatment.

Based on his studies of the patient reports and his other research, Mark identified patterns among the “exceptional responders” (the patients who experienced unusually positive improvements in survival) to anticancer approaches. Pancreatic cancer patients usually live only seven to eleven months, so you get a quick read on what works and doesn’t work. The patterns Mark saw included:

- Pursue a personalized **combination** of multiple (30 or more) anticancer approaches, such as personalized vaccines, meditation, exercise, and supplements like curcumin.
- **Travel to an experimental clinic**. 80% of the complete responses were people who had traveled to an experimental clinic in their first line or prior to their first line of treatment.
- Develop a positive **attitude** and determination through the process. Emotional state plays a crucial role in the effectiveness of immunotherapy, with stress weakening the immune system.

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- **Start integrative approaches early**. If people didn't find out about integrative oncology treatments until they already had resistance to their primary treatment, it didn't work. The anticancer approaches were prolonging the life of the primary treatment. Patients with damaged immune systems due to chemotherapy may not respond well to immunotherapy.
- When on standard treatments, work hard to **minimize side effects**. Prolong the effectiveness of the primary treatment.
- **Spend money**. To get to experimental clinics, get extensive testing, and access multiple treatments is expensive.

Mark realized that patients need a single, unbiased source of information on cancer treatments, including data on costs and effectiveness. He partnered with a doctor in Spain to create a clinic that offers a very wide range of tests and treatments guided by the principles he has identified. The clinic offers comprehensive cancer treatment with a personalized approach. Patients at the clinic in Spain receive personalized treatment plans and intense monitoring for up to 18 months. They are learning unique insights because they have so many different options to use in a less regulated environment. They are building a standard approach: throw everything at it (cancer vaccines, intratumoral injections, and typical anticancer IVs), use the standard of care as best you can, do your emotional work, get your body in the healing state, remove all your stress triggers. They are getting good responses in cancers that shouldn't respond to immunotherapy. They are finding that they can pinpoint the immunotherapy you need with adequate testing.

How can you learn more about navigating integrative cancer treatment?

- Explore the Hacking Cancer Research Portal
- Join the Patient Led Oncology Facebook group
- Request a consultation with Mark Taylor (which includes access to the Hacking Cancer Research Portal)
- See other discussions we have had on complementary cancer treatments, such as:
    - “Evaluating Complementary Therapies in Cancer Care” (Martin Lužbeták, MD, MS) [#108]
    - "A Patient’s View on Nutrition, Supplements, Integrative Oncology, and Complementary Therapies" (Robert Ellis and Glenn Sabin) [#33]
    - "Terrain and the Whole Person in Cancer Care” (Nasha Winters, ND, FABNO) [#95]
    - “Integrative Cancer Care” (Donald Abrams, MD) [#102]
    - “Cancer Scams: Don’t Get Taken” (Bapcha Murty) [#94]

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Meeting Notes

SUMMARY KEYWORDS

patients, cancer, clinic, treatments, testing, doctor, immunotherapy, data, immune system, study, checkpoints, chemo, work, tumor, response, terms, injections, people, vaccine, pancreatic

SPEAKERS

Mark Taylor (69%), Brad Power (8%), Jeff Krolick (5%), Rick Stanton (4%), Brian McCloskey (3%), John Powers (3%), Jay Sandler (3%), Amit Gattani (2%), Saed Sayad (2%)

Outline

Summary

- **Patient-led cancer care and integrative oncology with Mark Taylor.** 0:03
    - Mark Taylor shares his experience as an engaged and activated cancer patient, highlighting his leadership in integrative oncology.
- **Introducing Mark and his medical journey.** 2:25
    - Mark spent most of his life in finance and technology.
    - He experienced stomach pains.
    - Mark's friend suggested a circulating tumor cell blood test, which came up positive. Mark had elevated tumor markers, and a confirmed diagnosis of pancreatic adenocarcinoma.
    - His doctor refused to treat them without a biopsy.
    - Mark went on a world tour to various integrative medicine clinics, spending thousands of dollars and seeing over 20 doctors, but found little evidence to support their treatments and was left with a large bill and no patient referrals.
- **Cancer treatment approaches and their impact on survival.** 7:05

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    - After studying 100 patients, Mark found that the key to success in cancer treatment is not specific supplements or protocols, but rather a general approach that includes multiple anticancer activities (e.g., meditation, exercise, and supplements like curcumin).
    - The types of findings that stood out in exceptional responders were those doing 30 or more anticancer activities, with a correlation between these activities and improved survival.
    - He saw a correlation between early adoption of integrative approaches and better response rates, as well as the importance of minimizing the side effects of standard treatments.
- **Creating a better clinic that offers personalized cancer treatment options.** 12:52
    - Mark traveled to various integrative clinics worldwide to gather data on treatments for cancer, finding that many clinics had limited treatment options and biased views.
    - Mark realized the need for a single, unbiased source of information on cancer treatments, including data on costs and effectiveness.
    - Mark partnered with a doctor in Spain to create a clinic that offers a range of treatments and provides an unbiased view of their effectiveness.
    - Clinic offers comprehensive cancer treatment with a personalized approach, including various therapies and tests to monitor patient response.
- **Immunotherapy approaches for cancer treatment.** 18:26
    - Mark discovered new immunotherapy approaches to treat cancer, including targeting microbiome, hypoxia, and glycolysis.
    - Mark discusses using immunotherapy to treat various cancers, including colorectal, ovarian, and rectal cancer, with promising results.
    - Mark highlights the importance of identifying the right immunotherapy approach for each patient, as some treatments may not work due to factors such as steroid use.
- **Cancer treatment best practices from the data analysis.** 23:17
    - Patients with damaged immune systems due to chemotherapy may not respond well to immunotherapy.
    - Emotional state plays a crucial role in the effectiveness of immunotherapy, with stress weakening the immune system.
    - Mark used a Google Sheets document to track data and attract patients for his study.
    - Mark mentions legal considerations and the challenges of capturing data from patients, particularly those who are not regularly engaged in the study.
    - Mark notes that exceptional responders – those in pancreatic cancer treatment that lasted three years or more – have clear patterns.
    - For example, those who are determined and positive through the process do much better.
    - Mark describes his symptoms before his pancreatic cancer diagnosis: stomach pains, burnout, panic attacks, acid reflux, and dodgy stool.
    - Mark believes a personalized medicine approach is needed to address individual patient experiences and symptoms, rather than relying on control and treatment groups.
- **Cancer diagnostics for immunotherapy.** 35:12
    - Next Gen Oncology and BostonGene are leaders in immune system diagnostics, focusing on immune system detail and real-time cancer research in personalized treatment approaches. BostonGene's tumor report and spatial phenotyping product, focuses on checkpoints and the tumor microenvironment.

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    - Boston Gene's testing includes 500 druggable genes. Mark suggests that less than that may be insufficient for accurate results.
- **Integrative cancer treatment and personal healing journey.** 41:05
    - Amit Gattani and Mark discuss their personal experiences and the financial burden they face in pursuing treatment options.
- **Researching cancer treatment options and natural healing.** 45:22
    - Amit Gattani asks follow-up questions on prioritizing treatment options and consulting for individuals with cancer, highlighting the need for personalized advice based on specific circumstances.
    - Mark has researched natural healing methods for cancer, including modified citrus pectin, melatonin, and exercise, and has seen positive results in early-stage cancer patients.
    - Mark has also studied energy healing and shamanism, and believes that these practices can be beneficial for cancer patients, particularly in combination with conventional treatments.
- **Alternative cancer treatments and their effectiveness.** 50:27
    - Jeff Krolick shares his experience with alternative cancer treatments, including energetic healing and Rife therapy, and how they have affected his PSA levels.
    - Mark shares his personal experience with trauma healing and sensing energy blockages in the body through meditation and therapy.
    - Mark shares his experience with meditation and cancer treatment, highlighting the potential for visualization and energy flow to aid in healing.
- **Immunotherapy for cancer treatment.** 57:05
    - Rick Stanton expresses curiosity about the definition of immune state and how it's analyzed in cancer treatment.
    - Rick asks about vaccine vendors.
    - Mark mentions the importance of recognition, adjuvants, and MHC class for immune response.
- **Personalized cancer treatment strategies.** 1:02:01
    - Personalized vaccine prices are similar and expensive, from $80,000 to $125,000, depending on location.
    - It’s important to consider what happens around the vaccine.
    - Patients at the clinic in Spain receive personalized treatment plans and intense monitoring for up to 18 months.
    - Mark outlines personalized treatment plans for late-stage cancer patients, including immunotherapy and cell therapies.
- **Treatment options when money is limited.** 1:07:10
    - Jay Sandler, a patient with pancreatic cancer, expresses awe at Mark's ability to analyze data, and asks questions about study population size and timing of treatment.
    - Mark suggests combining multiple therapies for pancreatic cancer, even with limited resources.
    - Mark discusses the high cost of clinical trials for cancer treatment, ethical considerations, and potential solutions.
- **Cancer treatment strategies.** 1:13:46
    - John Powers appreciates the presentation and the approach of considering different perspectives, as it resonates with his own personal journey and the struggles of others in the group.
    - John acknowledges the lack of standards and requirements in the cancer space, and how Brad and Rick's efforts in bringing in various views and inputs are valuable in making progress.

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- A potential cure for pancreatic cancer with a tumoral vaccine, with promising results in a recent prostate cancer study.
- Brian McCloskey discusses a doctor in Mexico who uses a combination of 11 checkpoint inhibitors to treat cancer, with mixed results.
- The doctor's approach involves injecting all 11 drugs simultaneously, rather than targeting specific checkpoints individually.

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Meeting Transcript

Brad Power
This is the Cancer Patient Lab. This is one of our weekly webinar sessions. We're honored to have with us today Mark Taylor, who is a role model as a leader in dealing with his care, someone that we can all learn from in terms of his leadership and taking advantage of services and information to guide his own care and then helping others. He's currently in Portugal.

I got introduced to Mark by Houda Boulahbel. When I looked into who he was, I really liked the name “Patient Led Oncology”. That's who we are too. At the Cancer Patient Lab we're trying to help patients and their caregivers navigate their cancer and learn. It seemed like Mark was very aligned with what we're doing.

You can find his story on his website, Patient Led Oncology, and you'll find out that he's really been active in turning over every stone about treating his disease, and also elaborating on integrative oncology. I'm sure he'll go into that in some more depth.

I expect to get two things from this session that Mark will walk us through. One is his role as a very engaged and activated patient in managing his care. And second, I suspect we'll learn something about integrative oncology and what works and what doesn't in that sphere.

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Mark Taylor 3:09
Good to meet you all.

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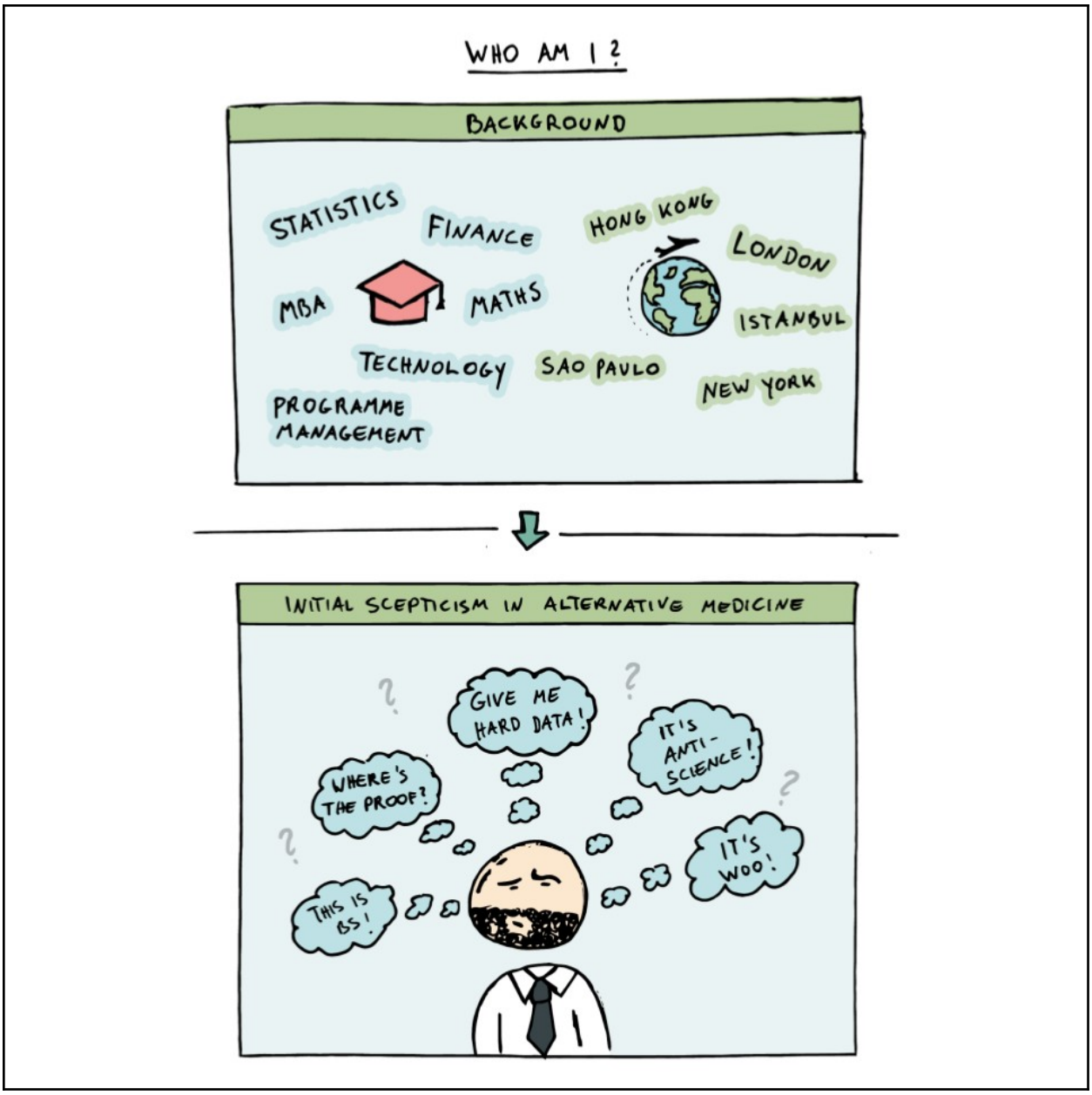

My story: I spent most of my life in finance technology. I worked on bond trading systems. It was a fairly conventional career, with a background in maths and statistics, technology, and program management.

I had no real insight into alternative health. I started off as a skeptic. If I'm honest with you, I was one of those hard data-driven people I come across from the business world who expect the standard of care to work perfectly.

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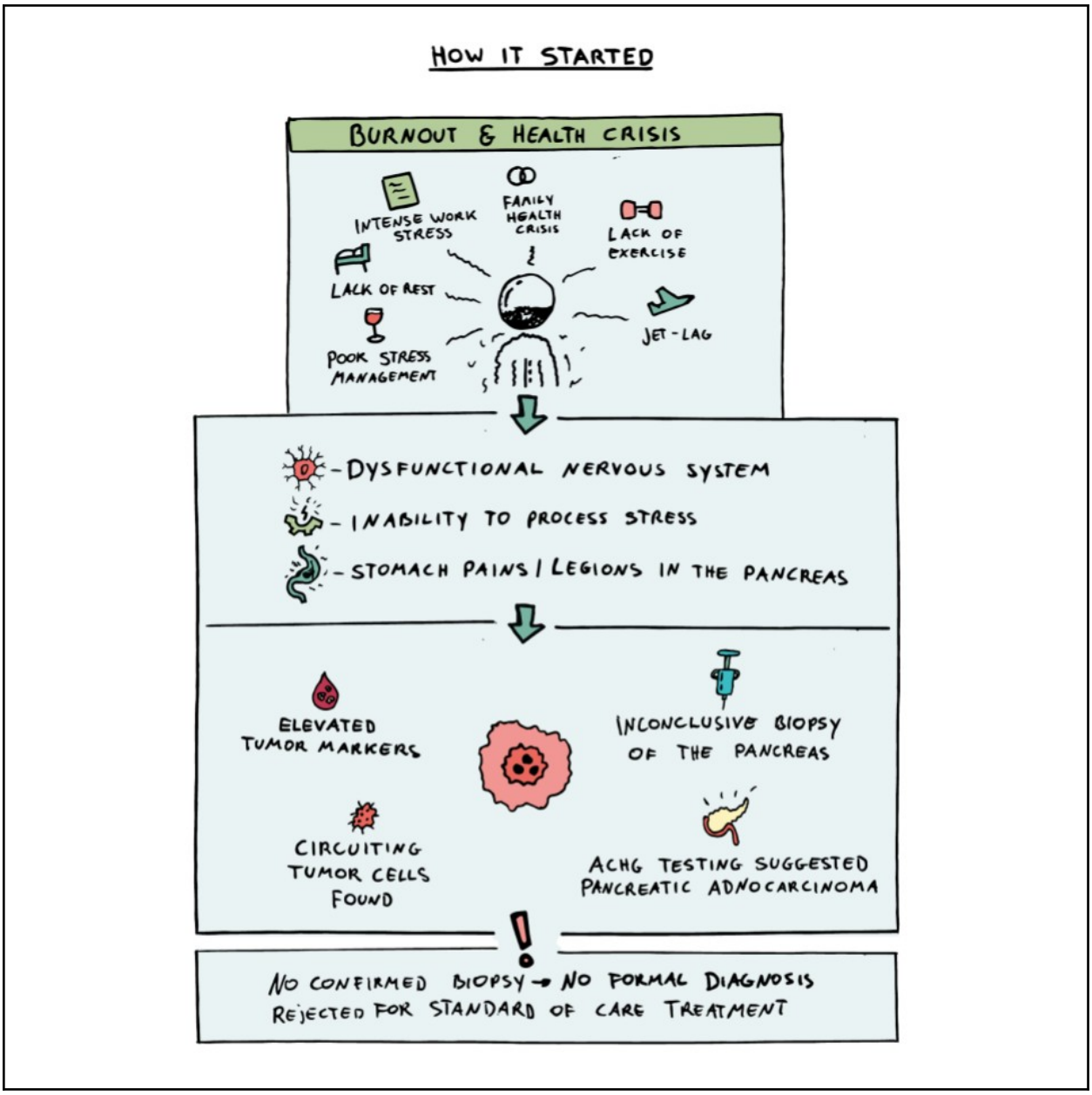

During a period of my life, I had a very intense period where everything came in line to cause me to have a burnout, which led to stomach pains that were undiagnosed. This is a common story that happens in the pancreatic space: lots of scans, some signs that the tail was kind of inflamed, which led to an endoscopic ultrasound. They saw some lesions. Their biopsy was inconclusive, and with an inconclusive biopsy, they wouldn't do anything. At the time, we were taking my blood samples. My tumor markers were slightly elevated. One of my friends happened to work in an integrative clinic and suggested that I get a circulating tumor cell test. I didn't believe it at the start. I spent some time researching it, and then jumped on it. It came up positive.

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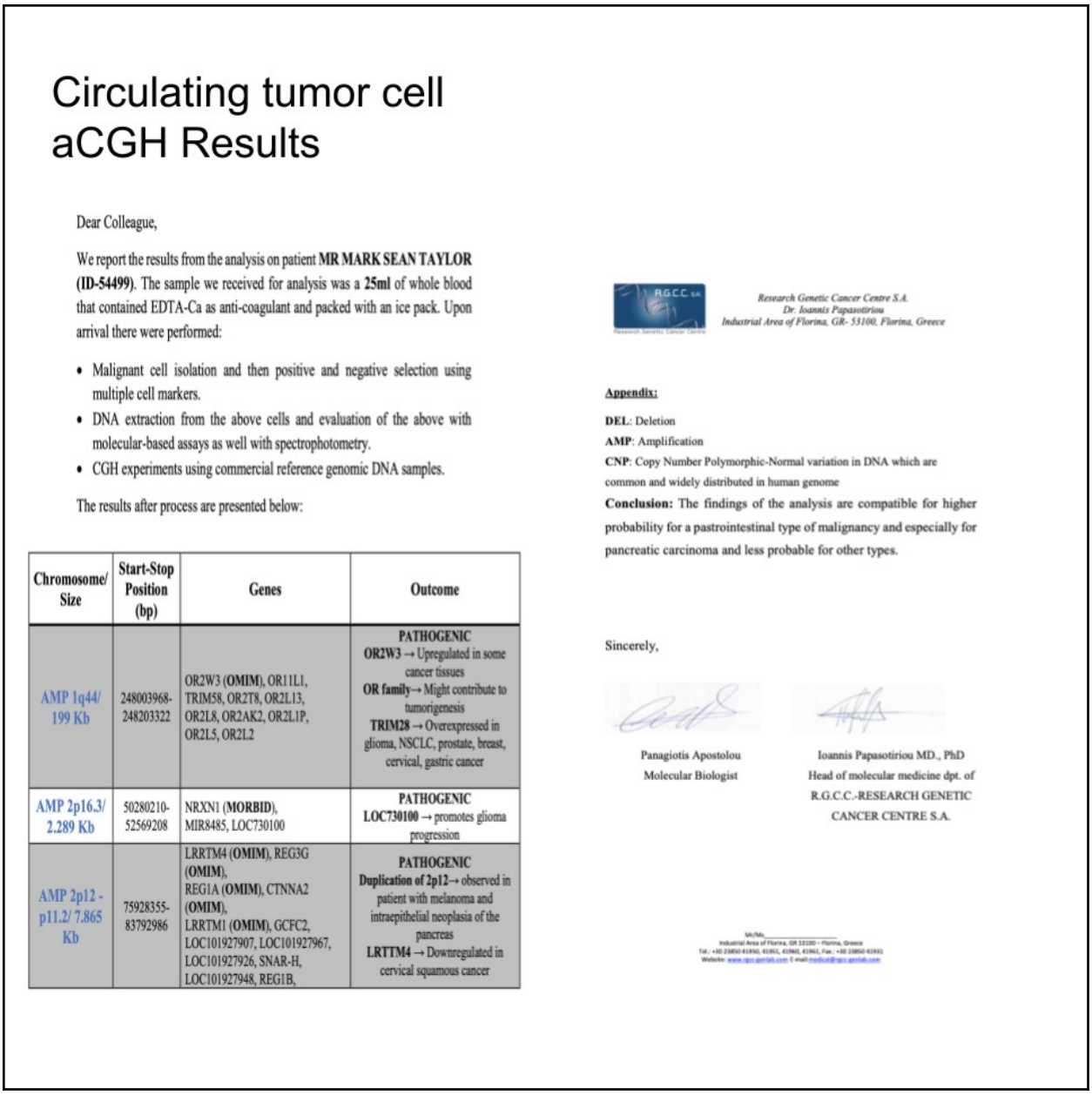

Circulating tumor cell aCGH Results

Dear Colleague,

We report the results from the analysis on patient **MR MARK SEAN TAYLOR (ID-54499)**. The sample we received for analysis was a **25ml** of whole blood that contained EDTA-Ca as anti-coagulant and packed with an ice pack. Upon arrival there were performed:

- Malignant cell isolation and then positive and negative selection using multiple cell markers.
- DNA extraction from the above cells and evaluation of the above with molecular-based assays as well with spectrophotometry.
- CGH experiments using commercial reference genomic DNA samples.

The results after process are presented below:

Chromosome/ Size	Start-Stop Position (bp)	Genes	Outcome
AMP 1q44/ 199 Kb	248003968-248203322	OR2W3 (**OMIM**), OR11L1, TRIM58, OR2T8, OR2L13, OR2L8, OR2AK2, OR2L1P, OR2L5, OR2L2	**PATHOGENIC** **OR2W3** → Upregulated in some cancer tissues **OR family**→ Might contribute to tumorigenesis **TRIM28** → Overexpressed in glioma, NSCLC, prostate, breast, cervical, gastric cancer
AMP 2p16.3/ 2.289 Kb	50280210-52569208	NRXN1 (**MORBID**), MIR8485, LOC730100	**PATHOGENIC** **LOC730100** → promotes glioma progression
AMP 2p12 - p11.2/ 7.865 Kb	75928355-83792986	LRRTM4 (**OMIM**), REG3G (**OMIM**), REG1A (**OMIM**), CTNNA2 (**OMIM**), LRRTM1 (**OMIM**), GCFC2, LOC101927907, LOC101927967, LOC101927926, SNAR-H, LOC101927948, REG1B,	**PATHOGENIC** **Duplication of 2p12**→ observed in patient with melanoma and intraepithelial neoplasia of the pancreas **LRTTM4** → Downregulated in cervical squamous cancer

Research Genetic Cancer Centre S.A.
Dr. Ioannis Papasotiriou
Industrial Area of Florina, GR- 55100, Florina, Greece

Appendix:

DEL: Deletion
AMP: Amplification
CNP: Copy Number Polymorphic-Normal variation in DNA which are common and widely distributed in human genome

Conclusion: The findings of the analysis are compatible for higher probability for a pastrointestinal type of malignancy and especially for pancreatic carcinoma and less probable for other types.

Sincerely,

Panagiotis Apostolou
Molecular Biologist

Ioannis Papasotiriou MD., PhD
Head of molecular medicine dpt. of
R.G.C.C.-RESEARCH GENETIC CANCER CENTRE S.A.

I then followed up with a company that was doing a CTC (circulating tumor cell) test, RGCC. [For information on RGCC, please see the notes from our discussion with RGCC, Meeting #51, on our discussion forum, community.cancerpatientlab.org, in the “Learning Sessions” section.] They did another test called ACGH (Array Comparative Genomic Hybridization) which can use probabilistic matching on the DNA to give a view in terms of what the cancer was, and it came up with pancreatic adenocarcinoma. I had lesions. I had elevated tumor markers. I had pains where my pancreas was. I had pretty good evidence to suggest I had early stage cancer, but the doctor wouldn't treat me because there was no confirmed biopsy. I was left to fend for myself without conventional treatment, and I was pretty angry at the conventional system for that at the time, not understanding how it worked.

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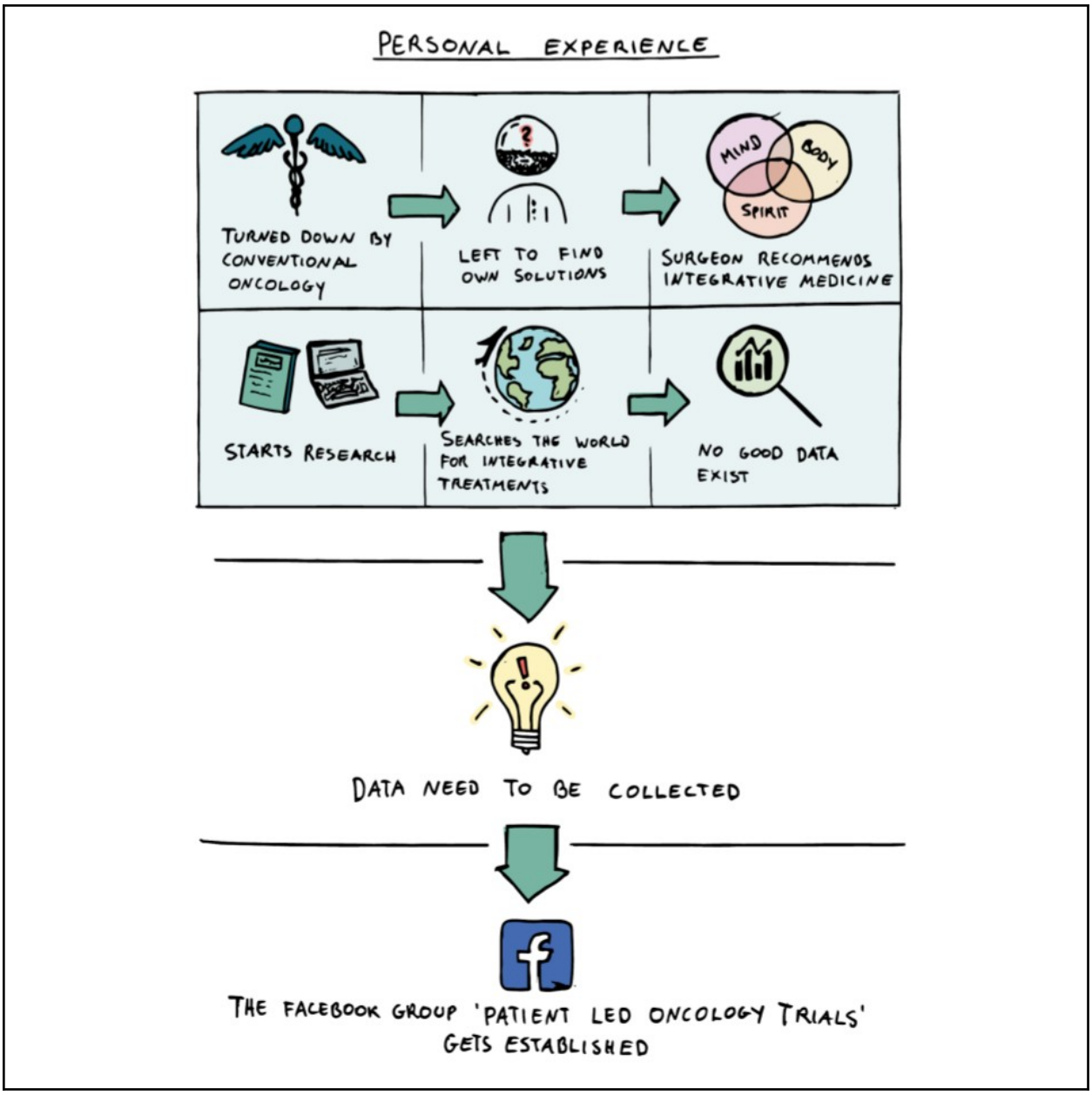
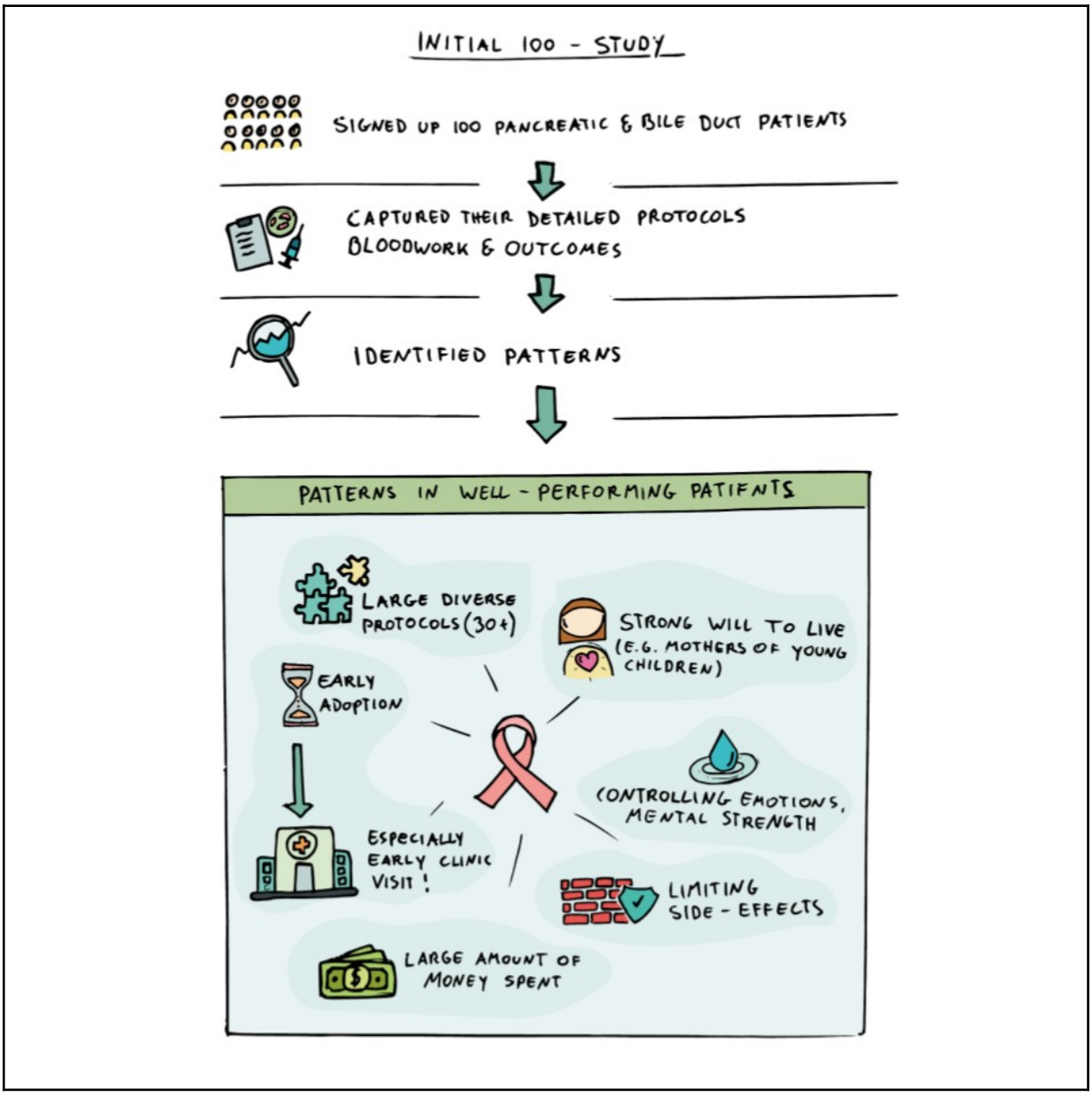


I was left to find my own solutions. I went out, started reading the typical books everyone reads: Jane's book (Jane McClelland, How to Starve Cancer: Without Starving Yourself), Nash's book (Martha Nash, Surviving Cancer ~ The Magic Ingredients: Inspiration and Practical Advice From a Cancer Survivor), Kelly Turner's book (Radical Remission: Surviving Cancer Against All Odds), and I just started reading more and more.

Then I saw a surgeon who I was discussing potentially getting surgery with, and he said off the record, “Look, I've seen people get results in clinics in Mexico, and you may want to consider integrative medicine.” That started me on a world tour. I flew to Thailand, Malaysia, the US, and the UK. I went to clinics. I probably saw around 20 different doctors over my time in the five years. If you've gone to these integrative clinics, you get sold a lot of stuff that's got very little

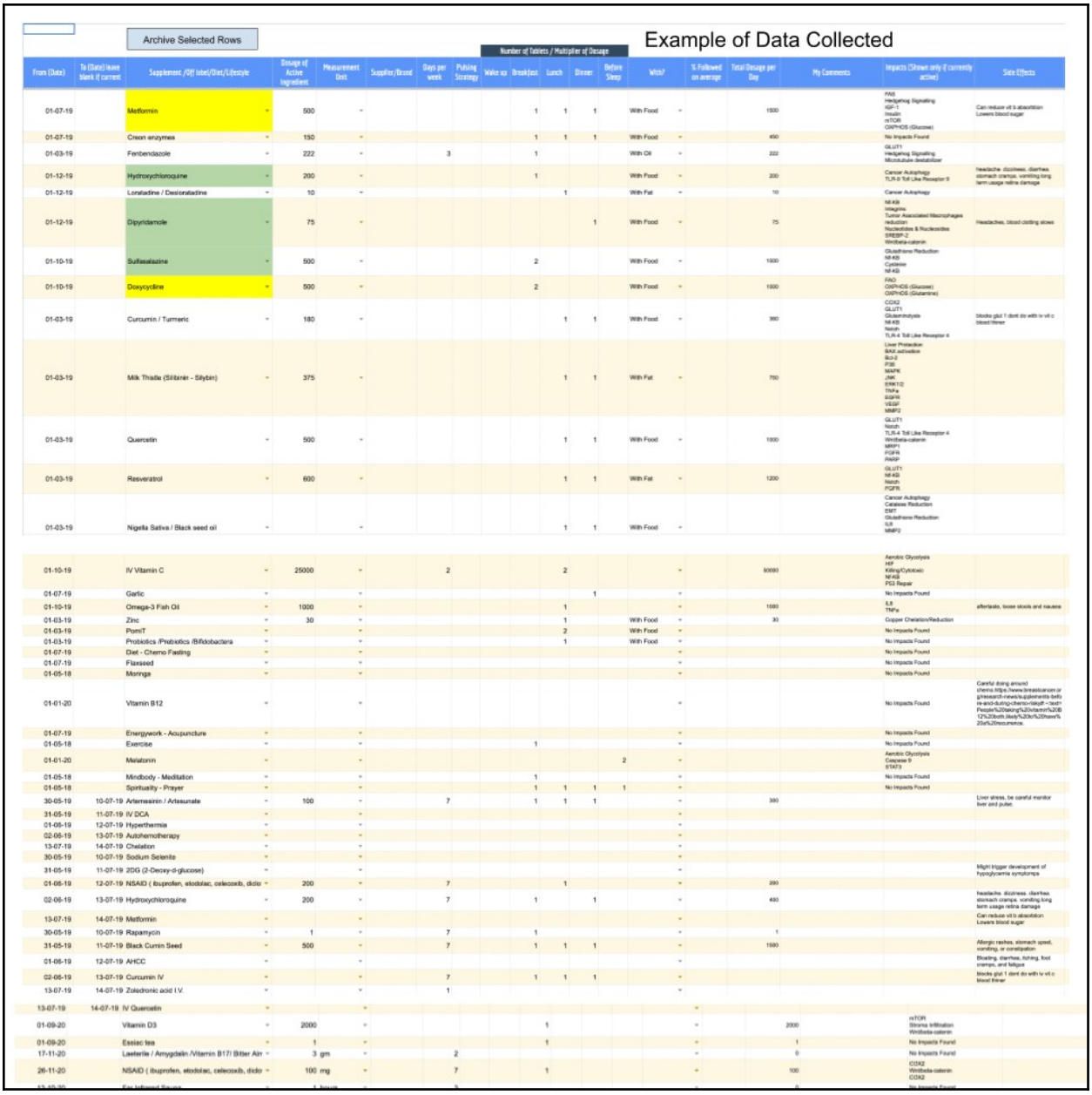
evidence behind it, and you get a huge bill attached to it. They rarely give you any patient referrals to say whether it's worked or not. This pattern was repeated in the books I was reading: when I was looking for evidence, real solid evidence on protocols to follow – I couldn't get any data.



With my background in technology and data and program management, I thought it was going to be fairly easy to fix. So I created a Facebook group to bring patients together to try and capture what they were doing and see what worked. My first trial was 100 pancreatic and bile duct patients. That was the cancer I had. It was also a pretty good one to start with because the average stage 4 pancreatic patient lives between 7 and 11 months. So you get a turnaround fairly quickly on what's working and what's not. I spent three years looking at 100 patients, and

captured every single bit of detail from what protocol they were doing, such as what supplements they were taking, what dosage, what time of day.

At the time, I was hoping like a lot of people do, that there was some magical substance out there that would have the answer, or some magical protocol that would have the answer. But what I found, after about three years of studying the data, wasn't so much the specifics that mattered, it was the general approach that made the big difference. There were some key things that stood out.



Mark Taylor 8:05

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This is the sort of data I collected from a specific patient. She was a five-year survivor of pancreatic cancer.

The findings that we had became almost a bit silly. There was a real correlation with those doing 30 things or more. In terms of the exceptional responders, there was one pattern. It seemed a bit silly saying that when I was meeting other patients, giving them my views of what I'd seen, it was like, “Yeah, those doing more, are doing better.” With “more” being like an anticancer supplement like curcumin, meditation, exercising, or a vitamin C IV (intravenous injection). It kept coming up.

As I got to understand how the cell works, and resistance and things like that, it started making sense to me that what actually is happening is a lot of these things have a minor impact on your potential to get a good response. By increasing the number of things you were doing which had anticancer effects, you were giving yourself a 1% improvement on survival for each thing you were doing, which makes sense when you start understanding the way pathways link to supplements. When you do the analysis on off label drugs or anticancer supplements, they'll typically relate to pathways that cause resistance from the chemo, which is a standard protocol for pancreatic cancer – FOLFIRINOX (a chemotherapy regimen) followed by gemcitabine (a chemotherapy). You are looking at a chemo extension.

Mark Taylor 9:47
I don't intend to show you the details of this report. I just wanted to give you an idea of the data – to give you a flavor of how there are line items in the sheet that someone collected.

Mark Taylor 10:14
We gave people these tools that they put in: the supplement, the dosing, and the anticancer pathways that were impacted.

These were the things we found that stood out:

- **Large protocols** – We call them “the 30 Plus”.
- **Early adoption of the protocols** – If people didn't find out about integrative oncology until they've already got resistance, it didn't work. It seemed to be that a lot of these anticancer approaches that people talk about were really more prolonging the life of the primary treatment. Now this may be specific to pancreatic cancer. I think for prostate cancer it will probably be a bit different, because you've got “wait and watch” as an option. The dynamics are slightly different for prostate cancer.
- **Experimental clinic** – There was a massive correlation with those going to an experimental clinic early on. We had four complete responses, which is very rare in pancreatic cancer, for those who had the bravery to fly from their country to a top clinic. Places like Kleef (Ralf Kleef, MD, had a private practice in Vienna, Austria, where he was an expert for hyperthermia and complementary medicine), which is shut down. He spent his life studying immunotherapy. Verita Clinic (Thailand). Well Again in Malaysia. They were typically in an unregulated area where people would need to fly to and spend a fair amount of time. But if they did it early, we saw like 80% of the complete responses

were people who had left in their first line or prior to their first line of treatment. And we're getting to NED (no evidence of disease) with pancreatic cancer, which is incredibly rare.

- **Strong will to live** – There was a clear correlation of people who really wanted to live, particularly mothers of young children, and you'd see the kind of determination in the patients. It's very difficult with cancer. It's very evident. Every integrative doctor I speak to talks about the apparent impact of someone's emotions on their outcomes. This is something I studied later on.
- **Limit side effects** – The importance of staying on standard of care seems so important. Those that limited the side effects of the high dose chemo did better. One of the main reasons people have to stop treatment in pancreatic cancer is because of the dose limiting toxicities of the chemo. So those that manage that do better.
- **Spend money** – Unfortunately, because of the number that went to these clinics, a lot of them did spend a lot of money. These clinics are expensive.

These were the main observations.

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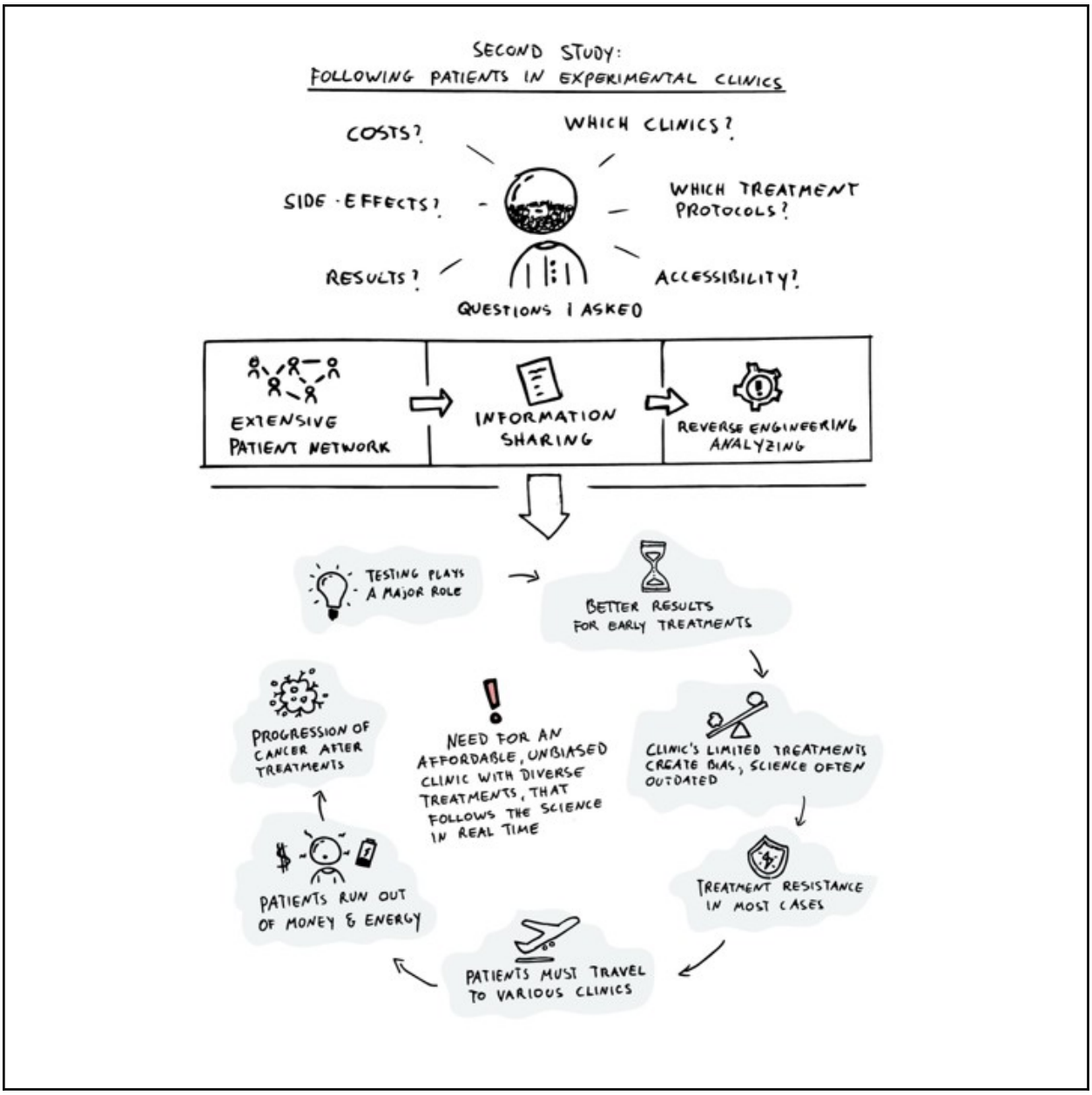

I then wanted to hone in on what those clinics were doing. I traveled around the world seeing a lot of these clinics. I came to realize when I'd seen these experimental doctors, that because there's no standard training for these doctors, each one had trained in a new specific skill. Every doctor I spoke to had different knowledge, different treatments, different approaches. Every doctor I'd speak to would expand my knowledge. After speaking to about 20 of them, I started having conversations with the doctors because of my previous conversations. I had knowledge they didn't have.

As a second study I went out and through my group started speaking to patients going into these clinics. I captured data about how much they were spending, what the experience was, like what side effects, and even down to the exact protocols. They would give me the treatments

they were doing, and what dosages if I could get it. I also captured who was doing well. Testing was really important. Starting the treatments early on in the treatment plan was very important. There was a realization that a lot of the clinics, probably more than 50%, had a very limited range of treatments. Patients were going to see what they considered was an expert, but really they're only an expert in what they offered. It would really be a biased view. A lot of these integrative clinics would give a biased view based on the treatments they did, and they weren't getting a real complete picture of what was available.

What would happen is they would start the treatment. Sometimes it would work. But then after a while, resistance would kick in, pretty much fundamentally. They'd be sitting there with that doctor, who would say, “You haven't utilized all the treatments.” In some cases, the doctor would carry on, but in vain. Other patients would travel to another doctor and start another treatment, until, in many cases, people ran out of money or energy. Quite often people were progressing after they stopped treatments, or particularly, when there was no standard of care left.

With this knowledge, I realized there was a need for a single place for collecting these data. For my own personal needs as a patient I had collected through this exercise all of the protocols, pretty much, of the top doctors in the world, including what drugs they were doing, and where they were sourcing it. I managed to get the costs.

Because of this resistance issue, and this bias issue, to me there was a need for a clinic that would have all these options available. It would give an unbiased view of what treatments were being offered. As the test was done, it would suggest what was useful, and you'd move on to that treatment. As resistance came, you'd move on to another treatment.

I had this powerful information, and I went looking for doctors around the world that would work with me. I basically gave them this information. I failed with the first few. Then I found a doctor in Spain who would work with me.

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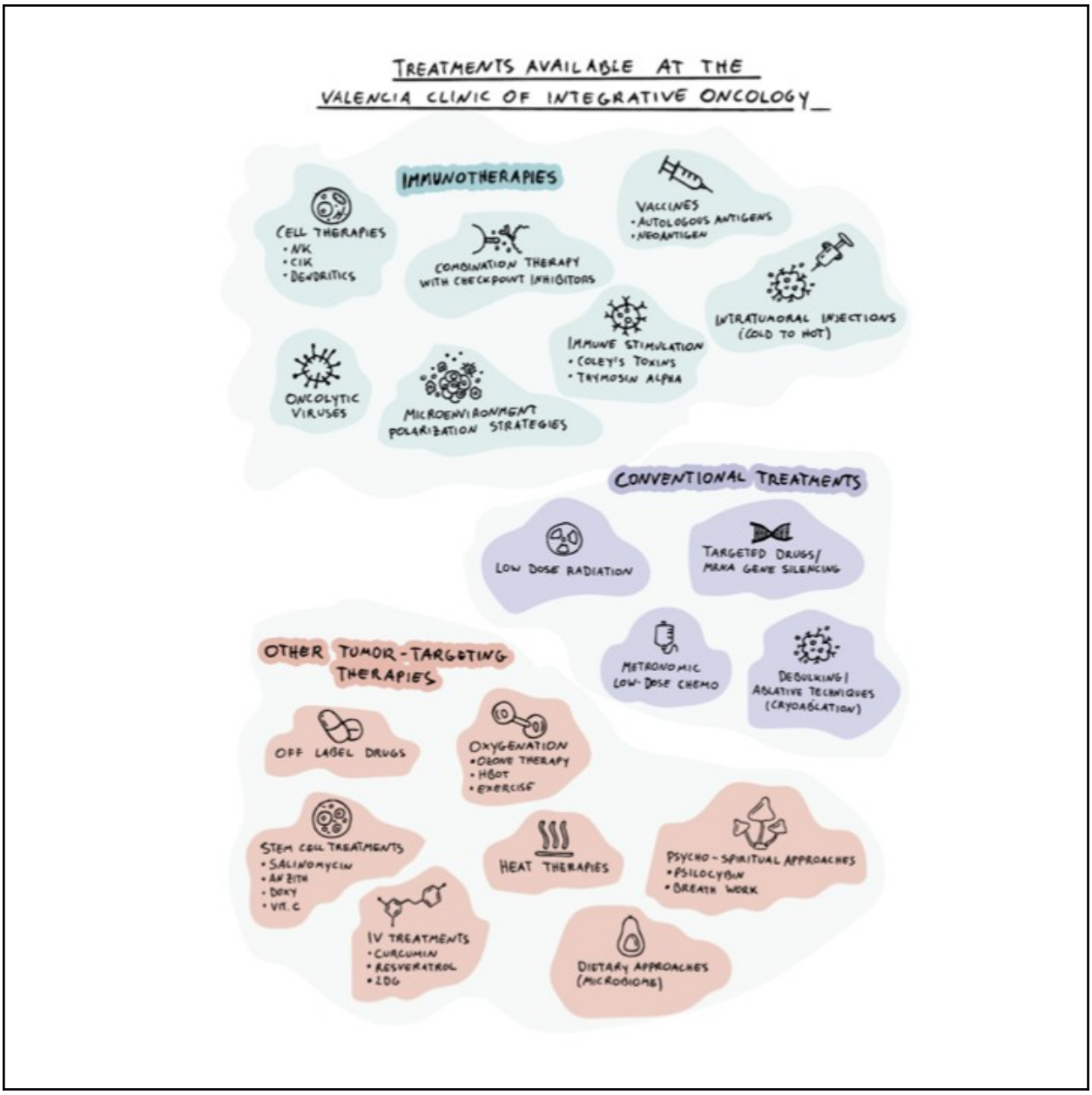
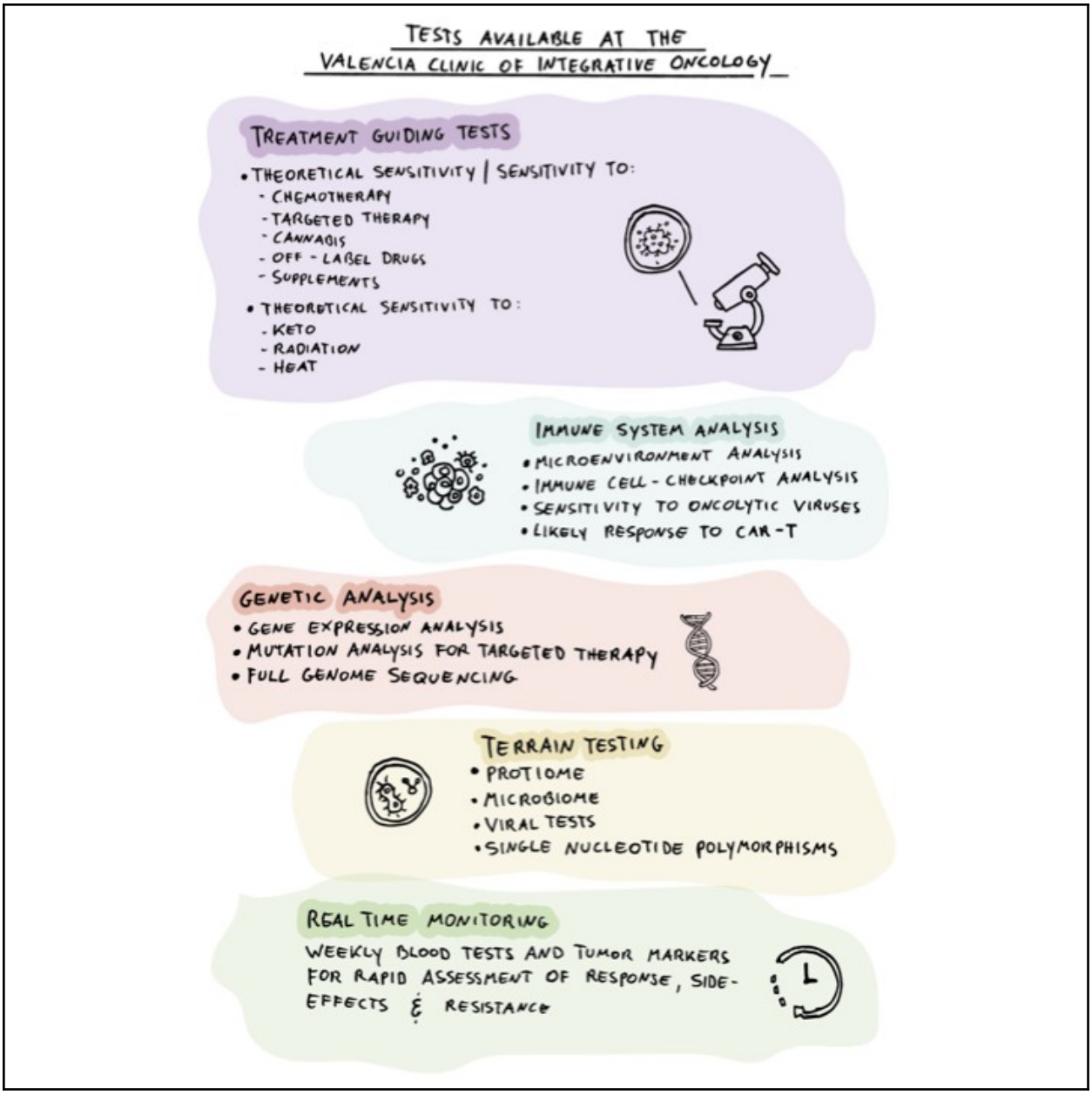


The idea is we bring everything into one place. Over the last two years we've been working, we've been trying to find everything we can and bring it into one place: every type of cancer vaccine, neoantigen vaccines, autologous vaccines, intratumoral injections, Coley's toxins, every IV, every cell therapy, every off label drug, every polarization strategy for the microenvironment, conventional strategies, stem cell treatments. Anything you hear about we're trying to pull into this clinic, including the psycho spiritual stuff like psilocybin therapy for death anxiety.

We've been running that for two years. The concept is that it gives patients a lot to offer. It's at a relatively low cost compared to other clinics. We're noticing some of the clinics, because of their limited range of treatments, add a huge markup, in some cases 500%. Because there was more

to offer, the markup could be less, then the patient would stay longer. They'd be under treatment.

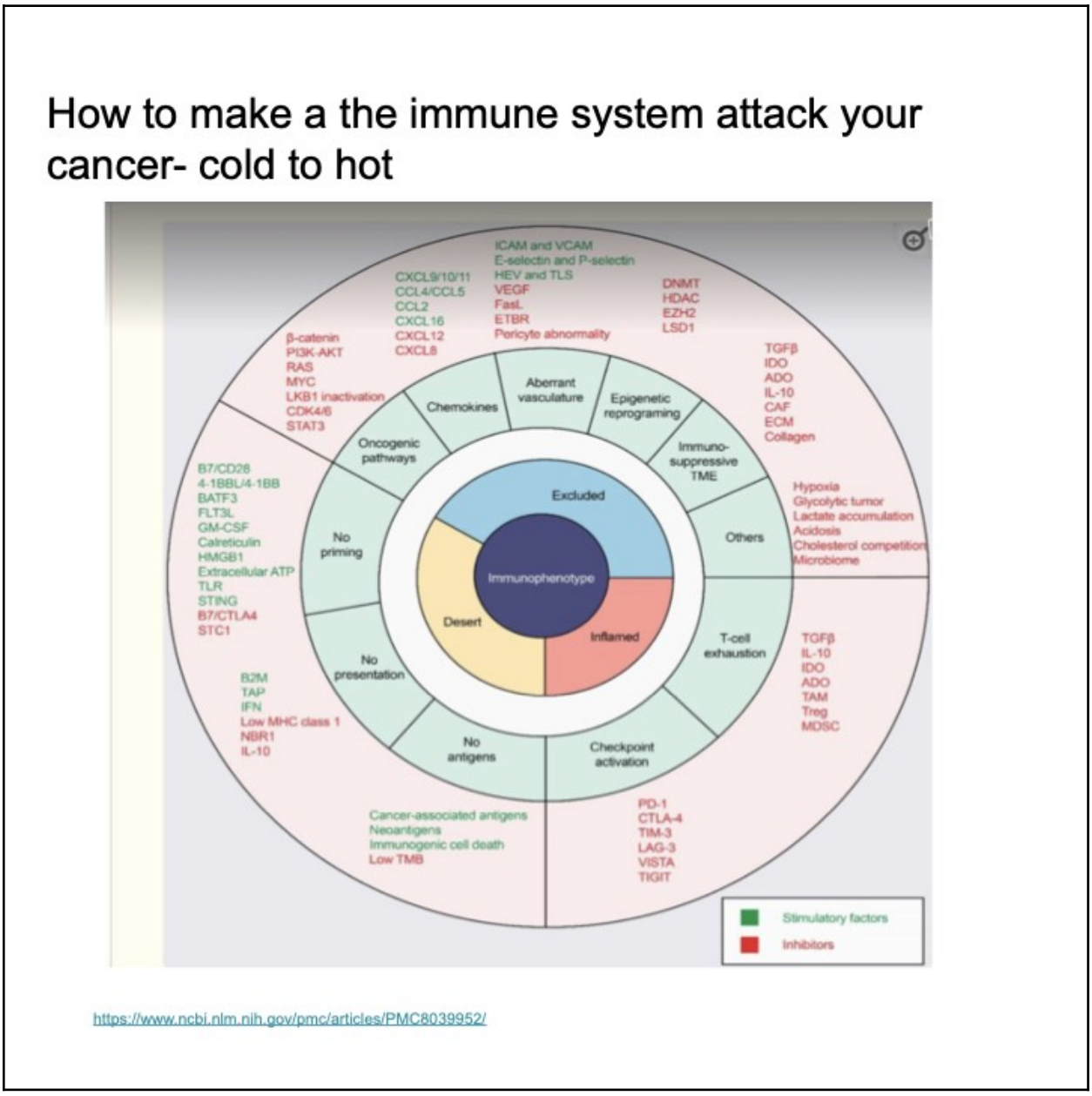


We also realized testing was important. So we tried to get hold of every single test you could possibly do in the world, such as chemo sensitivity to chemo-targeted therapy, cannabis oil, off label drugs, supplements, keto, radiation, heat, immune system analysis, checkpoint analysis, microenvironment analysis, response to CAR-T, oncolytic viruses, to array terrain testing.

Also, which was quite unique in this approach, we tested the blood almost daily. This gave us an immense amount of data. As we were doing treatments, we could see whether they were

responding almost immediately. We could spot side effects almost immediately, and we could see resistance almost immediately.

It's a context that we created. It's been running for 18 months now.



Through the research we came to the conclusion through picking up all these different doctors' ideas that in the integrative world now it's pretty much all going to immunotherapy. If you follow 90% of the integrative doctors, they're doing immunotherapy approaches. Everyone's trying to make the tumor responsive to the immune system, turning it from cold to hot.

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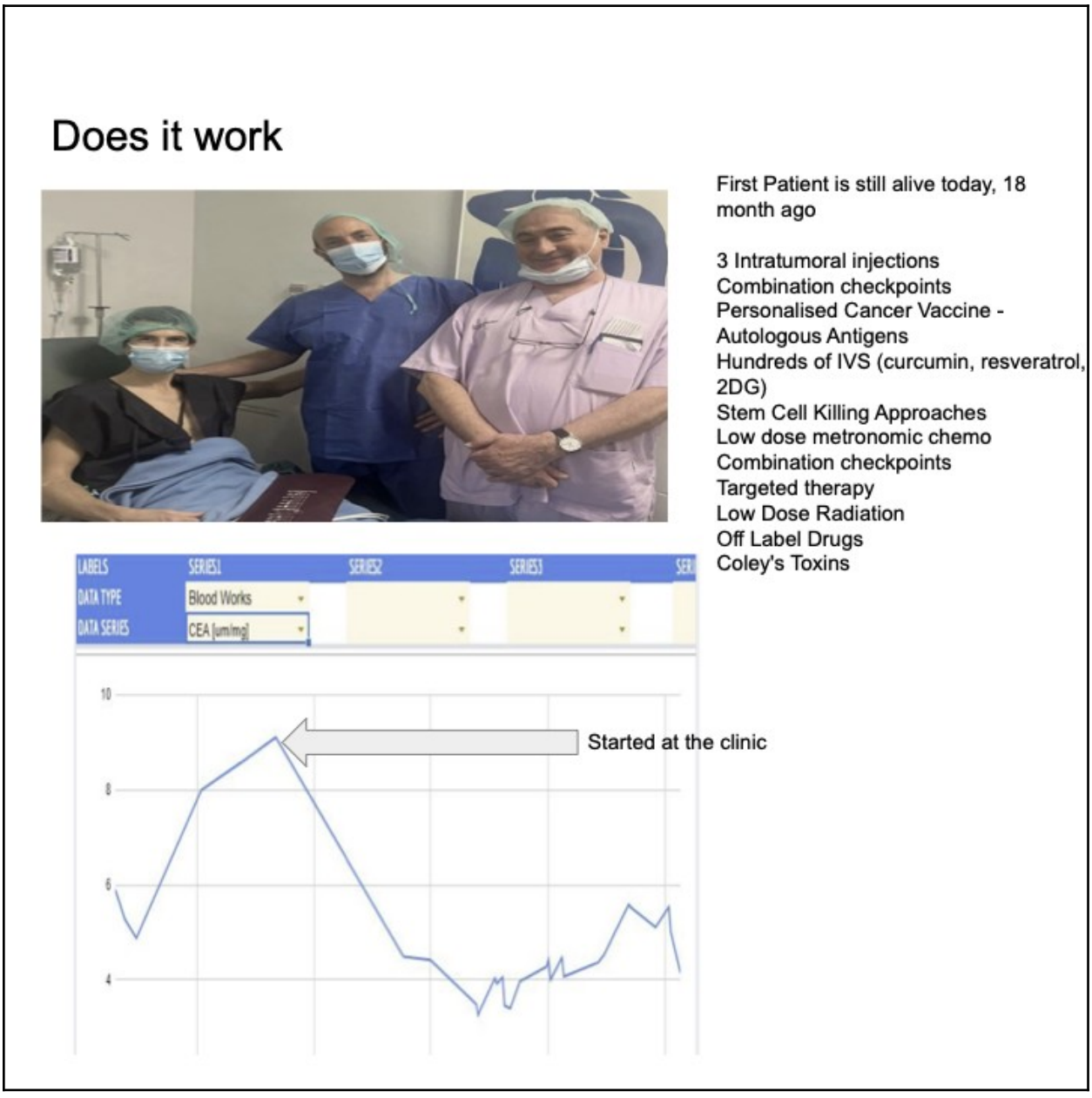
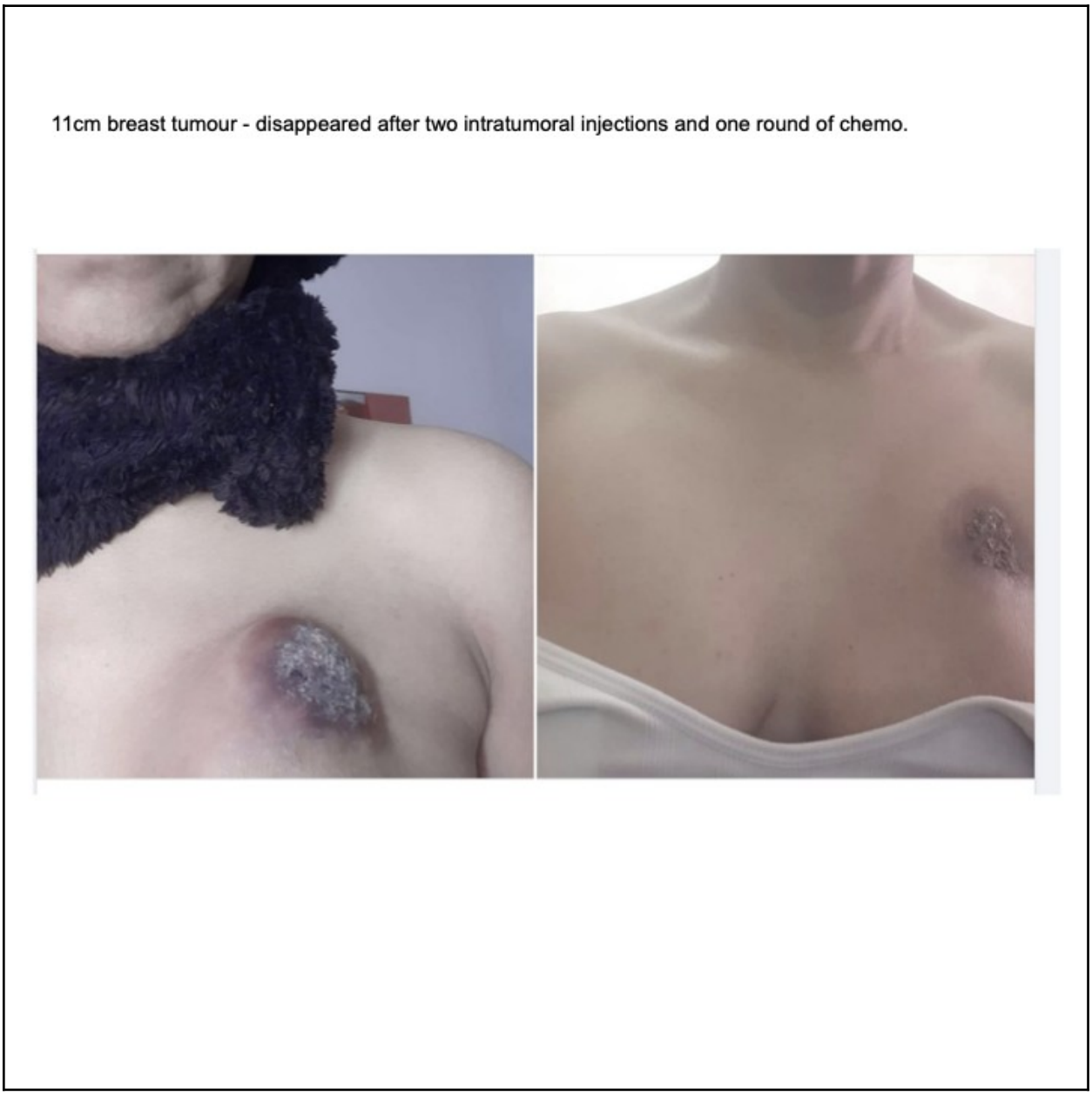
If you see a conventional doctor, he'll say, “Oh, your cancer doesn't respond to immunotherapy.” But really they're only talking about the drugs in circulation, such as PD-L1, PD-1, and CTLA-4, and if you're in the US LAG-3 (lymphocyte activation gene). When the conventional oncologists are saying, “There's no therapy for your cancer.”, they're really just saying, “... with the drugs that are in standard of care”. They're not looking at the microbiome, hypoxia, glycolysis, lactate, and they're not looking at antigen presentation and stimulating the immune system. It's got immune memory, and they're not looking at ensuring the cancer is exposing antigens for the immune system to see. There's a whole host of things that you can look at to get the immune system to respond. What we do is basically research mechanisms to work around this circle, and we're finding new things as well.



Is it working? Not always. The first patient we had came in 18 months ago. He was given up by standard of care, as his markers were on the rise. His cancer is still there. He's in a very late stage, a 10 centimeter lung tumor, probably about 20 other lung tumors to 10 centimeter tumors in the rib and the leg. We've kept him fairly stable over a year and a half.



Mark Taylor 20:18
We've had other successes, like a 10-centimeter breast tumor disappearing after two interferon injections, and one round of chemo, a single dose.

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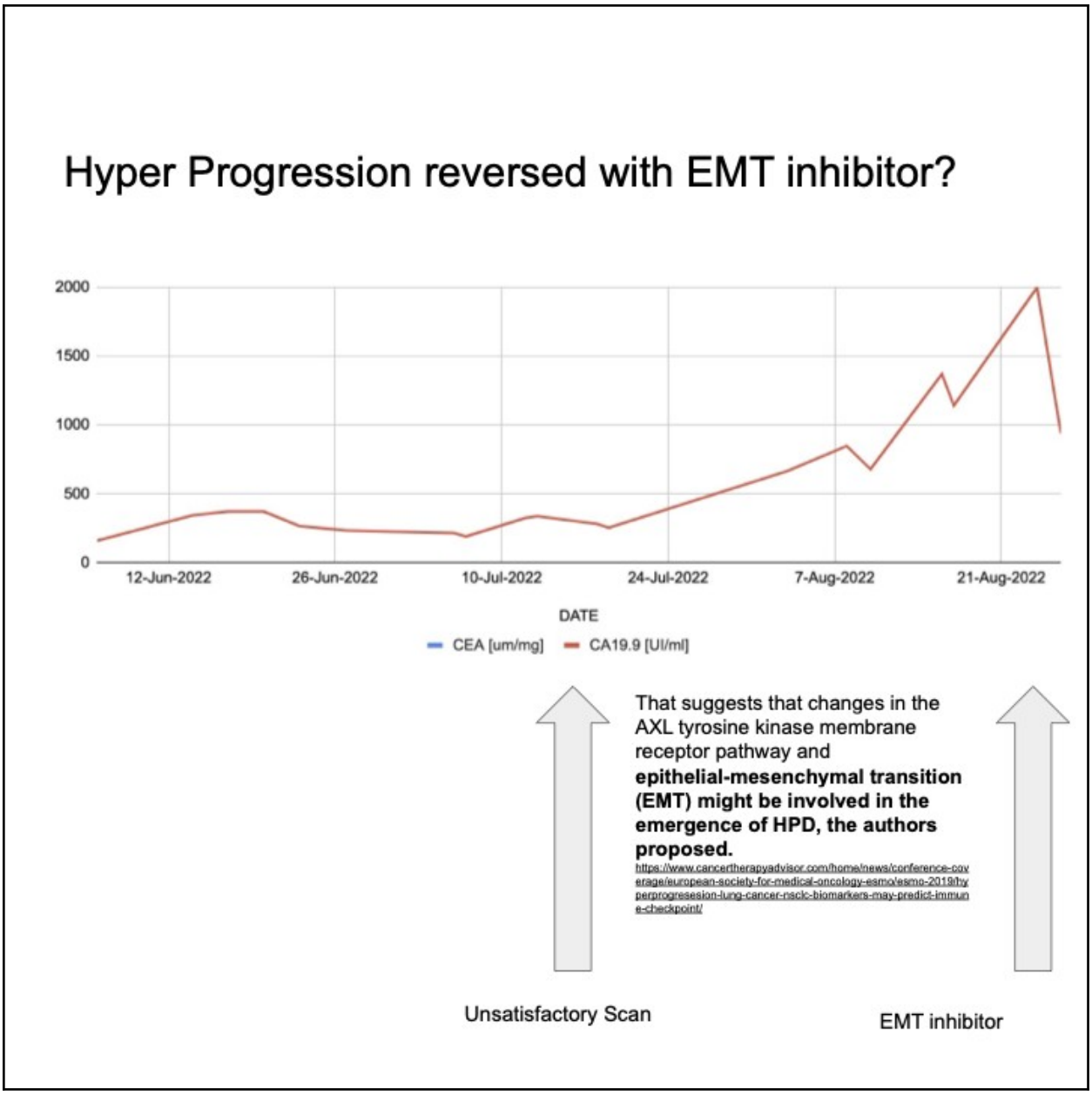

Because we've got so many different things we can use, we are learning things that we would never even expect to learn.

We had this case, we think it was hyper progression. This was someone who started checkpoints, and was kind of stable. Then – and this is something we see a lot – they're stable until they get some bad data, a bad scan, a scan that surprises them. Their markers started taking off, and then we couldn't control it. We found a study about EMT and its relation to hyper progression. We used an EMT inhibitor and got a huge response, an over 1000 drop in CA19.9, literally in a week.

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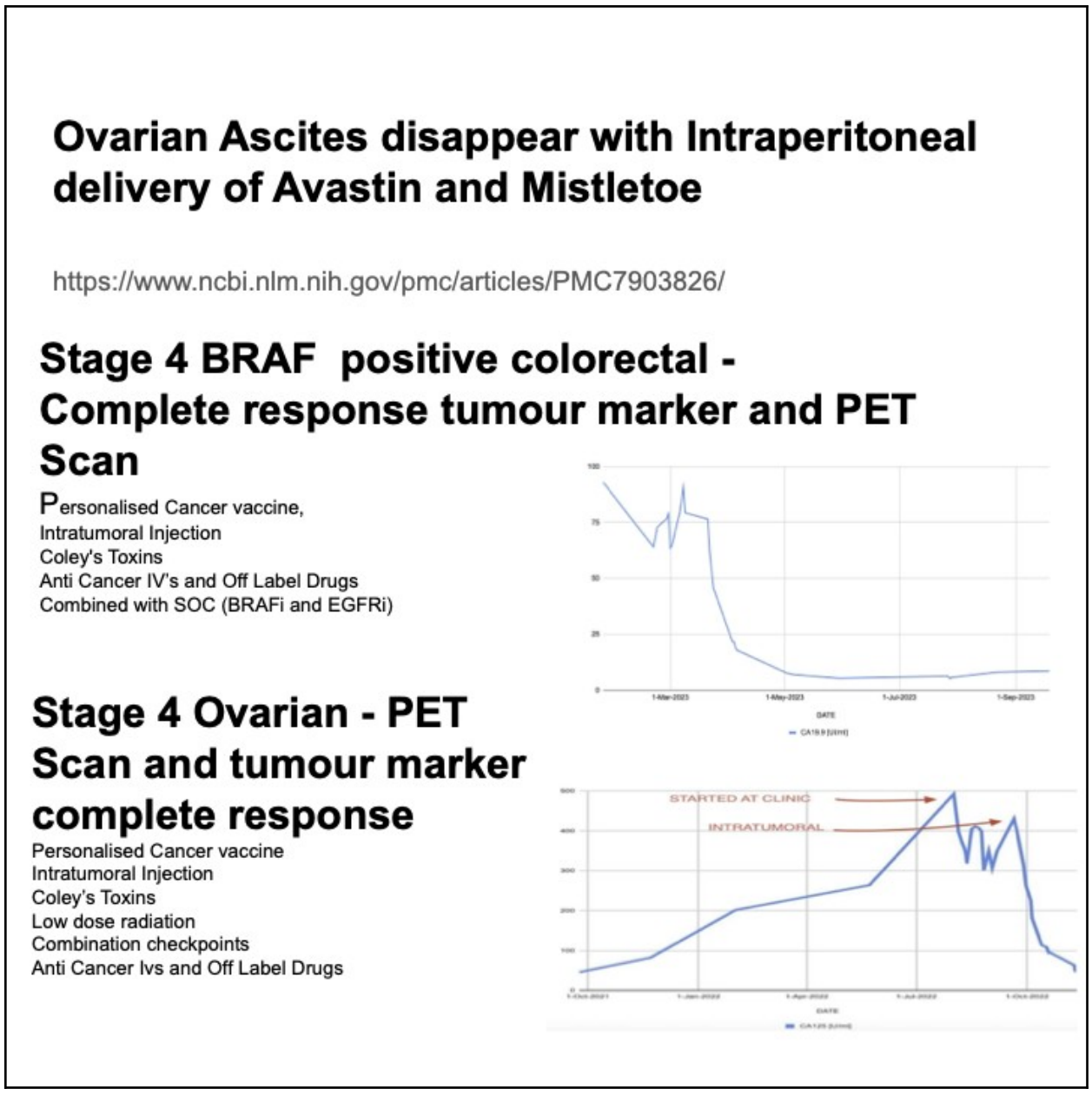
We're learning because we've got so many different options to use in a less regulated environment. I know this is hard to mimic in the States.

We're learning not just what's working, but these very niche sort of situations that aren't even studied very well in research. And then some other interesting things.



A BRAF-positive colorectal patient had a complete response on PET to Personalized Cancer vaccines.

We're building a standard approach, which is cancer vaccines, intratumoral injections, and typical anticancer IVs. An ovarian cancer patient had a complete response.

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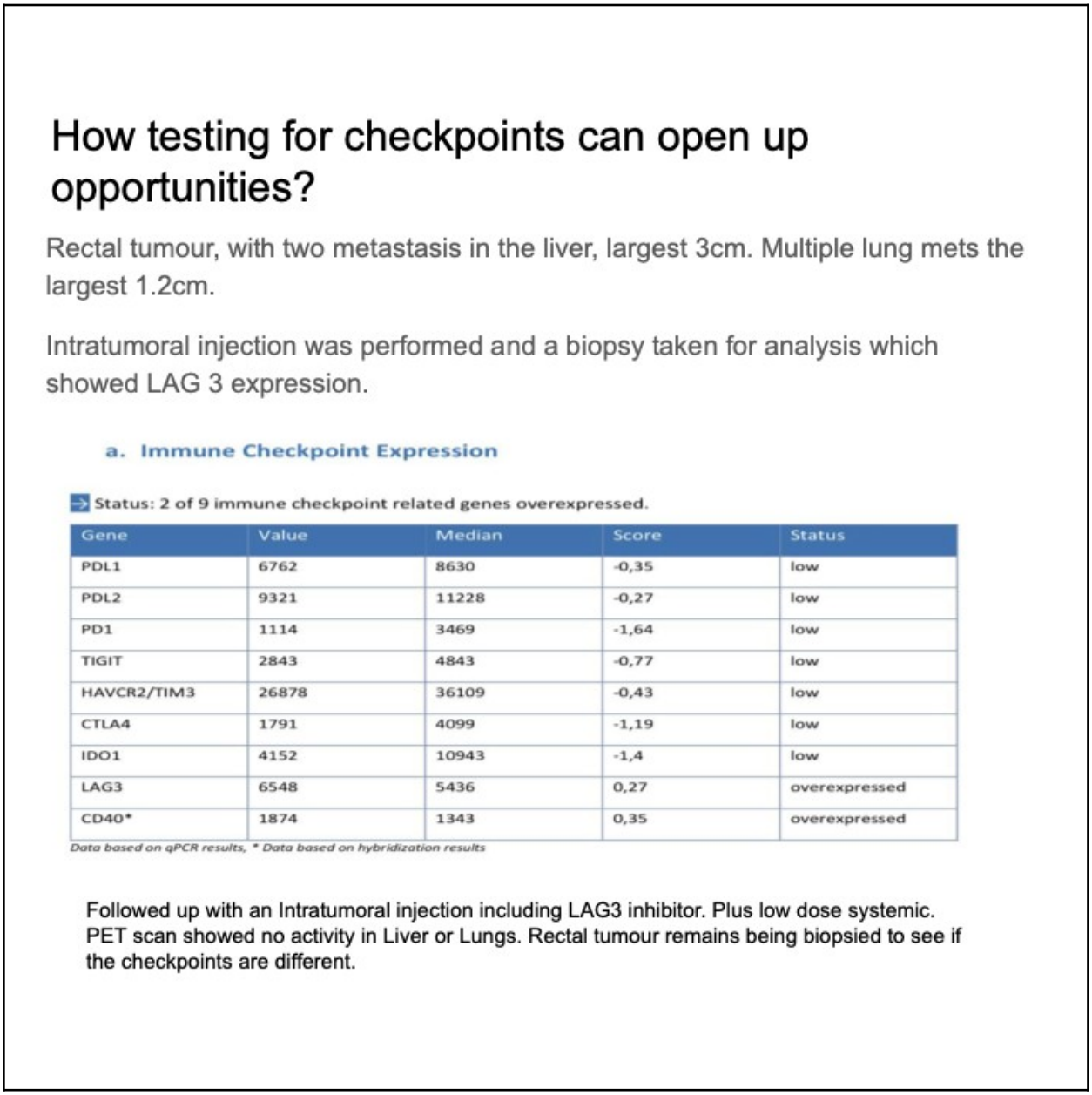
These are cancers that shouldn't respond to immunotherapy. They're the ones that didn't pass the typical trials.

We're also learning that you can really pinpoint what immunotherapy you need with adequate testing.



How testing for checkpoints can open up opportunities?

Rectal tumour, with two metastasis in the liver, largest 3cm. Multiple lung mets the largest 1.2cm.

Intratumoral injection was performed and a biopsy taken for analysis which showed LAG 3 expression.

a. Immune Checkpoint Expression

Status: 2 of 9 immune checkpoint related genes overexpressed.

Gene	Value	Median	Score	Status
PDL1	6762	8630	-0,35	low
PDL2	9321	11228	-0,27	low
PD1	1114	3469	-1,64	low
TIGIT	2843	4843	-0,77	low
HAVCR2/TIM3	26878	36109	-0,43	low
CTLA4	1791	4099	-1,19	low
IDO1	4152	10943	-1,4	low
LAG3	6548	5436	0,27	overexpressed
CD40*	1874	1343	0,35	overexpressed

*Data based on qPCR results, * Data based on hybridization results*

Followed up with an Intratumoral injection including LAG3 inhibitor. Plus low dose systemic. PET scan showed no activity in Liver or Lungs. Rectal tumour remains being biopsied to see if the checkpoints are different.

This was a tumor in the rectal passage, with metastases in the liver and multiple in the lung. We did one intratumoral injection in the liver, and she had a small response. But at the same time, we took a biopsy and did a checkpoint analysis. She came up with LAG-3 overexpressed. Only

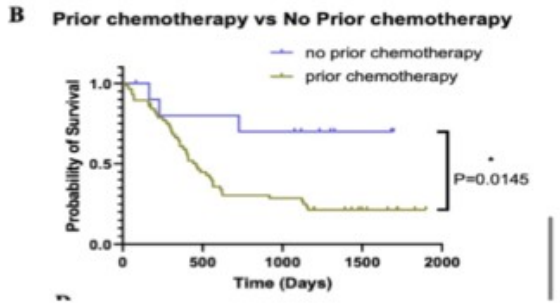
LAG-3, interestingly. We went back in and did another intratumoral injection with LAG-3 and systemic, and her liver and lung mets cleared on the PET scan.

But as important to focus on when it doesn't work

Struggled to get the treatment working for patients on steroids and opiates. Don't recommend it for very late stage patients. Most patients wait to long.

Nearly all patients arrive with damage from chemo. Hemoglobin and White blood cell issues are common, and nearly always become something that needs management. Studies show much better results when treatment are done before chemo.

https://esmed.org/MRA/mra/article/download/3761/99193546795/



Better results for patient who stay for long periods at the clinic.

Treatments typically need to continue or can act as a stop gap before a clinical trial. The latest area of of our research is into natural healing science, so we can work to build a transition from the clinic to normal life.

It doesn't always work. When you see these clinics, they will show off their successes. We do analysis on what doesn't work, and pretty much we can find reasons why things don't work.

All of our approaches typically use immunotherapy. If someone was on steroids, or opiates, we couldn't get the immune system to work. So it's kind of pointless going down that route.

Almost every patient we've had in the clinic has had damage through chemo. That's a finding that I don't think is talked about enough in the patient community, particularly in cancers that get

very high stress, high dose chemo, is how damaged the patients get towards the end. A lot of people put a lot of hope on moving to chemo at the end when all options run out. But if you look at the studies – this is a study that was done on intradermal injections of cell therapies – those with no prior chemo had three times better response than those with chemo. There's an education that we're trying to give that.

Unfortunately, a lot of people can't afford these things. This is for people who do have money. I don't recommend anyone spends money they don't have. But if you are going to consider doing it, you really want to be considering it early on in the treatment plan.

We also saw patients that stayed in the clinic longer did better.

We also unfortunately found that we've not had that much success in particular in some of the more aggressive cancers in stopping the cancer altogether. Typically people are needing to stay on treatments indefinitely. I see this a lot from my studies: that there's a hope that you can go to these experimental clinics and they lead to a long term remission, but we're just not seeing that in a huge amount.

But there are strands if there are people capturing data.

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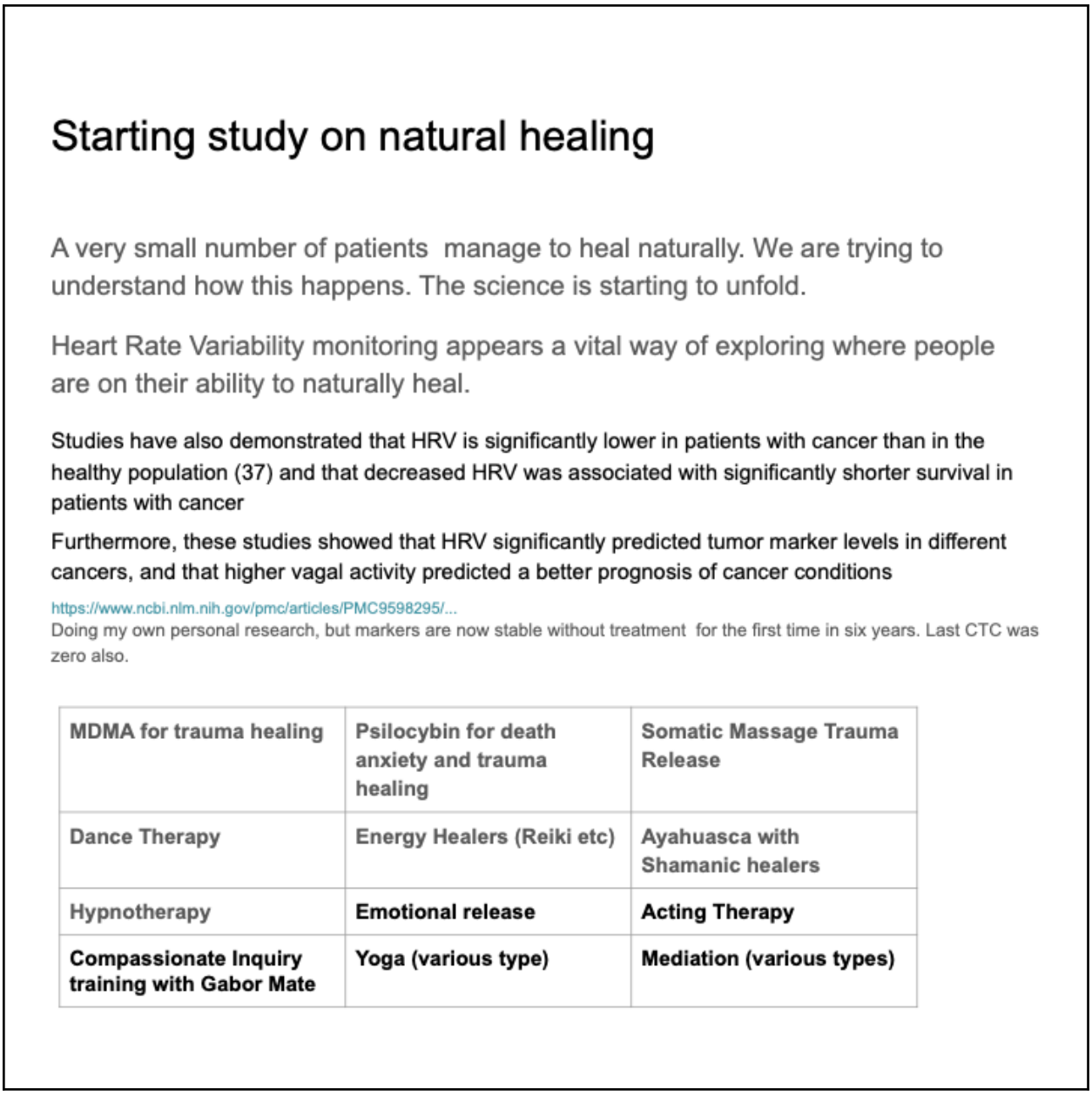

I've been investigating this natural healing approach, which is probably in the prostate cancer world because of the slow growing nature of it. You guys probably, through your analysis and these forums, have a window into how people can help heal themselves naturally, which needs to be a big area of research for everyone.

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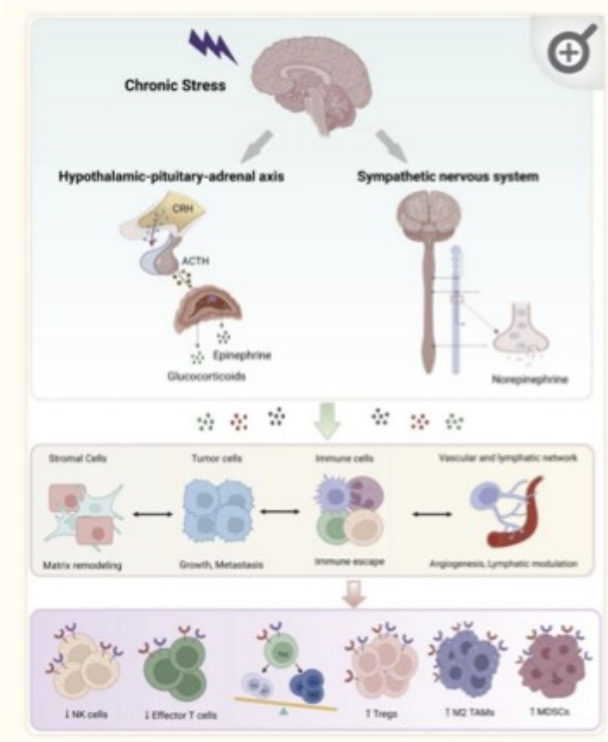
Emotional state is vital for an immunotherapy response.

Every integrative doctor I spoke to brought this up. Its discussed in Kelly Turners Book radical remission.

This talk with six pioneers in integrative medicine discuss its importance.

https://yestolife.org.uk/radio_shows/pioneers-of-integrative-oncology/



https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9579304/

Stress remodels the tumour to make it less responsive to immunotherapy.

We've seen in the clinic very clearly that if the emotional state of the patient is not good, then the immunotherapy doesn't work. Then we found studies to back that up as well. It's not just the cortisol impact that people talk about, but actually under stress the whole immune system engineers itself in a pro tumor fashion. So when you're looking at the immune system of the cancer, there are certain tumor cells, like T regs and tumor associated macrophages, that under stressful conditions upregulate, and you get more of these cells to stop the immune system going in. So the psychological aspect of this route is really important.

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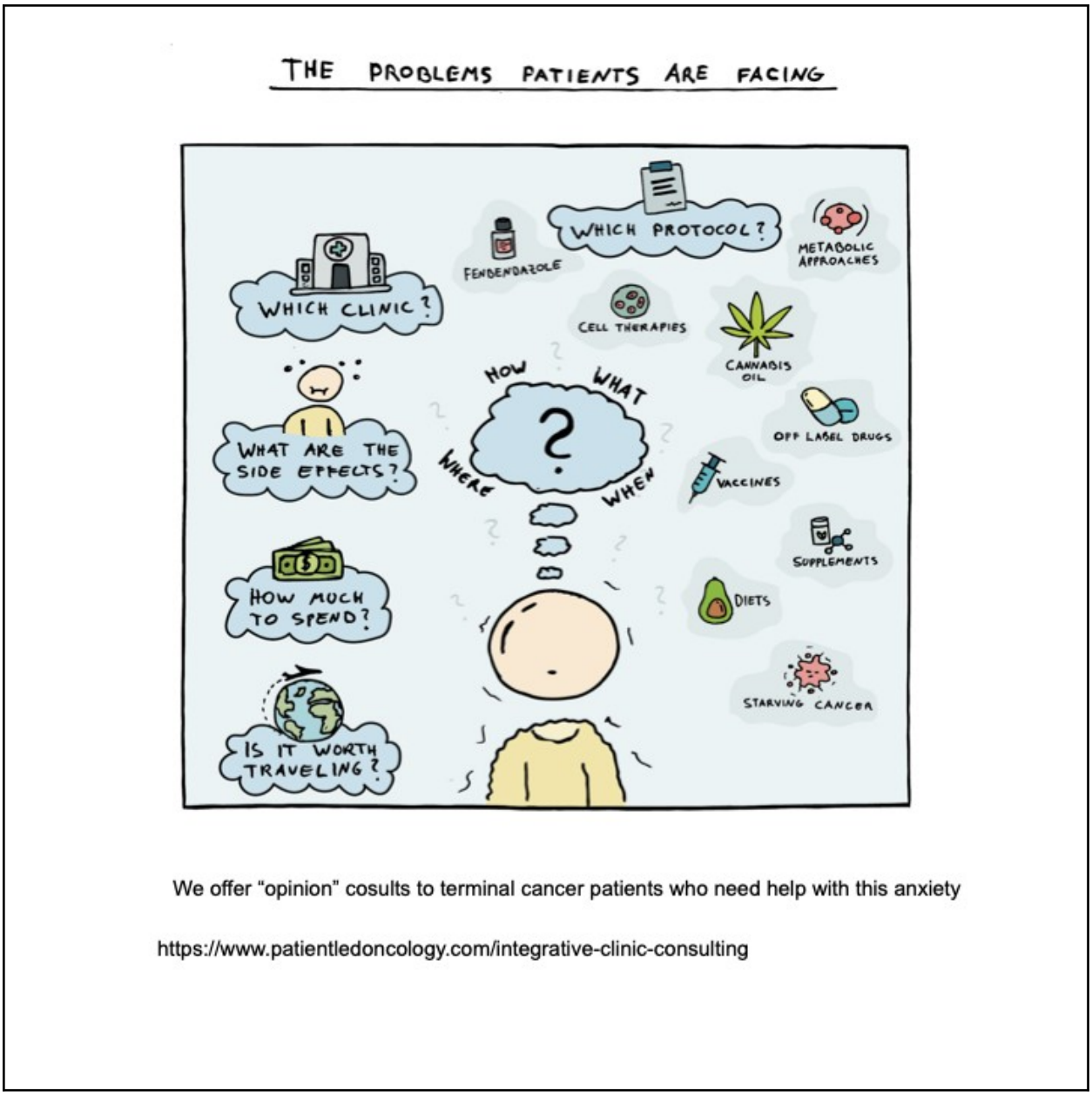

In terms of where we are going as an organization, we hope to solve an increasing problem we see with patients: now that we've got this world and these forums, a lot of people are now at a new level of stress, which is, “What should I do?” Given the data where we're looking at with so many options, we're setting ourselves up to be able to answer, “Under what situation is the best treatment to get? How much will it cost? Is it worth spending money for? Is it worth traveling for?”

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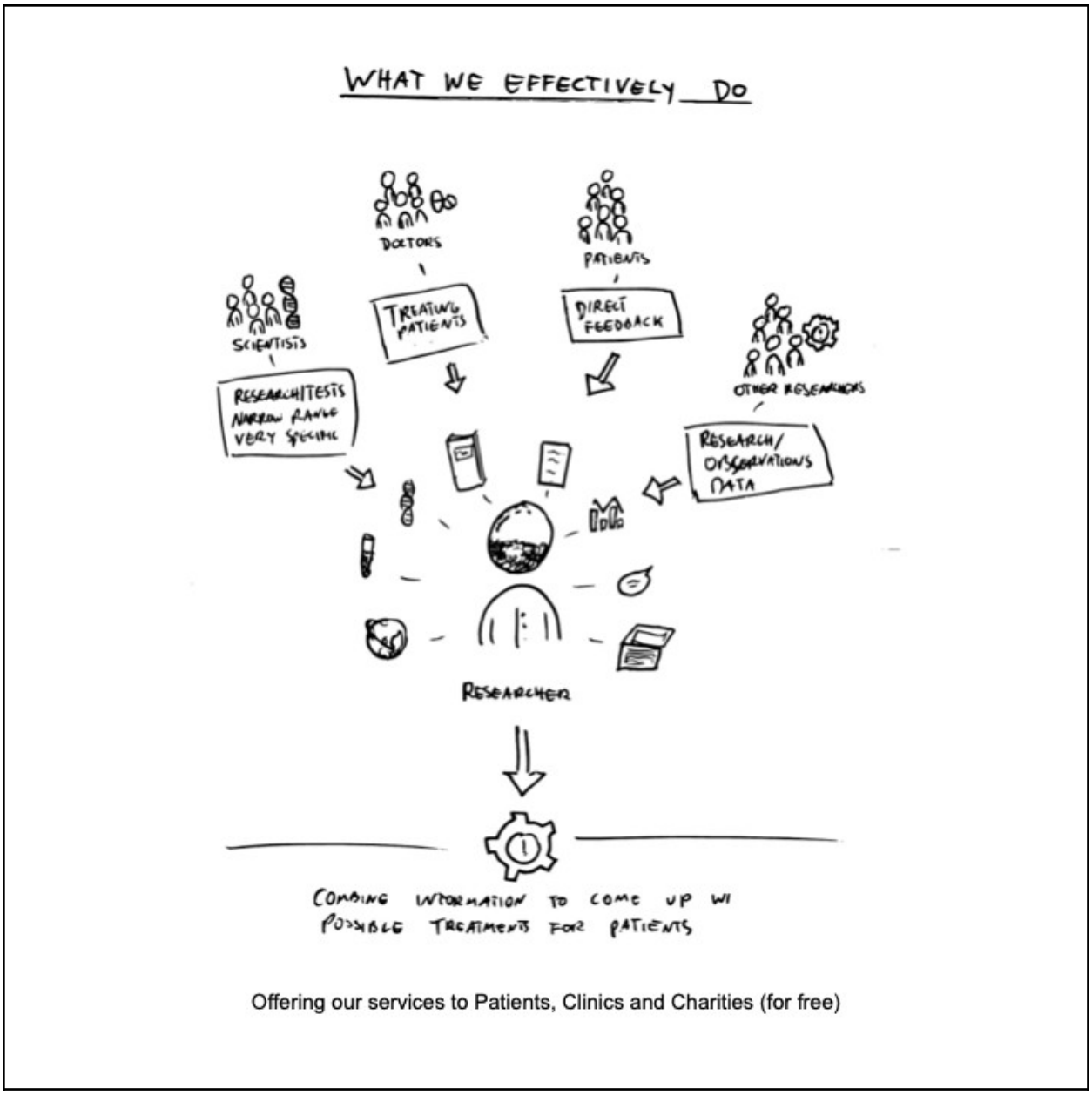

With this data, we're also looking for charities, patients, and clinics to work with and share these data.

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Book being written due out in 2024 with my partner Gabriele Gavazzi

"The End Game: Hacking Cancer Through Patient Collaboration. How new research from Immunotherapy to the latest science in natural healing Can Shift the Odds in Your Favor"

We're in the process of writing a book. I got a partner, Gabriele, and we've got a book coming out next year, which will summarize all our findings.

“A Cancer Hacker Solves His Own Needs and Helps Others Access the Best, New, Personalized Tests and Treatments” (Mark Taylor) [#71]

Brad Power 27:09
Mark, there's so much that is parallel with our thinking and approach. I’m very impressed.

You attracted patients and captured data from those patients. How did that work? As you know, there's a medical academic approach to doing that. I suspect you were sensible and were not following all the protocols of what medical science asks. How did you capture the data you shared? How did you draw your conclusions?

Mark Taylor 27:57
I sought legal opinion at the start. We weren't an organization at all while we did it. It was just run as a group of people.

We basically did it on Google Sheets. We said to people, “This is yours to own. It's up to you whether you share it with us.” So that's how we got around it. In terms of the technicalities, we weren't a formal group. There are other groups that had a prostate cancer study done. It was done by a few guys. Those guys aren't here. But there were similar studies. There are lots of groups popping up around the world looking at data. Our approach was, “This is your document to capture.” We built a tool which gave them, if they put in their supplement, it would tell you which pathways it would address. We let them track their blood. We told them that they could use it and what they could get out from it. That's how we handled the legalities.

But in terms of the actual capturing of the data, that was difficult. There was a charity in the US that tried to do the same. As you are probably all aware, it's such a dynamic process, and having cancer is such a busy business. Most people don't have the time to go in every week and change the fact that they've stopped doing curcumin this week, or stopped this off label drug because they've had a side effect, or they've been taken off this chemo. There were some patients that were pretty engaged, and we had regular catch-ups and gave the data.

After about a year into the study, it became very predictable how people would do based on what high level strategy they would take. Definitely, it was very dirty data. We definitely weren't capturing all the data.

Given typically that it’s very much a one way ugly strand of road for pancreatic patients, what you're really looking for are the exceptional responders – those that lasted, say, three years plus. You can really easily distinguish those that were in that category. There were very, very clear patterns. It was very predictable towards the end, knowing how well people would do. Did they start integrative medicine early? Did they see a clinic early? Are they determined? It's become easy for me even working in a clinic to establish if a patient's determined or not. The people that do really well are people like this, that join calls like this. They really research. 90% are not like that, and if you see a patient going, “I'm not sure about that. I don't want to do it.” They are giving a reason that shows that their determination is not there. Psychology was another aspect you can clearly see. Lots of integrative oncologists talk about it. Those that come across and manage to get over the psychological difficulties to remain positive through this process do much better.

Brad Power 30:57
If I play that back to you, it is basically observational and interpretation. You just saw what worked. If you were going by academic standards, they might say, “Where's your control?” And they might say, “Where's your data?” and so on. But you're just seeing what works. You're doing what I used to do in business, which is “best practices”, like, “This seems to be working for these people.”

Mark Taylor 31:31
Exactly. I started off at the beginning being quite persnickety, because I wanted the data to be to medical standards. But it was just tough getting patients to update it, and it was time

consuming. We were constantly having to make calls. As things went on, we had a dialogue. We knew this one was going to the clinic. We knew what they were doing. We knew the approaches they were following. With pancreatic cancer, thank God, it's such an aggressive disease. It's easy to establish who the exceptional responders are, which is slightly different to prostate.

Mark Taylor 32:16
Then you get those that run out of all options. The control is, … there's no way back. You've said goodbye to the standard of care. Increasingly, we're seeing pretty good responses to experimental options. That is stuff that is totally novel and new.

Saed Sayad 32:45
The importance of personalized and precision medicine – whether we call it “precision” or “personalized” – it means we should move off the idea of the control and treatment group and focus on each patient. That's one reason why the idea of placebo really doesn't work, and we need to change that idea.

What were your top three symptoms before you knew you had pancreatic cancer?

Mark Taylor 33:31
I see this a lot when I meet patients – there's quite a lot of people I see who have gone through quite an extreme burnout before they get cancer. Stomach pains were the first.

Saed Sayad 33:46
Which area?

Mark Taylor 33:50
There were two lesions that were identified – one on the tail and one near the head. I had pains there and in other parts of my stomach. A mild sort of pain.

But leading up to that I had a panic attack one evening. I called an ambulance thinking I was going to die. The panic attack was from the burnout. I spent a week in the hospital. For about six months my nervous system was totally out of whack. I went from being someone who traveled the world and lived in Hong Kong, New York, and Sao Paulo – I'd get my bags and go – to being someone who couldn't go into a restaurant without having anxiety. I couldn't do conference calls with my team. My nervous system was just totally gone. That was part of it. My symptoms were pain in the locations I mentioned. I'm trying to think, what else? I had that in periods of my life, but it was probably stress-related as well. Like I said, acid reflux. And dodgy stool as well.

Saed Sayad 35:12
By the way, I am going to share a link to a video I recently watched on YouTube. I strongly suggest everybody with cancer to watch at least the last five minutes of that video. Because it might change the outcome of your treatment.

“A Cancer Hacker Solves His Own Needs and Helps Others Access the Best, New, Personalized Tests and Treatments” (Mark Taylor) [#71]

https://www.youtube.com/watch?v=f_qkqjK7L8o&t=19s

> *“This video provides an overview of second and third generation sequencing technologies and their use in comprehensive clinical approaches to diagnosing and treating cancers via personalized genomic medicine. This talk was originally given at the 2021 GEP Faculty Alumni Workshop by Dr. Christopher A. Miller (Washington University School of Medicine) on June 12, 2021.”*

Brian McCloskey 35:52
I love how you've approached this, both with yourself and the patients that you're serving.

There's a slide that you showed regarding all of the different tests that some patients go through, everything from proteome to microbiome, et cetera. You use a lot of liquid biopsies as well. You are very focused on linking those diagnostics to immunotherapy.

I'm curious if you saw more value from certain types of diagnostics versus those that really didn't provide much insight?

Mark Taylor 36:38
We've settled on two leaders in the space at the moment that quite clearly stand out for me, which are NextGen Oncology and BostonGene. NextGen is based in Germany. Both have followed similar approaches where they're looking at a huge amount of detail, specifically around the immune system. NextGen Oncology’s approach has been fascinating. It's a no brainer when you're in this space.

There's so much research out there. If you look, once you start, knowing where to look for research, it almost goes on forever, if you want to find it. If you get into cancer research, you try to look for something, you can go down a rabbit hole, like on microbiome, metabolism, cancer chemoresistance, you can find the information out there.

What NextGen has done is look at all the genes in the cancer or the expression, and then they do a correlation, and also the microenvironment, all the immune cells and the immune cell interactions, with the cancer. They're looking for checkpoints, at everything. That made it useful. Then literally, their report changes every month. It's like they're doing real time research into what you can do based on the research that's coming out all the time. Which is the most sensible. This is the problem. What's happening now in this space is medical knowledge is meant to be doubling every three months. So if you stand still for three months, you're behind. This whole thing needs to be real time, despite the practicalities around that in the real world. But if you want the best results, that's what you need. And I think NextGen Oncology seems to be going in that space.

BostonGene is probably the next best I see. That's in the immune system, specifically.

If it's sensitivity testing, you've got Data, RGCC, NextGen, Main Track. I know people who have looked into the science behind them all, the scientists that really understand it will say the answer always depends. For example, RGCC use stem cells for their sensitivity testing, or they

use stem cell markers as a filter on their blood draw. So you're getting a stem cell look named “Journey”, which is using to the whole biopsy and the microenvironment around it to look at chemosensitivity. Datar are meant to have a very advanced way of growing their tumors.

I don't know whether that's answered your question. For immunotherapy it is NextGen and BostonGene, and then for the sensitivity tests, I'd say it depends.

Brian McCloskey 39:38
BostonGene does a basic tumor report, which gives some insight in terms of the tumor microenvironment, but they also have a spatial phenotyping product as well. Is that what you're talking about? Or are you just talking about their standard tumor report?

Mark Taylor 39:59
Their standard tumor report. They're looking at checkpoints. They're looking at the microenvironment. I haven't seen the other one. I need to look at that.

That doesn't discount the need to do standard mutational testing, which comes from Guardent or Foundation One, where that's a given. Typically it gets given in the standard of care, as well.

The default, the obvious solution on that is, if you can afford it, you want the 500, druggable genes tested. If you're getting any less than that you're being shortchanged, and taking a bit of risk.

Brian McCloskey 40:34
Yep. Which a lot of people do.

Brad Power 40:40
We're going to have BostonGene on a similar webinar in one week. They're going to be presenting their testing. And then also on November 1, one of their scientists is going to be talking about their bioinformatics.

We had a session with RGCC. For those who don't recall, you can check it in the archives.

Amit Gattani 41:05
You pinpointed the problem. People looking into integrative stuff find pieces of information, and the fatigue sets in. How many things can you choose? How many things can you do? And as you said, the medical information is doubling every three months. People get limited by time and money that they can spend on this.

How are you able to do this, both from an intellectual and resources perspective, as well as a capital and money perspective to be able to put together your planning? Because it's not a trivial task to integrate so much information, and be able to provide all of these treatments for all different types of cancers. It's quite amazing.

I'm curious as to what the size of your team is, the researchers? How are you able to solve the problem that everybody faces?

Mark Taylor 42:17
My personal story is I have a 25-year background in finance, working in Hong Kong, a low tax regime, and managing hundred million dollar projects, and so made investments. Personally, I said to myself, along that journey, I was not far from being able to retire.

At the start, I was nervous spending, like $300 on an IV Vitamin C treatment, when you're used to getting everything for free. Then my markers kept rising, unfortunately, without treatments. I kept going back for more. It was when I got to about $200,000, I just said the only way I can deal with this personal impact on myself is making this available for other people as well. It sounds crazy, but I've got an element of autism. I realized that to stay alive, I needed to solve this problem for myself, financially, and have a clinic that would be there for me. That was part of the motivation to find a clinic that would do this at a relatively low cost. So that was part of it.

I have very low volume disease. I didn't get a chance to talk about it. Because of the observations I've had of natural healing. That's been my focus for the last two years: what people do. I've done a fecal microbiome transplant. I've done so much trauma therapy, that I feel like a different person. I now live in a field, and yet, I used to live in a city. I’ve totally transformed my life as well to get there. And now my markers are stable without treatments. It's going to be a long journey of just throwing money at the problem, working through the research, doing everything I can, and then natural healing. That's the approach that I'm coming to view as the right approach for everyone: throw everything at it, use the standard of care as best you can. During that do all your emotional work, get your body kind of in the healing state, remove all your stress triggers. Because we know now with the science that there seems to be a way that the body can heal itself.

In terms of the resourcing: I relied on volunteers at the start. I got sporadic volunteers, people helping for say, one year. Someone helped with the spreadsheet development. I've got a really good researcher, Gabriele Gavazzi. He's in a lot of forums. He's developed the Rainbow Protocol (a sequential method for quantifying pigments, sugars, free amino acids, phenolics, flavonoids and MDA from a small amount of sample). It's kind of weird because we came up with this concept with a clinic where the research needed to be real time, and I worked with a doctor. After a while my bandwidth became constrained, and I needed someone else to do the research for me. In order to get real time data coming into the doctor, you almost need a team doing it. That's a service we're planning to offer. It's complex once you find any treatment that's working in a clinical trial. What are the side effects? What is the dosing? What are the interactions? Where do you buy the drug?

It is a full team. It's been about four of us: Julie, Ryan, Gabriele, and myself are the bulk of it.

Amit Gattani 45:53

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From all of the clinics that you have studied, and protocols you have studied, have you published your take of the best options and opportunities and the priority list of where people should look at the start?

Mark Taylor 46:12
I used to do that, then I realized it's way more complicated than just a generic response. It depends where the tumor is. It depends where you are. It depends on your diagnosis, what side effects you've got, or whether you've got chemo resistance. There's some thought process like this. Does the drug get into the blood brain barrier, if it's in the brain? Have you had chemo and got resistance, and therefore it's pointless going to a low dose metronomic chemo place because you've already got resistance? How is your immune system? If your immune system has tanked, immunotherapy may not work for you. There's a lot of detail. I've steered away from doing that. I do consults now. If it's prostate cancer, that is specific as your cancer is in the prostate.

For example, consider Dr. Gary Onik. Look up his study. He had crazy results. He did his own retrospective analysis. He is an intratumoral doctor from Florida. But more than 50% complete response to metastatic prostate cancer, intratumoral injections with cryoablation (cold treatment). So that's like on one end of if you've got prostate cancer and metastatic. It's amazing results. He is a prostate cancer survivor himself. He invented the IRE. (Irreversible electroporation is a new predominantly nonthermal ablative technology that uses high-voltage, low-energy DC current pulses to induce cell death. It is still being tested. It is used together with surgery to treat pancreatic cancer that has not spread but cannot be removed with surgery.) He is a super genius guy. That's one end, but it's expensive. I can find the study if you want as well.

The other end is natural healing for prostate cancer. My father's got prostate cancer. There's a lot of people out there with prostate cancer. There are so many people at the early stage, you can manage it with natural healing. It's one of the cancers that modified citrus, pectin, melatonin, things like that, doing exercise, mastering emotions. If it was in the early stages, I'd be veering more to stuff like that.

Amit Gattani 48:17
Have you looked into Ayurvedic treatments, which are common natural treatments in India, and energy healing?

Mark Taylor 48:28
Yes, me personally. My third study is on this, and I've done six. I'm a lab rat. I've done as many things as I can do, whether it's medically, or now more recently I've seen a multitude of energy healers. I haven't specifically done Ayurvedic, but I believe in it. It is similar to Chinese medicine. It's on this softer end. I think whether it works are not for a late stage cancer patient, for a pancreatic cancer patient, I don't think it's going to be enough. It's going to help once you've got the tumor burden down.

Increasingly the emotional state now has become very clear. If you study energy healing, which I have – I've talked to shamans from the Brazilian rainforest who do ayahuasca, and there was a therapist who came to the place I'm staying here from Germany, who is a PhD researcher, a clinical psychologist, working on the MAPS clinical trial for MDMA. She studies shamanism. She treats patients. I said to her, “How do you bring shamanism into your client base as a clinical psychologist?” She can't for ethical reasons, unless they ask her, because it's unconventional. Then I said, “Do you get better results when you bring shamanism to the work you do?” And she said, “By a long way.” That world is something I'm researching. There is stuff there. I throw myself into Mexico, Costa Rica, Portugal, and Spain. I go and seek out these people and try to learn what they do as well at the other end. I continue to be fascinated by what they tell me.

Jeff Krolick 50:27
In my small personal way, this is what I found too: that there are dozens and dozens of 1% improvement interventions. They can be hard to measure. But in aggregate, at the right time, the right combination, they can make a significant impact on your cancer and on your mood. I'm also interested in energetic healing. I saw in a short blurb about your background, that you had also done some work with Rife treatment. I don't always reveal all these things that I'm doing, but I have a Rife device that I use periodically, I haven't actually found it particularly effective, but it's interesting to explore these things. And when a test lines up with starting a new supplement, or a new practice, and then you suddenly see your PSA either start to go down or it stops going up.

By the way, I'm doing a protocol, starting and stopping one particular hormone therapy, based on how fast my PSA changes, an adaptive therapy. But there are periods when I'm not doing that. I have found, for instance, going to a Buddhist retreat several times and taking my PSA – I get a weekly PSA test – and seeing that the PSA actually went down a little bit, where it had never ever done that before.

Jeff Krolick 52:43
A Tibetan physician said, “Here's some herbs you should do in the morning and afternoon” as my PSA was going up, waiting to start the hormone therapy, for about three weeks it just leveled off, which hadn't ever happened before. It always went up in a certain progression. These are all very interesting responses that we can get.

It's very hard without very sophisticated testing to really know what's going on. For me, it's more, ”Okay, your PSA went up,” or it didn't go up. They started and stopped this treatment. I try to track all of those things without driving myself crazy with all of the details.

I wanted to second that I think this approach of many different interventions can have a small benefit and maybe a large benefit overall.

Mark Taylor 53:53
I totally agree. That's a fascinating finding. I normally keep this to myself, but given you've said it, I've done so many therapies around trauma healing in my own body. What I found is, I used

to be totally disassociated, totally in my mind, and that was one of the problems that led to my diagnosis: that I was a mind person trapped in my mind, and then through doing trauma therapy, I moved into my body. I can now sense my body to the point that I started, as I was doing trauma releases, and I've done a lot of therapy in that way. I was unleashing heaviness in the body that allowed me to go into the body. I've done so much of it now. I believe now I can sense what the Chinese medicine doctors and people talk about in terms of energy blockages. I can actually bring my awareness to parts of my body, to my pancreas, for example, and feel a discordance in the energy around certain areas of my body. By leaving awareness there as you do in body scanning meditation, the discordance decreases. My perception is if you do vipassana meditation (a form of mindfulness meditation that comes from the original teachings of the Buddha. It is a way of observing oneself without judgment, and it is said to be helpful in achieving enlightenment. Usually, it's done over the course of 10 days.), for example, which is body scanning, what that's doing is that awareness is part of the healing process. If you speak to a lot of exceptional responders, a lot of them will talk about visualization. They will say, “I sat there visualizing the immune cells coming to my cancer.” I sense that is a process that's going on from my latest research.

Jeff Krolick 55:29
That's been my experience too, with a particular meditation practice that is a Buddhist version of energy flowing and checking and sensing all of those things and visualization. That's a whole other aspect, which is really hard to pin down. But I've seen a couple of instances where my PSA went down.

Mark Taylor 56:00
That is super valuable. If more people start doing the same and start seeing the same experience, then it's a big finding. That's what's powerful about this forum, because prostate cancer is one of the cancers that's got a lot of options. It's an interesting test case for treatment protocols like that, because it's so slow going, and you'll see the impact quicker. Whereas if you have multiple liver mets, a status with pancreatic cancer, no amount of meditation is going to pull that back.

Rick Stanton 57:05
You mentioned how NextGen could characterize the immune state from their services. I was curious how that immune state was defined. I imagine RNA seq would be the simplest.

Mark Taylor 57:55
There's the microenvironment piece, where they're just looking at the cells within the biopsy. They're looking for T reg cells, or myeloid-derived suppressor cells, or NK cells, or cancer cells, or fibroblasts. There's that analysis.

Rick Stanton 58:19
What's the nature of that analysis? Is it just through a microscope?

Mark Taylor 58:23

I'm not sure what the mechanisms are used for that. They use real-time PCR reports, so possibly they use that, which is the most valuable piece of information, which is the interaction between the immune cells and the cancer cells and which checkpoints are up-regulated.

Rick Stanton 58:44
You did a really good talk about all the options – your circle with all of the axes of intervention, with checkpoints, and you mentioned very nicely that if someone – a doctor – says you won't respond to immunotherapy, you highlighted that that only means PD-L1 (Programmed death-ligand 1) and CTLA-4 (Cytotoxic T-Lymphocyte Associated Protein 4), a small subset.

With all those options, as a patient, it's like a dartboard. What am I going to do? What option am I going to pick from all those options in that big circle? There has to be some prediction of response. Like, “This looks like you might benefit from this axis.”

Is that something that your lab does?

Mark Taylor 59:57
That's what I mean. BostonGene is there as well. BostonGene looks at checkpoints. They look at the microenvironment. They give you a view in terms of what you can focus on. But we have had patients there for a long time. They can't test too regularly because it's expensive. What we end up typically doing is, we'll have a very strong focus on what needs to be done at the start. And then at a later date we will cycle off label drugs or supplements or low dose chemos to ensure everything is kept in check without continually testing. Sometimes it is easier to defend against what is coming, as opposed to testing to see whether you need to defend against it.

If you look at the studies, there are a few things that need to happen for immune response. One is you need recognition. The cancer needs to be identified by the immune system. Aside from mismatch repair deficiency cancers, where there are so many mutations, mutational burden is high, the immune system can see it, then cancer vaccines are the way to deal with that. If you look at the studies, the best science available, maybe it’s neoantigen vaccines. They are a little bit expensive, and it takes some time. There are some less effective vaccines you can do as well. Then when you get the immune recognition, you need to make sure that there's a process to make the immune system see it in terms of using adjuvants and toll-like receptors, and then you've got to ensure the antigens you've trained by your immune system are visible on the tumor cell. That's a mandatory MHC (major histocompatibility complex) class. You need drugs to address that. Checkpoints are mandatory.

Rick Stanton 1:01:48
Do you have a favorite vendor that would create a vaccine?

Mark Taylor 1:02:01
NextGen Oncology does their own neoantigen vaccine. Partly because it's cheaper than everywhere else, it's the one we use. We don't have enough data yet to see. I speak to a lot of

people who do a lot of vaccines. My hunch is they're all similar. I think people focus too much on the vaccine. More focus needs to be on the other things around the vaccine.

Rick Stanton 1:02:29
That's not my experience. The ability to define the peptide sequence seems to be variable. I've had several peptide vaccines identified for me from when I used to be in bioinformatics from some of my pals. It's variable. That was two years ago, so not too long ago.

How much is it? It was $80,000? Roughly? Has BostonGene come down a bit?

Mark Taylor 1:03:10
In the US, it's expensive. They're all around $100,000. I don't know if they've brought their price down. But in Europe, it's cheaper. 25,000 euros for us.

Amit Gattani 1:03:34
Mark, you said that you do consults. What's the best way to reach you for a consultation?

Mark Taylor 1:03:40
Via Patient Led Oncology. It is on the slide, or I can send it through.

Brad Power 1:03:52
When someone goes to your clinic in Spain, you said they're monitored almost daily for the side effects and things like that. We've heard something similar from another super patient like yourself, Ricardo Salgado, who went to a doctor in Houston where they were monitored and if they had any side effects they could call on a specialist. If they had kidney or liver issues, whatever it was, they could get them right in and get those side effects dealt with. They personalized the dosing of his drugs and combinations and everything else. It's very concierge, very intense. It's like having a whole hospital just for you. Very expensive. He moved to Houston for a couple of months.

When you said patients come for a long period, what is a “long period” for the patients that go to your clinic?

Mark Taylor 1:04:50
Well, typically in our clinic, they're quite late stage. The first patient, for example, was riddled with three or four kilograms of cancer. We've knocked some back, but it's still there. But he's kept going for 18 months, and he looks healthier than I am. We've got other patients who had a recurrence and had surgery. Now we're just defending.

It depends on the aggressiveness of the cancer and on the state of the patient.

If I think about the approach that we are settling on a little bit, which would be definitely a biopsy for testing, if we can do it, and then an intratumoral injection while we biopsy, if we can. We would go and get a neoantigen vaccine made, which will take three months. In the interim, if

they can afford it, assume that we can do a tumor-associated antigen, which is basically just circulating tumor cells grown, mashed up, and made as a vaccine. It's not as good as a neoantigen vaccine. But we get very good results with that. We give that regularly over three months.

Once we get the checkpoint analysis, we give that. We might do cell therapies, if they can afford it. That takes six weeks to make. That will be four weeks to deliver. It gets complicated. Three months of attacking it, and then you've got the neoantigen vaccine at the end, and hopefully, by three months, you've got everything down.

The neoantigen vaccine is taken over 12 months. They will come at the start of that week, and then every two weeks, every four weeks, so they'll tailor off. That's typically the approach we follow.

If you're late stage, you've really got three months. It is a good amount of time.

If you're starting your treatment, if you haven't done any standard of care therapy, you can come for a month and get the tests and start knocking things back and then move on to standard of care. That's one approach.

But we typically get, unfortunately, the people who've run out of all options, and they're damaged, and their hemoglobin is low, and their white blood cells are low. And it's a battle.

Jay Sandler 1:07:18
As a pancreatic cancer patient, I'm in awe of your ability to put all this together. I know a lot of pancreatic cancer patients, and I don't think one of them would have the ability to accomplish what you did. So my hat's off to you.

How many people were in the population that you studied and that your results based on?

Mark Taylor 1:08:16
The initial study was 100. The PanCAN study. Since the Clinic study, I would say I don't keep track. It's more casual. What was happening until recently is that, while I did the study, someone would come to me telling me they were going to a clinic. I would have a chat and understand their situation. I would tell them some information for free. Then I would track them. Over time, I had more feedback from patients, and I was getting it for free. So just this circular view. I'd probably say somewhere between 200 and 300 people were in that process.

Jay Sandler 1:08:54
That's quite a bit.

I'm interested in the timing of this. You say that most people come on more or less as a last resort. But that's after standard of care. So if someone came to you in the beginning, would this be in addition to standard of care? Or is it before standard of care?

Mark Taylor 1:09:34
I never give advice. I tell people, “You know what I've seen?” It would depend on the cancer. So I would say for pancreatic cancer, “It's quite clear from the study, that I saw that it's very rare to get to no evidence of disease on a scan or tumor markers with pancreatic cancer. It's very rare.” So I just say, “Look, from what I've seen, those who go to a good clinic have a very good chance of getting to NED.”

That can be done in many ways. Most people can't afford to go to a clinic and get dedicated treatments. Typically they'll get metronomic doses of chemo with some testing. Maybe immunotherapy with lots of IVs and hypothermia and hyperbaric oxygen. I get that. But it's also valid to say, “No, I haven't got that money, I'm going to do FOLFIRINOX. And I just want IV vitamin C and curcumin and hypothermia, and I'll do it concurrently with some off-label drugs. Everything's budget dependent, partly, and hassle dependent. A lot of people have kids, and can't afford to get up and fly somewhere. They need to think of a solution at home. It's always complex.

Mark Taylor 1:11:03
I also play a game of “if you tell me your budget, I'll give you an answer based on that budget, if it was me.” Or I can give an answer and say, “If I had unlimited money, this is what I would do.”

Jay Sandler 1:11:16
I like your concept of stacking therapies on top of each other. In pancreatic cancer getting a 1% advantage is huge.

You just referenced three months in the clinic. What would something like that run?

Mark Taylor 1:11:51
That's a very difficult question. There are lots of different clinics. It obviously depends on what you do.

With the clinic I'm working with, we are trying to come up with an ethical model. We're just getting started. The model we came up with is 30% cost plus price on meds, so there is no motive from the doctor to select one or the other for cost reasons. 495 euros a day in the clinic. It's not cheap, and it adds up. It typically depends on the stage. If you're only doing treatment in the clinic, and you've got multiple liver mets, you're talking easily between 50,000 and 100,000. If you've got a single liver met, then you might just get away with two intratumoral injections. That would be less than 30,000. The answer is always, “It depends.”

But unfortunately – and this is a horrible finding that we've come to – money is becoming a very strong factor in outcomes. I thought I was doing good for the world. Then you look at the situation, and you are not far off from a situation where money is going to be the deciding factor. We really need to reach out to the charities that can maybe fund these clinical trials, and

somehow get them to fund these trials into the standard of care. That's the only way of ethically using this data for all. It's a lot of money, as we know, to run clinical trials.

John Powers 1:13:46
A big part of my appreciation for what this group does in general, is you need to have the resources to do this kind of work on your own. It's not reaching the masses.

Mark, I don't know how much you've talked to Brad before this, but it seems like everyone in here, myself included, has gotten into the cancer space coming out of the business world, and we are shocked by what doesn't exist, instead of what exists. I think your approach was great because you came at it from all different areas.

It's clear from this group and a lot of other folks I see, that it's really not up to business standards. My frustration with this whole thing is there really are not standards or requirements, where you have, “Here's the standard. You have to meet this standard.” There are too many different options like that you haven't looked at conventional medicine, you haven't looked at molecular medicine, you've looked across the full spectrum like this. Brad and Rick and Brian have brought in all sorts of views and inputs, because it becomes a personal journey.

Fortunately you were strong enough to do this on your own. You can see on people's faces the strain from their own personal journeys, how hard it is, and people will lose months trying to do this when they're the ones with cancer. I'm glad you had the fortitude to drive through and be so open minded, because every bit of this helps. That's the only way we're ever going to get it to where it can become beneficial to people without the resources. There are so many similar stories, a lot of what you said resonates with everyone on here. I want to thank you, because I think you hit on some great stuff,

Brian McCloskey 1:16:53
I heard about intratumoral injections from a pancreatic patient whom we just onboarded last week, and he has had a complete remission. I know that it supposedly works in prostate cancer. I just wanted you to clarify, because prostate cancer patients, like many cancer patients, have multiple lesions.

If you're using an intratumoral vaccine, will it not only kill that tumor that you're injecting, but also other tumors?

Mark Taylor 1:17:40
It's a very good question. I'm glad you asked. Because this is recorded, I can get it to the world.

The wish from all the doctors doing it is that that's the case. They're all trying to build science to do it. But it's rare.

> *You can see a focal therapy prostate cancer study by Gary Onik at https://garyonikmd.com/wp-content/uploads/2021/12/Mens-Health-Best-Copy-Long-Term_Results_of_Optimized_Focal_Therapy_for_Prostate_Cancer.pdf*

“A Cancer Hacker Solves His Own Needs and Helps Others Access the Best, New, Personalized Tests and Treatments” (Mark Taylor) [#71]

> *And a study of a novel therapeutic modality utilizing local cryosurgical tumor cell lysis (the disintegration of a cell by rupture of the cell wall or membrane) and intratumorally-delivered immunotherapy to treat metastatic prostate cancer and other aggressive solid tumor cancers here.*

Dr. Onik is a genius. It's definitely worth watching his videos. We copy a lot of his ideas. What he does is simultaneously with the intratumoral injection to train a number of immune cells. Then he grows them by the billions in your own body by inserting GM-CSF (Granulocyte-macrophage colony-stimulating factor) on a daily basis. You end up with 20 billion. You go from sort of 3 billion immune cells to 20 billion within the body by manipulating their growth with growth factors over a month. He is training a small number and then growing them like crazy. You start off with a small army, and then by the end, you've got an army that is going everywhere. That's the idea that they're trying to do.

Brian McCloskey 1:18:51
How does he figure out what the immune cell concoction is? Is he using the BostonGene report?

Mark Taylor 1:19:03
He uses the NextGen Oncology report I talked about.

But quite often he doesn’t use it because you have to do the biopsy, and you may as well use the attempt at biopsy to do the intratumoral injection. People have mixed views because there are actually only three or four checkpoints in the market, unless you can get experimental checkpoints.

One strategy he's moved to is to just inject them all and see what happens. People focus on which doctor is getting the results. But looking at the tests, it's luck a lot of the time. If the checkpoints that are overexpressed are not druggable with conventional meds, you're checkmate. The testing is useful to know if you didn't respond because of XYZ.

Brian McCloskey 1:20:02
I talked to one pancreatic patient who went to Mexico. I can't remember the name of the doctor. He used 11 checkpoints or something like that simultaneously.

Mark Taylor 1:20:19
That circle I showed of those 11 drugs, actually 80% of them are doing other things, not just checkpoints. Most of them are using 10 drugs at once. They're trying to hack that circle.

“A Cancer Hacker Solves His Own Needs and Helps Others Access the Best, New, Personalized Tests and Treatments” (Mark Taylor) [#71]

Research Conducted by Mark Taylor
From the Patient Led Oncology website

Following his early stage pancreatic cancer diagnosis, Mark Taylor decided to concentrate his life mission on helping patients establish effective solutions for cancer. He spoke to many leading integrative doctors, including:

- Dr Kenny Yong - Well Again Malaysia - Treatment
- Dr Thomas Lodi - Life Co - Thailand - Treatment
- Dr Josep Carbonell - Mediterranea Medica Valencia - Treatment and Collaborator
- Dr Slocum - Chemothermia Istanbul - Treatment
- Prof Drevs - Unifontis - Germany Treatment
- Dr Majdylo - St Lukes - Gdanks Poland - Treatment
- Dr Chan - Life Clinic - Hong Kong - Treatment
- Dr Erin Collealy - Cancer Center for healing California Irvine - Consult
- Dr Jason Williams - Williams Cancer Institute - Consult
- Dr Mandeep and Arpan - Art of Healing Cancer Dehli - Collaborator
- Dr Hossami - Verita Life Thailand - Consult
- Dr Taufiq Jemain - Integrated Medical Health - Goldcoast - Collaborator

Through the patients in his study he has followed patients with almost every leading integrative doctor including Dr Block, Dr Isacoff, Dr Gary Onik, Dr Williams, Dr Chue, Dr Chen, Dr Daneil Thomas, including those who follow fellow patient researchers such as Jane McLelland, Linda Sinclair, Abbey Mitchel, Corrie Yelland and Daniel Stanchio. He understands the science behind the majority of approaches followed, and in most cases he can link research to indicate how the approach works and how well it will work.

He has an ambition to be one of the world's leading experts on Integrative Oncology, through research, self experience and through following patients going through these treatments.

TREATMENTS TAKEN

- High Dose Vitamin C - hundred of times
- IV Curcumin
- IV Quercetin
- IV Artesunate
- IV ALA
- 2DG IV and Oral
- DCA
- EDTA - chelation therapy
- DMSO
- Dendritic Cell Therapy
- Photo Dynamic Therapy
- Hyperthermia - Full Body and Local
- Ozone - IV and IntraPeritoneal
- High Dose Cannabis - RSO approach
- PEMF
- RIFE
- Diflunisal and IV Aspirin

“A Cancer Hacker Solves His Own Needs and Helps Others Access the Best, New, Personalized Tests and Treatments” (Mark Taylor) [#71]

- Personalized Cancer Vaccines
- Low dose combination checkpoints
- Coley's Toxins
- SOT - 7 times
- Imbiometer - cytokine and growth factor manipulation
- Rebounding
- Exercise with Oxygen,
- HBOT

TESTS

- RGCC
- NextGen
- Imbiometer analysis
- Cytokine analysis
- Off Label drugs and supplements - metabolic and gene inhibitors Mental Strength

MENTAL HEALTH

- High dose Psychedelics for Death Anxiety and Trauma healing
- Hypnotherapy - subconscious programming
- Emotional Freedom Technique - Trauma processing
- Counseling various types
- AntiDepressants and Anti Anxiety
- Various Meditation techniques