



7 Crucial Things

You Can Do to Beat Cancer

CTOAM PRECISION ONCOLOGY:

The evolution of cancer care.



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Precision Oncology - Less Stress, MORE TIME

Precision Oncology is, by definition, the very best cancer care the world has to offer. Therefore, any and all patients diagnosed with any stage cancer or those with a history of hereditary cancer should ensure they use Precision Oncology as their approach to cancer prevention, diagnosis and treatment.

While the earlier the stage of diagnosis, the better the likelihood of successful treatment, Precision Oncology can also provide great benefits to some patients at very late stages of cancer development.

Any individuals with a clear history of hereditary cancer in the family can also benefit from genetic testing and nutraceutical diets to identify their personal risk and to ensure they are doing what they can to prevent cancer onset.

The proper use of Precision Oncology has been proven to result in:



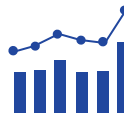
More precise diagnosis



More successful surgical procedures



Reduced need for traditional chemotherapy and radiation



Higher overall survival rates



Fewer, and less severe, treatment side-effects

Time Is of the Essence with Cancer, So Start with Precision Oncology Right Away

When you receive a diagnosis of cancer, the goals that you want to accomplish in your life will come into sharper focus and you'll naturally wonder how many of those bucket list items you'll get to experience. And one thing will be abundantly clear, you'll want to make sure that you do everything you can to experience every single one.

We can help you make those dreams come true.

A cancer diagnosis makes everything feel more urgent. And that's a good thing. Because, in fact, the scientific evidence is clear:

The more rapidly you get access to Precision Oncology, the better your prognosis.



The more information your doctor has on exactly where the cancer is in your body and what is causing your cancer to grow, and which treatments will be best for your unique mutations and lifestyle factors, the more successfully your Oncologist can treat you.

Do not wait, and do not wonder. Let us help you ensure you are including every step of Precision Oncology into your treatment plan.

In just one week, with our Precision Oncology services, you and your Oncologist can begin to receive personalized genetic test results to begin your personalized, targeted treatment plan.

In just one week

Precision Oncology Helps Stage IV & Inoperable Cancer Patients, Too

The use of Precision Oncology has already helped thousands of cancer patients, worldwide, including those diagnosed with Stage IV cancers and even those who have been told by their Oncologist that there is nothing more that can be done.

Access to targeted therapies that directly kill cancer cells, have been proven to slow and even reverse advanced tumour growth, turning an otherwise deadly cancer into a manageable, chronic condition, like diabetes or high blood pressure.

Time is of the essence, especially with advanced cancer. There are numerous studies outlining the increase in overall survival rates in previously untreatable cancers, when Precision Oncology is applied to a patient's care.

There are many documented cases of patients who were told their cancer was inoperable, but when the process of Precision Oncology was applied to their treatment, and the right therapy administered, their tumours shrank enough to become operable. This, in turn, resulted in brand new avenues of treatment that would not have been offered to those patients otherwise.

The science of cancer care is evolving at a very rapid pace. Each year there are new, FDA approved, targeted cancer treatments available. So, even if 6 months ago there truly wasn't a treatment option for you, there may very well be one available now.

If you have been told that your options are limited or that there is nothing more that can be done, remember this: At CTOAM, our sole purpose is to leave no stone unturned in finding these cutting edge treatment options that will target your cancer, and buy you more time for the people and things that matter most.





**What
Happened?
How you got
cancer.**

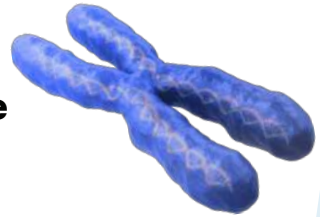
DNA

Is a code for the production and function of all cells in the body, composed of 4 types of repeating nucleotides, forming a double helix structure. The entire human DNA consists of more than 6 billion nucleotides

G
C
T
A
T
C
G
A

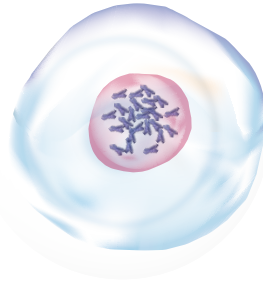
Chromosome

DNA is packaged into structures called chromosomes



Somatic cells

All cells contain 46 chromosomes, except the reproductive cells



Father

44 + XY

Mother

44 + XX

22+Y

22+X

22+X

22+X

Germline cells

Reproductive cells (called germline) have 23 chromosomes

44 + XX

Offspring

How Cancer and DNA Are Related

To understand the importance of the use of Precision Oncology in your cancer diagnosis and in the outcome of your cancer treatment, it is necessary to understand the basics of DNA and how genetic mutations occur in the first place.

DNA (which stands for deoxyribonucleic acid) is a chain of chemical bases attached together which act as a program code that defines how every cell in your body is to function.

This code is composed of four different chemical bases (referred to as nucleotides), abbreviated as A, T, G, and C, and which are complimentary to each other. This means that the chemical base A can bond with the chemical base T, while nucleotide G can pair up with C. This allows DNA code to exist as two strands and gives DNA its double helix structure, as well as stability and important biological functions.

The DNA code that cells use for function is very large (consisting of over 6 billion nucleotides, collectively referred to as the genome), and is tightly packaged into structures called chromosomes. In total all cells with a nucleus (compartment that houses DNA within the cell) contain 46 chromosomes, with the exception of reproductive cells.

Of the 46 chromosomes, 23 chromosomes have been inherited from your mother, while 23 have been inherited from your father. This is why reproductive cells only have 23 chromosomes each, allowing for the unification of genetic code from each parent during fertilization.

Of the 46 chromosomes, two are referred to as sex chromosomes, labelled as X or Y. Males always have XY chromosomes and the Y chromosomes can only be inherited from a father, while females have XX chromosomes. The other remaining 44 chromosomes are pairs of 22 non-sex chromosomes, and can vary substantially in size from one another. This means you have two copies of chromosome 1, one of each inherited from both of your parents, two pairs of chromosome 2, and so on.

Your DNA And Cell Division Regulation

Your DNA code contains information on how to produce functional molecules that can work, and perform important tasks, within the cell. Your DNA also contain information on how this production should be regulated.

Together the interplay between the code and the biological molecules within the cell will govern how a cell will function and behave for the entire lifespan of the cell.

The function within the cell that has to occur, or any interaction of the cell with its outside environment, will ultimately be determined by the information encoded in its DNA. Among other things, this includes cell division.

Cell division is a very important and complicated process, and has to be tightly regulated by the cell itself. As you can imagine, cell cycle control is also programmed into the DNA. This means that certain corruptions to the DNA code, in the form of mutations, can disrupt the proper control of cell cycle division, and if enough damaging mutations accumulate in any particular cell, this can eventually lead to an uncontrolled state of cellular division that leads to cancer.

In this way, cancer can be defined as a disease of mutated DNA. Because cell cycle and other biological events required for cancer development are such a complex processes, there are also many ways of affecting these processes. Consequently there are many ways that cancer can be created with mutated DNA. This is why cancer type is not determined merely by the tissue of origin (location in your body), but rather what mutation pattern is present behind the origin of cancer.

Hereditary Cancers

This also helps explain why some cancers might appear to be hereditary and run in the family, while others only appear spontaneously.

For hereditary cancers, some mutations that predispose individuals to cancers are passed on from generation to generation. These inherited mutations on their own typically will not produce cancer, but can act as contributing factors to future problems.

If certain other mutations spontaneously arrive, through lifestyle or exposure to certain triggers, cancer will appear. This naturally puts an individual with inherited cancer predisposing mutations at a disadvantage compared to a healthy person without such mutations, because the affected individuals need fewer mutation events throughout their lifetimes to initiate cancer development. A healthy individual without inherited predisposing mutations will then require more random mutations to develop cancer.

Screening for possible hereditary cancers is one of the best ways that humans can arm themselves with the information, and lifestyle changes, they need to reduce the likelihood of these cancers.

Cancer Is All About Your Genes

Ultimately, all cancers develop from mutations accumulated in your DNA. They may be inherited (germline) mutations and/or mutations that are acquired through lifestyle factors or exposure to environmental toxins (also known as somatic mutations). Hence the older the person, the greater likelihood that enough of such mutations will accumulate to lead to cancer. This is why cancers are typically observed in older individuals, and less frequently in young people or children.



What Is Precision Oncology?

Exploration of your genetics and lifestyle

Precision Oncology is an evidence-based, innovative approach to cancer treatment that is greatly increasing the life expectancy and recovery rates of cancer patients worldwide. Oncology journals and Associations worldwide refer to Precision Oncology as: The Evolution of Cancer Care.

Identification of influential environmental factors

Precision Oncology is rooted in the scientific proof that every person's cancer is comprised of a unique combination of genetically inherited mutations coupled with cell mutations that have arisen as a result of lifestyle choices, personal history, or environmental factors.

Finding the precise location and stage of all tumours in your body

This means your cancer is unique to you, and it must be treated that way.

Hours of worldwide research, just for you

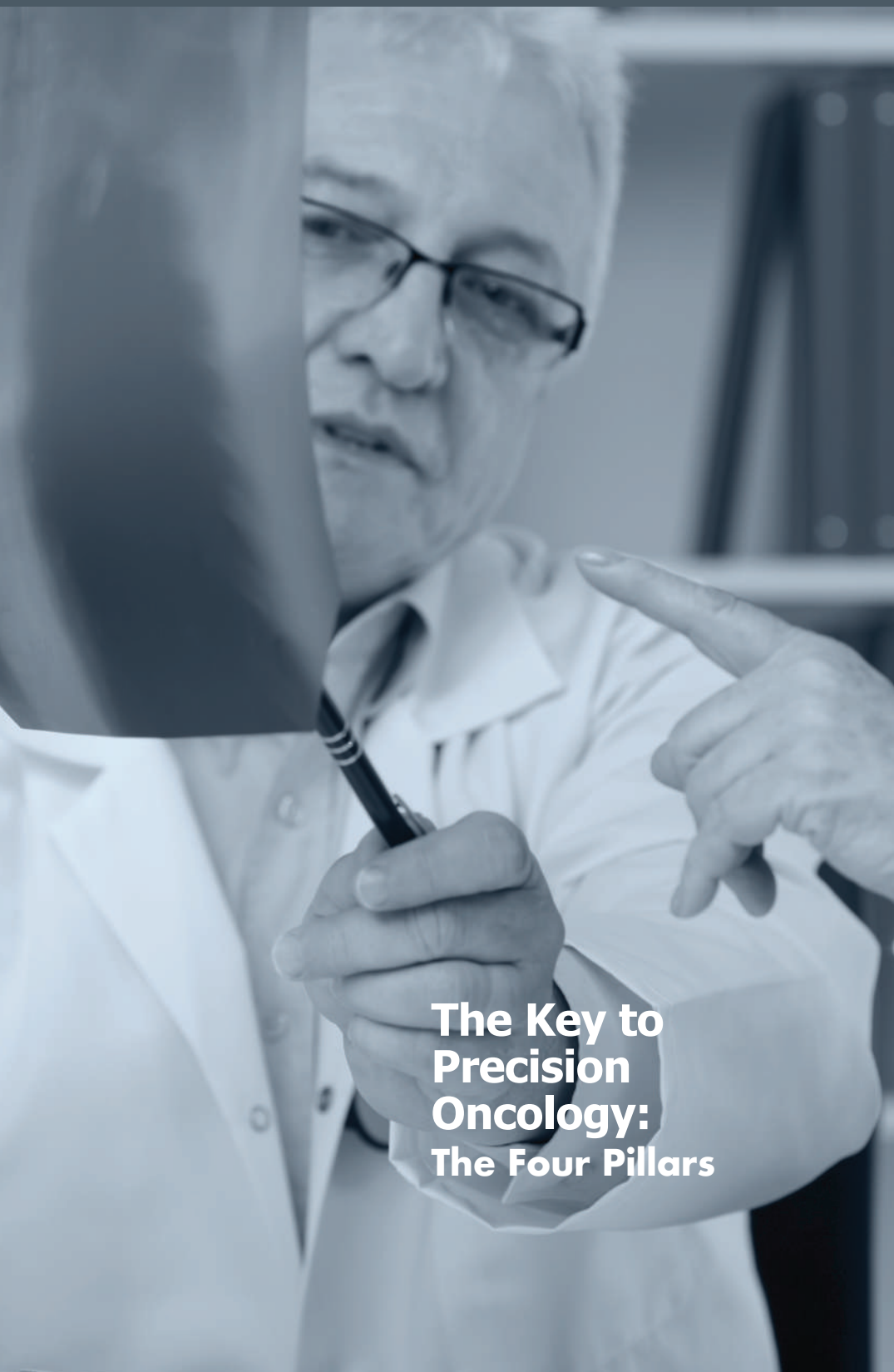
Precision Oncology begins with diagnostic tests that reveal the precise location of tumours in your body and the unique combinations of mutations are causing your cancer to grow. Then detailed research is conducted to identify the treatments that will provide the greatest benefit to you.

Targeted treatment options

Ongoing treatment monitoring

The Precision Oncology approach to cancer generates a more rapid and successful response to treatment, while greatly reducing the number and severity of side-effects and creating greater likelihood of longer progression-free and overall survival rates, and a lower chance of cancer recurrence.

The best outcome that science has to offer



**The Key to
Precision
Oncology:
The Four Pillars**

Precision Oncology has Four Distinct Steps, also referred to as The Four Pillars of Precision Oncology.

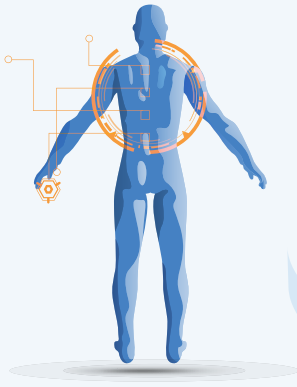
Research shows that when cancer patients include just one aspect of these Precision Oncology tools the results are improved survival rates over standard cancer care, with greatly reduced treatment side-effects.



When all 4 pillars of Precision Oncology are applied the results are significantly longer survival rates with fewer treatment related side-effects.

Therefore, ensuring that your treatment team is using each of these steps in your cancer care is the best way for you to know you're getting the very best care the world has to offer.





Precise Diagnosis

We use leading edge diagnostic tools, such as genetic testing and PET/CT imaging to find out precisely where the cancer is in your body and what is making it grow.

Personalized Research

Then we conduct many hours of personalized research, specific to your body, your inherited genetics, your lifestyle and your cancer genetics, to identify the best possible treatment options for you anywhere in the world.



Advanced And Targeted Treatment Options

We coordinate your access to leading edge surgical tools and medications that are targeted specifically for your cancer.



Ongoing Treatment Monitoring

We give you the most peace of mind, throughout your treatment process, with the use of ongoing genetic testing and non-invasive monitoring in the form of circulating tumour DNA (ctDNA) tests, also known as Liquid Biopsies. This ensures your body is responding and the treatment is working, and allows us, if needed, to make very rapid adjustments to your treatment protocol. We also use these liquid biopsy blood tests after your treatment is complete to provide you with regular reassurance that all is well.





At each step, decisions about how to proceed with treatment are personalized; directly driven by your genetic mutations and lifestyle factors – The treatment protocol is literally designed just for you, and constantly monitored and adjusted as needed. That is Precision Oncology.

Precision Diagnosis And Targeted Therapies Vs. Standard Care

Why is targeted therapy better than conventional chemotherapy or radiation?

Precision Oncology is the next step in cancer care – it is the natural evolution of chemotherapy and radiation therapy. It is more precise in targeting the cells causing your cancer. As a result, it improves long-term survival rates while reducing treatment-related side-effects.

Chemotherapy and radiation work by killing as many rapidly reproducing cells in your body as possible. This means that many healthy, rapidly reproducing cells also die, which is why people lose their hair and suffer from the many other unpleasant side-effects associated with these approaches. The philosophy behind these older forms of cancer treatment is that of trying to kill off the cancer cells before causing irreparable damage to too many healthy cells for patients to recover.

Chemotherapy has saved many lives when there was nothing else that medicine could provide. Nowadays, however, medical science has evolved to be able to target the cancerous cells

in your body with its cancer-cell-killing drugs while leaving your healthy cells unharmed. This is called targeted cancer therapy – and it is the present and future of cancer care, worldwide.

Chemotherapy paved the way for these targeted drugs, and is still used in the treatment of the vast majority of cancer cases. But science shows that targeted therapies are rapidly taking over as the best approach currently available to treat cancer: They offer significantly improved results with fewer and less severe side-effects.

Radiation therapy options have also become far more precise than they once were. Because of this newfound precision, localized radiation therapies can be extremely beneficial tools, with very few side-effects. But it is imperative that PET/CT scans are used first, to ensure precise placement of radiation rods, and to ensure that your radiation therapy targets your cancer as effectively as possible.

Simply Put: The more precise your diagnosis, the better your treatment plan can be personalized to what is actually making your cancer grow.

The Science Of Precision Oncology

When it comes to leading edge science and the diagnosis of cancer, there are two primary forms of diagnosis that will ensure we know which treatments are truly going to be the best for your cancer: Genetic Testing and PET/CT imaging.



PET/CT Imaging vs. CT Scans: More Accurate Staging, Surgery, and Treatment Monitoring

For the most detailed imaging of your tumours, we arrange Positron Emission Tomography/Computed Tomography (PET/CT) scans for our patients.

Results of these scans are available within 48 hours and they allow you to see exactly where the cancer is in your body. It also allows us to see which tumours are most aggressive which in turn allows your surgeon to be more precise in their removal of your tumours and to ensure that it is the most aggressive tumours that are targeted for biopsies (for genetic testing purposes) and for treatment, first.

The conventional forms of imaging provided in the Canadian Medical System, such as CT scans, MRIs, Ultrasounds and X-Rays, provide incomplete information on the size and location of suspicious lumps/abnormalities.

The images produced by these standard diagnostic imaging tests can be unclear, and – significantly – these images do not differentiate between healthy tissue, scar tissue, benign tissue, and tumour tissue, as they provide no information about biological activity.

This means that if your diagnosis and treatment is based on these forms of testing, you, your surgeon, and your Oncologist are unable to determine with confidence exactly where the cancer is in your body, which masses are cancerous and which aren't, and how aggressive your cancer is.

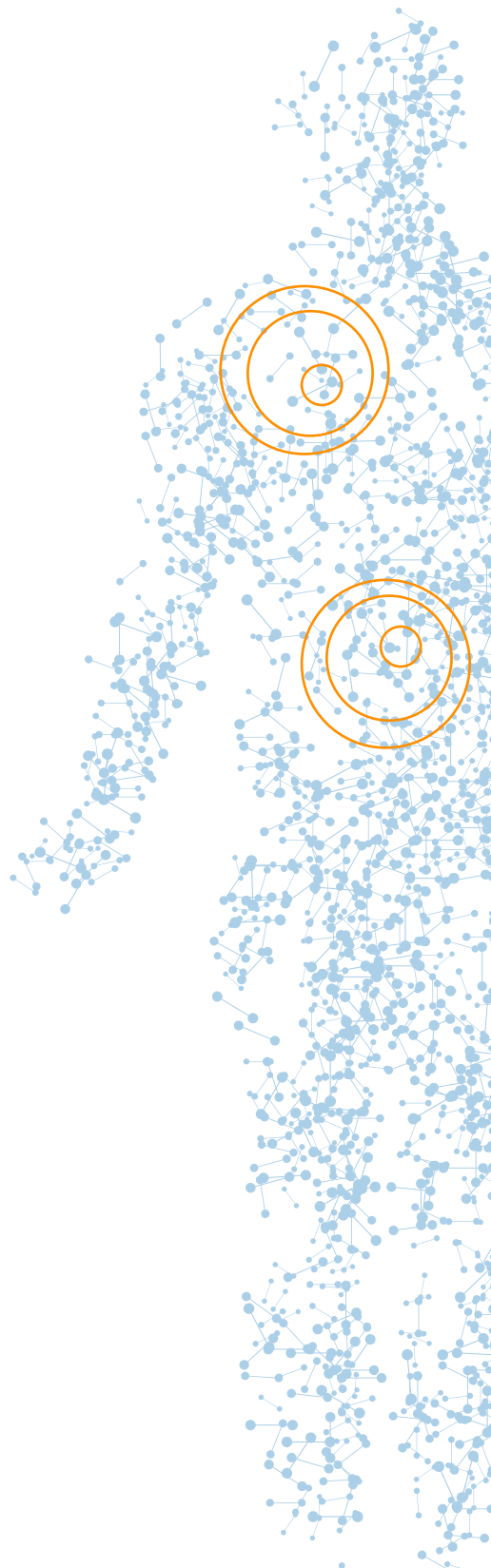
With PET/CT technology, on the other hand, it is possible to know, with very high confidence exactly where the cancer is in your body, and, as mentioned above, how aggressive each tumour is.

How Does PET/CT Work?

In PET/CT scans, you get a clear image of what's happening inside your body, in a way that X-rays, CT scans and MRI's alone just can't provide. For a PET/CT scan, patients are injected with a radioactive glucose solution. Cancer cells utilize large amounts of glucose for their rapid growth, so active tumours quickly uptake a significant amount of the solution, and will glow when imaged. Thus, the exact size, location and aggressiveness of tumours, can be easily identified.

If you have already received chemotherapy or radiation, and even targeted therapies, a basic CT or MRI scan may show that there are still some dark masses remaining. However, this may not in fact be active cancer. It may simply be scar tissue or dead cancer cells. A PET/CT scan can reveal whether these masses are in fact signs of active cancer, or of scar tissue from dead cancer cells. This means you don't worry needlessly, or continue unnecessary treatment.

If a PET/CT scan has not been provided for you, or has not been conducted recently, and you want to ensure you know where your cancer is and whether your treatment is having the desired effect, we highly recommend that you have a PET/CT scan as soon as possible. We can help coordinate this for you, through your public health care physician, or through one of a number of private clinics.



Genetic Testing For Targeted & Immunotherapy Options

There are two key forms of tests we perform on your blood or tumour tissue to aid us in the development of the most precise diagnosis and most personalized cancer treatment protocol:

Germline mutations testing and Somatic mutations testing.

Germline mutations testing detects hereditary (inherited from parents) alterations in DNA while somatic mutations testing detects acquired (over the course of a lifetime) alterations in DNA. Acquired alterations are responsible for the majority of cancers and influence the growth of your tumours and how they will respond to therapy.

To provide you with the best possible treatment options, detailed tests are conducted using a sample of your tumour tissue and/or a blood sample, which are carefully analyzed to determine the mutations in genes that are involved in your cancer.

These tests are capable of identifying hundreds of known cancer causing genes, such as *EGFR*, a commonly mutated gene, often found in lung cancers, and this information, plus our personalized research, tells us what is causing your cancer to grow and what

treatments will serve you best. Additionally, genetic tests, which explore any inherited mutations, such as *BRCA1* and *BRCA2* (commonly found in breast and ovarian cancers), are conducted to ensure that any targetable, inherited mutations are identified for treatment.

These genetic tests, coupled with PET/CT scans, and our personalized research program, provide you and your Oncologist with the most accurate diagnosis that medical science can offer at this time, and give you confidence that you are getting the best possible course of treatment for you.

There are two main ways of testing for germline and somatic mutations in cancer.

One is tumour tissue DNA sequencing which tests for hundreds of cancer-causing mutations, using a biopsy tissue sample. This type of test identifies the specific mutation(s) that are driving your cancer, which then allows us to target those mutations with special treatments called targeted therapies.

The other form of DNA sequencing test is called a liquid biopsy, also referred to circulating tumour DNA (ctDNA) testing.

Tumour DNA Sequencing

Tissue (tumour) samples, taken during biopsies, are stored for many years, generally at the hospital where the biopsy was performed. These samples can be requisitioned, with your permission, for further testing (such as tumour DNA sequencing). In this type of testing, a sample of tumour tissue from your biopsy is examined for hundreds of possible cancer causing germline, and somatic, mutations.

The processing time for this type of test is approximately 3weeks.

The results of this test provide a very clear picture of the key mutations that are involved in your cancer. This then allows our expert researchers at CTOAM to explore all possible targeted therapy options available for you, worldwide.



Liquid Biopsy For Diagnosis & Treatment Monitoring

In this form of genetic test, a sample of your blood is obtained and is then tested for a short list of mutations (as identified through personalized research, family history or a larger genetic test of the tumour biopsy).

This test is based on the widely accepted science, that all cells, including cancer cells, release their DNA into the blood stream. Unlike the tumour tissue test, where the DNA is isolated from the cells, in liquid biopsy, it is the DNA that is floating directly in your bloodstream, specifically DNA from those cells that have your cancerous mutations, that are isolated and analyzed.

For example: If a mutation in the *KRAS* gene (which plays an important role in cell regulation) is discovered in your biopsy sample, then we can look at the amount of this mutation (the percentage of DNA in your bloodstream that carries the mutation) circulating in your blood – both before and after initiating a new targeted therapy. If the amount of the *KRAS* mutation decreases within 3-6 weeks after treatment is initiated, then we know right away that the therapy is working.

This test can confirm whether or not your treatment is working, months before tumours are large enough to detect using a PET/CT. And the earlier a tumour is detected, the better your prognosis.

If there is no tissue biopsy to examine, and/or you are a Stage IV cancer patient, we can use this form of test to identify causative cancer mutations so you can begin a targeted therapy regimen right away. This means that within one week, you can have your test results and begin a targeted therapy regimen with confidence that it is the right one for you.

In Precision Oncology, Liquid Biopsy testing is recommended at the outset of treatment to establish a baseline of mutated cells in the bloodstream and again 3-6 weeks after you begin targeted treatment, and after any change in treatment to ensure the new drugs are working as intended.

Personalized Research & Advocacy

The outcome of your Precision Oncology tests will be compiled with your medical history and a detailed life history. This information will then be thoroughly examined in combination with any research we can find through online databases and oncology journals and compiled into a brief report outlining our findings of the surgical, dietary, lifestyle, and targeted therapy options that will provide you with the greatest benefit.

This report is presented to you in a lengthy consultation with your CTOAM Counsellor and is also presented to your Oncologist with direct consultation on next steps for treatment.

As needed our team will assist in the coordination of your access to your treatment of choice and we stay connected with you every step of the way to ensure you are getting the fastest access to the best treatments and that your treatment is being monitored (with liquid biopsy and self-report) to allow for rapid adjustments as needed, and most importantly, as much success and peace of mind as possible.

When asking your doctor (or your insurance company) to support an innovative treatment approach you must be able to provide them with solid scientific data that convincingly argues for something other than standard care.

CTOAM will provide you and your treating doctor with the data you require, and we will advocate as needed on your behalf for whichever treatment our research has shown will provide you the best possible outcome.

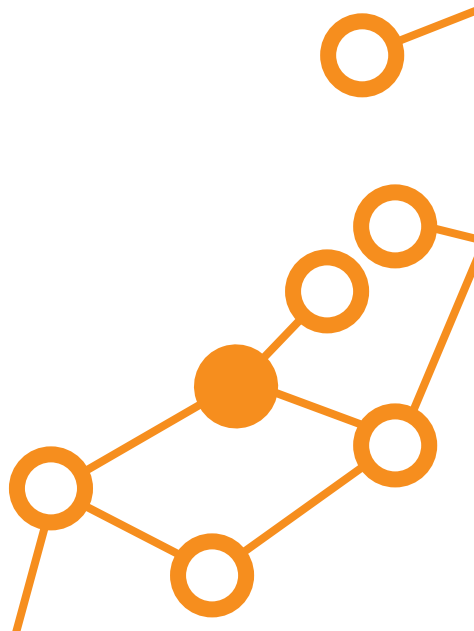
Over 85% of the time, regardless of the initial treatment plan that was created for you, or even if you've been told that there are no more options that Canadian medicine can offer you, when we present our report and the supporting evidence that accompanies it, our patients' Oncologists willingly adjust their approach and work alongside us to help facilitate your access to the treatment you need.

Together, we work with your Oncologist and your insurance provider, to help you access the treatment you need at minimal personal cost to you.

And when you must pay out of pocket for your treatment, we step in and do our best to negotiate compassionate access with the treatment provider.

And our service does not end there. We stay connected with you, and continue to provide you information on, and access to, any new tests or treatments that are likely to benefit you through the years.

So whether you've just received a diagnosis of cancer, or have been battling it for some time, it just makes sense to find out what Precision Oncology can do for you.





Targeted and Immunotherapies: Why You Need Them Now!

Targeted cancer treatments are those that have been designed, by medical scientists, to kill only those cells in your body carrying a specific cancerous mutation – rapidly eradicating cancer cells and leaving your healthy cells untouched.

Because these treatments directly attack the cancerous cells in your body while not affecting healthy tissue, targeted therapy treatment is proving to be much more successful than conventional chemotherapy or radiation in slowing or stopping the growth of your tumours.

In addition, targeted therapies have been shown to provide a significant reduction of treatment side-effects and physical recovery is often also more rapid with targeted therapy for these reasons.

Once a detailed genetic testing of your cancerous tissue or blood has been conducted to produce verifiable, scientific data about what is causing your cancer to grow, we can identify with great confidence the best treatments for you based on targeted cancer therapies.

Targeted therapies target and kill only those cells that have the cancerous mutation.

There are many hundreds of targetable mutations with FDA approved targeted therapies available today, so, even if you've been told there is nothing more that can be done for you in standard care, there very likely is a targeted therapy option that can help slow the growth of your cancer and even reverse it. Our job is to make sure you get it.

Nutraceutical Diet: Slow and Reverse Cancer with the Right Foods!

A nutraceutical is a food or nutritional supplement that has been scientifically proven to help slow the growth of cancer and help strengthen your immune system.

A nutraceutical diet is a form of targeted cancer therapy, which has been shown to aid in cancer treatment, recovery and prevention. Medical science has shown that nutraceuticals directly affect the development of cancer in two ways:

- They suppress cancer-causing genes that would otherwise trigger cancer growth
- They directly promote the activity of genes that suppress cancer from developing

This means that eating certain foods or supplements can have a significant, positive impact on the treatment, management, and prevention of cancer.

In fact, diet combined with a simple exercise routine has been shown to reduce the development of certain cancers by 80% alone.

Just as traditional chemotherapy and radiation are no longer the best approach to cancer treatment, so is

the standard elimination/restrictive diet approach, an outdated and unnecessarily limited approach to using foods to aid in cancer care and prevention.

It is quite simple to use foods alongside your targeted therapies and positively influence the outcome of your cancer treatment. But first you need proper genetic testing to identify which genes are mutated in your cancer and therefore which foods are most important for you to be consuming and which you should stay away from.

The Nutraceutical Diet

The foods and supplements, outlined in the nutraceutical diet that we design for you, have been shown, by medical science, to directly impact the genes and genetic pathways that are involved in your cancer.

Nutraceutical diets are typically quite affordable and easy to execute on a daily basis, making them a great long-term tool for cancer treatment, management, and prevention.

For those with a family history of certain hereditary cancers, a nutraceutical diet and structured exercise regime have been shown to greatly reduce the likelihood that cancer will develop.

Why Aren't More Cancer Patients on Nutraceutical Diets?

A personalized nutraceutical diet is a simple, affordable way to help treat cancer and prevent its recurrence. And yet, many cancer patients are not aware that this option for cancer care exists.

This is for the very same reason that so few cancer patients are offered targeted cancer therapies despite the mounting data showing their benefit: Genetic testing is required in order to identify the nutraceuticals that will serve you best, and genetic testing is not yet standard of care in Canadian Oncology. As a result most cancer patients, as well as most doctors, remain unaware of the impact of nutraceuticals in cancer treatment.

CTOAM will create the perfect nutraceutical diet for you, based on your lifestyle and unique genetics.



Clinical Trials Are Not Experimental Treatments

As part of all potential options investigated to treat your cancer, clinical trials are also investigated as an option for you. We evaluate all possible treatments that would be beneficial to your specific situation. And should you decide to engage in a clinical trial as part of your cancer treatment, our team will help coordinate your enrollment.

Many clinical trials prefer CTOAM clients, as many of the tests that are needed in the trial have already been performed as part of our research on your behalf. As a result our clients are often “fast-tracked” into trials and can begin receiving these treatments very quickly.

What Are Clinical Trials?

Clinical trials are one of the final stages a treatment undergoes before it becomes available to the general public. In order for a treatment to reach the clinical trial stage, it has already been rigorously tested and found to be likely superior to standard care.

For ethical reasons, there are no placebos used in cancer clinical trials. Patients receiving standard care are used as the control group – so the minimum treatment a patient participating in a clinical trial would receive would be standard treatment(s).

Clinical trials offer treatments that have already demonstrated effectiveness over standard care. Additionally participants are provided with superior imaging, molecular (genetic) testing, surgical, and advanced chemotherapy protocols not typically offered in public medical facilities.

Aren't Clinical Trials a Last Resort?

With the current approach to cancer treatment in Canada, coupled with the high patient load that most Oncologists face, many doctors do not have the resources to research and connect their patients with clinical trials. However, clinical trials can be accessed at any stage of your cancer care.

Depending on your genetic testing results, it may make sense for you to choose to enroll in a clinical trial at the beginning of your cancer treatment rather than thinking of them as a last resort. The testing and care that is provided to clinical trial patients combined with their demonstrated benefit over standard care, can make clinical trials a very intelligent first step.

Does Enrolling in a Clinical Trial Cost Me Anything?

This depends largely on where the trial is being conducted. In Canada, enrolment in clinical trials is free. However, they can be very difficult to access: There are many restrictions on eligibility, and many of the trials are blinded, which means you (and perhaps the researchers) will not know whether you are receiving standard treatment or targeted treatment.

In the US, some trials require you to pay the full cost of the drugs and the hospital stay (if needed), while some charge just the hospital costs; others are free, and some will even pay for all expenses, including travel. Should you choose to consider a clinical trial as part of your cancer care, our team will help find the best option for you.



Do You Want Precision Oncology? We Will Make It Happen

- Thorough education for you & your family on all aspects of Precision Oncology and optimal cancer care
- Rapid access to private diagnostic PET/CT imaging
- Immediate access to the very best genetic sequencing laboratories and best diagnostics in the cancer field
- Genetic sequencing tests
- A personalized research report that includes:
 - What is causing your cancer to grow
 - The identification of any heritable mutations
 - A list of your targeted therapy options
 - Guidance on how to access them
 - References for you and your Oncologist to explore the data for yourselves

- A personalized nutraceutical diet
- Access to our network of leading Oncologists and specialists
- Access to clinical trials as needed
- 24/7 CTOAM support
- Advocacy with your Oncologist, insurance company, and with pharmaceutical companies to gain you access to the treatment you need
- Counselling support services for you and your loved ones
- Ongoing, liquid biopsy, monitoring of your treatment progress as required
- Ongoing consultations with your personal research team
- Regular communication with your Oncologist
- Ongoing research for any new targeted therapies that can help you
- Privacy: Your genetic test data and your medical records remain strictly confidential with Canadian privacy laws being some of the best in the world

A Team Approach to Your Cancer Care

CTOAM provides your Oncologist with information they need to make the most informed decision about your care, including:

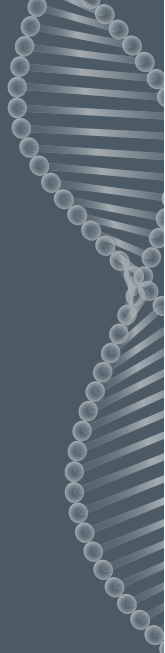
- Diagnostic proof of which genes are driving your cancer to grow (based on genetic testing of your tissue or blood biopsy)
- PET/CT imaging to see exactly where the cancer is in your body and which tumours are most aggressive
- A referenced summary of our research of all relevant medical options, showing better results than standard care
- CTOAM support, as needed, in accessing those treatments, as quickly as possible
- Follow-up monitoring to ensure the treatments are working well
- Dietary and lifestyle counselling to aid in your treatment outcome and in the prevention of recurrence
- Our team will be advocating on your behalf to bring you access to the latest and best evidence-based targeted therapy available, whether already available on the market (most often the case), or through clinical trials

The faster you use targeted therapies and immunotherapies to address your cancer the better your prognosis.

Over the past few years, there have been a record number of targeted therapies that have received FDA approval.

Many of these drugs work in a unique way that many Oncologists are not yet familiar with, but they are the primary talk of oncology conferences and medical journals, and with our research and collaboration with your Oncologist, you can access them, right here, at home.

Early access is key to successful treatment outcomes. The sooner your Oncologist starts you on the right treatment for your cancer, the better.



How long until you start getting the right treatment?

With cancer, the earlier and more precise your diagnosis, the less time your cancer has to spread and mutate further, which makes treating it much easier and more successful.

When you engage CTOAM's Precision Oncology team:

Within just a few days you can have obtained a PET/CT scan that can be utilized by your surgeon for more precise tumour excision and biopsy.

Within one week you could begin to receive targeted therapy options.

Within 3 weeks you will have the test data from a detailed genetic panel and a detailed and referenced research report identifying the best treatment options for you in order of preference.

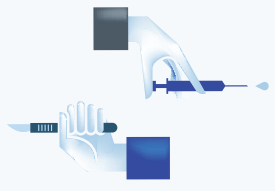
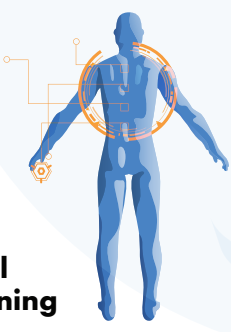
This means that within just 3 - 4 weeks of first contracting us, you and your Oncologist will have the most precise and detailed data available on what is causing your cancer to grow, what you can do about it, and when & how you can access those beneficial treatments.

Within 3 - 6 weeks after beginning a recommended treatment, you will have further proof, in the form of genetic data from a liquid biopsy blood test, whether or not that treatment is working as expected.

This allows for a rapid approach to modifying your treatment protocol as needed, as well as general peace of mind.

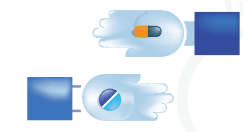
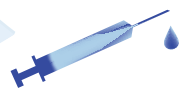
3-5 days
1 week
3 weeks
4 weeks
8+ weeks

Digital imaging

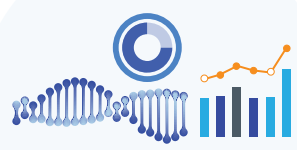


Surgery + Biopsy

Liquid biopsy

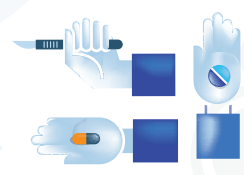


Potential targeted therapy START



Research data

Personalized options report



Targeted therapy & surgical options START

Treatment monitoring





Did you know?

In the time between your initial diagnosis and your first meeting with your Oncologist, our Precision Oncology team will already have a cancer treatment plan, that is 80% more accurate, for them to offer you.

So you'll walk in, and start the right treatment, right away!

Precision Oncology In Canada

Precision Oncology is the natural evolution of science and technology, as applied to cancer treatment and prevention. But while these advancements are an inevitable and beneficial development, Precision Oncology is still a relatively new branch of medicine.

Some hospitals in Canada do currently offer PET/CT scans but not as standard diagnostic protocol. Likewise, the genetic tests & targeted treatments that CTOAM recommends are slowly starting to become integrated within the Canadian health care system – but often only as a last resort, as opposed to a starting point.

Doctors working within the Canadian health care system have a set number of options they are permitted to offer you to treat your cancer, based on standard treatment protocols and an allocated cost per patient.

Once those standard treatments are exhausted, doctors have no more options to offer their patients. This does not in any way mean that there are no more options for you. And we have found that the vast majority of Canadian Oncologists are highly supportive of any evidence based options that are presented to them in the pursuit of the best care for their patients.

Current research into Canadian health care shows that full integration of personal oncogenomics may take anywhere from 10 (or more) years. And unfortunately, most people can't wait that long.

The drugs identified to target your cancer genes are often already used within the Canadian system to treat other types of cancers or illnesses. And with the personalized onco-genomic information provided by CTOAM, your doctor can often prescribe these for you, without you having to pay for it, or travel for treatment.

It is also not recommended that you wait until you've been told there is nothing else that can be done before accessing Precision Oncology technologies. Precision Oncology is simply the best line of defense – and outcomes are even better when Precision Oncology guides treatment from the beginning, rather than being used as a last resort.

Treatments guided by tumour DNA sequencing have been clinically proven to result in longer cancer-free times (remissions), longer progression-free survival, improved overall survival, fewer hospital visits, fewer side-effects, and overall better health. However, when targeted treatment is delayed, the chances of improved outcomes are reduced as cancer has time to spread and new mutations can evolve.

If that sounds of interest to you – we are here to share more about how you can access the most current evolutions in medical science, no matter where you live or what type or stage of cancer you have. A second opinion consultation will allow us to give you a very personalized review of your case. We will present you with a detailed list of next steps for you to take to your doctor and discuss with family and loved ones.

There is never any pressure to use our service – Our mission is to ensure that you know what's possible for your care – that you are as educated as possible about how cancer care works and how to get the very best treatment that medical science can provide.



Precision Oncology in the USA

As a US citizen you know firsthand the limitations and exorbitant costs of the US medical system. However, it might interest you to know, that one of the upsides of capitalism in your medical system (vs. a more socialized approach as in the UK or Canada) is that you have a much greater chance of getting access to genetic testing and PET/CT imaging technology – in other words, for all its shortcomings, the US system of care provides a much more thorough and accurate diagnosis for you than most universal medical systems.

US insurance companies understand that the more accurate your diagnosis, the better your treatment will be and the longer you'll be around to pay their fees. It may seem crass, but these are the facts. And, when it comes to getting the best cancer care possible, in the world, they work in your favor!

This means, you'll almost certainly be able to get very best diagnostics as part of your insurance. And, simply put, the more accurate your diagnosis, the longer you will live and the fewer side-effects and necessary tests, treatments and surgeries you have to endure.

CTOAM is here to help you make sure this happens for you. And once you have your genetic testing panel results and more accurate imaging scans via PET/CT, we will ensure that your oncologist has a full list of treatment options to consider and that you get the right treatment ASAP: Treatment options that are proven to give you more time and less side-effects than what you have been prescribed so far.

The US is a leader in developing targeted therapies and immunotherapies and this means most of these excellent treatments that are vastly extending the lives of cancer patients will be FDA approved and available to you through your insurance provider or compassionate access program.

If you can make a sound case for why these new treatments are right for you. Don't stress, you don't need to know how to do that – that's what we are here for.



We put many hours of personalized research and peer-review medical journal data together in one detailed report to ensure your oncologist has the back up they need to confidently prescribe the most effective treatment for you.

Think of it this way:

Without this data, you're stuck with standard care.

With this data, your insurance company cannot refuse you the very best treatment for your cancer.

If that sounds of interest to you – we are here to share more about how you can access the most current evolutions in medical science, no matter where you live or what type or stage of cancer you have.

A second opinion consultation will allow us to give you a very personalized review of your case. We will present you with a detailed list of next steps for you to take to your doctor and discuss with family and loved ones.

There is never any pressure to use our service – Our mission is to ensure that you know what's possible for your care – that you are as educated as possible about how cancer care works and how to get the very best treatment that medical science can provide.





Precision Oncology Worldwide

No matter where you live, your oncologist has heard about precision oncology – oncogenomics – and/or personalized cancer care.

No matter where you live, your oncologist wants to give you the very best cancer treatment that medical science can provide.

For the past 10 years we have helped oncologists in countries such as Australia, New Zealand, England, France, Germany, Switzerland, Sweden, Romania, Ukraine, Nigeria, India, United Emirates, Saudi Arabia, Egypt and Kuwait to name just a few. We helped these doctors provide treatments that were not yet part of those systems, and which the oncologists may not even have heard of, but which gave their patients (just like you!) more quality time.

The quality of the information we collect on your behalf provides your doctor with the confidence they need to go outside the box for you. Our service even helps to arrange your doctor's access to these innovations in treatment, and our treatment monitoring tests can be used no matter where you live – so you never have to wonder if your treatment is working, you'll know within a month, with 99.9% certainty.

If that sounds of interest to you – we are here to share more about how you can access the most current evolutions in medical science, no matter where you live or what type or stage of cancer you have. A second opinion consultation will allow us to give you a very personalized review of your case. We will present you with a detailed list of next steps for you to take to your doctor and discuss with family and loved ones.

There is never any pressure to use our service – Our mission is to ensure that you know what's possible for your care – that you are as educated as possible about how cancer care works and how to get the very best treatment that medical science can provide.

CTOAM Is Your Advocate for the Very Best Cancer Care

CTOAM provides your Oncologist with the information they need to have confidence prescribing life saving treatments that otherwise might not be available to you. The public health care system in Canada limits the types of tests your doctors can offer you which restrict your access to treatments that could benefit you the most.

We provide your Oncologist with the evidence they need to help you gain access to life-saving treatments, that would otherwise not have been available to you, often at no extra cost to you.

Currently, Canadian cancer patients must pay for the costs of these tests out of their own pocket, but increasingly, insurance companies are covering some or all of these costs. And genetic testing for certain common mutations such as *BRCA1* in breast cancers and *PD-L1* for immunotherapies is now often available within the public health care system. This means that some, or all, of your testing costs may in fact be recoverable.

The CTOAM Precision Oncology team makes it their priority to help you get the very best cancer care available, as close to home, at as little cost to you as possible. It is our goal to make Precision Oncology the standard

in Canadian health care and we do everything we can to help you access these life saving tests and treatments and to receive as much financial support for these options as possible.

Most often, CTOAM is able to advocate for you to get some or all of your treatment costs covered within the publicly funded medical system. We work hard to ensure your Oncologist is on board every step of the way – and if there's a way that your Oncologist can help you, they almost certainly will. They just need the evidence to prove that the treatment you seek is going to benefit you most. And that's what we are here for.

Occasionally, there is no coverage in your province or in the Canadian system at all, for the treatment that we have identified as best for you, and patients must pay out of pocket for their targeted treatments. If this is the case, CTOAM's clinical trial advocacy services are enacted and we engage our worldwide network of Oncologists and pharmaceutical companies as much as possible to gain you compassionate access or access via clinical trials.

All this is to say, that we do our very best to keep your medical expenses as low as possible, every step of the way.

How do you make it happen?

Start With A Precision Oncology Second Opinion

The American Society of Clinical Oncology, along with The Canadian Association of Medical Oncologists and Government cancer agencies all speak to the importance of a second opinion and actively encourage patients, on their websites, to get one at any time in their diagnosis or treatment. They further encourage doctors to support their clients on this path so that the best possible outcome can be reached and the patient has confidence in their treatment decision.

These agencies and clinics state that the benefits of obtaining a second opinion include:

- Confirmation or correction of the original diagnosis

Additional details about the type of cancer and its stage, such as:

- A description of where the cancer is located
- Whether the cancer has spread
- Whether it is affecting other parts of the body

- Perspective from experts in different oncology disciplines, such as medical oncology, radiation oncology, and surgical oncology

- Identification of other treatment options

- Which clinical trials are available for you

- Possible prevention of unnecessary surgery or invasive treatment

- Improved understanding of a diagnosis or treatment schedule

- Possibility of discovering new methods to treat chronic conditions

- Saving money on medical care over the long term

- Peace of mind



These agencies support second opinions because they have been proven to increase treatment success.

In fact, studies show that when a patient gets a second opinion, over 22% percent of the time the initial diagnosis is wrong.

Additionally, when a second opinion is presented to the original physician, more than 70% of the time the initial treatment plan is modified to incorporate new information.



CTOAM is the Gold Standard of Second Opinions:

When it comes to cancer, due to the high specificity and validity of the genetic testing and detailed imaging scans and the personalized research we provide your physician, well over 85% of the time Oncologists amend their original treatment plan to incorporate our new data. This means you get the best of both worlds! You don't have to change doctors and you get a more targeted treatment plan.

Bottom Line:

Your Oncologist will want you to have as successful an outcome to your cancer treatment as possible. And the excellent quality of FDA and CLIA approved tests, research sources and treatment options that CTOAM provides, allows your Oncologist to readily adopt the suggestions our team presents. Most doctors will welcome another physician's input. A good doctor understands your right to be well informed and should support a second opinion.

**With cancer, time is of the
essence.**

Contact us now:

Web: www.ctoam.com/contact

Email: info@ctoam.com

Phone: 1-778-999-5463

Start your journey today!

Register for a Precision Second Opinion
with our medical team:

www.ctoam.com/consultation

For more information on all of our
Precision Oncology service packages,
please visit:

www.ctoam.com/services



Cancer Treatment Options and Management (CTOAM)
Pioneers in Precision Oncology since 2010
The future of cancer care, *now*.

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