CTOAM

CANCER TREATMENT

OPTIONS & MANAGEMENT INC.

Press Kit 2017 - 2018

www.ctoam.com

For press inquiries, contact Marketing & Media or kim@ctoam.com.

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Information for Press and Media

"Nearly 1 in 2 Canadians is expected to be diagnosed with cancer in their lifetime." – Canadian Cancer Statistics 2017

That means nearly half of your readers will be affected by cancer in some way. As journalists, you can help them understand their options beforehand.

Precision Oncology and Personalized Cancer Care Services for Cancer Patients

CTOAM is a private company that works as a supportive arm within mainstream health care to enhance the quality of care that cancer patients receive. Our oncogenomics experts work together *with* the patient's oncologist and treatment team to help them provide their patients with tests and treatments they'd otherwise be unable to offer. In a nutshell, CTOAM offers a bridge between leading edge cancer research and front line cancer care. Our goal is to work ourselves out of a job – we hope that precision oncology will soon become integrated into standard care so well that our services, in their current form, will no longer be needed.

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Key Definitions

Cancer is a genetic disease caused by an accumulation of DNA mutations and epigenetic alterations leading to unrestrained cell proliferation and neoplasm formation.

Oncogenomics is a sub-field of genomics that characterizes cancer-associated genes. It focuses on genomic, epigenomic and transcript alterations in cancer.

Precision oncology, defined as molecular profiling of tumors to identify targetable alterations, is rapidly developing and has entered the mainstream of clinical practice. Genomic testing involves many stakeholders working in a coordinated fashion to deliver high-quality tissue samples to high-quality laboratories, where appropriate next-generation sequencing (NGS) molecular analysis leads to actionable results.[1, 2]

CTOAM's Mission and Mandate

Mission – CTOAM's mission is two-fold:

- To ensure that everyone has access to personalized cancer medicine now!
- To promote further research, understanding, and eventual integration of precision oncology into the mainstream health care system.

Mandate – We achieve our Mission by:

- Conducting personalized research
- Coordinating advanced diagnostic tests
- Recommending the right targeted treatments
- Arranging your access to these treatments
- Ensuring your treatment happens as close to home as possible
- Ensuring your treatment costs you as little as possible
- Ongoing treatment monitoring
- Advocating for you within the medical community, labs, hospitals
- Supporting your family and friends, as needed
- Advocating for precision oncology within the community

"Two years ago the BCCA [British Columbia Cancer Agency] told me they had nothing else to offer me other than chemo after my breast cancer spread to my lungs and bones. My sister told me about CTOAM after hearing of some positive results. I contacted Alex at CTOAM, who arranged to have tests completed to determine what was driving my cancer. I also changed to a community oncologist and the two of them collaborated and identified drugs that targeted my mutations and delayed my chemo. I have been travelling and enjoying life since. All I wanted to do was to be able to say to my family that I've done the best I could. And, with CTOAM, I know I have."

– *Margaret, CTOAM patient (breast cancer)*

Company Background

[Vancouver] CTOAM is an international oncogenomics startup based in Canada. Our company provides cancer patients with rapid access to personalized oncogenomics services, including genetic testing, PET/CT scans, personalized research, targeted therapies, immunotherapies, optimized chemotherapy, patient advocacy services, and more. Spearheaded by oncogenomics expert, Alex Rolland, CTOAM has been been helping cancer patients for nearly a decade.

Precision oncology offers cancer patients higher survival rates, with fewer and less severe side effects than standard care.[3] Numerous research studies demonstrate that tumour shrinkage rates and progression-free survival are greatly improved with precision oncology. For example, "in trials using precision medicine, tumour shrinkage rates were 30.6% compared with only 4.9% in those that did not."

Our recently updated website is a comprehensive online resource on precision oncology, designed to educate the public and medical health practitioners. It encourages people to explore this life-saving approach to cancer treatment. This site offers information on many forms of genetic testing including liquid biopsy and tumour DNA sequencing, as well as PET/CT scans, targeted cancer therapies, immunotherapies, optimized chemotherapy, clinical trials, patient advocacy, education, and emotional support.

Read Founder Bios

CTOAM was co-founded by oncogenomics expert Alex Rolland and mental health care specialist, Michelle Morand.

- Director of Scientific Research: Alex Rolland
- Client Care & Business Development: Michelle Morand

Download Bio Photos

- Alex Rolland
- Michelle Morand

Download CTOAM Logos

- CTOAM text
- CTOAM logo

> ***"[Alex] was very encouraging and wanted to try whatever we can. I'm happy I chose to do it because it's given me more time to spend with my family."***

– Betty, CTOAM patient (colon cancer)

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Topic Suggestions for Journalists

There are many fascinating, and often controversial, topics related to precision oncology and new developments in cancer research, treatment, and prevention. CTOAM's Director of Scientific Research, Alex Rolland, is happy to provide journalists with information, a written article, or be interviewed, on any cancer-related subject matter, including:

- ***Alternative Cancer Cures:*** What really works, why, and how to tell if what you're thinking of trying is going to help or hurt. Some topics under this heading include:
  - Dispelling cancer treatment myths (Vitamin C drip, energy healing, etc.)
  - What science says about CBD (Cannabidiol) and marijuana for cancer treatment
  - Uncovering the facts about naturopathy and cancer care
  - Why taking vitamins can increase your risk of cancer

- ***Cancer Prevention Tips***
  - Most accurate test for determining your risk of breast cancer
  - Best foods to eat, according to medical science
  - The science of exercise and weight training for cancer prevention
  - The impact of Vitamin C consumption on certain types of cancer

- ***Improving Cancer Patient Quality of Life and Survival Rates***
  - Increasing the amount of power and rights of cancer patients within standard care
  - How precision oncology has saved lives of cancer patients who'd been told by standard care there were no more options

- ***Celebrity Cancer Cases***
  - Why precision oncology might have saved Gord Downie's life
  - Why precision oncology might have saved Steve Jobs' life

- How precision oncology might have prevented Fran Drescher from being misdiagnosed in the first place
- The problem with celebrities giving health advice: how to tell fact from fiction
- How targeted cancer therapies saved Vancouver news anchor, Tamara Taggart
- Angelina Jolie's double mastectomy, genetic testing, and for whom it's necessary
- Olivia Newton John: how precision oncology could help her and whether medicinal marijuana is helping or hurting her
- Could Shannen Doherty have avoided chemo with precision oncology?
- Did Kathy Bates need a double mastectomy? How precision oncology can help ovarian cancer patients and breast cancer patient

- ***Canadian Health Care and Standard Care***
  - The current state of the Canadian health care system
  - The future of health care in Canada, and beyond: what countries are already using precision oncology and why aren't we?
  - Why Canadians don't need to go to the US or Europe for superior cancer care

- ***Differences Between Precision Oncology and Standard Care***
  - What precision oncology is and how it differs from standard treatment
  - Current shortcomings of standard cancer treatment: long wait times coupled with limited use of advanced diagnostic options lead to reduced efficacy of treatment and recurrence of disease
  - Validity (peer-reviewed, medical science) vs mythological (stories, fantasy) in cancer treatment – and how to tell which is which

- ***How Precision Oncology Can Enhance Standard Care***
  - Private health care vs public healthcare: why we already have a two-tier system and how to make it work for you
  - What CTOAM is doing to make precision oncology and personalized oncogenomics a part of standard care in Canada
  - The current need for integrating private companies with public health
  - The future of cancer treatment: what standard cancer care will look like globally and how people with cancer can access those options now
  - The pros and cons of having a two-tiered health care system

"I've just trusted in the medical system in this country forever and I was really surprised to find that by going to a private oncologist I could get the drugs I actually need versus the drugs they [BCCA] could give me. Alex was able to help me get these drugs, so I'm not paying for them. I've been on the [targeted] drugs now for a few months and I feel better than I've felt in a couple of years. I feel really good – like, shockingly good. And I'm not having any side effects from them at all. I feel fabulous. Although I do often have tired days still."

– Lisa, CTOAM patient (breast cancer)

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Useful Resources on Precision Oncology and CTOAM

- About CTOAM
- Shortcomings of standard cancer care
- How genetic testing works
- Why PET/CT offers the most accurate diagnosis
- The importance of expert analysis
- The role of personalized research
- How CTOAM works with oncologists

CTOAM Patient Success Stories with Precision Oncology

- Melanoma patient, Joan, becomes cancer-free with immunotherapy
- Breast cancer patient, Lisa, gets targeted drugs fully covered
- Interview with breast cancer patient, Lisa
- Breast cancer patient, Verna, avoids double mastectomy
- Lung cancer patient, Georgette, becomes cancer-free
- Breast cancer patient, Margaret, avoids chemo
- Ovarian cancer patient, Lauren, becomes cancer-free
- More success stories here!

CTOAM in the Media

- *The Effective Use of Green Tea in Cancer Treatment and Prevention* by Alex Rolland for Encompass Magazine, 2013
- *New Developments in Cancer Research, Treatment, and Prevention* by Alex Rolland for Encompass Magazine, 2012
- *Innovations in Cancer Research* by Alex Rolland for Encompass Magazine, 2011
- *Keeping Abreast of Breast Cancer* by Alex Rolland for Encompass Magazine, 2011

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"I was impressed with the research and knowledge Alex has. He's explained everything along the way; I've come to trust him implicitly. He always gives me hope, which is a huge benefit."

– *Damian, CTOAM patient (colon cancer)*

Overview of CTOAM's Work

"Personalised management is considered as the future of cancer care."
– The European Society for Medical Oncology (ESMO)

Giving Cancer Patients Access to Precision Oncology

"Almost half of us will be diagnosed with at least one form of cancer at some point during our lifetime. In addition, 1 in 4 Canadians will die of cancer. That might be your spouse, your parent, your child or you. The good news is we can do something about it. About half of all cancers can be prevented and research continues to improve the outlook for people with cancer."
– Dr. Leah Smith, CCS epidemiologist and co-author of the Canadian Cancer Statistics Report 2017

Anyone who has received a cancer diagnosis will immediately think about how the treatment itself is going to affect them and how long they have to live. Precision Oncology and Personalized Oncogenomics provide patients with treatments that greatly reduce the experience of treatment related side-effects, while increasing life-expectancy.

One of the barriers to more people making use of precision oncology is simply a lack of information on what options exist for evidence-based, enhanced cancer care, and how to access them. This is the challenge that CTOAM's services and website strive to solve. Many people may be aware that cancer is one of the leading causes of death worldwide – in fact, the number of cancer cases is expected to increase by 50% within the next 20 years. But what most don't realize is that superior testing and treatment options already exist, and can provide significant benefits, a reduction in treatment side-effects, and an increase in life expectancy.

At present, due to budgetary constraints and the slow-moving machine that is Canadian cancer care, there's a significant lack of access to precision oncology services in mainstream cancer care. Life-saving diagnostics and treatments – such as, tumour DNA sequencing, liquid biopsy, PET/CT scans, and targeted cancer therapies – are currently

inaccessible to the majority of cancer patients through standard cancer care. However, with the use of CTOAM's precision oncology services, cancer patients are able to rapidly access these advanced tests and treatments for as close to free, and as close to home, as possible.

And, to further our goal of both enhancing individual patient care and improving Canadian cancer care in general, CTOAM works closely with a patient's public health care oncologist. By embracing a supportive role, we're able to help oncologists access the treatments that will be best for their patient's cancer.

This integrated approach to cancer care is the natural next step in the development of cancer treatment.

What is Precision Oncology?

Precision oncology is an innovative approach to cancer treatment, based on peer-reviewed medical science and leading edge technology. This research has demonstrated that cancer is a disease caused by DNA mutations and epigenetic alterations, which leads to unrestrained cell proliferation and neoplasm formation in the body. Therefore, precision oncology looks at each patient as a *unique* case requiring individualized research and treatment – as opposed to standard care's traditional one-size-fits-all approach.

It also offers cancer patients higher survival rates, with fewer and less severe side effects than standard care.[3] Numerous research studies demonstrate that tumour shrinkage rates and progression-free survival are greatly improved with precision oncology: for example, *"in trials using precision medicine, tumour shrinkage rates were 30.6% compared with only 4.9% in those that did not."*[4]

There are several terms used by different medical institutions across the globe to refer to precision oncology. These terms include personalized cancer medicine, individualized medicine, and personalized onco-genomics – used by ESMO, the Mayo Clinic, and BC Cancer Agency, respectively.

No matter what you choose to call it, precision oncology is worth exploring – regardless of whether you're a cancer patient, a supportive friend or family member, a doctor, or a clinical oncologist. Understanding the benefits of genetic testing, expert analysis,

personalized research, and targeted therapies can empower you to make the best decision possible regarding testing and treatment options.

Why CTOAM Exists

CTOAM's is working to enhance standard care protocol, so that, in the future, all cancer patients have access to precision oncology services. Our cancer experts strive to ensure that clinical oncologists know about oncogenomics, feel confident recommending this approach, and can help their patients benefit from it.

As precision oncology specialists, we connect our clients with the best, evidence-based cancer treatment available for their unique form of cancer. We do this by using the most advanced genetic tests (DNA tumour sequencing and liquid biopsy) and imaging technologies (PET/CT), which allow us to identify what is driving the cancer to grow, exactly where it is in the body, and how aggressive it is.

Genetic tests like DNA tumour sequencing and liquid biopsy allow us to identify the exact mutations that are driving a patient's cancer and then match that to a targeted drug. *"For instance, about 25 percent of breast cancers test positive for the HER2 mutation. Several new drugs are extremely effective in treating this fast-growing tumor. (...) The prognosis for HER2-positive patients has dramatically improved since doctors started prescribing these drugs."*

Without the data from genetic tests (and proper analysis), it's impossible to know which targeted therapies will be effective. These essential tests are currently not offered through mainstream cancer care in Canada, except in rare initiatives like BCCA's POG program. Unfortunately, programs like these only accept a very small number of patients per year and patients must fit highly specified criteria, in addition to being in an extremely dire condition.

PET/CT scans are much more accurate at detecting where cancer is in the body compared to traditional diagnostic tools, such as ultrasound, CT, and MRI. In one well-documented study, getting a PET/CT scan *"caused a change of staging and treatment plan in 25-33% of cases."* In another study on prostate cancer patients, *"PET/CT scanning led to a change in planned management in 51% of patients."* According to the BC Cancer Agency, *"in up to 87% of cases in which a patient has had a PET/CT scan, the test leads to changes in decisions by*

oncologists for planned cancer treatment, to avoid over-treatment with harsh side effects or under-treatment."

Our cancer expert then analyzes the results of these accurate tests and conduct personalized research to identify the targeted cancer therapies that will be most effective for the patient's cancer. This personalized research takes into account the patient's lifestyle, environment, history, and hereditary factors, as well as the data from the genetic tests and PET/CT scan.

Once we've identified what's driving the patient's cancer, we then find targeted therapy options that have been demonstrated to be most effective for the specific mutation(s).

Without a service like CTOAM, it is difficult – if not impossible – for patients in Canada to access these advanced diagnostic tools via standard care, not to mention have an expert analyze the data and recommend the correct targeted therapies. The majority of clinical oncologists do not have the necessary training to analyze the data properly, nor even know the right tests to recommend (through no fault of their own). And while genetic testing is more accessible in the US because of their privatized health care system, the costs can be prohibitive. CTOAM offers more affordable prices than the Mayo Clinic and MD Anderson, plus the benefit of Canadian currency.

Throughout the process, CTOAM's experts liaise with the patient's oncologist and treatment team to ensure they have all the necessary data to access to the most effective cancer treatments for their patient's unique form of cancer. This also helps the oncologist to develop an understanding of oncogenomics and see the benefits first hand. Because we are a location independent company, CTOAM is able to provide our precision oncology services to clients anywhere in the world.

CTOAM's Director of Scientific Research, Alex Rolland, explains why he founded CTOAM nearly a decade ago: *"People need these services – their lives depend on it. But they aren't able to access them on their own through standard cancer care in Canada, nor in many other countries, at this point in time. We exist to give people immediate access to the care they need and our goal is to make this the standard of care throughout Canada."*

He also mentions that CTOAM offers virtually the same oncogenomics services as American private companies like the Mayo Clinic: *"Canadians heading to the US in search of better cancer treatment should call us instead – we provide the same personalized cancer services as the Mayo Clinic, or MD Anderson, at a fraction of the cost, plus little or no travel. The same is true for American cancer patients. They can access our services and benefit from the best tests and treatment options without having to leave their home town."*

Patient Recommendations

Cancer patients who've hired CTOAM are impressed with the care they receive and results achieved. Breast cancer patient, Margaret, a BC resident, says that if she were to give advice to someone newly diagnosed with cancer, it'd be: *"Hire somebody like CTOAM that can help you get this [genetic testing, personalized research, and advocacy] done. All I wanted to do was to be able to say to my family that I've done the best I could. And, with CTOAM, I know I have."*

Betty, a colon cancer patient and CTOAM client, has similar words for someone newly diagnosed: *"I'd say phone Alex right away. [If I could go back in time], I think I would have started with CTOAM faster (if I'd heard about them sooner)."*

Colon cancer patient Damian, who's been a client with CTOAM for several years, says: *"I'd recommend they give Alex a call and use his service. A doctor's just a doctor – meaning, they don't have time to do the research that Alex does, plus they have to stick with the protocols [of standard care]."*

The Future of Cancer Treatment, Now

Eventually, precision oncology will become better integrated into standard cancer care – something that Alex Rolland and the CTOAM team hope happens as soon as possible. In the meantime, however, cancer patients on the front lines *need* access to these life-saving services *now*, and CTOAM is here to provide this for them.

We offer a Precision Second Opinion to anyone who'd like to know how precision oncology can benefit their unique form of cancer. If someone you know has received a cancer diagnosis, register today.

[1] *Am Soc Clin Oncol Educ Book, 2017;37:160-169. doi: 10.14694/EDBK_174176.*
[2] *Precision Oncology: Who, How, What, When, and When Not? Schwartzberg L1, Kim ES1, Liu D1, Schrag D1.*
[3] *Garraway L., Verweij J, Ballman K. Precision Oncology: An Overview. J Clin Oncol. 2013; 31 (15):1803-1805.*
[4] *Schwaederle et al., (2016). Impact of precision medicine in refractory malignancies: A meta-analysis of 13,203 patients in phase I clinical trials. 2016 ASCO Annual Meeting.*