



December 29, 2016

Ms. Lisa Mueller  
Investigations and Resolutions  
The College of Physicians and Surgeons of Ontario  
80 College Street  
Toronto ON M5G 2E2

File #LM/7214399

**Response to Dr. Tozer's report and addendum report**

Dear Ms. Mueller,

There are three significant problems with Dr. Tozer's assessment:

1. **Unsuitable reviewer:** Dr. Tozer is not my peer. By his own admission he has limited or no knowledge concerning the therapies I use, and has similarly limited or no knowledge of the CAM model and governing CPSO policy. These deficiencies make him totally unsuitable to review my charts for patients treated with "safe" chemo, DCA or other complementary therapies. Despite this limitation (which Dr. Tozer should have acknowledged), he goes on to make negative comments about these therapies and their application to my patients, which are by consequence, entirely without factual, anecdotal or evidentiary foundation.
2. **Numerous errors made during the review:** In reviewing my charts Dr. Tozer made multiple errors and incorrect assumptions which appear to have adversely informed his ultimate conclusion. Because so many of Dr. Tozer's underlying assumptions are incorrect or inaccurate, his ultimate conclusion can hold no weight.

Some examples include: Dr. Tozer erroneously suggested that I did not order certain tests, made incorrect diagnoses, and failed to communicate with other doctors etc. None of these assumptions are true. Given the imprecision and inaccuracy of these and so many more of Dr. Tozer's assumptions and observations, there is no way this Committee can properly give any weight to Dr. Tozer's opinion. His errors are all the more concerning since a careful review of my patient charts by any reader would quickly set the record straight (i.e. it is clear I did order certain tests, I did make the correct diagnoses, and I did communicate with other doctors). In truth, it is difficult to see how these factual errors (which Dr. Tozer then used to underpin his ultimate conclusion) could have been made at all, let alone by the College's own reviewer.

3. **Demonstrated a lack of adequate knowledge of traditional oncology:** In his report(s), Dr. Tozer has made erroneous statements with respect to basic tenets of traditional oncology that are deeply troubling. The ignorance revealed by the erroneous statements ought to cause the



Committee significant concern as to his competency as a suitable and unbiased CPSO reviewer in this particular context.

These three points are discussed below.

### 1. Unsuitable reviewer

It is trite to say that when evaluating any medical practice, let alone a CAM / “safe” chemo practice such as mine, it is of utmost importance to use a reviewer who has familiarity with the CAM modalities being employed and the treatment practices being used.

In this case Dr. Tozer was neither familiar with CAM, nor with the “safe” chemo treatments which he was charged with opining upon. This means he is not a true peer, and is not properly placed to legitimately and fairly opine upon my practice.

Insofar as Dr. Tozer is not properly placed to fairly review a CAM practice such as mine in these circumstances, Dr. John Gannage (CPSO CAM peer assessor and CAM provider) aptly observes (Tab ●):

*“A member incorporating CAM into practice for cancer patients cannot be found guilty of professional misconduct solely based on the fact of offering CAM therapies. The member is obligated to adhere to the CPSO’s CAM policy while administering therapies, specifically with respect to informed consent and communication, avoiding conflict of interest, strictly refraining from exploitation, and by offering therapies that are informed by evidence. However, to be investigated and/or found guilty of falling below practice standards, or even to be complained about by a professional colleague, simply for practising CAM is in violation of both the spirit and letter of the CPSO’s Policy #3-11, if not the Medicine Act itself.”*

With respect to Dr. Tozer’s dearth of knowledge and experience around “safe” chemo in particular, here he is even less qualified to opine.

The Committee will know from my prior response in 2014 that “safe” chemo is a form of immunotherapy.

1. Dr. Kenneth Matsumura, a world-renowned physician and inventor, has clearly explained this in his original letter dated Apr 12, 2014 (pg. 3-4). He is the inventor of this patented therapy, and has researched it for over 30 years.
2. The “safe” chemo patient chart summary that we provided to the College clearly shows an unusually high response rate of mainly stage 4 patients, and mainly those who have failed prior therapies, using only the single chemo drug carboplatin. Our response rate is much higher than



any published studies using carboplatin for these cancer types. It can clearly be inferred that there is something special about this therapy that has caused enhanced cancer cell kill. Since mesna itself has no direct cancer-killing properties, but is used to protect the immune system, it has to be the patient's immune system contributing the cell kill.

3. The redacted oncologist's notes relating to one of my active "safe" chemo patients (attached at this Tab) reveal that the oncologist is very surprised at how well his patient is doing, with excellent response in stage 4 disease and minimal side effects. He repeatedly referred to "safe" chemo as "remarkable". Again, it can clearly be inferred that there is something special about this therapy that has caused enhanced cancer cell kill above and beyond what carboplatin alone is capable of. This also serves as independent confirmation of Dr. Matsumura's claims about "safe" chemo.

As the Committee will glean from the report of **Dr. Robert Kerbel** (Tab ●), the field of immunotherapy is radically different than traditional oncology. So different in fact that the results of standard tests used with regular chemotherapy can often have opposite meaning when used with chemo-immunotherapy. Dr. Tozer's misapprehension regarding this phenomenon is revealed in the following remark:

***"Harm also resulted when patients who clearly had evidence of disease progression and had become clearly palliative were told that their worsening symptoms and worsening findings on radiology were the result of the treatment working."***

As a traditional oncologist, Dr. Tozer's opinion about complementary therapies like "safe" chemo have no meaning. The appearance of early tumour enlargement on imaging (like CT scan) is NOT a sign of treatment failure with immunotherapy. To highlight this point, I refer the Committee to this ASCO (American Society of Clinical Oncology) publication about cancer immunotherapy, with relevant excerpts below: <http://jco.ascopubs.org/content/33/31/3541.long>

***"As immunotherapeutics become increasingly available to patients, clinicians face a major challenge in the evaluation of these novel drugs—the accurate determination of clinical efficacy."***

***"By RECIST criteria, a significant increase in the size of tumor lesions and the development of new lesions are considered unequivocal disease progression."*** [\[referring to chemotherapy\]](#)

***"Some patients with melanoma treated with ipilimumab [\[an immunotherapy\]](#) ...experienced initial increased size of tumor lesions, confirmed by biopsy as inflammatory cell infiltrates or necrosis, with subsequent decreased tumor burden."***



*“Immune-related response patterns have been observed in clinical trials of ipilimumab [an immunotherapy], including development of new lesions associated with edema and infiltrates of immune cells and transient increases in baseline tumor lesions.”*

*“Delayed clinical responses were also observed in studies of immunotherapeutic agents, such that an increase in total tumor burden was later followed by tumor regression. These findings of pseudoprogression would have been classified prematurely as progressive disease by historic WHO or RECIST criteria...”*

**Dr. Kerbel** is a prominent cancer researcher at Sunnybrook Hospital in Toronto, has provided an opinion regarding cancer immunotherapy for the Committee (Tab ●). As you will see he has published over 400 papers and given over 800 lectures around the world (Tab ●, CV). He has a particular interest and experience in the area of immunotherapy. In this regard he states:

*“One of the interesting features of this form of therapy is that it is not uncommon for patient’s tumors to show no signs of tumor shrinkage/regression for quite some time... the tumors may actually continue to grow; historically this would be viewed as ‘treatment failure’ or ‘tumor progression’ ”.*

Dr. Kerbel goes on to explain the mechanism for the false impression of treatment failure in patients who are responding well to immunotherapy. His opinion further confirms what I have been saying about immunotherapy (including “safe” chemo), and what Dr. Tozer appears to have completely failed to appreciate: Namely that pseudoprogression is a real phenomenon and does occur in the use of immunotherapies such as the “safe” chemo regimen.

**Dr. Vikas Sukhatme** is a professor of medicine at Harvard Medical School, the Chief Academic Officer and Harvard Faculty Dean at BIDMC, and Chief of the Division of Interdisciplinary Medicine and Biotechnology at BIDMC. He has kindly provided an opinion for the College (Tab ●). As the Committee will see, Dr. Sukhatme has special expertise in immunotherapy (such as “safe” chemo) and metabolic therapy (such as DCA). We do not require Dr. Sukhatme to be an expert about “safe” chemo *per se*, because he has excellent knowledge of immunotherapy in general, as a result of his own extensive research.

Dr. Sukhatme states:

*“Immunotherapy is in some ways different from conventional chemotherapy in that it might take some time to act. Also, approaches to evaluate the success or lack thereof of such therapies that relies on*



*anatomic imaging might be misleading, since there might be an increase in tumor size due to infiltration of immune cells, which might actually be fighting the tumor.”*

Once again, this confirms what I have stated about the immunotherapy “safe” chemo and refutes Dr. Tozer’s erroneous assertion to the contrary.

**Dr. Tozer’s also erroneously states that DCA’s “efficacy as a cancer treatment is unknown.”**

Dr. Tozer’s remarks about DCA have no merit or scientific basis whatsoever.

The current state of publications on the subject clearly proves otherwise. There are now multiple *in vitro* and *in vivo* publications (including human) that confirm the efficacy of DCA as a cancer treatment. The five-patient University of Alberta DCA study quoted by Dr. Tozer in fact confirms the efficacy of DCA in 2 of 5 patients who had reduction of glioblastoma with DCA therapy alone. For him to state otherwise is simply disingenuous.

**Dr. Kerbel** has also provided an opinion about DCA, as an independent Canadian researcher not affiliated with my practice. For the Committee’s benefit, Dr. Kerbel explains in detail the mechanism of DCA’s action against cancer, and explains why there are no large clinical trials, and why there likely never will be. Yet despite that, he is supportive of our use of off-label DCA. In his report he writes (Tab ●):

*“But this does mean that the drug cannot or should not be considered for use on occasion in cancer patients, especially late stage refractory disease patients. This is something about which I have some experience and knowledge...”*

He also confirms that there are a “...large number of peer reviewed papers by many independent research groups dealing with DCA as a cancer drug, published in respected journals.”

To this end, a Medline search using the key words “dichloroacetate” and “cancer” reveals 229 peer-reviewed publications:



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Publication dates: 5 years, 10 years, Custom range...

Species: Humans, Other Animals

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Search results

Items: 1 to 20 of 229

1. Long-term stabilization of stage 4 colon cancer using sodium dichloroacetate therapy. Khan A, Andrews D, Blackburn AC. World J Clin Cases. 2016 Oct 16;4(10):336-343. PMID: 27803917 Free PMC Article Similar articles

2. Dichloroacetate Prevents Cisplatin-Induced Nephrotoxicity without Compromising Cisplatin Anticancer Properties. Gaigamuwa R, Hardy K, Dahlistrom JE, Blackburn AC, Wium E, Rooke M, Cappello JY, Tummalapalli P, Patel HR, Chuah A, Tian L, McMorow L, Board PG, Theodoratos A. J Am Soc Nephrol. 2016 Nov;27(11):3331-3344. PMID: 26961349 Similar articles

3. Therapeutic applications of dichloroacetate and the role of glutathione transferase zeta-1. James MO, Jahn SC, Zhong G, Smeltz MG, Hu Z, Stacpoole PW. Pharmacol Ther. 2016 Oct 19; pii: S0163-7258(16)30197-8. doi: 10.1016/j.pharmthera.2016.10.018. [Epub ahead of print] Review. PMID: 27771434 Similar articles

4. Fatal Liver and Bone Marrow Toxicity by Combination Treatment of Dichloroacetate and Artesunate in a Glioblastoma Multiforme Patient: Case Report and Review of the Literature. Uhl M, Schwab S, Efferth T. Front Oncol. 2016 Oct 7;6:204. PMID: 27774434 Free PMC Article Similar articles

5. The effect of dichloroacetate in canine prostate adenocarcinomas and transitional cell carcinomas in vitro. Hartling T, Stubbendorff M, Willenbrock S, Wagner S, Schadzek P, Ngezahayo A, Escobar HM, Nolte I. Int J Oncol. 2016 Oct 5. doi: 10.3892/ijo.2016.3720. [Epub ahead of print] PMID: 27748833 Similar articles

6. The effect of dichloroacetate on male rat thymus and on thymocyte cell cycle. Stanevičiūtė J, Urbonienė D, Valančiūtė A, Balnytė I, Vitkauskienė A, Grigalevičienė B, Stakišaitis D. Int J Immunopathol Pharmacol. 2016 Oct 14. pii: 0394632016674019. [Epub ahead of print] PMID: 27742881 Similar articles

Related searches: sodium dichloroacetate cancer, dichloroacetate cancer review

Titles with your search terms: Unexpected Discovery of Dichloroacetate Derived Adenosine Triphosphatase [J Med Chem. 2016], GSTZ1 expression and chloride concentrations modulate sensitivity [Biochim Biophys Acta. 2016], Inhibition of the pentose phosphate pathway by dichloroacetate unravels a new mechanism of action [Oncotarget. 2016]

Find related data: Database: Select Find items

Search details: dichloroacetate[All Fields] AND ("neoplasms"[MeSH Terms] OR "neoplasms"[All Fields] OR "cancer"[All Fields]) Search See more...

Recent Activity: Turn Off Clear

- dichloroacetate cancer (229) PubMed
- dichloroacetate cancer AND (Humans[Mesh]) (144) PubMed
- Sucralfate causes malabsorption of L-thyroxine. PubMed
- On-target inhibition of tumor fermentation

In fact, as of the Nov 19/16 search date, my latest human DCA publication appears at the top of the list. This particular publication shows how DCA can stabilize stage 4 cancer long-term with minimal side effects. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5067498/>

This study relates to a current patient of my practice, and the College may choose to exercise its power to interview her and check her hospital records including CT scans to confirm she is still alive and well with stage 4 colon cancer, and taking DCA (for over 4 years now) with no simultaneous conventional cancer therapy.



I have published other DCA papers, all demonstrating its usefulness in cancer therapy. Again, Dr. Tozer's statement to the contrary is simply not true.

Dichloroacetate for palliation of leg pain due to cancer:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3146743/>

Intravenous dichloroacetate as a cancer therapy, a report of 3 cases:

<https://www.ncbi.nlm.nih.gov/pubmed/25362214>

Dichloroacetate as a radiation sensitizer in renal squamous cell carcinoma:

<https://ibimapublishing.com/articles/ACRT/2012/441895/441895.pdf>

Others have published equally compelling research.

**Dr. Dana Flavin** has published a human case report of successful treatment of chemo-resistant stage 4 thyroid cancer using DCA therapy: <https://www.ncbi.nlm.nih.gov/pubmed/22966401>

Dr. Flavin has also published a case of complete remission of chemo-resistant lymphoma with dichloroacetate: <https://www.ncbi.nlm.nih.gov/pubmed/20886020>

Dr. Flavin is a Professor of Pharmacology at DeMontfort University, Leicester, UK, and former science assistant to the Associate Bureau Director for Toxicology at the FDA. Dr. Flavin has provided an opinion for the Committee outlining her position on the use of off-label DCA. She is an internationally recognized expert and clearly endorses the use of DCA in the treatment of cancer (Tab ●):

*"We are now using DCA in our patients internationally, including Italy, UK, Germany, Ukraine and other countries. We see that lower doses of chemotherapy are equally effective as a normal dosage, when DCA is included in the regime. This reduces side effects, and allows better compliance for patients to accept chemotherapy or respond to immunotherapy."*

For his part **Dr. Sukhatme** (Harvard Medicine Professor and Chief Academic Officer) is also highly supportive of our use of DCA as an off-label cancer therapy (Tab ●):

*"It is been known for years that many cancer cells upregulate fermentative glycolysis, a process that is counteracted by DCA... there is no financial incentive for drug companies that manufacture the non-cancer drugs to carry out the appropriate clinical trials to validate or invalidate their use... it makes sense to consider the use of these drugs with the appropriate informed consent in place for the treatment of certain groups of patients even in the absence of randomized phase 3 evidence."*

Furthermore, the Committee need only have reference to the patient charts provided to the College (and reviewed by Dr. Tozer) as part of this investigation for evidence of DCA efficacy. One example is



patient L. N. who is in remission from glioblastoma for over 5 years after standard therapy was completed, who has been treated using DCA.

Based on my DCA patient charts in the possession of the College, the current state of published DCA research and the opinions of world-renowned experts provided to the College herein, repeated questioning with respect to the proper use of DCA to treat cancer is no longer needed. The question of the efficacy of DCA as a cancer therapy (which has greatly troubled the ICRC in the past) should finally be put to rest.

**Dr. Tozer has limited knowledge/experience with CAM:**

Dr. Tozer's report is rife with observations like those outlined below, all of which reveal his limited scope of CAM knowledge and experience, being a traditional oncologist:

**Ms. J.F.**

**According to Dr. Tozer: "Patient was demonstrated to have bilateral ovarian metastases and yet there was a discussion about fertility preservation. Dr. Khan does not appear to have a realistic understanding of the prognosis of metastatic melanoma. Furthermore, were the patient to become pregnant, melanoma is one of two cancers that can cross the placenta and colonize the fetus."**

Dr. Tozer does not appear to consider that even patients with advanced stage cancer like Ms. J. F. do inquire about future fertility, and we discuss options such as egg banking used via surrogate pregnancy with a sperm donor, for example. Dr. Tozer also does not have a realistic understanding that long-term disease stabilization or complete remission can be achieved with stage 4 cancers using non-traditional therapies. Please refer to publications listed in my CV as examples, and also this video made by a patient of ours with long-term remission of metastatic melanoma using DCA therapy:

<https://youtu.be/rbh28wAiLtg>

**According to Dr. Tozer: "Discussions about liposuction and fertility preservation in a patient with a poor prognosis seem unreasonable."**

This is a terribly negative statement, but sadly realistic for stage 4 cancer patients receiving conventional toxic therapies. It may surprise the Committee to learn that this Stage 4 melanoma patient is still alive and well at the end of 2016 with a trivial amount of disease (stable) that is managed using complementary therapies alone. She continues to be followed (with amazement) by her multidisciplinary team at Sunnybrook. Dr. Tozer's negative assessment of such a discussion exposes his lack of relevant knowledge around minimally toxic evidence-based unconventional CAM therapies and





again highlights his unsuitability to provide any meaningful opinions about my CAM practice. He has no experience against which to fairly measure my treatment modalities.

**Mrs. F. H.**

**According to Dr. Tozer: “It is not clear that the physician understands the management of chemotherapy side effects in that he actually was using Mesna to combat neutropenia.”**

This statement shows a complete lack of understanding of how “safe” chemo actually works. Had Dr. Tozer taken the time to read Dr. Matsumura’s Apr 2014 letter and review the relevant literature that was submitted to the College, he would certainly have had a better understanding of how off-label mesna used with carboplatin acts as an antidote to reduce or prevent bone marrow toxicity (thereby assisting the neutrophil count).

Contrary to Dr. Tozer’s assertion, I certainly do understand the management of chemotherapy side effects and indeed, the ghastly reality of the many side effects common in conventional cancer treatment is what motivates me to continue to provide this alternative to patients who either cannot or chose not to subject themselves to conventional chemo treatment and its side-effects.

## **2. Numerous errors made during the review**

Below is a sampling of errors made by Dr. Tozer in his report(s). Please note this is not a complete list, and numerous other errors also exist – the errors are simply too many to list here. Normally I would provide an exhaustive recitation of each error, however whereas here, the underlying report is already of reduced value given that Dr. Tozer is not a true peer and has no knowledge of the CAM modalities being employed, I have only highlighted some of the most glaring errors for the Committee’s consideration.

**Mr. Y. P.**

**Dr. Tozer observes: “Although blood work was ordered by Dr. Khan, there is no evidence that he ordered imaging”**

Since the patient and I were working together with one of his open-minded oncologists, CT scans were ordered by the oncologist at his hospital. E.g. CT scan dated Jan 31, 2014 ordered by the oncologist. I ordered chest x-rays and ultrasounds (e.g. CXR req dated Jun 25, 2014 and ultrasound req dated Jun 25, 2014). Thus, Dr. Tozer’s contention that I did not order imaging is incorrect. Also, Dr. Tozer appears to be unaware of our pre-“safe” chemo checklist which includes imaging (x-ray, CT scan, MRI, ultrasound as



appropriate for the clinical situation), and which happened in this instance. Incidentally, Dr. Ko (the College's previous assessor) specifically commended me on the use of this checklist at our personal interview which was part of the earlier tranche of this investigation.

**Dr. Tozer observes: "The patient also indicated that he wished for communication between Dr. Khan and his oncologist and family physician. There is no evidence that this actually occurred."**

Evidence of communication with the patient's oncologist has been provided. e.g. email dated Mar 15, 2014 (blood test results forwarded to the oncology team which includes the oncologist), and documentation about "safe" chemo provided for the oncologist. Note that "safe" chemo patients also have my cell phone number, and they are free to share with their oncologist who can call me any time with questions. Thus again, Dr. Tozer's conclusion is in error.

**Mrs. T. M.**

**Dr. Tozer observes: "There is no evidence that the patient had any radiologic investigations performed to determine treatment efficacy of the SAFE chemo. Nor were serial CEAs ordered."**

This observation is incorrect. A review of the chart confirms that CEA was ordered on Jul 18/14 (result of 74.0). This was a very advanced stage patient who did not live long enough to have the follow-up CEA done. This is evident in the chart, so Dr. Tozer's critique is unfair and invalid.

**Mrs. F. H.**

**Dr. Tozer observes: "Dr. Khan consistently referred to the patient as having metastatic cervical cancer whereas the diagnosis was demonstrated to be metastatic ovarian cancer."**

Dr. Tozer is incorrect. This patient had cervical cancer with ovarian metastases. For example, see Dr. Brien's consultation note dated Mar 12, 2014. Pathology report is also in the chart dated Sept 9, 2013, with a diagnosis of "metastatic cervical mucinous adenocarcinoma". Once again, Dr. Tozer's review of the patient charts was inadequate and his conclusion erroneous.

**Dr. Tozer also incorrectly observes that accurate information about the conventional therapeutic options that would be offered to treat the same patients "was never provided to any of the patients in the charts reviewed."**



This observation is incorrect. Medicor consent forms list all the options (conventional therapy, non-conventional therapy, and no therapy). All patients are required to sign a consent form. This is made plain in the patient testimonial letters attached to this package at Tabs ●●

**Dr. Tozer asserts that Dr. Matsumura claims that “safe” chemo “cures 95% of patient with cancer with no side effects.”**

This statement is inaccurate. Nowhere have I or Dr. Matsumura claimed that SEF chemo cures 95% of patients. Rather, their SEF chemo FAQ document (given to all patients before receiving this therapy) is absolutely clear that the treatment’s response rate ranged from 80-90%. The complete remission rate is up to 10% for stage 4 cases. No patients are ever misled about the cure-potential for “safe” chemo.

Although the therapy is called “side effect free” chemo, that name is qualified with a clear and detailed explanation that it is not actually side effect free (no drug therapy is 100% side effect free). It is explained that the side effects are so low that patients typically do not feel like they are receiving chemotherapy. This is explained in the consent form. Given his erroneous conclusion, it is possible that Dr. Tozer did not read the FAQ document or Dr. Matsumura’s website, or the consent form which have been provided. My patients’ letters further confirms their awareness of the potential side effects. See Tabs ●●●

### **3. Demonstrated lack of adequate knowledge of traditional oncology**

Dr. Tozer’s comments reveal a concerning lack of adequate knowledge of certain basic tenets of traditional oncology. Further, the absence of such basic knowledge only highlights his lack of qualification to act as a CPSO reviewer in this context.

According to Dr. Tozer:

**“Most chemotherapy drugs (carboplatin and gemcitabine included) do not cross the blood brain barrier.”**

**“There is no evidence that carboplatin penetrates the blood brain barrier to any extent...”**

**“He [Dr. Khan] overestimates the ability of chemotherapy to cross the blood brain barrier.”**

These repeated statements regarding carboplatin (and gemcitabine) are totally inaccurate. As a medical oncologist and PhD, it is shocking that Dr. Tozer is either not aware of, or did not take the time to research the facts before issuing repeated false statements in his report. The result of his misleading and erroneous statements is a report replete with unsubstantiated conclusions with no basis in medicine. In this regard, I have included multiple references that confirm both of these chemo drugs do



indeed cross the blood-brain barrier. While this may seem a small point, it is not. Rather, Dr. Tozer's error about this basic, widely-known tenet of traditional oncology should give the Committee considerable concern about this ability to opine upon even traditional areas of oncology to say nothing of his unsuitability to opine upon my CAM practice.

Carboplatin crosses the BBB

<https://www.ncbi.nlm.nih.gov/pubmed/27098429>

<https://www.ncbi.nlm.nih.gov/pubmed/23376611>

<https://www.ncbi.nlm.nih.gov/pubmed/18282356>

Furthermore, this study demonstrates that the tissue concentration (compared to blood concentration) of carboplatin is very similar to temozolomide which is a standard drug used for brain tumour therapy:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4020433/>

Gemcitabine crosses the BBB

<https://www.ncbi.nlm.nih.gov/pubmed/18701427>

<https://www.ncbi.nlm.nih.gov/pubmed/17439736>

<https://www.ncbi.nlm.nih.gov/pubmed/15714201>

<https://www.ncbi.nlm.nih.gov/pubmed/12025223>

<https://www.ncbi.nlm.nih.gov/pubmed/11734865>

**Dr. Tozer also erroneously observes: "Cutaneous/chest wall metastases are notoriously difficult to assess in terms of treatment response."**

This statement has no scientific basis whatsoever. Below is an illustration of a patient who has breast cancer with chest wall/cutaneous metastases. Even a layperson can easily see that she has responded very well to therapy (i.e. treatment response). Serial photography and measurement with calipers are more than adequate to measure the response of the metastases in this type of situation.



Before treatment:



After treatment:





**With respect to carboplatin, Dr. Tozer makes the following erroneous observations:**

**“There is no one size fits all in current cancer treatment as far as chemotherapy is concerned...”**

**“There is no chemotherapy drug that is useful across all sites...”**

Despite being a medical oncologist, Dr. Tozer does not seem to have a good understanding of the chemo drug carboplatin. Carboplatin is on the WHO Essential Medicines List because it is a generic chemo drug that can be used to treat all of the following cancers:

- 1) ovarian carcinoma (FDA approved indication)
- 2) brain tumours
- 3) endometrial cancer
- 4) germ cell tumours
- 5) head and neck cancer
- 6) bladder cancer
- 7) breast cancer
- 8) cervical cancer
- 9) Ewing’s sarcoma
- 10) acute lymphocytic leukemia
- 11) non-small cell lung cancer
- 12) small cell lung cancer
- 13) non-Hodgkin’s lymphoma
- 14) melanoma
- 15) neuroblastoma
- 16) osteosarcoma
- 17) rhabdomyosarcoma
- 18) retinoblastoma
- 19) testicular cancer
- 20) Wilm’s tumour

A reference is attached at Tab ●.

**Dr. Tozer also erroneously observes: “Harm resulted when patients were exposed needlessly to chemotherapy when there was no evidence of active disease.”**

This is an unscientific and hypocritical statement. Medical oncologists routinely prescribe chemotherapy when there is no evidence of active disease (because microscopic disease is presumed to be present, or



very likely present). This is called “adjuvant chemotherapy” or “consolidation therapy”. This is common knowledge in oncology, however reliable references are provided below.

<http://www.mayoclinic.org/diseases-conditions/cancer/in-depth/adjuvant-therapy/art-20046687>

“Even if your surgery was successful in removing all visible cancer, there may be a chance that your cancer could return. Microscopic bits of cancer sometimes remain and are undetectable with current methods. Depending on your specific case, you may benefit from adjuvant therapy, since this additional treatment may reduce the risk of your cancer recurring.” (MAYO CLINIC)

<https://www.cancer.gov/publications/dictionaries/cancer-terms?cdrid=45654>

“Treatment that is given after cancer has disappeared following the initial therapy. Consolidation therapy is used to kill any cancer cells that may be left in the body. It may include radiation therapy, a stem cell transplant, or treatment with drugs that kill cancer cells. Also called intensification therapy and postremission therapy.” (NATIONAL CANCER INSTITUTE)

<http://www.cancer.org/cancer/breastcancer/detailedguide/breast-cancer-treating-chemotherapy>

“Surgery is used to remove all of the cancer that can be seen, but adjuvant chemo is used to try to kill any cancer cells that may have been left behind or spread but can't be seen, even on imaging tests. If these cells were allowed to grow, they could form new tumors in other places in the body.” (AMERICAN CANCER SOCIETY)

**Dr. Tozer further observes erroneously: “Use of circulating tumour cells would not be an appropriate means of determining whether a patient was responding to treatment.”**

Dr. Tozer’s comment reveals that his limited knowledge or experience using circulating tumour cell (CTC) counts, again undermining his suitability as a peer reviewer in this case. His statement is totally false (see Medline-indexed publication showing CTC can monitor response to cancer treatment:

<https://www.ncbi.nlm.nih.gov/pubmed/16280045>)

I have also recently attended a certified CME course on use of CTC counts in oncology, at the Canadian College of Naturopathic medicine (an accredited Canadian university). This course confirms CTCs can be used to assess response to therapy. Certificate of attendance is attached at this Tab.



In summary, Dr. Tozer's lack of experience, understanding or knowledge of CAM and other non-traditional cancer therapies severely undercuts the value of his views about my practice and patient care. The limited value of Dr. Tozer's opinion is further diminished by the raft of factual errors, omissions and outright misstatements in his written report(s).

The College asked him specific questions relating to CAM, with full knowledge that he is a traditional oncologist without any experience in CAM oncology. While Dr. Tozer did answer these questions, he did so with the full knowledge that was not qualified to express the opinions that he did. Dr. Tozer has demonstrated carelessness by making numerous errors and unsubstantiated assumptions.

I see no reasonable basis to rely upon Dr. Tozer's assessment as part of this investigation, and I respectfully request the committee to discard it in its entirety to prevent overt bias, as well as refrain from using Dr. Tozer in the future to review my complementary medicine practice in any form. The fact that the College has chosen to ignore the more balanced and factually accurate opinion of its own assessor, Dr. Ko, in order to secure a more critical opinion from Dr. Tozer hints at a measure of unfairness and bias which does not befit this profession's governing body.

I take my responsibility to uphold the values of this profession very seriously. I am no less serious about the importance of providing the best and most compassionate CAM therapies to my patients. However, my practices ought not to be condemned solely because they are foreign to or disapproved by Dr. Tozer; this would be unfair to me and to my patients. Rather, as Dr. Gannage observes in his report (Tab ●):

"The innovative aspect of medicine brought forward by its members and minority peer groups, which is central to much needed, never-ending progress in the profession as a whole, is to be encouraged."

Sincerely,

Akbar Khan, M.D.

Encl.