

**Responses from Dr. Howard Lim to questions remaining from  
March 21, 2019 Oncology CME Webcast: Follow-up Care of Colorectal Cancer Patients**

- What about IV vitamin C in high doses: any additive/complementary effect at all?  
– There is some in vitro data about possible cytotoxic effects at high cellular levels. There is a randomized trial in the NEJM in 1985 looking at oral doses which was negative. Vitamin C doses can cause some issues with some lab values as well – you can see a rise in Cr which is, to my understanding, interference with the lab not due to actual kidney problems. There have been some very small trials in oncology patients in combination with chemotherapy with mixed results. I personally don't support and tell patients there is little data to support it and leave it up to them to decide for themselves.
- Could you explain the Warburg hypothesis? – It's more of a theory that cancer cells manifest increased aerobic glycolysis. However, it remains unclear on how this can be clinically translated at this point in time. Following is an NIH 2016 reference might be useful to expand on your question: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4783224/>
- In a patient with strong family history of colon cancer but negative colonoscopy, can he be followed with just FIT or should he have repeat colonoscopy every several years? – That would depend on the endoscopist's opinion. Normally with the higher risk patients – it tends to go down more a colonoscopy path.
- Are there any studies on patients who have undergone alternative therapies for colorectal cancer and came back to you for chemotherapy? – There are studies of inferior survival in patients who have opted for alternative treatments over chemotherapy. There isn't a study of what happens if these patients then receive chemotherapy. Likely depending on the situation (type of cancer, bulk of disease, how aggressive it is) – chemotherapy might help salvage the patient, but is unlikely to shift the curve to a similar survival as a patient who received upfront chemotherapy.
- What was the response and have you refused to provide treatment if someone has been to Mexico and has tried many unconventional treatments? – Medical tourism exists; if a patient goes away and comes back with side effects, I treat the patient medically to the best of my abilities and without judgement so as to preserve the physician patient relationship because ultimately the patient is going to get sick and will require support near the end of life. Also, I have to come to realize that my ideal thought of what the end of life looks like may not be what the patient's ideal thought is; sometimes people want to have some sort of therapy going into their vein until their last breath. I don't have to be the person giving that therapy when it is harmful – but I can still try and support what symptoms I can. I'll be honest this is still an area I struggle to manage as it is so variable from patient to patient.

- My patients often aren't clear about their family history, and have some vague information about parents having possibly polyps, but no clear diagnosis of colon cancer. As long as they are asymptomatic, I have been screening them with FIT > age 50. Is this reasonable in the context of probable family polyps? – The number of polyps over the lifetime can range 10-15 before there is a concern of polyposis syndromes. I think if you can get the history of how many scopes, and at what age they started scopes (people will remember that) – that might help determine whether they require a FIT or should go straight to C-scope. So if someone remembers that their family member had polyps and had 2 scopes over ten years – likely only a couple polyps, you could consider FIT (probably not high risk) – if the family member had yearly scopes then I recommend discussing with the gastroenterologist about whether they would consider a scope. These patients with multiple polyps should also be referred to BC Cancer's Hereditary Cancer Program clinic to assess for polyposis syndrome testing.