

August 27th, 2023 Version 3.5

Resolving Pulmonary Artery Intimal Sarcoma via the Standard of Care combined with Metabolic Therapies

Patient: Dennis Stacey

Authors: Dr. Michelle Howard, Dr. Gregory Howard, Daniel Orrego

Objective: Establish a precise account, inclusive of detailed medical records and supporting scientific research publications, of precisely how independent, self-administered metabolic therapy in combination with the Standard of Care, can directly contribute to resolving and preventing reperfusion of disease, in a Pulmonary Artery Intimal Sarcoma tumor model, specifically addressing metastatic disease progression to the lower right lobe of the lung.

Design: Case narrative.

Setting: Surgical tumor resection and independent self-administration of the Seyfried Press/Pulse Metabolic Protocol.

Interventions: Surgical resection of primary tumor and consistent control of metabolic response as validated daily in the form of measurably decreased blood glucose in the 65mg/dL (3.5mMol/L) range along with elevated blood ketone (BetaHydroxyButyrate) bodies in the 2-3mMol/L range, via a precise daily accounting of Fat grams, Protein grams and Carbohydrate grams consumed, in relation to total calories and the ratio of Fat grams to Protein plus Carbohydrate grams, inclusive of Hyperbaric Oxygen Therapy (mechanism of action: upregulation of Reactive Oxygen Species), 3 days per week at 2.2AT for 90 Minutes per session, as well as the use of novel substrates such as Fenbendazole dosed at 5mg/Kg, 3 days on, 4 days off (mechanism of action: microtubule inhibition) and 6-Diazo-5-Oxo-L-Norleucine dosed at 0.2-0.4mg/Kg on day 0, day 4, day 8, day 12, followed by a two-week break, then repeated (mechanism of action: glutaminolysis inhibition), at interval.

Primary Outcome Measures: Decline of tumor dimension, decline of Standard Uptake Values as evidenced via PET/CT scan, along with prevention of metastatic disease progression and reperfusion.

Results: Decline in both tumor burden and Standard Uptake Values. No new disease progression.

Conclusion: While the Seyfried Press/Pulse Metabolic Protocol does not constitute a replacement for Standard of Care antineoplastic therapies, given

PAIS with
Metastatic
Progression

PAIS and Multimodal Therapy

PAIS vs PAT

OUND

Lung Cancer and
Metabolic Therapy

Hyperbaric Oxygen
Therapy and
Metabolic Therapy

Fenbendazole and Microtubule Inhibition

Fenbendazole Anticancer Effects

C6H9N3O3 Mechanism of Action

C6H9N3O3 Phase I

Trial

C6H9N3O3 Overview that metabolic therapies are primarily targeting mitochondrial competency rather than nucleic mutations, these preliminary results suggest a potential for clinical application which merits further research.

Preliminary Findings: As of October, 2022, a forty-eight-year-old male, 235lbs, one Mr. Dennis Stacey, a Canadian National, with prior diagnosed risk factors for diabetes, hypertension, dyslipidemia, and diverticulitis, presented to physicians with shortness of breath, lethargy, and limited capacity to exert himself, initially presumed to be suffering from a pulmonary embolism. Further diagnosis via echocardiogram and imaging (MRI and PET/CT) revealed a 50% ejection fraction along with a malignant mass measuring 6.6cm by 3.4cm, with a corresponding Standard Uptake Value of 14, along with a presumed metastatic lesion to the right lower lobe of the lung, measuring 10mm with a Standard Uptake Value of 5.3, and another presumed lesion in the right level 2 lymph node, measuring 11mm with a Standard Uptake Value of 7.2.

Treatments: A surgical resection achieving R1 Margins (cancer cells present microscopically at the primary tumor site) of the primary tumor within the pulmonary artery was performed, with subsequent pathology demonstrating that the removed tissue was MDM2 positive (Murine Double Minute 2, a negative regulator of the tumor suppressor p53 gene) and of a high mitotic (ratio between the number of a population's cells undergoing mitosis to its total number of cells) value.

Remarkably, patient declined recommended post-surgical Standard of Care interventions in the form of Doxorubicin (topoisomerase II inhibitor) and F Ifosfamide (upregulation of amphotericin B cholesteryl sulfate toxicity), instead opting to pursue the Seyfried Press/Pulse Metabolic Protocol, independently. Survivorship with the Standard of Care was estimated at 18-24 months

The Press/Pulse Protocol consisted of a precise daily accounting of dietary grams of Fat, grams of Protein and grams of Carbohydrate consumed, at a caloric density in deficit from basal metabolic rate and total daily energy expenditure, at a ratio such that for every two grams of Fat consumed, correspondingly, one gram of Protein plus Carbohydrate was consumed. Metabolic effects were validated via twice daily measurements of blood glucose and blood ketones, pursuant to achieving therapeutic targets of 65mg/dL (3.5mMol/L) blood glucose and 3mMol/L blood ketones.

Additionally, stress management in the form of massage, sauna, walking, resistance training and meditation were consistently included on a daily and weekly basis.

Histopathology

Clinical Notes

Clinical Notes

Clinical Notes

Clinical Notes

PET/CT Scan

Press/Pulse Protocol

Blood

Glucose/Ketone

Data

Furthermore, Hyperbaric Oxygen Therapy, 3 days per week, for 90-minute sessions each at 2.2AT and above were implemented, contingent to glucose levels being in the therapeutic zone of 65mg/dL and ketones in the 2-3mMol/L range, prior to entering the chamber.

The repurposed substrates Mebendazole and Fenbendazole (microtubule inhibitors) were implemented at 5mg/Kg, 3 days on, 4 days off.

As well, oral dosing of the novel substrate 6-Diazo-5-Oxo-L-Norleucine (mechanism of action: glutaminolysis inhibition) was implemented at 0.2-0.4mg, dosed on Day 0, Day 4, Day 8, and Day 12, followed by a two-week break, prior to repeating the interval.

Supplements such as Metformin at 1000mg/day (inhibits hepatic gluconeogenesis and intestinal glucose uptake) and Berberine at 1600mg/day (inhibits peripheral tissue glycolysis), were implemented as an adjuvant method of glucose control, in combination with precise nutritional control of glucose and ketone response.

HBOT and Therapeutic Ketosis

Clinical Notes

Clinical Notes

Clinical Notes

PET/CT Scan

Results: Tumor burden decreased slowly over time, as evidenced via PET/CT scan, with the most recent imaging demonstrating primary lung lesion has decreased to 4mm. No corresponding Standard Uptake Value is associated with this lesion, nor the lesion in the lymph nodes, and there are no new or progressive lesions detected.

Discussion: While this case represents atypical therapeutic choices by a patient, it does demonstrate the near-term effects of metabolic therapy when combined with the Standard of Care, in managing what would otherwise be a OUNDATO near uniformly fatal disease model. Ostensibly, continued glucose control via precise administration of nutrition would be warranted prophylactically, pursuant to managing disease recurrence, as would frequent PET/CT imaging to monitor clinical status.



Diagnosis

Pre-Surgery



Surgery

Tumor Resection



Post-Surgery

НВОТ



Surviving & Thriving



