CASE SERIES

Cancer Therapy Using Antiparasitic Medications Guided by Acupuncture Meridian Assessment: A Case Series of Six Patients

Frederick Tim Guilford, MD; Simon Yu, MD

Abstract

Background: Cancer cells exhibit metabolic reprogramming often driven by aberrant Wnt/β-catenin signaling. Recent evidence suggests antiparasitic drugs can inhibit this pathway. Acupuncture Meridian Assessment (AMA), a modification of electroacupuncture according to Voll, measures electrical conductance at acupuncture points to guide therapeutic interventions.

Objective: To evaluate clinical outcomes of AMA-guided antiparasitic and antifungal therapy in patients with advanced cancer.

Methods: Six patients with stage IV cancers (breast, lung, prostate, glioblastoma, and multiple myeloma) underwent AMA evaluation between 2011 and 2022. Treatment protocols included combinations of ivermectin, mebendazole, praziquantel, niclosamide, and antifungals, selected based on AMA readings. Primary outcomes were overall survival and disease progression. Dental infections were addressed concurrently.

Results: All six patients demonstrated prolonged survival, exceeding the expected conventional prognosis. The breast cancer patient achieved complete remission (30+ months disease-free). The multiple myeloma patient has been surviving 14 years with normalized biomarkers. The lung cancer patient has been surviving 10 years post-diagnosis with negative imaging. Both glioblastoma patients showed tumor regression with extended survival, although one glioblastoma patient died from a fall with head injury in 2025 after submitting this article. The prostate cancer patient is surviving and has achieved a PSA reduction from 32 to 0.3. No serious adverse events were reported.

Conclusions: AMA-guided antiparasitic therapy showed promising outcomes in this small case series. These preliminary results warrant further study to evaluate the efficacy and safety of this integrative approach.

Keywords: electroacupuncture according to Voll, acupuncture meridian assessment, Wnt/β-catenin pathway, repurposed drugs, antiparasitic therapy, integrative oncology

Frederick Tim Guilford, MD, Science Officer, Your Energy Systems, Palo Alto, CA, USA. **Simon Yu**, MD, works in the private practice of medicine in a practice titled Prevention and Healing in St. Louis, MO, USA.

Corresponding author: Frederick Tim Guilford, MD
E-mail: drg@readisorb.com

Introduction

Cancer metabolism has been a focus of research since Otto Warburg's 1924 discovery of altered glucose utilization in tumor cells. Contemporary understanding reveals cancer metabolism to be highly heterogeneous, with many variations resulting from aberrant Wnt/β-catenin signaling, which is a pathway crucial for normal tissue development, and which becomes dysregulated in malignancy.[1,2]

The Wnt pathway drives metabolic reprogramming, promoting glycolysis, glutaminolysis, and supporting cancer stem cell survival.[3,4] Aberrant Wnt activation is implicated in multiple cancer types, contributing to therapeutic resistance through mechanisms including enhanced oxidative-stress management and tumor microenvironment manipulation.[5-8]

Current cancer therapeutics face significant challenges, particularly in advanced disease where conventional treatments often fail to provide durable responses.[9-11] The emergence of drug repurposing offers new therapeutic possibilities, with antiparasitic agents showing unexpected anti-cancer properties through Wnt pathway inhibition.[12-16]

Acupuncture Meridian Assessment (AMA), developed by Dr. Simon Yu as a modification of Electroacupuncture According to Voll (EAV), measures electrical conductance at specific acupuncture points to assess organ function and guide therapeutic selection.[17,18] EAV displays clinical utility in various diagnostic applications, with studies demonstrating correlations between electrical readings and pathological conditions.[18-20,22]

This case series evaluates the clinical outcomes of AMA-guided antiparasitic and antifungal therapy in six patients with advanced cancer, hypothesizing this integrative approach could therapeutically benefit through Wnt pathway modulation and address underlying microbial contributions to cancer progression.

Methods

Study Design

This retrospective case series analyzes six patients with advanced cancer treated with AMA-guided antiparasitic therapy between 2011-2022 at a single integrative medicine practice.

Patient Selection

Inclusion Criteria. (1) Histologically confirmed advanced cancer (stage III-IV); (2) Life expectancy <2 years based on conventional prognosis; (3) Completion of or refusal of standard oncological treatment; (4) Informed consent for alternative treatment approach.

Exclusion Criteria. (1) Active conventional cancer treatment during the study period; (2) Severe hepatic or renal impairment; (3) Pregnancy or lactation.

Acupuncture Meridian Assessment Protocol

Equipment. Studies were conducted using a modern version of the original EAV device, a commercially available MORA device (MED-Tronik, Germany, measuring electrical conductance at acupuncture points; scale 0-100, normal range 45-55).[21,23]

Procedure. The procedure detailed below was followed:

1. A diagram of the testing setup is shown in Figure 1.[23]
2. Patient was positioned comfortably with skin cleaned using alcohol wipes.
3. Baseline measurements taken at 40 standard acupuncture points representing major organ systems[23,24] (Figure 1).
4. Points showing abnormal readings (indicator drop <45 or >65) were identified.
5. Medication testing was performed by introducing test substances into the circuit as described by Voll,[17,23] (Figure 1).
6. Substances normalizing aberrant readings were selected for the therapeutic protocol.

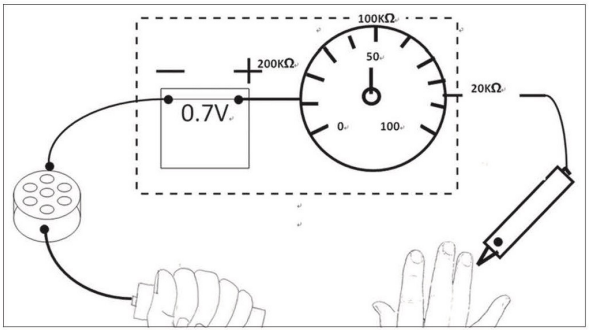
Standardization Measures. Same operator (S.Y.) performed all assessments; Consistent environmental conditions (temperature 68-72°F, humidity <60%) were maintained; Calibration checks were performed daily; Repeat measurements were taken to ensure reproducibility.[23]

Treatment Protocols

A combination of the following medications and therapies was chosen using the AMA testing as a guide.

Antiparasitic Agents. (i) Ivermectin: 12-24 mg three times daily, 3 weeks on/1 week off;[13,14,25] (ii) Mebendazole: 100 mg three times daily, 3 weeks on/1 week off;[26,27,28] (iii) Praziquantel: 600 mg three times daily, 3 weeks on/1 week off;[29,30] (iv) Niclosamide: 500-1000 mg three times daily, 3 weeks on/1 week off;[12,15,31] (v) Pyrantel pamoate: 725 mg three times daily, 3 weeks on/1 week off.

Figure 1. A diagram of the testing set up is shown



Antifungal Agents: Antifungal agents were utilized when the medications were found to restore the meridian reading to normal in each individual. (i) Itraconazole: 100 mg three times daily;[32-36] (ii) Fluconazole: 100 mg three times daily;[37,38] (iii) Nystatin: 500 000 U three times daily.[39]

Supportive Therapies. These agents were used when medications were found to restore the meridian reading to normal in each individual, so the usage varied as guided by the findings. (i) Doxycycline: 100 mg three times daily (when indicated);[40-42] (ii) Tinidazole: 250-500 mg three times daily (when indicated); (iii) Azithromycin: 500 mg three times daily (when indicated);[43] (iv) Doxycycline, Azithromycin, and Vitamin C (DAV).[42]

Dental Protocol. All patients underwent a comprehensive dental evaluation with a biological dentist. Infected teeth, root canals, and cavitation sites were addressed through extraction or surgical debridement as clinically indicated.[44-50]

Outcome Measures

Primary Outcomes. (i) Overall survival from treatment initiation; (ii) Progression-free survival; (iii) Radiographic response (RECIST 1.1 criteria when applicable).[51]

Secondary Outcomes. (i) Biomarker changes (PSA, tumor markers, kappa light chains); (ii) Performance status (ECOG scale): The ECOG Performance Status Scale, or ECOG-PS, is a 0–5 point system used in oncology to evaluate a patient's ability to perform daily activities;[52] (iii) Quality of life assessment using the short form health assessment;[53] (iv) Adverse events (CTCAE v5.0) Common Terminology Criteria for Adverse Events (CTCAE), any unfavorable and unintended sign (including an abnormal laboratory finding), symptom, or disease temporally associated with the use of a medical treatment.[54]

Data Collection and Analysis

Patient data collected retrospectively from medical records, including: (i) Demographics and cancer characteristics; (ii) Treatment protocols and duration; (iii) Serial imaging and laboratory results; (iv) Adverse event documentation; (v) Survival data with a minimum of 12-month follow-up.

Table 1. Patient Demographics and Cancer Characteristics

Case	Age	Gender	Primary Cancer	Stage	Prior Treatments	Prognosis (months)
1	46	F	Breast (Triple-negative)	IV	Surgery, Chemotherapy, Herceptin	6-12
2	46	F	Multiple Myeloma	IV	Radiation	12-24
3	72	M	Lung (NSCLC)	IV	None (inoperable)	3-6
4	46	M	Glioblastoma	Recurrent	Surgery, Radiation, Chemotherapy	6-12
5	64	F	Glioblastoma	Recurrent	Surgery, Radiation, Chemotherapy	6-12
6	75	M	Prostate	IV	Declined surgery	12-18

Statistical Analysis

Descriptive statistics were calculated for patient characteristics and outcomes. Kaplan-Meier analysis performed for survival data. Given the small sample size, formal statistical testing was not performed.

Ethical Considerations

All patients provided informed consent for treatment. This retrospective analysis was conducted in accordance with institutional guidelines for case series reporting. Patient identities were de-identified for publication.

Results

Patient Characteristics

Six patients with advanced cancers were treated between 2011 and 2022 (Table 1). Median age was 55 years (range: 46-75 years). All patients had stage IV disease except two with recurrent glioblastoma following standard therapy.

AMA Findings

All patients demonstrated abnormal readings at multiple meridian points (ranging from 13 to 20 out of 40 points).[21] (Hong 2016), Most common abnormalities involved: (i) Lymphatic system (6/6 patients); (ii) Liver/detoxification pathways (5/6 patients); (iii) Immune system markers (5/6 patients); (iv) Organ-specific points corresponding to primary tumor location (6/6 patients).

Medication testing consistently indicated the normalization of aberrant readings with antiparasitic and antifungal agents, guiding treatment selection as previously described.[55]

Treatment Outcomes

Each patient (Table 1) was treated with medications normalizing the abnormal AMA readings. Tooth evaluation, as indicated by abnormal meridian testing, was recommended.

Case 1 - Breast Cancer. 46-year-old female with stage IV triple-negative breast cancer and metastases to sternum, lymph nodes, and lung. Following 60 days of combination therapy (ivermectin, doxycycline, tinidazole, pyrantel pamoate, praziquantel, nystatin) and dental work, the patient achieved a complete radiographic response. Remained disease-free at 30+ months follow-up.

Case 2 - Multiple Myeloma. 46-year-old female with stage IV multiple myeloma and bone metastases. Kappa light chain levels decreased from >4000 to 156 mg/L (near normal). Bone pain resolved within 2 years. Surviving 14 years post-diagnosis with continued treatment rotations that include Ozone Ultraviolet Blood Irradiation, intravenous vitamin C, and Insulin Potentiation Therapy (IPT).

Case 3 - Lung Cancer. 72-year-old male with stage IV Non-Small Cell Lung Cancer (NSCLC) and bone metastases. Initially inoperable, the tumor became resectable after treatment with ivermectin, praziquantel, nitazoxanide (Alinia), mebendazole, itraconazole, and fluconazole. Surgical pathology revealed coccidiomycosis infection within tumor. Ten consecutive positron emission tomography (PET) scans were negative over a 10-year follow-up.

Case 4 – Glioblastoma. 46-year-old male with recurrent glioblastoma post-standard therapy. Treatment included ivermectin 12 mg, mebendazole 100 mg, praziquantel 600 mg, azithromycin 500 mg, tinidazole 500 mg, and nystatin 500 000 IU, followed by doxycycline 100 mg, fluconazole 100 mg, itraconazole 100 mg, and 3-bromopyruvate. Tumor size decreased from approximaatly 2 cm. to minimal on 13-month follow-up imaging as seen in images on pp. 109-210[56]

Case 5 - Glioblastoma. 64-year-old female with recurrent glioblastoma. AMA indicated 13 out of 40 meridians were out of balance. Treatment protocol: ivermectin 24 mg, mebendazole 100 mg, praziquantel 600 mg, niclosamide 1000 mg, tinidazole 250 mg (3 weeks on, 1 week off for 6 cycles), followed by nystatin 55 000 IU, fluconazole 100 mg, and itraconazole 100 mg. Reported as the only survivor among 12 patients in a concurrent medical experimental therapy group, in which the patient elected not to participate. Tumor undetectable on imaging with resolution of neurological symptoms at 4-year follow-up.

Case 6 - Prostate Cancer. 75-year-old male with stage IV prostate cancer, PSA 32 ng/mL. Treatment protocol: Ivermectin, chlorine dioxide, and fenbendazole. PSA decreased to 0.3 ng/mL with no evidence of metastatic disease.

Survival Analysis

Median overall survival has not been reached with a median follow-up of 48 months (range 13-168 months). All six patients exceeded their expected prognosis based on conventional treatment outcomes:

- Expected survival: 3-24 months
- Actual survival: 13-168+ months (6/6 patients still alive)

Adverse Events

No serious adverse events (Grade 3-4 CTCAE) were reported. Mild gastrointestinal symptoms (Grade 1-2)

occurred in 3/6 patients, which were managed with dose reduction or temporary treatment interruption. No treatment discontinuations due to toxicity occurred, consistent with the generally favorable safety profile of these repurposed agents.

Biomarker Responses

Objective biomarker improvements were documented in 4/6 patients with measurable markers: Multiple myeloma: Kappa light chains 4000→156 mg/L; Prostate cancer: PSA 32→0.3 ng/mL; and improved biomarker levels throughout the follow-up period; Glioblastoma cases: scans improved.

Discussion

This case series demonstrates prolonged survival in six patients with advanced cancers treated with AMA-guided antiparasitic therapy. All patients exceeded the expected survival (based on conventional prognosis), with several achieving complete or near-complete responses.

Proposed Mechanisms of Action

The clinical responses observed may result from multiple mechanisms:

Wnt Pathway Inhibition. Antiparasitic drugs used in this series have demonstrated Wnt/β-catenin pathway inhibition in preclinical studies. Ivermectin blocks β-catenin/TCF function,[13] while niclosamide down-regulates multiple Wnt pathway components.[12,15] Benzimidazole compounds disrupt microtubules and reduce β-catenin nuclear transport.[26-28,57] Pyrvinium pamoate inhibits Wnt signaling and mitochondrial oxidative phosphorylation.[16,58]

Microtubule Targeting. Several agents target microtubules, potentially disrupting cancer cell division and β-catenin signaling.[57,59] This mechanism may explain responses across different cancer types.

Metabolic Disruption. Several drugs may interfere with cancer cell metabolism through mitochondrial targeting,[40-42] and disruption of the "reverse Warburg effect" where cancer cells parasitize stromal cell metabolism.[60-63]

Microbial Factors. The concurrent treatment of dental infections and potential systemic microbial burden may address the inflammatory drivers of cancer progression.[44,64-67] The surgical pathology from Case 3 supports this hypothesis by revealing a fungal infection within the tumor and may function in a similar manner to *Fusobacterium nucleatum*, an oral anaerobe rarely seen in a healthy lower GI tract but frequently found in colorectal cancer (CRC). *Fusobacterium nucleatum* pathogen is known to activate Wnt/β-catenin pathways, providing a biological mechanism for the infection's impact.[68-72]

The finding of coccidiomycosis in the tumor mass of Case 3 is an example of a microbe-related cancer, The fungus acts as an inflammatory provocateur. It doesn't necessarily rewrite the cell's code itself, but it creates a toxic, inflamed environment stimulating the cell's signaling pathways (like Wnt) into an inflmmatory "overdrive" state conducive to cancer.[44,64-72]

Oxidative Stress Modulation. Several agents increase reactive oxygen species production in cancer cells,[25,27,31] potentially overwhelming cancer cell antioxidant defenses while leaving normal cells protected.

Clinical Implications

These results suggest AMA-guided therapy may offer a systematic approach to treatment selection in integrative oncology. The method's ability to guide medication selection based on individual patient responses represent a form of personalized medicine within complementary approaches, building on established EAV research.[17-22,24]

The role of concurrent dental infection treatment deserves emphasis, as chronic oral infections have established links to systemic cancer risk,[44,67,73-75] and may contribute to treatment resistance through inflammatory mechanisms involving IL-6, TGF-β, and other cytokines.[76-84]

Comparison to Literature

Limited published data exist on antiparasitic drugs in human cancer treatment. Our previous publication in 2019,[55] first described this approach, and subsequent research has supported the anti-cancer properties of these agents. The survival outcomes compare favorably to historical controls for similar advanced cancers, though direct comparison is limited by patient selection and concurrent treatments.

Preclinical studies support the mechanisms proposed: ivermectin inhibits Wnt/β-catenin and Akt/mTOR pathways,[13,14,25] Niclosamide targets multiple signaling pathways, including Wnt, NF-κB, and Notch,[15,31] and benzimidazoles disrupt microtubules while increasing oxidative stress,[26,27,28] and antifungal agents like itraconazole inhibit Hedgehog, Wnt, and PI3K/mTOR pathways.[32,33,34,35,36]

Limitations

This study has several limitations:

- **Study Design**: Retrospective case series without control group limits conclusions about the causality and efficacy.
- **Selection Bias**: Patients self-selected for alternative treatment, potentially representing healthier or more motivated individuals.
- **Concurrent Treatments**: All patients received multiple interventions including dental treatment, making it difficult to isolate effects of antiparasitic therapy.
- **Small Sample Size**: Six patients provide insufficient power for statistical analysis or generalizability.
- **Outcome Assessment**: Lack of standardized quality of life measures and formal response criteria for some cases.
- **AMA Validation**: The AMA technique lacks independent validation and standardization across practitioners, though it builds on established EAV research.[17,23,24,85,86]

Safety Considerations

While no serious adverse events occurred, the long-term safety of extended antiparasitic drug use in cancer patients requires systematic evaluation. Drug interactions, resistance patterns, and cumulative toxicities need investigation in larger cohorts. A veterinary antihelminthic once considered an adjuvant chemotherapeutic agent levamisole was not used as it was discontinued due to toxicity concerns.[87]

Future Directions

These preliminary results warrant prospective clinical trials with appropriate control groups. Recommended next steps include:

1. **Pilot Randomized Controlled Trial**: Compare AMA-guided therapy to standard supportive care in advanced cancer patients.
2. **AMA Validation Studies**: Independent assessment of AMA reproducibility and correlation with clinical outcomes, building on existing EAV research.[19,21,23,24]
3. **Mechanistic Studies**: Laboratory investigation of Wnt pathway inhibition and other proposed mechanisms in patient samples.
4. **Safety Surveillance**: Systematic collection of adverse events in larger patient cohorts.
5. **Biomarker Development**: Identification of predictive markers for treatment response, potentially including microbial profiling, given the dental infection findings.

Conclusions

This case series demonstrates promising clinical outcomes in six patients with advanced cancer treated with AMA-guided antiparasitic therapy. While limited by study design constraints, the consistent pattern of prolonged survival across different cancer types suggests potential therapeutic benefit, warranting further investigation.

The integration of diagnostic assessment (AMA), targeted therapy selection, and concurrent treatment of potential microbial contributors represents a novel approach to integrative cancer care. The mechanistic rationale is supported by extensive preclinical literature on Wnt pathway inhibition by antiparasitic drugs, and the role of chronic infections in cancer progression.

The remarkable responses observed, particularly the unusually prolonged survival warranting further investigation in advanced disease, highlight the potential for repurposed drugs in oncology while emphasizing the need for rigorous scientific evaluation of integrative approaches.

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Ethics approval and consent to participate

Individual patients gave their approval for publication, and no identifying information was used.

Competing Interests

Dr. S.Y. has no financial interest in the AMA diagnostic approach. The authors declare they have no competing interests.

Authors' contributions

S.Y. obtained the information, and F.T.G. drafted the manuscript with support from S.Y.

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